

Ernst Berger/Brigitte Müller-Huber/Lukas Thommen, *Der Entwurf des Künstlers. Bildhauerkanon in der Antike und Neuzeit. Katalog und Beiheft. Antikenmuseum Basel und Sammlung Ludwig*, Basel 1992. 352 Seiten, 314 Abbildungen.

As its title announces, this lavishly-produced exhibition catalogue of selected casts in the Basel Antikenmuseum spans five millennia of Western sculpture, from Old Kingdom Egypt to the 1990s. In volume 1, the theme is addressed in a series of 35 short chapters, each copiously illustrated by line drawings and photographs in color and black-and-white. Volume 2 supplements these by a further series of monochrome photographs, some screened onto graph-paper, and by tables of measurements for the more important statues. The purpose of all this, of course, is to present Berger's reconstruction of Polykleitos's Canon to a wider public than that reached by the monumental catalogue of the Frankfurt Polykleitos exhibition, in which his ideas were first published (H. BECK/P. C. BOL/M. BÜCKLING [eds.], *Polyklet. Der Bildhauer der griechischen Klassik* [1990] 156–84). Polykleitos and his school accordingly receive the lion's share of attention, while the Hellenistic and Roman periods are omitted entirely.

After a brief preface, Chapter 1 introduces the reader to the Egyptian and Greek terminology: daktyls, feet, ells/cubits, and the various measuring systems of which they formed part. Chapter 2 sketches the two major systems of Egyptian anthropometry – though it should be noted that we now know that the so-called Second Egyptian canon was introduced at least a generation before the traditionally-accepted date of 664 (the beginning of the 26th Dynasty). The authors correctly note that these Egyptian grids presuppose a rudimentary sense of proportional interrelations between the various parts of the body, since they are based upon the length of the foot and the hand.

Yet the Egyptian system also does more, for, as Whitney Davis has recognized (the observations that follow largely paraphrase W. DAVIS, *The Canonical Tradition in Ancient Egyptian Art* [1989] 206; 208; 219–20), once it is imposed upon the body, it immediately shifts what looks at first sight to be a purely practical design aid into the realm of prescriptive anthropometry, and thus of *replication*. The Egyptian canon functions to transmit an authoritative but anonymous construction of the world, a unique yet infinitely replicable Founding Perception ("spoken by the ancestors", as one Egyptian sage put it); for by eliminating difference in every aspect that is held by the Founder to matter it enables the reproduction of the normative Egyptian body in any context and at any scale. Yet this strategy, in turn, puts the artisan-specialist in a very special position: it both subordinates him absolutely to this generative Founding Perception, and canonizes him as its privileged transmitter. This view of the "artist"/Künstler and his mission is clearly very different from that which most Swiss and other visitors to this exhibition will have held, and it is a pity that the catalogue does not make it more explicit.

Chapter 3 turns to the reception of the Egyptian canon in archaic Greece. Implicitly correcting a common misconception in the handbooks that the Greeks simply borrowed the so-called Second Egyptian canon with little or no adaptation, the authors argue that they introduced several innovations that profoundly changed its entire conception. Using Dieter Ahrens' work on the Tenea kouros, they note that among other innovations the archaic Greeks extended the canon to include the entire head (for the two Egyptian grids extended only to the hairline or eyeline), and propose that they took the ratio between this and the statue's total height (in this case, 1:7.5) as their starting-point for constructing the grid. The head height was then subdivided into an exact number of grid-squares (here, 4) and used to proportion the major divisions of the body (chin to nipples; nipples to navel; navel to bottom of pubis; etc.), while the individual squares determined the minor divisions. This essentially modular system again allowed the end product to be of any size: in the case of the Tenea kouros, the square was fixed at 2.5 daktyls, resulting in a head-height of 10 daktyls

and a total height of 75 (1.53 m), but it could have been fixed at 3, 4, or any other number, increasing the size of the statue accordingly.

Yet while this system seems at first sight to work quite satisfactorily for the front of the Tenea kouros, it fits the sides and back far less well. Were they indeed largely extra-canonical (as the authors suggest) or are we missing something? Indeed, even as regards the front, closer examination of the reconstruction (fig. 15) shows that the statue's rounded surfaces and smooth transitions offer disturbingly few precise points of contact between it and Ahrens' proposed grid. Furthermore, Berger et al. only make a passing attempt to test the system on other kouros, and ignore the issue of regional differences entirely. Kroisos, Ptoion 12, and the new Ischys kouros (the only Samian one with an intact head) fairly beg for inclusion here.

So while the authors' reconstruction of archaic Greek workshop practice is certainly plausible, it is hardly verifiable in absolute terms. And as RAINER MACK has shown in a recent dissertation, the archaic canon's social role was not only quite different from the Egyptian but deeply problematic on its own terms (*Ordering the Body and Embodying Order: The Kouros in Archaic Greek Society*. Univ. of California at Berkeley [1995]). This profound cultural and artistic change, involving a qualitative shift in the status and mission of the artisan-specialist, are addressed in one brief paragraph on p. 21: once again, the subject and the catalogue's audience merit more.

The difficulties multiply when one turns to the classical period, where apart from two reliefs in Oxford and the Piraeus (ch. 4: figs. 20–26), the evidence consists entirely of Roman copies. And the evidence of the two reliefs is not encouraging, for as the authors show, neither can be fully reconciled with the Pheidonian or any other Greek metrological system known to us. If they were indeed carved as sculptors' models, as the catalogue plausibly suggests, then they show that classical Greek sculptural canons could, on occasion, be downright quirky.

