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# Patterns of Attention: Attention and its Fringes in the Aesthetical Discourse (18th-21st Century)

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# The Direction of Our Gaze: Attention in Wolff's Psychology and Aesthetics

# Matteo Favaretti Camposampiero

# Abstract

Notwithstanding the general agreement about the significance of Christian Wolff's psychological account of attention, the details of this account as well as its connection to his analysis of aesthetic experience are still largely unexplored. This paper shows that Wolff had clear insight not only into the complex interaction between attention and the faculties of sensation and imagination (sections 1-3) but also into the effects of training (section 4), the relation between attentional and physiological processes (sections 5-6), and the mechanisms of bottom-up attentional control (section 7). Moreover, the paper delves into the fact that, long before developing his psychology, Wolff considered the relation between attention, beauty, and visual perception in the context of his treatises on architecture, which contain some key ideas of Wolffian aesthetics (sections 8-9).

It is no secret that Christian Wolff (1679–1754) devoted special attention to attention<sup>1</sup>. Starting at least from the late nineteenth century, scholars and historians of cognitive psychology have recognized his detailed treatment of this topic to be highly significant for the development of the discipline. In his 1890 Principles of Psychology, William James wrote that "Wolff's account of the phenomena of attention is in general excellent"2. More recently, Gary Hatfield has identified Wolff's doctrine of attention as the turning point in the gradual emergence of this mental faculty as a subject of primary interest in modern psychology<sup>3</sup>. In spite of such acknowledgments, large-scale reconstructions of the eighteenth-century debate have done little to explain why Wolff was so concerned with the nature and mechanisms of attention. In contrast to twentieth-century scientific psychology, Wolff's analysis of mental faculties and processes was also intended to provide the theoretical basis for other, not purely theoretical disciplines like logic and ethics. As concerns attention, its study was fundamental for both the theory of cognitive error and the theory of moral error that Wolff developed in logic and ethics, respectively<sup>4</sup>; but also further cross-disciplinary

<sup>1</sup> Unless otherwise indicated, all translations are the author's.

<sup>2</sup> James (1890), vol. I, p. 409n.

<sup>3 &</sup>quot;Wolff's discussions of attention mark its introduction into psychology as a major topic" (Hatfield [1998], p. 5). "After Wolff, the literature on attention in the eighteenth century virtually exploded" (*ibidem*, p. 16) and was largely influenced by the Wolffian paradigm. Part of that 'explosion' was already documented by Braunschweiger (1899). By contrast, Neumann's (1971) overview appears rather dismissive of Wolff's contribution and biased by the assumption that he merely simplified Leibniz's account.

<sup>4</sup> I have argued this point in Favaretti Camposampiero (2017), pp. 119-121.

links may be worth considering. In particular, this paper explores the hypothesis that the dynamics of attention and distraction were relevant to Wolff's ideas about beauty and fine arts.

Scholars often credit Alexander G. Baumgarten (1714-1762) and his disciple Georg F. Meier (1718-1777) with reevaluating the lower part of the cognitive faculty and, consequently, with being the first to acknowledge the aesthetic role of involuntary attention<sup>5</sup>. This view is consistent with the widespread assumption that Wolff, by contrast, situated attention in the higher part of the cognitive faculty, along with intellect and reason6, thereby privileging its epistemic functions. The main reason for this assumption is that Wolff's Psychologia empirica features a chapter "On Attention and Reflection" within the section "On the Higher Part of the Cognitive Faculty". Accordingly, his Psychologia rationalis features a chapter "On Attention and Intellect", which suggests a close connection between these two faculties. In spite of this division of topics, Wolff clearly points out that attention and reflection constitute a sort of intermediate level that bridges the gap between the lower and the higher cognitive faculty, without exclusively pertaining to either of them<sup>7</sup>. The following reconstruction shows that Wolff had clear insight not only into the complex interaction between attention and the faculties of sensation and imagination (sections

<sup>5</sup> See, e.g., Thums (2003), p. 63; Thums (2008), p. 163; and Alford (2020), p. 16.

<sup>6</sup> See Adler (2003), pp. 46-47, and Ehrenspeck-Kolasa (2015), p. 25.

<sup>7</sup> Wolff (1732), § 233. Cf. Wolff (1734), § 357n.

1–3) but also into the effects of training (section 4), the relation between attentional and physiological processes (sections 5–6), and the mechanisms of bottom-up attentional control (section 7). Moreover, it delves into the fact that, long before developing his psychology, Wolff considered the relation between attention, beauty, and visual perception in the context of his treatises on architecture, which contain some key ideas of Wolffian aesthetics (sections 8–9).

## I. Attention

Wolff provides two similar yet not identical definitions of attention. The first one, in German, appears in the so-called *German Metaphysics* (1720) and characterizes attention as the power or faculty (*Vermögen*) "to home in on one of the soul's thoughts, in such a way that we are more aware of it than of the rest; that is, a power to make one thought have more clarity then the others". The second definition, in Latin, appears twelve years later in the groundbreaking *Psychologia empirica* (1732) and characterizes attention as "the soul's faculty to make one partial perception within a composite perception have more clarity than the others".

In the twelve years that separate the two works, Wolff's psychology underwent several developments, refinements, and revisions, in both doctrine and

<sup>8</sup> Wolff (1720), § 268.

<sup>9</sup> Wolff (1732), § 237.

terminology. Whereas the former definition restricts attention to the domain of thoughts (i.e., conscious mental contents)10, the latter refers attention to perceptions (i.e., mental representations)<sup>11</sup> in general. However, this difference is negligible, as the former work lists both the Latin terms *cogitatio* (thought) and perceptio (perception) as equivalent to the German term Gedanke (thought)<sup>12</sup>. In Wolffian terminology, both thoughts and perceptions are large categories, including sensations, mental images, concepts, and generally every kind of representational content. Notwithstanding the differences, one and the same idea underlies both definitions of attention: among the plurality of objects that our mind represents at each moment, a single item can be selected by the mind to become more salient to the mind itself than all the others simultaneously perceived. Attention is the power to concentrate on a single portion of the mind's "total perception", which is the sum of all its perceptions at a given instant<sup>13</sup>.

As such, attention is closely linked with apperception or consciousness<sup>14</sup>, which is related to perceptual clarity. A perception is conscious if and only if it is clear, that is, if and only if it represents its object in such a way that we can recognize it and distinguish it from other objects<sup>15</sup>. Common experience shows that, to some extent, apperception

<sup>10</sup> Wolff (1720), § 194.

<sup>11</sup> Wolff (1732), § 24.

<sup>12</sup> See the German-Latin register of technical terms at the end of Wolff (1720).

<sup>13</sup> Wolff (1732), § 43.

<sup>14</sup> Ibidem, § 25.

<sup>15</sup> Ibidem, § 31, § 34n.

depends on our will<sup>16</sup>. Of course, if an object is before our eyes, we cannot help but notice it; nevertheless, we may increase our awareness of a specific part of the object, thus making that portion of our visual field clearer than the rest<sup>17</sup>. This power is not limited to sensations (i.e., sense perceptions of things that presently affect our senses)18 but also concerns our imaginations or phantasmata (i.e., sense perceptions of absent, previously sensed things)19. Thus, the soul has some power over the clarity of its own perceptions<sup>20</sup>, which is commonly called attention. In this way, the phenomenon of apperception justifies the ascription of attention to the soul and shows that Wolff's definition of attention is a real and not merely nominal one21. The Psychologia rationalis further specifies that attention is - along with memory – a requisite for apperception<sup>22</sup>.

