

THE BIRTH OF SYMMETRY FROM THE SPIRIT OF PROPORTION

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Fields of interest: Aesthetics, Philosophy of Music, Philosophy of Culture.

Publications: Albert van der Schoot (1999:91-100) *Rational order in tone scales and cone scales*, in *Filozofski Vestnik*, Vol. XX/2-Suppl.

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Abstract: *In classical treatises, symmetry was introduced in a different context and with different objectives than later discussions would suggest. It was embedded in convictions on proportion that had to do with ontological rather than with aesthetical views; it is in this sense that Vitruvius prescribes the proportional structure of the human body as a model for the design of a temple. Early Neo-Platonism rejects Plato's own ideas regarding symmetry on the basis of its idealistic approach of the concept of beauty: properties that are measurable in their extension cannot be the source of the immaterial beauty of their carriers. In the fifteenth century, the Florentine Accademia Nova succeeds in reuniting these ideas with Plato's own. The waning of the Platonic tradition in European academe eventually leads to the rejection of proportion in British empiricism.*

1 THE VITRUVIAN TRADITION

The concept of symmetry which the ancients dealt with has little to do with our present ideas of mirror symmetry or rotational symmetry. We would call anything symmetrical which shows a structure that can be rendered as ABBA, or ABCBA, etc. – independent of the mutual relationships between A, B and C. What the ancients meant by *symmetrical* is what we would now call *modular*, or, in different contexts, *commensurable*. The latter term, in fact, is nothing but an exact Latin translation from the Greek *συμμετρο*. That is: the parts can be measured by the same measure, and it is also by that measure that

the parts fit the whole. But this is a criterion which loses its function in the Cartesian mathematical framework, in which numbers are a continuum and every quantity is arbitrary. Renaissance thinking about measure and proportion, on the other hand, was dominated by the rediscovery of the Vitruvian books on architecture; and Vitruvius claims that every architect who wants to build a temple must diligently go by *modular symmetry*, which originates from *proportion* [‘Aedium compositio constat ex symmetria, cuius rationem diligentissime architecti tenere debent. Ea autem paritur a proportione (....).’ *De architectura*, III.I.1]. Mathematical foundations of criteria for beauty, as we know them from Antiquity and from the Renaissance, are guided by *this* sense of symmetry. Many of these texts, even if they refer to art, show that symmetry was not first of all thought of as a criterion for *artistic* quality. They do not deal with prescriptions for representation or expression, but rather with the *ontology* of the object. Ideally, the object itself is supposed to be symmetrical, and that is the reason why that symmetry must also appear from the depiction. It is symmetry which turns the Vitruvian temple into a representation – that is, a representation of the human body. The guide-line here is not perceptual similarity, but the *ratio* of the body; Vitruvius believes that the structure of the body, down to the minutest details, is determined by modular proportion, and he gives a meticulous explanation of those details. In this context he gives the description of the *homo quadratus*, which became familiar through Leonardo’s well-known drawing, showing how circle and square function as the circumferential measure of the human body. Vitruvius gives an exact description of the size of the particular members of the body, in their respective rates to the size of the body as a whole: the foot is 1/6th of that size, the face (from chin to hairline) is 1/10th – a distance divided into three equal parts by the nostrils and the eyebrows, and so on. This well-proportioned body provides the measurements for the building of the temple: ‘for any temple without symmetry and proportion lacks the *ratio* for its composition, if it does not follow the exact ratio of the members of a well-built human body’ [‘Namque non potest aedis ulla sine symmetria atque proportione rationem habere compositionis, nisi uti hominis bene figurati membrorum habuerit exactam rationem.’ *De architectura*, III.I.1].

2 PLATONIC OPPOSITION AGAINST PLATO

Plato does not consider symmetry as a property of measurable objects only. In his assessment of ‘the good’ in *Philebus*, he mentions symmetry between beauty and truth as one of the three aspects that constitute the good. And Timaeus says: ‘Now all the good is beautiful, and the beautiful is not without measure; therefore a living being, in order to be considered beautiful, must also be symmetrical’ (Plato, *Timaeus* 87c). This symmetry, then, also applies to the organism. Therefore, the humours must be balanced, and a powerful body cannot be considered beautiful if it lodges a weak soul. In the *Sophistes*, ugliness is defined as *αμετρία*, ‘measurelessness’ (Plato, *Sophistes* 228c).

