Original Article



The Primacy of Form over Color: On the Discussion of Primary and Secondary Qualities in Herder's Pygmalion

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ABSTRACT

A key question in the art debate in the eighteenth and nineteenth centuries was whether color should be used for sculpture. Recent archaeological research had shown that the sculpture in ancient Greece was polychrome, but skepticism about applying paint to one's own work was widespread among modern sculptors. Some scholars explain this reluctance as a consequence of racial prejudice: the Greek athlete was an image of white Europeans. This article will try to show that a re-reading of Johann Gottfried Herder's book on sculpture can give us a different and more probable explanation. Herder shared Roger de Piles's view that the essence of sculpture was form, while color was most characteristic of painting. What set Herder apart from his predecessor, however, was his attempt to give the theory a scientific rationale. He found this in contemporary accounts of visually impaired persons' relationship to the sensory world and not least in empiricist philosophy's distinction between primary and secondary sensory properties.

I. SCULPTURE AND THE MYTH OF PYGMALION

The ancient myth about Pygmalion is perhaps best known from Ovid's Metamorphoses, which tells the story of a sculptor who fell in love with his own work after Aphrodite had infused the statue's cold substance with the breath of life. It was a beloved motif in art because it was interpreted as an allegory of sculpture. One well-known representation of the scene from Ovid is Jean Léon Gérôme's (1824– 1904) painting in the Metropolitan Museum of Art in New York, which shows the artist (Pygmalion) and his work meeting in a kiss, as the artist with closed eyes blindly embraces the naked body of his beloved with lustful hands (see figure 1). The artist's body movements are far more dynamic than those of the statue. The statue (which in Gérôme's time was identified with Galatea1) is more cautious, bending the upper part of her body gently in the direction of her creator, while keeping both feet firmly on the plinth and marble block (according to Ovid, she was shaped of ivory) from which she is carved, perhaps suggesting that her metamorphosis from dead stone to living flesh was a gradual process.

The use of color in the image reinforces the impression that this is a gradual transformation. Galatea's feet, which are gathered and stand statically at their base, have the chalk-white color of marble. Although the rest of Galatea's body remains pale (as was natural; the name Galatea means "she who is milk-white" in Greek, Γαλάτεια) we can clearly see that the upper part of her body is about to be filled with a gentle coloring. Her hair is almost black and her face, which is turned towards Pygmalion, has acquired a natural skin color.

Gérôme's work combines two arts; it is a painting but represents the carving of a statue. In using bright white for the not-yet-transformed parts of Galatea to show that it is of marble, Gérôme gave in to the aesthetic conventions of the time; in the nineteenth century, sculpture made of marble was al-

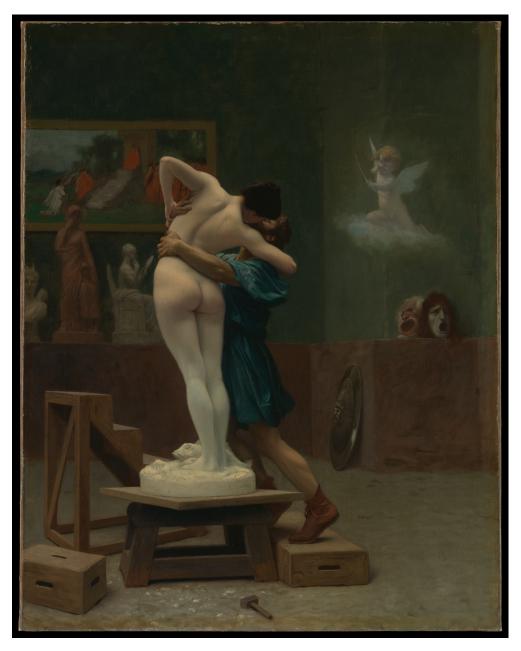


Figure 1. Jean Léon Gérôme, *Pygmalion* (1890). Oil on canvas. Metropolitan Museum of Art, New York. Credits: Public domain.

most always without surface treatment, even though it was well known that this was not the case in antiquity. Although Gérôme's compatriot, the well-known theorist and politician Antoine Chrysostome Quatremère de Quincy (1755–1849), published the book *Le Jupiter Olympien* on the evidence of polychromy in ancient Greek sculpture as early as around 1815, few of Gérôme's fellow sculptors dared to experiment with color. In fact, Gérôme himself was one of the few who challenged the rules, and his justification for doing so was the information he had obtained from recent archaeological excavations in Greece. This is demonstrated by his painting from 1893, *Painting breathes life into sculpture*, showing a woman, dressed in ancient Greek costume, in the process of coloring small statuettes of dancing women (see figure 2). The scene takes place in Tanagra, a town in Boeotia in Greece, where, in the nineteenth century, a number of tombs from the third and fourth centuries BC, equipped with painted terracotta statues, were discovered. Gérôme, who over time became increasingly interested in sculpture, even made



Figure 2. Jean Léon Gérôme, *The Antique Pottery Painter: Sculputrae vitam insuffiat picutra* (1893). Oil on canvas. 50.1 × 68.8 cm (19 ¾ × 27 1/16 in.) Art Gallery of Ontario. Gift of the Junior Women's Committee Fund, 1969. Image copyright Art Gallery of Ontario. Used by permission.

a statue called *Tanagra* where the marble surface was covered with touches of color. Although desirous to imitate that tradition, Gérôme was far more careful in his use of color than the Greek masters who inspired him. Using a technique similar to ancient encaustic, Gérôme contented himself with applying dashes of color to the statue's hair, eyes, mouth, and jewelry (see Lippert 2014, 109).