### II. Distraction

Although attention is a power, it also manifests a limit. No other cognitive faculty rivals attention in expressing at the same time both the power and the limits of our finite minds. Indeed, the very power to select one object among simultaneous perceptions

<sup>16</sup> Ibidem, § 234.

<sup>17</sup> Ibidem, § 235.

<sup>18</sup> Ibidem, § 65.

<sup>19</sup> Ibidem, §§ 92-93.

<sup>20</sup> Ibidem, § 236n.

<sup>21</sup> Ibidem, § 237n.

<sup>22</sup> Wolff (1734), § 25.

is but the other side of our essential inability to apperceive all those perceptions at once, that is, to make our total perception clear. God, whose infinite mind is always perfectly aware of everything, has obviously no need for attention.

Moreover, attention itself proves to be a very limited power in terms of both its extent and its control by the will. Untrained human attention is extremely liable to distraction. An interface between the lower and the higher cognitive faculties, attention can be pulled either toward the objects of the former or toward the objects of the latter. Wolff's Psychologia empirica provides a sort of phenomenological account of how the senses and the imagination (the faculty to reproduce previous sensations) act as distracting factors. Sensations prevail by their clarity, which obscures competing perceptions: "A sensation prevents us from being attentive to an imagination, and a stronger sensation prevents us from being attentive to a weaker one"23. For the same reason, eyesight is the most powerful source of distraction, since visual sensations regularly outdo the others in clarity. A public speaker, for instance, is "attentive to the words he recites", but "when he directs his eye on a person, he feels his attention to the speech fail"24. According to Wolff, the very adoption of terms like 'obscure' and 'clear' to express the formal properties of perceptions and concepts reveals that such differences were originally observed in visual

<sup>23</sup> Wolff (1732), § 238.

<sup>24</sup> Ibidem.

perceptions<sup>25</sup>. As detailed below, the centrality of eyesight in his account of attention follows from his witting assumption of the science of vision as a paradigm for the theory of knowledge.

On the other hand, the imagination poses no less of a threat to our powers of concentration by its variety. The uncontrolled proliferation of mental images draws our attention and diverts it from the subject that we wish to consider<sup>26</sup>. The difficulty to meditate that we experience the day after a party illustrates this point. Overstimulated by the variety of sensory impressions, the imagination keeps on reproducing mental pictures of yesterday's party. Thus, "the imagination disturbs attention no less than the senses do: indeed, by means of the variation and novelty of ideas, the imagination produces the same effect that the senses produce by means of clarity"<sup>27</sup>.

Far from being mutually incompatible, both distracting factors actually concur to elude our voluntary control. As Wolff puts it, "the senses and the imagination join forces to hinder attention", although it is the senses that "excite" the imagination, which therefore depends on them<sup>28</sup>. Wolff describes this sort of multifactorial distraction as a two-stage process: one of the senses "draws the attention to itself", but once it is captured, "the attention clings to the imagination, which continuously suggests

<sup>25</sup> Ibidem, § 76n.

<sup>26</sup> Ibidem, § 241.

<sup>27</sup> Ibidem, § 241n.

<sup>28</sup> Ibidem, § 242.

new things"<sup>29</sup>. First, some sensory perception captures our attention and diverts it from its object. At the same time, by the law of imagination (or the association of ideas, as it later came to be called), it triggers a series of mental images which then keep our attention steadily focused on themselves, until either a new sensation attracts it or the will regains control of the direction of thought.

Common-sense awareness of the distracting power of the senses30 leads people to adopt indirect, behavioral strategies to avoid or minimize involuntary shifts of attention. When we want to pay full attention to a phantasma of the imagination or to an inner operation of the mind, we close our eyes - we obstruct the sensory channel so as to prevent external objects from stimulating our sense organs<sup>31</sup>. Another usual strategy is to choose an appropriate environment: a silent place, for instance, reduces the effects of noise on concentration. Citing German and Latin proverbs<sup>32</sup>, Wolff praises the benefits of working in the early morning, when only "few objects act on the sense organs" and the body is not yet disturbed by hot weather, human sounds, or its own physiological needs and processes<sup>33</sup>. This and similar phenomena (like the fact that some scholars love staying up at night to work) confirm the general truth that the fewer things stimulate the senses, the

<sup>29</sup> *Ibidem*, § 242n.

<sup>30</sup> Wolff labels it "a common notion" (ibidem, § 238n).

<sup>31</sup> Ibidem, § 239.

<sup>32</sup> See Wolff (1724), § 87: "Morgen-Stunde, habe Gold im Munde". Wolff (1732), § 240n: "aurora [...] Musis amica".

<sup>33</sup> Ibidem, § 240n. See also Wolff (1720), § 271.

easier it is to keep one's attention focused34.

# III. Degrees of Attention

However effective in countering distraction, the indirect strategies just mentioned do not expand the limits of our attention faculty. Still, these limits are neither constant nor universal. As with the other cognitive faculties, Wolff thinks that attention naturally develops up to a certain, individually variable degree, then requires purposeful application in order to progress further:

Newborn children hardly pay attention to anything, but their attention to the objects must be gradually aroused, and so they eventually get used to paying attention to some things. However, although with the passing of time they learn to pay attention to several objects, their attention is nevertheless only light and does not progress to a higher degree at a later age unless one often repeats the acts that pertain to that degree, that is to say, unless one previously does the exercises<sup>35</sup>.

It is exercise and constant training that explain the extraordinary attentional powers traditionally ascribed to ancient celebrities like Archimedes and Julius Caesar as well as modern mathematicians like Christopher Clavius, John Wallis, and Pierre Rémond

<sup>34</sup> Wolff (1732), § 240.

<sup>35</sup> Ibidem, § 248.

de Monmort<sup>36</sup>. Exercises, however, vary according to the specific dimension of attention that one wants to improve. Wolff does not consider attention to be a one-dimensional magnitude. On the contrary, he distinguishes five parameters according to which the different degrees of attention can be measured<sup>37</sup>: intensity, longevity, extension, selectivity, and presence of mind<sup>38</sup>. For each parameter, the actual degree of one's attention is considered to be individually variable.

- 1. Intensity measures the power to increase concentration so as to obscure sense perceptions, which would otherwise divert attention<sup>39</sup>. Some people can be so absorbed in their intellectual activities that they hardly notice any sensory stimulation, whereas other people immediately respond even to the slightest inputs from the senses<sup>40</sup>. Thus, one's level of attention is determined by one's threshold of apperception of sensory perceptions: the higher the threshold, the more intense the attention.
- 2. The longevity of attention measures its duration over time<sup>41</sup>. Some people can concentrate on the same subject or follow a single thread of

<sup>36</sup> Ibidem.