Chapter 5 turns to the full classical and Polykleitos, and here again the authors' proposals are lucid, ingenious, and broadly plausible – but essentially unverifiable in the monuments. For although I find it quite likely that Polykleitos did indeed simplify the archaic system by reducing all the parts of the body to simple fractions or submultiples of its total height; that he then translated these submultiples into Pheidonian dactyls; and that his canon was first applied to an immobile dummy standing "at attention", then compressed to calculate the muscular distortions set up by the *contrapposto* – although I have few problems *in theory* with any of this, I have argued elsewhere that in practice, the copies inject a most disturbing set of unknowns into the equation (*The Canon of Polykleitos: A Question of Evidence*. *Journal Hellenic Stud.* 98, 1978, 122–31: an article that the authors have apparently overlooked). For in addition to the difficulty of deciding exactly where a given measuring-point lies on the statue's largely undulant surfaces they now force one to guess which copy most accurately preserves the poise and measurements of the lost original. Berger et al. fail to address either problem, merely observing that Polykleitos surely derived his system from the natural articulation of the human skeleton (p. 32), and selecting the Naples Doryphoros for their reconstruction of it (ch. 8). In Chapter 24, however a brief *Kopienkritik* is attempted and the admission made that the Naples statue may not be fully accurate in some details (p. 106).

To support their argument, the authors naturally cite the wellknown passage from Galen listing Polykleitos's choice of points for the arm. In fact, Galen cites his canon in many more places than are to be found in Overbeck's standard compilation of 1868, from which most scholars (including Berger and, until recently, myself) have worked (J. OVERBECK, *Die antiken Schriftquellen zur Geschichte der Bildenden Künste bei den Griechen* [1968] nos. 958–59, 961). When experimenting with the *Ibycus* database at the University of Texas at Austin in 1985, I came across another dozen of them, which will be published with full commentary by GREGORY LEFTWICH in his forthcoming book, *Ancient Conceptions of the Body and the Canon of Polykleitos* (Princeton, in press). Among these is a list of points for the leg which must be taken into account in any future reconstruction.

The Diadoumenos, the authors admit, is difficult to reconcile with their system (pp. 11,123), though they think that they have reached a solution. I leave others to pronounce upon its likely validity, merely observing that any decision on this score must be based on the fact that Polykleitos's canon was completely comprehensive and rigorously accurate, permitting no leeway or uncertainty. For two other citations of the canon in Diogenes Laertius, again hitherto unrecognized, certify the *para mikron* of the artist's own statement that "perfection (*to eu*) comes about *para mikron* through many numbers" as meaning "little by little",

not "within a little" or "almost" (DIOG. LAERT. 7,26, and, less straightforwardly, 2,32; cf. this reviewer's *Greek Sculpture: An Exploration* [1990] 265). The former reads, "τὸ εὖ γίνεσθαι μὲν παρὰ μικρὸν, οὐ μὴν μικρὸν εἶναι (οἱ δὲ Σωκράτους)", or "Wellbeing is attained little by little, but is no trifle itself (some attribute this to Sokrates" [2.32]). The translation of *para mikron* as "little by little" is questioned most recently by J. J. POLLITT (in: W. G. MOON [ed.], *Polykleitos, the Doryphoros, and Tradition* [1995] 21); yet he has overlooked these citations. For Polykleitos, as one would expect and as logic and language demand, perfection was an absolute and not susceptible to qualification.

The remainder of the catalogue then takes the story to Lysippos (ch. 10), whose Apoxyomenos "shows a certain tendency towards a modular simplification of proportions" (p. 48). It then skips the Hellenistic world and Rome (!) to resume with Villard d'Honnecourt and others; accompanied by well-chosen illustrations and traversing Leonardo, Dürer, and their successors, it proceeds step by step to the modern era, where Rodin and Le Corbusier rub shoulders with two wittily ironical studies by Laurens and Lüpertz.

Chapters 22 on contemporary physiques (male and female) and 23 on computer simulation are evidently included mainly to add a *frisson* of local color (Basel bikini girls and posturing musclemen) and hi-tech "relevance". The juxtapositions of one bathing-beauty with the fully-draped Ornithe and her sister from Geneleos's Samian dedication and another with the upper part of the north-west corner of the Parthenon (figs. 112–13) are particularly inept: why not a reprise, for example, of Dora Maar's superb 1934 photo of the "supermodel" Assia (CHR. BOUQUERET [ed.], *Assia sublime modèle* [1993] 83) to pit against the Knidia, or an Arnold Schwarzenegger against the Doryphoros? And instead of the doll-like computer simulations (of yet more bathing-suited girls), how about a computerized photogrammetrical study of the half-dozen remaining full-length copies of the Doryphoros? For this, it seems to me, is the only way in which these replicas can be thoroughly compared and their points of contact objectively determined.

Part II of the catalogue returns the reader to classical Greece, with detailed reconstructions of the anthropometry of nine selected classical masterpieces: Polykleitos's Doryphoros and Diadoumenos; the Velletri Athena; the three Ephesian Amazons; and Praxiteles' Pouring Satyr, Sauroktonos, and Knidia. Part III adds five more Polykleitan figures: the "Diskophoros", Hermes, Herakles, Dresden Youth, and Westmacott Youth. The *Beiheft* with its rich photographic and other documentation has already been mentioned.

Yet even though I have been generally somewhat critical of the authors' methodology, this is not to say I necessarily reject their conclusions or repudiate their venture. Far from it: both well-illustrated and well-reasoned (once one accepts its premises), this catalogue is a welcome addition to the ever-growing bibliography on sculptural planning in general and Polykleitos in particular. If it thereby generates further controversy in its turn, so much the better.

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