Symmetry, then, seemed ready to set off for a splendid career in future considerations of beauty, and predestined to play the main part when Platonism flared up again in the fifteenth century – the age in which proportional thinking became a central issue, aided by the rediscovery of Vitruvius’ books on architecture. But long before symmetry ever crossed the minds of the Florentine Platonists, it had to survive an imminent breakdown at the outset of Neo-Platonism, in the writings of Plotinus. The reason for that menace lies in the very heritage that Plotinus wanted to do justice to; in a sense, Plotinus was

more Platonic than Plato. Plotinus is searching for the *source* of what strikes the observer as beautiful – and that, he believes, is a far cry from symmetry. He gives two types of argument, which we may summarize as: symmetry is neither a sufficient nor a necessary condition for beauty. It is not necessary because many of the things we would unhesitatingly appreciate as being beautiful do not consist of parts, so there is simply nothing that might be ordered symmetrically. These are no futile matters: gold, sunlight, a simple sound, but also the virtues of the soul, behaviour, and character. Of course Plotinus still deals with a concept of beauty in which the lustre of moral virtues is not strictly separated from outward splendour, but the examples of gold and sunlight illustrate that this is not the only reason why symmetry does not qualify as a criterion for beauty. This goes for compound as well as for simple matters. For if we judge a whole as being beautiful, says Plotinus, then how could its parts *not* be pervaded by beauty? The fact that symmetry may attend beauty as well as ugliness goes to show that it is not a sufficient condition for beauty. Symmetry in an ugly face is not really different from symmetry in a handsome face. At this point, Plotinus seems to be in full agreement with Edmund Burke, who would use the same argument in 1757 to denounce symmetry as a criterion for beauty. But here, the context is quite different. For where Plotinus investigates the ontological status of the object and passes judgment on symmetry as a non-material source of visible beauty, Burke analyses his own experience and finds that his judgment does not change according to the proportions of the object (*Enquiry* Part III, section iv). Plotinus takes another non-material example to further illustrate this point: the logical structure of a propositional proportion: ‘For the proposition that justice is noble stupidity is in harmony and accordance with the proposition that temperance is foolishness, and they agree with each other.’ (*Enneads* I,6,1). John P. Anton (1964: 235) claims that ‘Plotinus identifies falsehood with ugliness’, and lectures him for this ‘serious logical and aesthetic flaw’. But Plotinus does not identify logical falseness with aesthetic ugliness; he calls arguments such as the above *kaka*, a term by which he expresses (with a moral overtone) that he objects to them. In *Enneads* I,6,2 he qualifies as ugly [*αισχρος*] whatever is not subjected to the rule of *logos*, but in that context he deals with the beautiful in bodies; this passage is an echo of *Timaeus* rather than a condemnation of false argumentation. The argument shows how much Plotinus’ criteria are different from those of modern aesthetics. Separating form and contents, which allows for a distinction between subject-matter on the one hand and its arrangement on the other, and then subjecting only the latter to aesthetic judgement, would be an absurdity to him. His objecting to symmetry as a criterion for beauty must therefore not be understood from aesthetical, but from metaphysical motives. Symmetry concerns the outward experience, and finding the source of beauty in exteriorization is an eyesore. Physical bodies, as opposed to virtues, are not beautiful in themselves; objects are not beautiful ‘*παρ αυτων των υποκειμενων* (= by their substrata, *Enneads* I,6,1)’, but because of their *methexis*, their participation in non-material beauty. The ‘first’ beauty must, by itself, be *without* shape (*Enneads* VI,7,33). In short: symmetry is not the *cause* of beauty, but, in some qualifying cases, its *effect*. Striving for beauty means being attracted to that which exceeds the beautiful object and which arouses erotic passion. In experiencing that passion, the soul has in view what is within reach; but in her passion she ‘reaches out gently for something different, something greater, attracted, so to say, by her memory. (...) That’s why even in our world beauty is what shines out above symmetry, rather than symmetry itself, and that is the real focus of desire.’ (*Enneads* VI,7,22). Plato could not have expressed himself more Platonically.

3 THE FLORENTINE RECONCILIATION

All of this leaves Renaissance Neo-Platonism with a double heritage – and in fact, here we do rediscover both viewpoints concerning the assessment of proportion as a criterion for beauty, even within one and the same text. Marsilio Ficino resounds an echo of Plotinus’ objections when in *De Amore*, in his comment upon Agathon’s contribution to the *Symposium*, he plays off beauty against exterior form (*De Amore*, V, iii). If beauty were palpable, it would not bear any relationship to the virtues of the soul. Palpable bodies which we call beautiful do not owe their beauty to their physical existence. Physical existence may continue while beauty fades away. The size of an object does not give any information about its beauty; quantity is not a measure. Beauty is not absorbed by *the exterior eye*, the sensorial eye, but by the inner eye, the eye of the mind. If exteriority were decisive, our eye would grossly fall short, for it is far too small to embrace the overwhelming greatness of the vault of heaven (cf. Kant’s later interpretation of the mathematical sublime as an awareness which transcends the exteriority of sensorial experience, in his *Critique of Judgment*, §§ 25-27). We owe our capability to enjoy that beauty to an organism which is not subject to any restrictions in terms of quantity: ‘the soul, in a single point, takes in the whole breadth of the body in a spiritual way and in an incorporeal image’ [‘Sed spiritus in punto omnem corporis amplitudinem spiritali modo et incorporea imagine suscipit.’ *De Amore*, V, iii, fol. 44r/v]. Since beauty is a spiritual quality, it can never depend on size, order and proportion. Ficino more or less literally quotes Plotinus when he adds that beauty, if it were to depend on the mutual proportion of the parts, would never extend to those parts separately, ‘whence follows something absurd: that things which are not beautiful in their own natures produce beauty’ [‘Unde non nihil sequitur absurdissimum ut que suapte natura spetiosa non sunt, pulchritudinem pariant.’ *De Amore*, V, iii, fol. 45r].