<sup>37</sup> The phrase "measure of attention" (attentionis mensura) occurs ibidem, § 244n. Wolff uses the term 'degrees' (gradus) to denote both the five parameters or dimensions of attention and the various degrees that they may acquire. To avoid ambiguities, I use 'parameter', 'dimension', or 'measure' (depending on the context) to translate 'gradus' in the former sense.

<sup>38</sup> These five abstract terms are absent from Wolff. I borrow the names of the first three dimensions from Hatfield (1998), p. 16. Hatfield calls 'voluntary control' what I call 'selectivity' and does not list the fifth dimension. See also Braunschweiger (1899), pp. 39–47.

<sup>39</sup> Wolff (1732), § 243n.

<sup>40</sup> Ibidem, § 243.

<sup>41</sup> Ibidem, § 244n.

thought for a relatively long time, whereas "the attention of other people vanishes immediately"<sup>42</sup>. Mathematicians and philosophers excel at this, as they are trained to survey and carry out long proofs. By contrast, even a short demonstration may cause beginners in mathematics to experience a lack of attention. This difference in the degree of individual attention also provides supporting evidence for the claim that even mental properties are quantifiable and therefore liable to measurement and mathematical knowledge, just like any other finite thing (be it material or immaterial)<sup>43</sup>.

3. The extension of a person's attention indicates how many objects she can concentrate on at one time: "Some people can pay attention to several things at the same time; other people to only one thing"<sup>44</sup>. This acknowledgment of different individual ranges shows that Wolff is not committed to the longstanding prejudice that attention must focus on a single object at a time<sup>45</sup>. Of course, he believes the smallest extension to be the most frequent case by far, since most people experience that they cannot pay simultaneous attention to what they see and what they hear or otherwise perceive, and that their attention decreases when divided among different objects – whence the Latin saying, *Pluribus* 

<sup>42</sup> Ibidem, § 244.

<sup>43</sup> Wolff (1728), § 13n, § 14n.

<sup>44</sup> Wolff (1732), § 245.

<sup>45</sup> It is unclear, however, whether Wolff intends to ascribe the same level of clarity to all the simultaneous targets or whether he acknowledges multiple levels and a possible gradation from the focal center to the periphery of the perceptual field: see Hatfield (1998), p. 19.

intentus minor est ad singula sensus<sup>46</sup>. However, he also maintains that some people "can pay attention to several things at once, so as to be equally aware of them", regardless of whether those objects are perceived by the same sense or different senses<sup>47</sup>. The anecdote of a multitasking Julius Caesar, allegedly able to dictate four letters while writing one himself, is cited as a notable example of divided attention<sup>48</sup>. Psychology, claims Wolff, often has something to learn from such historical accounts, for cases of this kind are less unusual than one would think<sup>49</sup>.

4. Selectivity expresses the most idiosyncratic aspect of individual attention. Whereas "some people can pay the same attention to whatever object", other people manage to concentrate only on certain matters and pay slight or no attention to any other thing<sup>50</sup>. Although Wolff does not use the term 'selectivity', he has a name for its opposite, namely "the indifference of attention"<sup>51</sup>. Erudites typically display a highly selective attention. They easily focus on their beloved objects but they entirely neglect what is not of special interest to them:

Poets devote attention to the verses they read and the objects whose concepts are useful to compose verses. It is difficult for them to pay the same attention to other things. A geometer can devote amazing attention to algebraic

<sup>46</sup> Wolff (1732), § 245n.

<sup>47</sup> Ibidem, § 245.

<sup>48</sup> On this anecdote, see also James (1890), vol. I, p. 409.

<sup>49</sup> Wolff (1732), § 245n.

<sup>50</sup> Ibidem, § 246.

<sup>51</sup> Ibidem, § 252.

calculations and geometric figures, but if he has to read verses or other things that are alien to his field, he can hardly pay attention to them, even though he can understand them<sup>52</sup>.

This description is reminiscent of the ancient stereotype of stargazers and theoreticians, who do not even watch where they put their feet<sup>53</sup>. Wolff's literati are so absorbed in their readings and meditations that they tend to neglect "their business, domestic affairs, and even body care"54. Furthermore, this context brings to light the important link between the cognitive faculty of attention and the appetitive faculty. Wolff defines appetite as "the inclination of the soul to an object according to the good perceived in it"55 and maintains that we desire what we represent to ourselves as good<sup>56</sup>. Appetite in general includes both the sensory appetite (appetitus sensitivus), which "arises from a confused idea of something good [ex idea boni confusa]"57, and the will or rational appetite, which "arises from a distinct representation of something good"58. The reason why the soul is inclined toward good is that the cognition of something good always gives us pleasure<sup>59</sup>, for what is good perfects our state, and pleasure is the intuitive cognition of some

<sup>52</sup> Ibidem, § 246.

<sup>53</sup> See Blumenberg 1987.

<sup>54</sup> Wolff (1732), § 246.

<sup>55</sup> Ibidem, § 579.

<sup>56</sup> Ibidem, § 586.

<sup>57</sup> Ibidem, § 580.

<sup>58</sup> Ibidem, § 880.

<sup>59</sup> Ibidem, § 558.

perfection<sup>60</sup>. Hedonistically, pleasure determines our appetites. However, since appetite "influences the determination of attention"<sup>61</sup>, pleasure also plays a fundamental role in directing our attention. Different categories of people direct their attention to different kinds of objects, according to the pleasure they can take in them. Wolff even interprets the famous Virgilian motto *Trahit sua quemque voluptas* (everyone is attracted by their own pleasure: Ecl. II 65) as indicating "the reason that determines attention"<sup>62</sup>. Attention has a hedonistic root.

5. As Wolff describes it, the presence of mind appears to be a specific consequence of indifference or low selectivity. Indeed, the fifth measure of attention expresses the ability to (and habit of) "pay(ing) full attention to the present thing, whatever it might be", whereas its opposite, the absence of mind, consists in paying attention to the present thing only if it belongs to the class of objects that one is used to considering<sup>63</sup>. Thus, selective attention entails a sort of protracted distraction from the present thing, from what is given in the concrete circumstances at hand. As Wolff points out, this mental state corresponds to the neglect of everyday life that has been described above as typical of erudites and literati. In addition to these people, however, Wolff now lists two further categories that often lack presence of mind: 1) artists (artifices), "some of whom do not like anything but the art they cultivate", and whose attention

<sup>60</sup> Ibidem, § 511 (more on this below).

<sup>61</sup> Ibidem, § 246n.

<sup>62</sup> Ibidem.

<sup>63</sup> Ibidem, § 247.

is therefore constantly absorbed in their beloved artistic matters; and 2) people (mostly women: the "lower sex"!) whose attention is entirely captured by Venus (i.e. sexual pleasure), so that they can hardly attend to other activities<sup>64</sup>. This confirms that Wolff deems pleasure in all its forms a powerful attention trigger. (I will get back to the role of pleasure and specifically aesthetic pleasure in sections 7–8.)