Even if most sculptors at the time were reluctant to color or tint their works, Gérôme was not the only one in the nineteenth century to experiment with such techniques. The most famous who did so was Quatremère de Quincy's close friend, the Italian sculptor Antonio Canova, who at the height of his fame was notorious for his attempts to mitigate the coldness of the marble surface by applying colored substances, and sometimes even metal accessories, to his works (Bindman 2016, 231). However, neither Canova nor Gérôme had much success among critics for the way they treated the marble surface. When Gérôme's *Tanagra* was exhibited at the Salon of 1890, the work met with strong criticism. One of Gérôme's fiercest opponents characterized coloring as a ravage of art. All the use of painting, gilding, polishing, and inserting of precious stones is, in reality, a manifestation of counterfeit taste that one must simply disregard and forget (Lippert 2014, 111; Héran 2004, 68, 70).

Skepticism against the use of color in nineteenth-century art theory was not due to a lack of knowledge about the art of antiquity but was related to the fact that sculpture was considered a tactile form of expression. The next chapter will discuss how Herder used the theme of "blindness" to show how the visually impaired can enjoy sculptural art, as opposed to painting, which, using colors, is a purely visual mode of expression. After this we will discuss to which degree Herder's ideas can be said to be based on philosophy, especially John Locke's empiricism, before, finally, the article concludes with an analogy between Herder and Johann Joachim Winckelmann—the leading authority on antique sculpture.

II. HERDER'S PYGMALION AND THE TOPIC OF BLINDNESS

One may wonder why artists and critics who claimed that Greek art was the greatest of all time—considering recent research's discoveries of ancient polychromy—were unwilling to accept the use of color

in contemporary sculpture. Today it is a widespread belief that the predilection for pure, white marble was dictated by racial prejudice. According to George L. Mosse, anthropologists used Greek classical sculpture to contrast Europeans and natives from other continents based on their resemblance to the idealized Greeks (Mosse 1995, 166; see also Hodne 2020a). This article will seek to demonstrate that a more likely explanation can be found in the negative treatment that the phenomenon of color received in the philosophical discourse concerning the role of the senses in cognition in the sixteenth and eighteenth centuries. In fact, the Pygmalion theme was not only popular among poets and painters; oddly enough, it was also central to the philosophical debate of this period. One famous writer who commented on this debate—on both its philosophical and aesthetical aspects—was the German theologian and philosopher Johann Gottfried Herder (1744–1803). In a book on sculpture that came out in two versions (in 1770 and 1778, respectively), entitled *Plastik: Einige Wahrnehmungen über Form und Gestalt aus Pygmalions bildendem Traum*, Herder presented the view that the different art forms are linked to their respective senses.

Herder's focus on the contrast between two senses in particular—the sense of sight and the sense of touch—paved the way for much of the thinking around art within the German language area in the nineteenth and early twentieth centuries. Classical archaeologists saw Herder's notion of the tactile as a more congenial and direct approach to the essence of Greek art, namely, its plasticity (Adam 2013, 245). Herder's thoughts on an original state, where it is the hand that guides the eye, are reminiscent of Alois Riegl's (1858–1905) genealogy of sensory experience. The term 'haptic' belongs to Riegl's vocabulary, but the opposition between haptic and optical modes of expression seems to be modelled after Herder's distinction between the sense of touch and sight. Riegl would also have agreed that tactile art forms are characterized by the fact that they seek their ultimate goal in the reproduction of physical objects in their material individuality (Barbisan 2013, 259). It is also possible to talk about a line further to Heinrich Wölfflin's (1864–1945) assessment of the purely optical approach as just one of several ways of perceiving reality (Barbisan 2013, 253).

Analyzing arts' relationship to the senses is best done by excluding senses from perception, touch from painting, sight from sculpture. Here, Herder could profit from stories about how visually impaired persons experience the world. To Herder, the fact that persons who are blind can benefit from the encounter with sculpture, but not painting, meant that sculpture as a form of art possessed certain qualities that were vital to sculpture, but not quite as important to painting. A painting consists of colors on the canvas that are invisible to a visually impaired person, while form is accessible to him through the sense of touch. From this, Herder concluded that form, line, and drawing are something we most associate with sculpture, while color belongs to painting. Thus, form and color each have their own form of expression; the former belongs to sculpture, the latter to painting. From this, one might be tempted to conclude that sculpture and painting are equal, only that sculpture, belonging to the realm of touch, is judged on the basis of its form, while painting, which is visible to our eyes, is measured by the quality of its coloring. For Herder, however, it was not quite that simple; he argued that sculpture possesses certain qualities that painting lacks. While color can only be perceived by the sighted, shape is accessible to both the sighted and the visually impaired. Experience also shows, Herder claimed, that the ability of visually impaired people to identify objects by touch largely compensates for lack of vision, due to the fact that the sense of touch provides a more direct and truthful access to objects than the sense of sight does.

