
Part II

Material and Social Transformations

Bernini Struts

Michael Cole

Few works in the history of sculpture are more admired for the sheer skill of their carving than Gianlorenzo Bernini's *Apollo and Daphne* (figure 3.1). Charles Avery counts it among the pieces that established Bernini as "the greatest sculptor in the world."¹ Peter Rockwell maintains that "any sculptor who looks at Bernini's *Apollo and Daphne* can only come away astonished."² And Howard Hibbard concludes his discussion of the statue by suggesting that it is *too dazzling*, showing "a quality of immature excess, of virtuosity for its own sake."³ The *Apollo and Daphne* has come to stand as the perfect antithesis to the modernist principle of "truth to materials," the ultimate illustration of the artist defying his medium's very nature. Indeed, it has become difficult, in view of the *Apollo and Daphne*, to imagine what Bernini could *not* make marble do. No wonder Jennifer Montagu caused a small sensation when she argued that its most famous features were executed by Bernini's gifted assistant Giuliano Finelli rather than by the master himself.⁴

Bernini began the *Apollo and Daphne* in 1622 and had largely completed it by 1624, the last year of his employment with Cardinal Scipione Borghese. Roughly contemporary with the sculptor's *David* (1623–4) and still standing in the building for which it was made, it represents the culmination of a series of works that, as Rudolf Preimesberger suggested in a classic article, ask to be measured collectively against a sixteenth-century, largely Florentine, tradition.⁵ The *Apollo and Daphne* and the other statues Bernini made for the Cardinal were collectors' pieces, appealing explicitly to a cultivated audience with a historical sensibility and a keen awareness of sculptural practice. They engage themes from



Figure 3.1 Gianlorenzo Bernini, *Apollo and Daphne*. Reproduced from Kristina Herrmann Fiore (ed.), *Apollo e Dafne del Bernini nella Galleria Borghese* (Milan: Silvana, 1997).

Renaissance art theory, and they consistently show the artist identifying and overcoming conventional ideas of marble sculpture's "difficulties," often by doing things said to be possible only in other media. To follow Preimesberger, the group to which the *Apollo and Daphne* belongs aims to isolate and erase what sixteenth- and early seventeenth-century writers presented as the *limits* of sculpture: the representation of fire, for example, or of lightness, or of transparency, or of transformation.

The importance of this way of thinking is evident in much of the recent literature, including, notably, the catalogue for the *Bernini Scultore* exhibition at the Galleria Borghese in 1998.⁶ More recently, though, it has become possible to evaluate Preimesberger's theses in somewhat different terms, with a new eye to the actual facture of the sculptures. One of the revelations of Anna Coliva's 2002 book *Bernini Scultore: La Tecnica Esecutiva*, for example, is that Bernini initially accepted a prescript adhered to by many of his Cinquecento predecessors: that to offer a truly virtuoso display of technique, the sculptor's composition had to be monolithic. Like Michelangelo, Baccio Bandinelli, Giambologna, Ippolito Scalza and others before him, the young Bernini looked for ways to carve complex groups in a single piece of stone.⁷ Evidently, Bernini's sculptures were also appreciated in these terms: Paolo Alessandro's 1704 *Raccolta di statue antiche e moderne*, for example, states that "the Cavaliere Gianlorenzo Bernini sculpted the well-known story of Apollo and Daphne *in un solo marmo* for Cardinal Borghese."⁸ To be sure, his increasingly ambitious works reveal an apparent willingness to piece in sections of marble where this couldn't be easily perceived: part of Proserpina's hair, for example, is inserted into the otherwise monolithic statue showing her abduction, as is a large section of drapery in the *David*.⁹ It seems safe to assume, nevertheless, that even these works were meant to be taken, like the *Laocoön* a century earlier, as monoliths.