Whereas the first four parameters of attention have mainly epistemic consequences, as they influence our knowledge of things, the last one is also beneficial to praxis, as it directly affects our situated agency, or the "legitimate and prudent determination of free actions"65. Having a "mind present to everything [animus ad omnia praesens]" is relevant from both an ethical and a juridical point of view, for "lack of the attention that must be constantly paid to any present thing gives rise to negligence [culpa], which moralists and jurisconsults oppose to malice [dolo] in human actions"66. Unlike mere inadvertence, negligence is the agent's fault, precisely because it is the consequence of a cognitive behavior - the absence of mind – that the agent could (and should) have avoided. Negligent ignorance is no excuse<sup>67</sup>.

<sup>64</sup> Ibidem.

<sup>65</sup> Ibidem, § 247n.

<sup>66</sup> Ibidem.

<sup>67</sup> See Favaretti Camposampiero (2017), pp. 119-120. A somewhat comparable position on inattention and error appears in Leibniz: see Favaretti Camposampiero (2016), pp. 741-742.

# IV. Attention Training

A striking aspect of Wolff's phenomenology of attention is the ambivalent cluster of abilities, idiosyncrasies, and ineptitudes that characterize the concentration powers ascribed to intellectuals and artists. On the one hand, these social categories excel among cognitive agents in terms of attention intensity, longevity, and perhaps even extension. On the other hand, such outstanding powers not only appear conditional on the specific objects and circumstances of their application, but they also turn into disadvantages if considered in their practical, concrete, ordinary-life implications, for the high rate of selectivity determines a neglect of everything that is not pleasurable, in particular the kind of occupations and urgencies that require immediate presence of mind. The very ability to manage attentional resources that makes intellectuals and artists excel in their own fields is negatively counterbalanced by their poor management of the same resources when it comes to focusing on unfamiliar or uninteresting matters.

Notwithstanding its individual limits, Wolff maintains that everyone's attention can be improved in all its five dimensions, whose actual degrees depend not only on inborn talents but also (and perhaps primarily) on use and exercise. Once again, historical anecdotes provide supporting empirical evidence. Mathematicians like Archimedes, as well as "other erudites and artists", did not get their excellent degree of attention "from nature"; rather,

"they obtained it by means of continuous use" <sup>68</sup>. Nevertheless, Wolff also acknowledges that there are significant differences in the individual predisposition to cognitive training, as well as in the predispositions to several other cognitive tasks: "Some people simply chance upon the exercises by which they obtain their abilities [habitus], and they master these abilities without any opinion or intention, although others must work very hard to acquire them" <sup>69</sup>.

On the other hand, Wolff's praise of the effectiveness of training in developing human cognitive powers is complemented by his awareness that no ability that must be acquired through constant exercise can result in a permanent possession. Just as frequent practice makes it possible for virtually everyone not only to acquire and improve but also to preserve their attentional abilities70, so lack of exercise and use inevitably causes a decay of the acquired abilities or even their loss<sup>71</sup>. Wolff has great confidence in the educational virtues of mathematics and claims that the study of this discipline is "in its own kind the most excellent means to acquire attention" - though "not every kind of attention"72. As hinted above, each dimension of attention requires a specific treatment in order for it to develop beyond its ordinary degree. Despite their differences, such treatments always take the general form of exercise, which consists in the "repetition of acts that are

<sup>68</sup> Wolff (1732), § 248.

<sup>69</sup> Ibidem, § 251n.

<sup>70</sup> Ibidem, § 255.

<sup>71</sup> Ibidem, § 254.

<sup>72</sup> Ibidem, § 248n.

specifically or generically the same"<sup>73</sup>. Exercises also have degrees, depending on both the number of repetitions for each session and the number of sessions<sup>74</sup>.

- 1. Since the intensity of attention coincides with its resistance to competing stimuli, attention can be intensified by training to keep it focused on the chosen object while gradually increasing the environmental noise and the force of sense impressions in general<sup>75</sup>.
- 2. To increase the longevity of attention, one should simply train to protract one's attention for longer and longer intervals while focusing on the same object<sup>76</sup>. Here, Wolff makes an interesting point concerning the relation between attention span and awareness of the passing of time: "For those who excel in this dimension of attention, time passes beyond all expectation, since they pay no attention at all to the succession of things, from which the notion of time arises, but they devote their attention entirely to the object with which they are concerned"<sup>77</sup>. Furthermore, Wolff emphasizes the role of appetite in influencing the duration of our attention span "in several ways"<sup>78</sup>.
- 3. After acquiring the abilities to protract attention for a certain time in spite of environmental stimuli, we should train to distribute our attention first between two objects, then among three, four,

<sup>73</sup> Ibidem, § 195.

<sup>74</sup> Ibidem.

<sup>75</sup> Ibidem, § 249.

<sup>76</sup> Ibidem, § 250.

<sup>77</sup> Ibidem, § 250n.

<sup>78</sup> Ibidem.

and so forth<sup>79</sup>. In this way, we gradually acquire the power to divide attention among multiple objects. This priority order of the various trainings is not random, for Wolff maintains that the ability to attend to several things at the same time requires the preliminary development of both intensity and longevity.

- 4. Wolff recommends two exercises to increase the indifference of attention. The first exercise is based on chance: it consists in striving to pay attention to whatever object accidentally occurs to us. By contrast, the second exercise is based on a deliberate choice: a person should train to focus on the very objects that he usually neglects, "especially those that he deems unworthy of his attention and from which the mind recoils, so to speak" Once again, Wolff mentions appetite as a decisive factor whose influence we should carefully consider when planning our attentional strategies<sup>81</sup>.
- 5. As concerns the presence of mind, Wolff claims that it can be acquired by means of the same training that makes attention indifferent which confirms our impression that the presence of mind follows from a low degree of selectivity (see above). In relation to the moral relevance of this dimension of attention, Wolff praises Confucius for his habit of considering the least important issues with the same degree of attention as the most important ones<sup>82</sup>.

Wolff's argument to the effect that every

<sup>79</sup> Ibidem, § 251.

<sup>80</sup> Ibidem, § 252.

<sup>81</sup> Ibidem, § 252n.

<sup>82</sup> Ibidem, § 254n, § 255n.

dimension of our attention can be increased by suitable training is based on the idea that even qualities are quantifiable in terms of degrees. Consider, for instance, intensity or the power to concentrate in spite of sensory obstacles. This power is not equally distributed but varies across individuals in terms of quantity: some have it more than others. Thus, "attention has a quantity. However, attention is a faculty of the soul, one of its intrinsic determinations; hence, it is a quality of the soul"83. Thus, the power under consideration is "a quantity of a certain quality"84, that is, a degree, which can therefore be increased by exercise. The same holds for the other four measures of attention as well<sup>85</sup>. Although this argument is not entirely clear to me86, its interest lies primarily in the attempt to justify the application of a quantitative approach to psychological entities and phenomena, which is perfectly in keeping with Wolff's idea of psychometry<sup>87</sup>.

# V. Attention and the Brain

A further aspect of attention that Wolff considers susceptible to improvement through training is the extent of our voluntary control of

<sup>83</sup> Ibidem, § 249.

<sup>84</sup> Ibidem.

<sup>85</sup> Ibidem, §§ 250-253.

<sup>86</sup> In particular, it seems to be affected by the ambiguous use of the term 'degree' that has been noted above.