There is little doubt that Herder drew much of his inspiration for his book from the famous French art critic and editor of the *Encyclopédie* Denis Diderot (1713–1784), as Diderot's name is mentioned in *Plastik*'s first sentence. In a letter to an anonymous Madame, usually referred to as the *Lettre sur les aveugles*, à *l'usage de ceux qui voient* (1749), Diderot discussed the fact that the visually impaired and sighted relate to the sensible world in different ways. Diderot's interest in the visually impaired's relationship to the perceptible world was inspired, among other things, by innovations in medical science. A couple of decades before Diderot's *Lettre*, the first successful cataract surgery had been performed by the British physician William Cheselden (1688–1752). Cataracts can be congenital, and a question that preoccupied both doctors and philosophers was how a visually impaired person who suddenly became sighted would experience reality; would he see the world in the same way as one who has been seeing all his life?

From Diderot's 'Lettre', Herder learned about Cheselden as well as another well-known example of blindness, namely the story of Nicholas Saunderson (1682–1739), a famous Cambridge professor

and friend of Isaac Newton. Saunderson lost his sight at the age of 1 year due to smallpox, but this did not stop him from pursuing an academic career as a mathematician. What fascinated many about his life story was his ability to replace the absence of sight with the sense of touch. A significant part of the discussion in Herder's *Plastik* is based on the consequences that can be deduced from the Saunderson case, which shows us the difference between how a visually impaired person and a sighted person experience the world, and how a visually impaired person can perfect other senses, both hearing and touch, so that lack of vision is almost not perceived as a loss. This was undoubtedly an important point for Herder. One of his goals was to change the status of the sense of touch by assigning it an important role in the perception of art. So far, the general practice in aesthetic thinking had been to grant the sense of sight a privileged status, not only in the experience of art, but in cognition in general. It was on this basis that the philosopher G.W.F. Hegel (1770–1831) distinguished between the theoretical senses of sight and hearing and the practical senses of smell, taste, and touch (Hegel 1973, 61; see also Barbisan 2013, 253). Herder also believed that the German language facilitated a 'supremacy of sight' due to the etymological connection between the words *Schönheit* (beauty) and *schauen* (to see). If we had succeeded in deriving from this sense alone a true phenomenology of the beautiful and the true, Herder said, we would have achieved a great deal. Unfortunately, this is not possible, because we would not have achieved "what is most fundamental, simple, and primary. The operation of the sense of sight is flat; it plays and glides across the surface of things with images and color" (Herder 2002, $39-40).^{2}$

The reason why a theory of beauty cannot be deduced from the sense of sight is that other senses are also at play. The experience of beauty is linked to the perception of form, and form is experienced better and more clearly by the touch of the hand than the eye's distant gaze. The problem with the sense of sight is that it is constantly deceived. How the eye is betrayed is perhaps best demonstrated through the well-known example of a straight stick that looks bent when inserted into the water. We are able to maintain that the actual shape of the stick is straight because the sense of sight is corrected through other senses. From this observation, Herder drew the radical conclusion that the sense of sight is secondary in relation to touch. He argued that it is the tactile approach to objects that teaches our eyes to distinguish between small objects close at hand and large objects at a distance; our perception of space, which we believe is purely visual, is trained by the sense of touch.

Herder's theory that it is through the sense of touch that we get a concept of space and three dimensionality was derived from the texts of John Locke, Cheselden, George Berkeley, Condillac, and Diderot (Herder 2002, 16). Interestingly, Locke used a flat painting's capacity to create the illusion of depth as an argument that what we actually see when we look at a globe of uniform color is not the convexity of a sphere, but a simple flat and circular shape (Lichtenstein 2008, 65). Diderot discussed the same question in his Lettre sur les aveugles, in which he argued that one of the reasons why it is difficult for a person who becomes sighted after being born blind to recognize objects is that the objects are in space; their distance and angle in relation to the spectator vary and they will therefore appear to the eye in different ways. The eye sees the object but it does not see space, and the capacity to judge a distance must be learned through experience (Morgan 1977, 51).

Herder imagined that a child, when it comes into the world, sees only in two dimensions and that the experience of depth is gradually learned by touching things with its hands. Eventually we experience this as natural.

We believe we see something when in fact we touch it... Eventually, we see so much and with such rapidity that we no longer feel things, even though our sense of touch remains the solid foundation and guarantor of seeing. In all of these cases sight is but an abbreviated form of touch. The rounded form becomes a mere figure, the statue a flat engraving. (Herder 2002, 38)

That 'the living, embodied truth of the three-dimensional space of angles, of form and volume, is not something we can learn through sight' is an experience we must take with us to art, for 'this is all the more true of the essence of sculpture, beautiful form and beautiful shape, for this is not a matter of color, or of the play of proportion and symmetry, or of light and shadow, but of physically present, tangible truth' (40).