Later in his career, Bernini began more freely to combine large pieces of marble, and even to mix marble with other materials. His duties at St. Peter's, in particular, required him to think on a substantially larger scale and to adapt his practices accordingly: by mid-century, in fact, Bernini's 1631–8 *St. Longinus*, along with the other statues he designed for the crossing, were serving as examples of how to hide joins with draperies and other devices.¹⁰ This new method, like his later chapels, where stucco pretends to be stone and subtle shifts of color and textures make it difficult to see just where a piece of marble ends and a less noble material begins, marks a crucial technical departure from the ambitious sculptures of the

previous century. It is difficult to imagine Michelangelo or Giambologna doing anything of the sort, and even Francesco Mochi seems to have followed Bernini's path only when working from Bernini's designs. The works from the 1630s and after consequently raise questions about how we are to take the Borghese marbles. Do the early examples of piecework in any way anticipate Bernini's later colossi? Where Bernini resorted to adding pieces to a statue, was this planned from the outset or a response to accident? The cord of the sling in the *David*, the stone of which is not continuous with the rest of the statue, shows how difficult these questions can be to answer.¹¹ Indebted as the *David* is to Florentine precedents, and to Michelangelo's scowling giant in particular, Bernini has pursued a sort of form that sculptors only began to attempt in the later sixteenth century, piercing the single marble block at various points and dramatically excavating the figure's limbs. Bernini must have realized that David's liberated arms would be challenging enough to execute, and he may well have decided that the cord would be impossible to make as an integral feature of the statue. It is equally conceivable, however, that Bernini decided here to test what the stone would allow and that, under the pressure of his instruments, the marble simply snapped, requiring Bernini to carve and attach a new weapon.

Either way, such passages indicate that, by the time he undertook the last details of the *Apollo and Daphne*, Bernini would have been well aware of the dangers his daring approach to the marble block presented. Hands, fingers, and the things they held were frequently the zones of highest risk, as not only the *David*'s sling but also an attached finger in the *Pluto and Proserpina* demonstrate.¹² This casts Bernini's eventual treatment of Daphne's own hands in a surprising light. Passages like these fell into the category that Benvenuto Cellini, one of the most informative early modern writers on the craft of marble sculpture, referred to as "extravagant attitudes."¹³ Cellini meant to draw attention to poses that were striking and unusual, but he also uses the term "extravagant" in something like its literal sense of "straying beyond bounds," denoting sections of marble that project dramatically outward from another surface or core. As the painter Pontormo, too, noted, these were the achievements that most impressed viewers, even viewers who were not practicing marble-cutters.¹⁴

Frequently, as Cellini notes, the sculptor would begin to execute such features not with a chisel but with a drill.¹⁵ One can see the results of the procedure Cellini had in mind in works like Vincenzo de' Rossi's 1586 *Hercules and Cacus* or Nicolas Cordier's 1605 *St. Sebastian* (figure 3.2).¹⁶



Figure 3.2 Nicolas Cordier, *St. Sebastian*. Reproduced from Silvia Pressouyre, *Nicolas Cordier: recherches sur la sculpture à Rome autour de 1600* (Rome: Ecole Française de Rome, 1984).

Intending to represent a hand with splayed fingers, the sculptor would begin by boring out the spaces that would separate the digits – that this was Bernini's first step in the *Apollo and Daphne* is evident from a *pentimento*, the hole he began to drill in the stone that now constitutes Daphne's right ring-finger, before realizing that the space he aimed to open should go farther to one side.¹⁷ After drilling through the stone, the sculptor would then hollow out the area with a rasping file (*raspa*) or small chisel (*scalpello*), leaving a series of struts or bridges in place to brace the stone while he worked. Only when the hand was finished would these struts be cut away. The fact that many sculptures survive with such struts still intact indicates that their removal was among the last things the sculptor would do on the work, presumably in the interest of keeping the figure's most fragile parts protected, even while other areas of the statue were being carved. It also suggests that sculptors who had once planned for hands arranged in dramatic poses sometimes lost their nerve, deciding that a seemingly “non-finito” statue was preferable to one with replaced or added fingers, arms, or legs.