<sup>87</sup> See Feuerhahn (2004).

its direction88. Indeed, ordinary experience shows that the we can change the direction of attention at will: "We are able to successively shift our attention to the various parts of the total perception to our liking"89. This specific power to gradually inspect an object by shifting our mental focus from one part to the other so as to scan the object entirely is what Wolff calls "the faculty to reflect"90. Accordingly, reflection is "the successive direction of attention" to the various parts or features that are present in the thing perceived91. Since reflection leads to distinct perceptions, which are the first step in the formation of universal concepts and the very basis of intellectual cognition, the power to direct attention turns out to play a key role in the operations of the higher cognitive faculties as well<sup>92</sup>.

More relevant to our present purposes, however, is the treatment of this topic in the framework of rational psychology, which can be considered an attempt to explain, and not simply to describe, the phenomenon of the direction of attention<sup>93</sup>. Its explanatory pattern consists in exploring the physiological basis of mental activity. Rational psychology does not consider the mind as separated from its body; on the contrary, this discipline adopts a psychophysical perspective, which starts from the

<sup>88</sup> Ibidem, § 256n.

<sup>89</sup> Ibidem, § 256.

<sup>90</sup> Ibidem, § 257.

<sup>91</sup> Ibidem.

<sup>92</sup> Ibidem, § 266ff.

<sup>93</sup> Empirical psychology, by contrast, only aims to show "quod plures dentur attentionis gradus", without investigating "quaenam sint eorundem graduum rationes" (*ibidem*, § 245n).

assumption that every mental fact (with the sole exception of apperception) has a bodily counterpart in some modification of the brain. According to Wolff, this psychophysical correspondence is a mere fact, which does not by itself entail any causal relation between mental and brain states. Indeed, the question of whether mind-body causation is real is addressed only in a later section of Psychologia rationalis by comparing the three available hypotheses, namely physical influx, occasionalism, and pre-established harmony. Nevertheless, Wolff maintains that what happens in the body may help explain what happens in the soul, by casting light on its otherwise hidden reasons: "In rational psychology, we give the reason [rationem reddamus] for that which is in the soul, but in virtue of the soul's essence and nature such reasons are often revealed by that which happens in the body. Thus, we are committed to explaining what changes happen in the body when we experience certain changes in the soul"94. This passage is intended to justify the physiological character of Wolff's approach to attention in the framework of rational psychology. In particular, the rational psychologist is committed "to explaining what happens in the body when we direct our attention to something perceptible"<sup>95</sup>. As concerns the direction of attention, the concomitance of psychological and physiological phenomena has an explanatory value: "That which happens in the body is the reason for

<sup>94</sup> Wolff (1734), § 357n.

<sup>95</sup> Ibidem.

that which happens in the soul"96.

What could be the physical counterpart of a mental phenomenon like attention? Remember that Wolff links attention to an increase of perceptual clarity. According to his psychophysical theory, whenever the mind perceives an object, the brain forms a "material idea"97. Roughly speaking, Wolffian material ideas are akin to Cartesian brain traces: 1) they are motor inputs that either propagate through the nerves from the sense organs to the brain (in the case of sensations) or originate in the brain itself (in the case of the imagination and of intellectual operations); and 2) they provide the organic body with a system of internal, purely material representations, which makes constant psychophysical correspondence possible98. Any increase in the clarity of a certain perception may correspond to an increase in the relative speed of the corresponding material idea, to a slowing down of the surrounding material ideas, or to the persistence of that material idea against a background of swiftly changing material ideas<sup>99</sup>. In all these three cases, the difference in motion that distinguishes a certain material idea from the others has the effect of making the represented object more salient to perception. Thus, attention and its shifts are consistently associated with variations in the kinetic properties of such physical correlates of perception.

<sup>96</sup> Ibidem, § 363n.

<sup>97</sup> Ibidem, § 112.

<sup>98</sup> See Favaretti Camposampiero (2009), pp. 588-608.

<sup>99</sup> Wolff (1734), § 357.

# VI. Attention and the Eyes

How does this discovery of the physiological basis of attention contribute to explaining the various phenomena that *Psychologia empirica* has ascribed to this cognitive power? In addition to conveying sensory inputs to the brain, material ideas also supply motor outputs to the muscles. Since eye movement is one of such outputs, it can also be causally connected with the brain activity related to paying attention to visible objects. Indeed, Wolff's strategy in *Psychologia rationalis* consists in correlating attention with sight, the direction of the mental eye with the direction of the physical eye. Clearly, this strategy is based on the implicit assumption that attention to visible objects is paradigmatic of how attention works in general.

The correlation is established as follows: "If we direct our attention to a visible thing, we turn our eyes directly to it" 100. Imagine "you are looking at a man's face and want to direct your attention to his mouth: you will experience that you turn your eyes directly to the mouth" 101. The reason for this automatic behavior is that an object is seen more clearly than others if it is placed "directly before the eye" – i.e. roughly on the visual axis, in such a position that, if the object emitted rays toward the eye, they would be "perpendicular to the center of the pupil" 102. Since directing attention is related to

<sup>100</sup> *Ibidem*, § 358. The eyes tend to move even when attention focuses on a *phantasma* of the imagination: *ibidem*, § 365.

<sup>101</sup> Ibidem, § 358n.

<sup>102</sup> Ibidem.

perceptual clarity, its physical counterpart is that the brain orients the eye toward the object to provide a clearer perception of it by means of a faster-moving material idea.

Given this psychophysical correlation, the geometrical laws of optics can be invoked to explain why our attention to visible objects has such narrow limits. According to Wolff, our attention field is not even broad enough to cover a human face in its entirety. At most, we can focus on a person's mouth, but as soon as we try to include the nose, our eyes move upward and our attention shifts to the new focal point 103. This is because only the center of our visual field is perpendicular to the center of the pupil and this position can be occupied by only one (portion of an) object at a time; thus, our visual attention is necessarily restricted to the object or part that has the required geometrical relation to our eye<sup>104</sup>. Of course, it is possible to broaden our attention field by weakening our concentration, but this only shows that the intensity of attention is inversely proportional to its extension: "The greater attention we pay to a visible thing, the smaller the part to which attention is directed"105. Our attention is weaker if it has to include objects whose "rays" are not exactly perpendicular to the center of the pupil, since such objects are less clearly perceived. Wolff even suggests an analogy between this phenomenon and the mechanical principle that a perpendicular

<sup>103</sup> Ibidem, § 359n.

<sup>104</sup> Ibidem, § 359.

<sup>105</sup> Ibidem, § 360.

stroke is stronger than an oblique one 106.

On the basis of his optics, physiology, and empirical psychology, Wolff seeks to isolate and explain the various factors that contribute to orienting our attention in any given context. Although he does not formulate an express distinction between top-down and bottom-up control of visual attention, his list of attentional distribution factors includes, on the one hand, the will, and on the other hand, certain features of perceptual stimuli. Moreover, his occasional reference to volitional factors as "extrinsic reasons" – as opposed to the reasons that are intrinsic to the total perception itself - suggests a roughly analogous distinction 107. Thus, we may reasonably maintain that Wolff acknowledges and analyzes both voluntary attentional control and stimulusdriven mechanisms of attentional capture. Leaving aside the former and the related issue of freedom of attention<sup>108</sup>, the next section will focus on the latter, for they are relevant to the aesthetic issues addressed in the final sections.