III. HERDER AND THE PHILOSOPHERS

Herder's claim that our eyes must be trained by touch to be able to perceive depth is not supported by evidence. Modern science tells us that humans and some other animal species with normally developed binocular vision are able to see three dimensionally and judge objects' distance from the eye on the basis of visual information deriving from two eyes. However, knowledge of how binocular vision works was limited before the 1830s, when Charles Wheatstone developed the first stereoscope, a device that could recreate a three-dimensional effect by combining two dissimilar binocular pictures (Ono, Wade, and Lillakas 2009, 493). By means of the stereoscope, Wheatstone could demonstrate what actually happens when we see objects in depth. Since our two eyes perceive one object at slightly different angles, two slightly different images will be projected on our eyes' retina. In our brain they will fuse, and we will accept them as a view of one solid three-dimensional object seen at a certain distance.

Consequently, although Herder relied on authorities, he had no basis for claiming that the eye did not perceive depth. For this reason, he also lacked sound arguments when he excluded the sense of sight from our judgement and appreciation of sculpture. Therefore, Rachel Zuckert is correct in claiming that Herder's attempt to define the art of sculpture through an exclusive relationship to the sense of touch is unjustified (Zuckert 2009, 290). Ultimately, it becomes impossible to maintain an essentialist definition of sculpture as an art based on one particular sense.

What concerns us here, however, is not what is right and wrong in a perceptual psychological sense, but how Herder relied on available scientific information in his argument for the central role of touch in perception of sculpture, and the primacy of form over color in the assessment of art. Herder was of the opinion that the sense of touch precedes and instructs the sense of sight, and thus has a form of precedence. This precedence is not limited to the perception of space but applies to our experience of reality in general. When we are confronted with a physical object, the sense of sight is unable to give us access to its shape as such; what we see is only surfaces and colors. Surfaces, images, and figures exist "on a plane, whereas bodies and the forms of bodies depend upon our sense of touch" (Herder 2002, 39). In addition to being vital to the way we perceive and appreciate sculpture, the sense of touch even seems to operate on a philosophical and metaphysical level; while sight reveals surfaces, touch leads the way to the thing itself, so to say (35). Herder even went as far as to claim that 'sight gives us *dreams*, touch gives us *truth*' (38).

When Herder challenges the privilege traditionally assigned to the sense of sight in our sensorium, his intention is not to place all the senses on equal footing. In *Plastik* he is primarily interested in two senses—sight and touch—and he claims that the sense of sight is not indispensable because what happens when a person becomes visually impaired is that sight is 'replaced through *touch*, luminous color by clearly modeled and enduring *forms*' (37). It is important to note the link between sight and color and touch and form in this quote because it implies that the various art forms align themselves with the hierarchy defined by the senses. Consequently, sculpture stands above painting because while sculpture is close to the physical body, painting actually only gives us shadows. In our experience of bodies, our hand is supported by the sense of touch. This is an experience that is strengthened rather than weakened if our ability to discern details through sight is lost. Likewise, it is only an advantage if the darkness of night "removes all the colors from things and obliges us to attend to the *presence and existence of an object*" (81).

Herder's argumentation, which leads to the conclusion that sculpture reigns at the top of the hierarchy of art forms, is based on an assessment of the role of the senses in perception, where touch has a special link to form. At this point, Herder's view corresponds to Locke's distinction between primary and secondary sensory qualities, which asserts that our perception of an object's form, differently from color, is based on properties inherent in the object itself.

One can understand why this view was met with sympathy among theorists of art. That drawing the contour of an object is more important than applying color to it, had been the dominant view ever since Leon Battista Alberti, in his *Della Pittura*, claimed that an artist's skill is measured by his ability to use black and white (1966, 82). Alberti's view was shared by Giorgio Vasari and a number of leading Italian Renaissance artists. The same can be said of the situation in seventeenth-century France, where only one prominent member of the *Académie royale de peinture et de sculpture*, Roger de Piles (1635–1709), rose to the preference for *couleur*. Closer to Herder in time, arguments in favor of 'drawing' can also be found in Immanuel Kant's *Critique of Judgement* (see Owens 1979, 44; Hodne 2020a, 13–4).

Is it a coincidence that the discussion about the relationship between form and color reached its peak with the French debates in the seventeenth century, when a completely parallel debate is going on in philosophy? As Edward Nye observed, the French "'querelle du coloris' happens at about the same time Locke is writing his Essay Concerning Human Understanding, in which there are similar implications to his radical idea of primary and secondary qualities: colour is a secondary quality which is 'in the mind' rather than 'in the world'" (2000, 12 n5).

One should emphasize that when De Piles preferred color to shape and form, he was speaking about painting. An important argument for his focus on color was that form is more characteristic of sculpture; it belongs to another medium. Against this, the champions of form, heralded by Charles le Brun (1619–1690), said that form in painting is represented by line and drawing (dessin, equivalent to the Italian disegno). In any case, if a visually impaired person was asked to decide on the controversy between the two parties, he would indisputably have judged in favor of the Poussinists and form (Lichtenstein 2008, 36–7).