Ficino seems to be in full agreement here with Plotinus, stipulating that symmetry does not contribute to beauty. A few pages later, however, the message seems to be entirely different (V, vi, fol. 50r-51v). Here, Ficino speaks of *ordo*, *modus* and *speties* as being constitutive of the beauty of the human body, and he explains that *modus* implies that each part of the body should get the right size, respecting the proportion proper to the whole body (*debita totius corporis proportione servata*). That implies that the length of the face must be thrice the length of the nose, which must have the same size as the lips and the ears, furthermore that the half circles of the auricles must together form the full circle of the open mouth, just like the two eyebrows, and that the total length of the body must equal eight times the size of the head, which is also the size of the width of the body when the arms are stretched out. Ficino presents us here with a set of modular proportional prescriptions, resembling those by Alberti and various other contemporary theoreticians of art. How could that possibly be reconciled with his earlier disqualification of proportion as a criterion for beauty?

Ficino introduces the concepts of *ordo*, *modus* and *speties* after establishing that the body’s beauty becomes visible only in the refulgence which results when the body is *infused* with its own idea. This process of infusion implies that a spiritual principle penetrates into the physical body, in order to *inspire it*. But in order for this infusion to take place, and therefore for this refulgence to come about, the body, or indeed all matter, needs to be aptly prepared. This preparation consists of the *ordo*, *modus* and *speties* mentioned above.

In this sense, due proportion of the body is for Ficino, as opposed to Plotinus, a condition for beauty, or rather a preparation. But then the *modus* is no more a part of the body than *ordo* and *speties* are. *Ordo* can't be a part because it refers to the whole, and *speties* is totally dependent on such immaterial factors as shade and radiation. Concerning *modus*, Ficino says here that *it non quantitas est sed terminus quantitatis*. This must be taken literally: measures are planes, lines and points that mark the shapes of the body, but have no volume. They are, therefore, not of a physical nature.

In his translation of *De Amore*, Jayne (1944: 173) points out the rhetorical function of the triad *ordo*, *modus* and *speties*, and he mentions the writings by Bonaventura as being Ficino's source. But in rhetorical tradition, these terms are subordinate in importance. Also, Jayne ignores the use of the terms by Thomas, with whose writings Ficino was certainly intimate, and Thomas' reference to Augustine. Moreover, he overlooks Ficino's own explication of the terms.

Our conclusion must be, then, that Ficino does not replace the Plotinian point of view concerning symmetry (which wants to see beauty elevated above matter, and proportion subordinated to transcendent beauty) with Renaissance prescriptions of proportion, but *synthesizes* both principles in a most ingenious way: 'beauty is so foreign to matter that it never imparts itself to matter unless the matter has been treated with the three incorporeal preparations which we have discussed' ['pulchritudinem usque adeo esse a mole corporis alienam ut numquam ipsi materie se communicet, nisi tribus illis incorporalibus preparationibus quas narravimus sit affecta.' *De Amore*, V, vi, fol. 51v.].

In the same way, Ficino speaks of the preparation for true love, meaning the love of God, by falling in love with another body. Platonic love (a term coined by Ficino!) is Christianized. In spite of that Christian imprint, Ficino's sophisticated *adoption* of symmetry as an element on the road that leads towards beauty remains close to the way of thinking that led Plotinus to his *rejection* of symmetry. Plotinus and Burke, on the other hand, are allies taken at face value only: Burke's opposition to symmetry is only an aspect of his total rejection of the ancient adoration of proportion. His aesthetics is different because his ontology is different; it is not derived from an idealized order that could find mensural expression, but from nature as it is experienced in everyday life. Therefore, according to Burke, 'it is not measure, but manner, that creates all beauty which belongs to shape' (*Enquiry Part III*, section iv).

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References to the works of Burke, Ficino, Plato, Plotinus and Vitruvius have been made according to the usual conventions, in order to make them independent of any particular edition.