# VII. Attention Triggers

Wolff considers five main factors that have the power to influence the direction of our attention from the bottom up: spatial relations, perceptual

<sup>106</sup> Ibidem, § 360n.

<sup>107</sup> Ibidem, § 368n; see below.

<sup>108</sup> See esp. ibidem, §§ 363-364.

clarity, perceptual novelty, pleasure, and displeasure.

- 1) In the absence of other determining reasons, the direction of visual attention is determined by the relative positions of the observer and the objects, hence by merely optical reasons. By default, "attention is attracted by the part of the visible that is placed directly before the eye or, if we are not used to accurate contemplations, by the visible thing that is placed more directly before the eye" than the other objects in the visual field <sup>109</sup>. That is why we should be careful about what we look at, warns Wolff, as what captures our attention is likely to trigger a sequence of ideas governed by the imagination, which can have morally relevant consequences <sup>110</sup>.
- 2) The second factor lies in the formal differences between perceptions, that is, in their differing degrees of clarity. As with the first factor, Wolff qualifies his claim with a sort of *ceteris paribus* clause concerning the absence of other simultaneous attention triggers: "If we perceive several things with different senses and there is no reason to direct our attention to anything else, we direct it to what is perceived most clearly"<sup>111</sup>. A sharp pain, for instance, is likely to draw our attention to the detriment of all concurrent sensations, unless we have other, more pressing concerns. In most cases, however, we do have reasons to turn our attention to something that is not our clearest present perception. Thus, concludes Wolff, we may hardly experience that default state in which

<sup>109</sup> Ibidem, § 361.

<sup>110</sup> *Ibidem*, § 361n.

<sup>111</sup> Ibidem, § 367.

it is the intrinsic distribution of clarity in our total perception that entirely determines the direction of our attention<sup>112</sup>.

A further factor, which Wolff treats separately, appears to be merely the physical counterpart of the second one. Among several objects acting on different sense organs, attention is drawn to the one that acts with most strength and thus produces a faster-moving material idea in the brain in the shortest time<sup>113</sup>. Here, the scale of attraction concerns the perceived objects themselves rather than our perceptions of them. Wolff's emphasis on the polysensory character of the phenomena under consideration confirms that he does not take eyesight to necessarily prevail on the other senses. A piercing sound, for instance, may divert our attention from visual contemplation<sup>114</sup>.

3) The third factor is the "objective reason"<sup>115</sup>, which consists in the material difference between perceptions, that is, in their representational content. Once again, a factor's effectiveness in grasping our attention is conditional to the lack of other prevailing influences. *Ceteris paribus*, what makes a certain perceptual information salient in the context of our total perception is its relative novelty: "If the senses perceive several things and there is no reason to direct our attention to anything else, we direct it to what has little similarity to the things that we have already

<sup>112</sup> Ibidem, § 367n.

<sup>113</sup> Ibidem, §\$ 369-370.

<sup>114</sup> Ibidem, § 370n.

<sup>115</sup> Ibidem, § 368n.

perceived at some other time"<sup>116</sup>. Experience shows that the unusual attracts attention immediately and that animals are particularly susceptible to the lure of the unusual. As their attention is less influenced by "extrinsic reasons" (i.e. by volitional control), animals have a clearer perception of the "objective reason"<sup>117</sup>.

After these three attractors of attention, Wolff considers two mechanisms that govern, respectively, the fixation or diversion of attention. Whereas the former three factors pertain to features of the object as perceived by the subject, the fourth and fifth factors depend on the subject's response to a certain perceptual stimulus.

- 4) The fourth factor is pleasure (*voluptas*): "If we perceive pleasure from a certain thing, we fix our attention on that thing and keep it fixed on it"118. Wolff sketches a teleological justification of this phenomenon to the effect that attention is used by perceivers as a means to pursue their pleasure, which therefore appears to be the final cause of the attentional mechanism. By arousing the perceiver's desire for a certain thing, pleasure stimulates attention: "The pleasure we perceive from the thing is the stimulus that impels us to attention, insofar as it is a stimulus to do what gives us possession of that pleasure or leads us to its fruition"119.
- 5) The fifth factor is displeasure (taedium). Whereas pleasure arises from the intuitive cognition

<sup>116</sup> Ibidem, § 368.

<sup>117</sup> Ibidem, § 368n.

<sup>118</sup> Ibidem, § 371.

<sup>119</sup> Ibidem, § 371n.

of some perfection, displeasure arises from the intuitive cognition of some imperfection<sup>120</sup>. Thus, displeasure is not a mere lack of pleasure but its opposite<sup>121</sup>, which consequently causes the opposite effect on attention: it impels the perceiver to divert her attention from the thing from which she perceives displeasure. Again, the process is teleologically oriented, since displeasure acts as a negative final cause, so to speak. Feeling displeasure from a certain thing, the soul develops an aversion to that thing<sup>122</sup> and wishes to escape the very thought of it. Averting attention thus appears to the soul as a means to achieve that end<sup>123</sup>.

# VIII. Attention and Beauty

Wolff adduces three examples to illustrate his hedonistic account of attention fixation and diversion: a new book, a young beauty, and a painting. The pursuit of pleasure may take the form of intellectual interest, as in the case of the bookworm, whose attention is immediately captured by the newly printed volume that he sees when entering a bookshop<sup>124</sup>. More commonly, the promise of pleasure

<sup>120</sup> Wolff (1732), § 518.

<sup>121</sup> This opposition is the reason for the translation of *voluptas* and *taedium* adopted here. Indeed, Wolff laments the lack of a Latin word "that would be the opposite of voluptas by virtue of etymology", like the words *Lust* and *Unlust* in German (*ibidem*, § 518n).

<sup>122</sup> Ibidem, § 592.

<sup>123</sup> Wolff (1734), § 372.

<sup>124</sup> Ibidem, § 371n.

that captivates our visual attention arises from beauty and may take the form of physical attraction: "Thus, if one perceives pleasure from a girl's beauty, when seeing a young woman of commendable beauty he turns his eyes to her and keeps them fixed, which is evidence that his attention is directed to her"<sup>125</sup>. By virtue of the psychophysical correspondence between mental focus and visual focus, the direction of our gaze reveals the orientation of attention.

Aesthetic values also account for the diversion of the gaze. Whereas beauty arouses pleasure, ugliness causes displeasure, which stimulates visual avoidance of the unsightly object or person. Wolff does not consider this phenomenon in relation to the human body but in relation to artistic beauty and its opposite. His third example concerns the opposite visual behaviors that connoisseurs display when looking at a piece of art, depending on whether they like it or not:

Thus, a connoisseur of pictorial art perceives displeasure from a painting that infringes the rules of art, just as he perceives pleasure, by contrast, from a painting that fully satisfies them. Therefore, if he is offered a painting that infringes the rules of art, he does not deem it worthy of his attention, so no persuasion can induce him to contemplate it; just as he immediately turns all his attention to a painting that conforms to the rules of art, so he cannot be distracted from contemplating it<sup>126</sup>.