Concerning the question of blindness, we remember that this revolved around two well-known examples: Newton's colleague Saunderson and the young boy whom Cheselden operated on for cataracts. The special thing about the cataract operation was that the experience of a visually impaired person, who for the first time in his life gained his sight, might provide empirical evidence for or against a philosophical problem that the Anglo-Irish philosopher William Molyneux (1656-1698) had posed in a letter to his friend John Locke (Morgan 1977, 23). Molyneux's question, which Locke included in An Essay Concerning Human Understanding (1689), was something like the following: Let us imagine a man who was born blind and who in his childhood by touch had learned to recognize two objects of the same material and about the same size, one as a cube, the other as a sphere. Let us further assume that the cube and the sphere were placed on a table, and the visually impaired man suddenly became sighted. Would he then, without touching the objects, be able to say which of them was a cube and which was a sphere? Molyneux's own answer to the question was negative. For even if a person born blind knows how a cube and a sphere feel when touched, he has no knowledge that what affects his fingers in a certain way must affect his sense of sight in the same way (Morgan 1977, 6–7).

Locke agreed, claiming that a man who regained his vision would not be able to name the objects in front of him because that would require him to compare it to some pre-existing idea that was common between touch and vision. Such an idea could not be a sensory impression but would have to be something more fundamental to which individual impressions would refer. In fact, the main aim of Locke's An Essay Concerning Human Understanding was to refute the claims from champions of the theory of innate ideas that some abstract terms must be present in our mind prior to sensory experience, and that these have a clarity that is lacking in sense impressions. Against the belief in innate ideas, Locke wanted to demonstrate that it is possible to explain how human beings can attain knowledge by use of their natural faculties alone (see Morgan 1977, 6–7).

But can we really trust our senses? Locke's predecessor, René Descartes (1596-1650), thought that was not possible. Descartes claimed that conclusions based on sensory experience do not correspond to the criterion that something is certain, namely, that it appears clear and distinct. Locke accepted Descartes' reasoning to a certain point. One reason why we cannot simply trust our senses is that it is possible that some of the sensations that we have of objects bear no resemblance to the objects themselves. What happens when we experience something as sweet, warm, or blue is that a 'certain bulk, figure, and motion of the insensible parts' in the body produces certain sensations in us, Locke claimed (Morgan 1977, 13). Locke called such sensations 'secondary qualities'.

Since there are secondary qualities, there must also be primary qualities. Primary qualities, also referred to as original qualities, are properties that Locke believed were intrinsic properties of objects, and thus properties an object has in itself, independent of minds (Keating 1993, 306; Hatfield 2011, 305). When we perceive a body as having a specific shape and size, it is because the object in question actually has these properties—they are in the object itself, not in our perception of them or in our consciousness (Hatfield 2011, 306). The purely philosophical questions at the bottom of Locke's distinction between primary and secondary qualities are not so important in our context. The crucial thing for us is that he makes a distinction between two types of qualities and ranks them in such a way that one must think that there is a kind of status difference between them; the primary, which is something that actually exists in itself, completely independent of the perceiving subject's ability to

see and hear or feel desire and pain, must be first in rank. Examples of primary qualities are shape, size, and movement; while among the secondary we find heat, color, and taste. Based on Locke's criteria, a scheme can be made that sorts sensible qualities, as in table 1.

We note that the two aspects discussed at the beginning of this article in relation to art and especially sculpture, namely, form and color, are both part of Locke's system, where form is defined as a primary quality and color is secondary. Is it conceivable that the skepticism of color in eighteenth- and nineteenth-century art theory has to do with the fact that it was perceived as secondary and therefore an obstacle to the perception of what is essential in art, namely form? In that case, we are faced with an interesting case in which an epistemological question about our sensory relationship to the world, exemplified by a visually impaired person who becomes sighted, quickly becomes relevant within the aesthetic discourse.

The foremost promoter of this topic to the general public was Denis Diderot, who by virtue of his role as author and editor of the first modern encyclopedia, had a very special position in European cultural life in the mid- and late eighteenth century. In discussing the various philosophical views on the subject of the visually impaired man who regains his sight, Diderot also included the position of a friend and countryman, the priest and philosopher Étienne Bonnot de Condillac (1715–1780), who, in the treatise Essai sur l'origine des connaissances humaines (1746) had dealt with questions of the same kind that occupied Locke and George Berkeley (1685–1753). A few years after Diderot's Lettre sur les aveugles (1749), Condillac wrote the Traité des sensations, in which he elaborated on how our thinking is based on information we receive from the senses. To show how this happens, Condillac thought that one must first identify the contribution of each of our senses. In the real world, it can be difficult to isolate the senses and study their contributions individually, but we can imagine how it must be if we think of a lifeless statue that is gradually brought to life through the activation of the senses, one by one, beginning with the sense of smell. After this, Condillac discussed all the senses, including sight and hearing, but paid special attention to the sense of touch because it allows us to develop concepts of space, extension, and solidity. 'Indeed, it is only when it is endowed with the sense of touch that the statue becomes conscious of itself as something distinct from its own representations' (Herder 2002, 13).