<sup>125</sup> Ibidem.

<sup>126</sup> Ibidem, § 372n.

These remarks are not casual. They are wellconsidered reflections rooted in Wolff's early work on aesthetic experience and properties. In both his German and Latin treatise on civil architecture, Wolff provides an objectivist characterization of beauty in terms of perfection: "Beauty is either a true perfection or an apparent one, insofar as it is sensed or perceived"127. The same idea is still present in Psychologia empirica, which characterizes beauty as "the observability of perfection" 128. Things are beautiful if and only if they are perfect and their perfection is open to sense perception. According to whether the perceived perfection is true or apparent, the beauty that the perceiver ascribes to the object is itself true or apparent ("false", says the German text)129. On the other hand, perfection is characterized in teleological terms by reference to the object's intended purposes. Architectural perfection, for instance, consists in the fact that the entire building and all its single parts fully conform to the ends of the builder<sup>130</sup>.

Being ultimately anchored in conformity to intentions and purposes, aesthetic values are not

<sup>127</sup> Wolff (1738), § 10. Cf. Wolff (1750), § 9. Wolff's Anfangs-Gründe der Bau-Kunst and Elementa architecturae civilis first appeared in 1710 and 1715, respectively, but (unless otherwise indicated) I quote from the later, revised editions.

<sup>128</sup> Wolff (1732), §§ 544-545: "Pulchritudo consistit in perfectione rei, quatenus ea vi illius ad voluptatem in nobis producendam apta. [...] Hinc definiri potest Pulchritudo, quod sit rei aptitudo producendi in nobis voluptatem, vel, quod sit observabilitas perfectionis: etenim in hac observabilitate aptitudo ista consistit". Wolff's inclination to reduce beauty to perfection also emerges from the fact that the *German Metaphysics* accounts for the enjoyment of artworks in terms of perfection and pleasure alone, without even mentioning beauty: see Wolff (1720), § 411.

<sup>129</sup> Wolff (1750), § 11. See Krueger (1980), pp. 58-59.

<sup>130</sup> Wolff (1750), § 8; Wolff (1738), §§ 8-9.

arbitrary but objective: "Since beauty is founded on perfection, but perfection depends on the ends, beauty is not arbitrary"<sup>131</sup>. Nevertheless, Wolff's concept of beauty also has a subjective side132, for it involves a reference to perception, which distinguishes it from mere perfection and makes it possible to account for pleasure and taste. Since pleasure is precisely the feeling caused by perceiving perfection<sup>133</sup>, the perception of beauty gives us pleasure and makes us like its source: "Since the sense of perfection arouses pleasure, we like beautiful things [venusta placent]" 134. But if beauty depends on intrinsic features of an object such as its conformity to certain purposes, then why is there no universal agreement about what is beautiful and what is not? Wolff's intellectualistic reply to the relativistic challenge is that we are often deceived by our prejudices, which make us perceive beauty where in fact there is none or only a semblance of it. If we took care of comparing things with their intended purposes, we would be able to evaluate their genuine perfection so as to discern true beauty from its semblance<sup>135</sup>.

Whereas this general account of aesthetic values is meant to apply to every perceptual object and thus to cover the entire range of our aesthetic

<sup>131</sup> Ibidem, § 14.

<sup>132</sup> Pimpinella (2006), p. 20, makes this point with reference to architectural beauty alone. Cfr. Krueger (1980), pp. 62-64.

<sup>133</sup> Wolff's psychology develops this Cartesian and Leibnizian idea by characterizing pleasure as the intuitive cognition of perfection: see Wolff (1720), § 404; Wolff (1732), § 511; Schwaiger (1995), pp. 51-66 and 120-189; Vesper (2006), pp. 26-28; and Vesper (2008).

<sup>134</sup> Wolff (1738), § 11. Cf. Wolff (1750), § 9.

<sup>135</sup> Ibidem, §§ 10-11; Wolff (1738), §§ 12-13.

experience, any further analysis of the link between beauty, perfection, and purposes appears to be relative to the specific type of objects considered. Even within the domain of artworks – leaving aside natural beings, whose perfection does not depend on the intentions of a human maker – the purposes to which their perfection relates are not the same for every kind of artifact or artwork. Concerning visual arts, Wolff assumes that their main intended purpose is representational: visual artists aim to provide faithful pictures of things. Accordingly, he maintains that a painting's perfection consists in its likeness to the thing it represents, its original or "prototype" 136. This is the source of our delight at seeing a good painting: by perceiving how much it resembles its object, we perceive its perfection, which causes pleasure.

Wolff, however, ascribes beauty even to the works of non-representational arts like architecture. Obviously, the criterion for their perfection (and consequently beauty) cannot be likeness. Buildings are intended to provide a safe, convenient, and comfortable space for the various indoor activities that people may want to perform inside of them. Thus, their perfection should be judged with respect to this practical purpose, hence in terms of firmness, comfort, usefulness, and so on. But what about beauty? Wolff's account of aesthetic values entails that the beauty of a building is not a further, independent perfection, but the perceptual manifestation of those essential perfections. A building that perfectly serves

<sup>136</sup> Wolff (1732),  $\S$ 544<br/>n. See Wolff (1720),  $\S$ 404; Kobau (2008).

its purpose is eo ipso beautiful, for "beauty is for the most part connected to stability and comfort" 137. If such a building does not necessarily appear beautiful to us, it is because we are misled by our prejudices (see above). That is why the architect should take care not only of the true beauty of the building, which simply supervenes on its essential perfections, but also of its apparent beauty. Any building should be made not only such as to be beautiful but also such as to appear beautiful, for otherwise people would not perceive its entire perfection but feel the lack of something essential to it, which would cause a prejudice and thus stir displeasure 138. Wolff's emphasis on the public dimension of aesthetic pleasure also relates to his awareness of the social, political, and economic functions of architectural beauty, both in terms of public happiness and in terms of personal or institutional reputation and prestige 139.

Here, however, the main difficulty in Wolff's approach comes to light. In order to account for the obvious fact that a perfectly functional building may nonetheless appear aesthetically imperfect, Wolff is forced to dissociate the objective side of beauty from its subjective side, which his theory aimed to keep together. Once he acknowledges that it is not enough for a building to perform its intended practical functions in order for it to appear beautiful, he must conclude by virtue of his own premises that being beautiful is not enough to appear beautiful.

<sup>137</sup> Wolff (1721), § 388.

<sup>138</sup> Wolff (1750), § 18; Wolff (1738), §§ 21-22.

<sup>139</sup> See Wolff (1721), § 388.

Perfection and perception, the two essential components of Wolffian beauty, tend to split into the true beauty of the object on the one hand, which may remain unperceived, and its apparent beauty on the other hand, which may not correspond to its real perfection.

## IX. Attention and Ornament

How do architects ensure that the buildings they plan will appear beautiful? Chiefly by respecting the rules of proportion and symmetry. Mathematical ratios lend beauty if they are perceived, "but we cannot perceive them unless we can measure them at a glance [durch das Augen Maaß]"140. "Since things that are unknown are not considered beautiful, only those ratios that are easily recognized at a glance [oculorum judicio] are beautiful"141, namely "the ratios that can be expressed by numbers that are not too large"142, such as 1:2, which is the most graceful of all ratios, since it is the easiest to perceive and recognize. The same holds for the relation of symmetry, which should govern the distribution of the architectural elements that can be seen together "at a glance [uno obtutu]" 143. Thus, in order to appear beautiful, a building must display well-proportioned and symmetrical forms.

<sup>140</sup> Wolff (1750), § 20.

<sup>141</sup> Elementa 1738, § 25.

<sup>142</sup> Wolff (1750), § 20.

<sup>143</sup> Wolff (1738), § 32.

This is where attention comes into play. As mentioned above, Wolff observes that the beauty of a painting, its conformity to pictorial rules, attracts connoisseurs' attention by arousing their pleasure. Something similar must hold for architectural works, in which the expert's eye can easily appreciate regularities that elude a lay person's sight: "[...] if a connoisseur of architecture contemplates a building that is erected according to the rules of architecture, from this he recognizes its perfection. But since experience confirms that he thereupon takes pleasure in it, it is once more evident that pleasure consists in the intuition of perfection"144. The limit of such aesthetic perfections is that they only capture the attention of a very select public. Even if certain buildings were and appeared beautiful by virtue of their construction and form, ordinary people might still fail to enjoy such beauty simply because they might not notice it. But if people disliked them, those buildings could not be deemed perfect.

Wolff's remedy to this limit is ornamentation. He claims that "a building must not only be beautiful but also adorned [zierlich]"<sup>145</sup>. The function of ornaments is not to increase the (real or apparent) beauty of the building but to entice people to pay sufficient attention to it, so as not to overlook its beauty: "Since no building can appear beautiful to us unless we contemplate it diligently [mit Fleiß], here and there the architect must also add to the building something that induces people to look at it

<sup>144</sup> Wolff (1720),  $\S$  404; see also  $\S$  411.

<sup>145</sup> Wolff (1750), § 18.

carefully [mit Ernst]"<sup>146</sup>. Architectural ornaments are expressly designed to attract attention<sup>147</sup>. This function is so essential to them that Wolff bases his whole characterization of ornaments on it: "We call nonessential ornaments [ausserwesentliche Zierathen] everything that is made only in order to lure passers-by into looking at the building"<sup>148</sup>. "A building's ornamentation is the apparatus of things that appear on the building in order to attract the eyes of passers-by"<sup>149</sup>.

Whereas art connoisseurs immediately turn their gaze on the artistic beauty that they are trained to recognize, ordinary passers-by need to focus on the artwork in order to perceive its aesthetic perfection. Ornaments help them do so by catching their attention and channeling it toward the intended object. The function that Wolff ascribes to ornamentation is not to be itself the object of visual pleasure<sup>150</sup>, but rather to make the artwork perceptually salient in the visual context.

It is precisely this power of attraction that makes ornamentation a double-edged sword. After praising its usefulness, Wolff recommends having only moderate recourse to it. Ornaments, he warns, should never be used extravagantly. If our aim is to

<sup>146</sup> Ibidem.

<sup>147</sup> According to Pimpinella (2006), pp. 19-20, "Sous cet aspect, Wolff suit Alberti qui appelait *ornamentum* la lumière de la beauté (*lux pulchritudinis*)".

<sup>148</sup> Wolff (1750), § 12.

<sup>149</sup> Wolff (1738), § 15.

<sup>150</sup> See, by contrast, a recent characterization of ornament as "something over and above the functional shape, added for the sake of visual pleasure" (Trilling 2001, p. 12). "Ornament is the only visual art whose primary if not exclusive purpose is pleasure" (*ibidem*, p. 14).

highlight the elegance of a building, then we should rely on the quality of the materials and the excellence of the work, rather than overload the construction with decorative elements<sup>151</sup>. Since ornaments easily capture people's attention, an excessive amount of them inhibits the contemplation of the building. Instead of directing our gaze toward the building's beauty, lavish ornamentation absorbs our attention entirely and thus conceals what it is meant to reveal. Overabundance is counterproductive, for it turns an attention trigger into a cause of distraction:

If there are too many ornaments, the eye remains fixed on them alone, and they distract people from the contemplation of the building's perfection. Thus an excess of these ornaments hinders what they should promote<sup>152</sup>.

If ornamentation is excessive, the eyes linger on it and, tired from contemplating it, they do not turn to the building itself – which goes against the purpose for which ornamentation is intended<sup>153</sup>.

While bound to draw upon this resource, the architect should see to it that the building's ornamentation does not "cloud its true or apparent perfection"<sup>154</sup>. Furthermore, some passages suggest that, according to Wolff, the size and distribution of ornaments should respect the rules of proportion

<sup>151</sup> Wolff (1750), § 14.

<sup>152</sup> Wolff (1710), § 18; cf. Wolff (1750), § 13.

<sup>153</sup> Wolff (1738), § 16.

<sup>154</sup> Ibidem, § 23. Cf. Wolff (1750), § 19.

and symmetry that govern the size and distribution of all the architectural components<sup>155</sup>.

Something of this cautious attitude toward ornamentation still survives in Kant's attempt to distinguish between the purely ornamental element, which "augments the satisfaction of taste" by merely adding to the beautiful form of the artwork, and the decorative element, which seduces "through its charm [Reiz]"156. More generally, every additional element that has the power to attract attention appears to play an ambivalent role in aesthetic contemplation, depending on whether it draws attention to itself or to the artwork. On the one hand, charms "actually do damage to the judgment of taste if they attract attention to themselves as grounds for the judging of beauty"; on the other hand, non-formal elements like the colors added to a painting may "enliven the representation through their charm, thereby awakening and sustaining attention to the object itself"157. Even Gadamer's reevaluation of the decorative function, though otherwise critical of Kant's approach, draws on the same basic idea that ornaments should attract attention but not retain it on themselves.

Certainly, [ornament] should not invite the attention to linger and be itself noticed as a decorative motif, but have merely an

<sup>155</sup> See, e.g., Wolff (1738), § 403 and § 411.

<sup>156</sup> Kant (1790), § 14, p. 111.

<sup>157</sup> Ibidem, pp. 109-110. On beauty, attention, and ornaments, see also ibidem, § 12, 107.

accompanying effect. [...] But on the other hand, it should not have a dead or monotonous effect, for as an accompaniment it should have an enlivening effect and in this way must, to some extent, draw attention to itself<sup>158</sup>.

In these late developments, we may still recognize the remnants of Wolff's warnings about the ambivalent power that ornaments have on our attentional behavior. We may thus conclude that Wolff's careful scrutiny of the dynamics of human attention was historically significant not only for the progress of modern psychology but also for the emergence of eighteenth-century aesthetics as an autonomous discipline firmly rooted in the study of the human mind. However, far from reducing aesthetics to a by-product of Wolffian psychology, the above reconstruction suggests that Wolff's interest in the relation between attentional mechanisms and aesthetic experience was even prior to his development of a full-fledged psychological theory of attention: Artistic beauty and related phenomena may have contributed to making him more attentive to the direction and shifts of the human gaze.

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<sup>158</sup> Gadamer (1997), p. 130.

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