Isn't Condillac's animated statue a Pygmalion? There is every reason to believe so, because only a few years earlier the French scientist André-François Boureau-Deslandes (1689–1757) wrote a novel in which the philosophical question of sensation is associated with the well-known story from Ovid.³ Jean-Jacques Rousseau made sure that the themes from the story of Pygmalion were made known to a wide French and European audience, with his famous melodrama of the same name. Rousseau's play was probably written in 1762, but not performed until 1770, the same year as the first edition of Herders *Plastik*. Rousseau's inspiration from Condillac is revealed in the scene where Pygmalion's statue, named Galatea, touches herself and exclaims 'moi' and, as she repeats the touch, again 'c'est moi', and 'ce n'est plus moi' when she touches a marble block (Mülder-Bach 1998, 95).

Herder may well have been familiar with Rousseau's work before the publication of the second edition in 1778, but it is uncertain to what degree *Plastik* was influenced by his ideas. We do know that he had a good knowledge of French art from the time he stayed in Paris. He was particularly interested in the collection of sculptures in Versailles, which dated from the time of Louis XIV and consisted, among other things, of a large number of copies of antiquity's most celebrated works of art. French

Table 1. Primary and secondary qualities based on John Locke's scheme

Primary qualities	Secondary qualities
Form	Color
Extension	Sound
Motion	Taste
Solidity	Smell
Texture	Heat and cold
Number	

intellectual life was no stranger to him either, and like other prominent European intellectuals of this period, he would immediately understand the account of a lifeless statue brought to life through a gradual activation of the senses as a reference to the narrative of Ovid. Although Herder, who included the name Pygmalion in the subtitle, did not explicitly discuss Condillac's treatise, there is little doubt that Condillac's ideas resonate throughout his book.

Condillac's conviction that it is necessary to study the senses separately to distinguish precisely what ideas are owed to each sense was aimed at Locke's doctrine that the senses give us intuitive knowledge of objects, but his polemic was, above all, directed towards the theory of innate ideas of the Cartesians. While it is a little surprising that such complicated philosophical considerations about innate ideas might be of interest to literary writers, this is how we must interpret a poem by the Marquis de Saint-Lambert (1716–1803). In the poem Pigmalion, Saint-Lambert depicted the gradual awakening where the statue opens its eyes and sees the day and its loved one. The sentence that follows, 'Son âme est sans idée, et n'a que des desirs,/ Ses premiers sentiments ont été des plaisirs', means that desire comes before ideas. 'Since innate ideas are discounted, pleasurable sensation can have priority in the statue's experience', said J. L. Carr (1960, 249) in an article on Pygmalion and the Philosophes.

Gérôme's painting depicts Galatea with lifeless, chalk-white legs that seem to resist when the figure's upper body makes an unnatural movement to the right to kiss its creator, as Pygmalion, the sculptor, eagerly embraces his work, which has now become flesh. Gérôme's choice to focus on the embrace may have been determined by more than an interest in the scene's erotic aspects. The love between the two shows a philosophically justified view that human desire comes before abstract rationality. If we imagine Galatea as a real human being, the picture (and the story) shows that our desire and ability to love is with us from birth. However, concepts that can help us understand spheres, cubes, and other objects we interact with in our daily lives are not yet present in Galatea's mind because innate ideas are not something we are born with.

Herder must have supported the empiricists' claim that we do not have innate ideas. Several of his discussions in Plastik seem to presuppose this, including his analysis of Father Castel's ocular harpsichord in the introduction to Part 3 of the book. The Jesuit priest Louis-Bertrand Castel (1688–1757) worked for many years to create an instrument that would combine musical tones with colors. The instrument was made with sixty small pieces of colored glass that were covered by curtains. When a key on the harpsichord was struck, a curtain would open to let light shine through the glass with the color that corresponded to that specific note. The piece of music would, in this way, be accompanied by a harmonic play of colors. The project, supposedly based on an Aristotelian idea of a connection between musical and chromatic harmonies, aroused great interest among Castel's contemporaries, including the German composer George Philipp Telemann (1681–1767), who composed music for this instrument (Hankins 1994, 146). Such music would reportedly be of great joy to people who are deaf, who, if the project had been feasible, would have been able to appreciate musical harmony. Herder, however, referred to it as a failure and added that the probable explanation is that 'without the contribution of a more fundamental sense, the sense of sight affords us only a panel of light and color, and thus only the flattest and emptiest pleasure' (Herder 2002, 63). In addition to clarifying the point that colors are not essential in the perception of beauty, Herder used the example of Father Castel's musical experiments to emphasize an equally important point: colors and sounds will never merge in a pleasant inner harmony because a common inner sense, a sensus communis (in the Cartesian meaning of the word), where impressions from the body's various external organs are collected and processed, does not exist.

IV. HERDER AND WINCKELMANN

Herder assured his reader that he did not write as an artist or art historian. He acquired much of his knowledge about art history from his countryman, Johann Joachim Winckelmann. In Winckelmann's ekphrasis of the Vatican's famous Apollo Belvedere, Herder claimed to find support for his own discussion of the limitation of the sense of sight in the perception of art. Herder saw Winckelmann's celebrated description of the Vatican Apollo 'as an attempt to overcome the dominance of sight and to enter into a more profound relation to sculptural form' (Herder 2002, 19). Since we are deceived by our senses, we cannot simply trust our eyes. Similar passages, where Winckelmann's description of the Apollo is adapted to Herder's own theoretical enterprise are found in both versions of his *Plastik* as well as the fourth of his *Kritische Wälder*.

According to Inka Mülder-Bach, Herder's 'pygmalian aesthetics' must be understood in the light of his distinctive interpretation of Winckelmann's ekphrasis of the Apollo Belvedere (Mülder-Bach 1998, 71). That Herder sought support for his views from Winckelmann was natural. With his books on the art of antiquity, Winckelmann had achieved the status as the most outstanding expert in classical archaeology in large parts of Europe, outdoing important precursors like the French antiquarian Comte de Caylus. The tribute to the art of antiquity in his principal work *Geschichte der Kunst des Alterthums* was based on a careful study of works from that period, especially Roman copies of Greek originals. Although Winckelmann's earlier work, *Gedanken über die Nachahmung der griechischen Werke*, largely dealt with painting, there is little doubt that he was particularly interested in sculpture. That Herder shared this love of sculpture is natural in light of what we read in *Plastik*, but he also shared Winckelmann's assessment of the superiority of Greek art, not only in comparison with Roman art, but also that which is beyond the Alps, where the beauty of form declines. For Herder, there was no doubt that the unsurpassed fidelity to nature and determinateness that the Greeks gave to every character, and situation and passion helped them reach a level in their art that the world has never seen, either before or since (Herder 2002, 80).

When talking about the relationship between the two in the light of *Plastik*, Winckelmann's little treatise on *Der Fähigkeit der Empfindung des Schönen in der Kunst* from 1763 is of particular interest. Here, Winckelmann addressed some of the same questions that Herder dealt with, albeit in a slightly less philosophical way. In the first of his *Kritische Wälder*, in which Herder defended Winckelmann against the attacks that Lessing launched in *Laokoon*, he expressed his disappointment that Lessing had not treated Winckelmann as a philosopher. According to Herder, one must understand Winckelmann on his own terms; one must realize that he lived as if he was walking in the academy of the ancient Greek sages (Herder 1853, 14), which is probably why he did not find it necessary to explain where he got his ideas from. If Winckelmann had read Diderot's *Lettre sur les aveugles*, he would not have found it necessary to refer to it explicitly in his essay anyway.

In the text about our capacity to appreciate beauty, Winckelmann introduced one important example that reveals the kinship between his discussion and that of Herder, namely, that of Newton's colleague, the visually impaired Saunderson. Winckelmann introduced this example in a special context that has to do with what he called "the accuracy of the eye" (*Richtigkeit des Auges*). According to Winckelmann, the accuracy of the gaze is an innate gift that can be practiced and compared with the musician's *Gehör*. However, the eye is not exact in all its operations; it does not perceive form and color with the same degree of precision. In fact, the correctness of the eye consists first and foremost in an exact assessment of the shape and size of objects. The same criterion cannot be applied to the vision of color because here we do not require the artists to relate to the phenomenon in the same way, and consequently they will also reproduce colors in different ways in their art (Winckelmann 1913, 196–7; see also Décultot 2013, 93). Therefore, the use of color remains individual; it expresses the personality of the painter, not the objective truth of the perceived body.

The discussion of correctness is followed by a description of what is, for the most part, the incorrect use of color in Poussin, Barocci, and Guercino, and then a description of form problems in Barocci, Pietro da Cortona and Parmigianino. Thus, it is clear that what Winckelmann is absorbed with here is the relationship between form and color, and, given that *Richtigkeit* in a strict sense is limited to the assessment of form and cannot be applied to color with the same degree of precision, one must assume that even Winckelmann took into account recent philosophical insights concerning primary and secondary qualities. A further example seems to confirm this. *In his Lettre sur les aveugles*, Diderot recalled that the visually impaired Saunderson was said to be able to distinguish a counterfeit coin from a real one by touch, even though the counterfeit was so well made that it could deceive a sharp-eyed collector (Morgan 1977, 47–8). A perfectly analogous example can be found in Winckelmann's treatise on the *Fähigkeit der Empfindung des Schönen*, only that Saunderson is substituted by Winckelmann's benefactor, Cardinal Alessandro Albani. The cardinal's villa at the Via Salaria in Rome was, for several years, Winckelmann's workplace; as Albani's librarian, he had access to a rich collection of antique sculpture, coins, and epigraphy. The cardinal, who was genuinely interested in ancient art, had been collecting objects since his youth. Initially, he had planned a military career, but low vision, which

eventually led to blindness, forced him to change plans. However, he did not lose interest in ancient art. Herder would hardly be surprised to hear that Albani, like Saunderson, was able to compensate for his lack of sight with an acute touch. Like Saunderson, Albani was able to analyze coins by means of the sense of touch alone; he could easily, Winckelmann said, take a Roman coin and determine under which emperor it was minted without the aid of sight (1913, 199).

It is obvious that philosophy's questions about our sensory approach to reality, as conveyed by Diderot, was something that occupied art theorists in many countries. The theme is found in both Winckelmann and Herder, albeit in different ways. The question of the visually impaired and the sense of touch was not nearly as important for Winckelmann as it was for Herder. While Herder explored the role of the sense of touch in the aesthetic experience, Winckelmann focused on the contrast between outer and inner senses and linked the ability of aesthetic judgment to the latter. In the case of Winckelmann, the argument about sculpture's advantages over painting has not been systematically developed on a theoretical level, despite the fact that, for large parts of his life, it was sculpture he dealt with the most. On the other hand, the distinction between sculpture and painting is not crucial in every respect. Although sculpture, owing to the sense of touch, provides a more complete experience of form, form is the main element in the art of painting as well. Herder praised Winckelmann's discussion of the clear and well-defined contour of Greek art, which he considered in light of William Hogarth's (1697-1764) 'line of beauty'—a serpentine line that, according to the English painter, defines the principles of beauty and grace in art.

Our experience of something as beautiful is based on an assessment of form. In perception of art, color is of secondary importance; in some cases it can even represent a distraction that draws our attention away from what is essential. Winckelmann would undoubtedly have supported Herder's claim that color belongs to the surface of things and is peripheral when it comes to judgement of beauty. The advantage of Herder's text is that he refers to his sources. Therefore, we know a considerable amount about what kind of thoughts influenced him, and that his distinction between primary and secondary sensory qualities came from empiricist philosophy. This connection is not as clear with Winckelmann, but we know that he read and criticized the English author and essayist Joseph Addison (1672-1719). Addison, who was one of the founders of The Spectator magazine, in which the ideas of the leading intellectuals of the time, including Newton and Locke, were presented in an easy-to-understand way to the average reader, was naturally well informed about the latest trends in philosophy and science. One of the ideas that he discussed in his magazine was what he believed to be a universally acknowledged theory, that 'Light and Colours, as apprehended by the Imagination, are only Ideas in the mind' (Addison 1907, 65 [no. 413])—a theory that, according to Addison, was based on Locke's distinction between primary and secondary qualities of matter.⁵

The example of Addison shows how central the question that Locke had raised was in the aesthetic debate of the time. It is obvious that Winckelmann received many of the same impulses as Herder and that his preferences, like those of Herder, had a metaphysical and cognitive justification. In my opinion, the philosophical blessing of form as a primary sense quality can give us an answer to the question we initially asked in connection with Gérôme's work. Philosophy and art criticism had roughly the same attitude to the phenomenon of color, namely that it is an element of distraction that draws our attention away from what is essential in art: the beauty and harmony of form. Is it any wonder that a theoretic like Winckelmann, who in good classicist tradition searched for the universal laws of art behind passing appearances, would reject as insignificant an element (color) that exists only for the viewer's subjective and highly fallible gaze?

It is here that we must look for the main reason why, in the nineteenth century—long after Quatremère de Quincy had proved that the sculpture of antiquity, even in its best periods, was polychrome—pure marble was preferred to painted surfaces. The case is complex, and Quatremère de Quincy himself had suggested one possible explanation when he pointed to the contrasts between coloring and modern taste. After all, what modern man looks for and appreciates in art differs considerably from the taste that prevailed in the ancient Greek society, where the art object's religious function was just as important as its beauty (Hodne 2020b, 16-7). However, it is insufficient to define modern taste—that is, the one that dominated around the year 1800—as different from that of the ancient Greeks. An explanation of Herders's and Winckelmann's aesthetic preferences must be sought in the emergence of a philosophical aesthetic that sought beauty in an art work's form.

Exactly how much knowledge Herder had about polychromy in ancient sculpture is unclear. His statement that 'in the most beautiful ages statues did not require drapery or colors, eyeballs or silver' (2002, 56) may indicate that he believed that color was most prevalent in archaic art and during Hellenism, which was considered an aesthetic period of decay. However, as has been previously established, Winckelmann already had extensive knowledge of polychromy in ancient sculptural art (see Hodne 2020b). Considering that Winckelmann's Geschichte was translated into French only a few years after its publication and that his ideas were studied and commented on by prominent intellectuals, contemporary aversions to color in sculpture can hardly be due to a lack of knowledge about ancient polychromy. Likewise, it is wrong to claim, as some have done, that in art's preference for pure, white marble, one sees a cultivation of a particular racial ideal that highlights the European and his cultural ancestor, the Greek, as a model of bodily beauty. When artists and critics wanted to leave the statue clean and untreated, it was not for the sake of whiteness itself, but because the absence of color helped to emphasize form. The discussion of form and color had been a central element in the discussion of art since the Italian paragone debate, and despite sporadic opposition from prominent proponents of couleur, such as Roger de Piles, it was the partisans of form who constituted the majority in neoclassical art circles. In any case, this dominance would have been difficult to reverse, and it was not made easier by the fact that prominent cultural personalities such as Diderot and Herder, with the help of Locke's empiricism, gave form a scientific confirmation.

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ENDNOTES

- 1 The first to associate Pygmalion's statue with Galatea was probably Jean-Jacques Rousseau.
- 2 Platonism derived the primacy of vision over other senses from its relation to knowledge. 'To know is to see' (Lichtenstein 2008, 67).
- 3 Pigmalion, ou la Statue Animée (1741). See Carr (1969, 239).
- 4 Although mainly through French commenators, cf. Décultot (2000, 68).
- 5 However, as Victor M. Hamm noted, Addison's theory of primary and secondary pleasures of the imagination is not entirely consistent with Locke's philosophy (Hamm 1937, 499).