There is no doubt that Bernini, too, regularly followed this same procedure, for a number of his later sculptures retain their struts. And that even such a brilliant carver as he left sculptures with added fingers – the broken and repaired fingers on Apollo's right hand being a particularly telling case in point – demonstrates that the fears such technical aids betrayed were not unwarranted. Research by Coliva, Rockwell, and their collaborators reveals that the *Apollo and Daphne* depends more heavily on drillwork than any other early Bernini statue.¹⁸ It is unclear just what implications this has for its authorship: a number of Finelli's portrait busts show him to have been a great master of the drill, but then so do the statues of Pietro Bernini, Gianlorenzo's father and teacher, that are closest to Lorenzo's first works in date. Questions of attribution notwithstanding, knowledge that the maker used the drill extensively in the work encourages the viewer to look at the branches of stone that run between Daphne's fingers (figure 3.3) in a particular light: whatever else they are, they are traditional struts, sections of marble that the carver did not quite bring himself to cut away. It seems likely that Bernini and Finelli both used such devices whenever they carved hands; the added weight the laurel stems and leaves brought to Daphne's fingers, however, would have made these all the more necessary. That they retain their conventional role within the carving process is reinforced by the fact that the area adjacent to the struts counts among the most unfinished-looking in the whole statue: chisel and



Figure 3.3 Gianlorenzo Bernini, *Apollo and Daphne* (detail). Reproduced from Kristina Herrmann Fiore (ed.), *Apollo e Dafne del Bernini nella Galleria Borghese* (Milan: Silvana, 1997).

file marks are visible across the inside of Daphne's hands, one of her fingers is so roughly sketched that it looks faceted, and the thumb is almost entirely uncarved. Traces of graphite, moreover, suggest that Bernini still thought there remained work to do.

From one point of view, this adds weight to Rockwell's assertion that the sculptor's carving technique was, on the whole, traditional. Certainly Bernini seems to have been following later sixteenth-century practices, which themselves followed the examples of more ancient techniques.

At the same time, Bernini's struts are uniquely ingenious, for, unlike most of their counterparts, which undermine the illusionism of the work, his at first remain almost unnoticeable. Possibly for the first time in the history of marble carving, an artist has attempted not to remove devices that were conventionally employed as temporary supports, but rather to make them virtually disappear into the work's fiction. The move might be compared to the use Adriaen de Vries made, in the same period, of the sprues used to channel molten bronze into his molds, turning the metal tubes into branches and other motifs rather than simply sawing them off the finished statue.¹⁹ Bernini was more likely inspired, however, by the tree stumps and other forms that marble sculptors had long used to prop up figures that could not stand on their own two feet. The branches that run between Daphne's fingers are akin to the disguised structural devices that Bernini used elsewhere in his early marbles – the armor that supports his David, for example, or the drapery that braces his *Aeneas* – with the difference that the *Daphne* points to concerns about the marble's tensile strength rather than about statics as such. The irony is that the passages viewers have long regarded as proof of Bernini's bravado would, in almost any other context, have made him look cautious.

The struts in the *Apollo and Daphne* don't look like miscalculations (overestimating the poses the sculptor could get away with) or retreats (reassessing the marble's strength once the fingers were actually blocked out); one reason for this, of course, is what surrounds them. The sculptor did not just clear out the four hollows separating the fingers and thumb of each hand; he bored a host of voids, leaving forms that ramify out from and around the fingers. Some of these are clearly motivated by structural as much as by aesthetic concerns: the stem that grows out from the knuckle of Daphne's left index finger braces the leaf it joins, and a billowing lock of Daphne's hair helps support the burst of leaves from her left thumb. Thanks to Bernini's or perhaps Finelli's fine carving, however, some of the stem-bridges become the most delicate parts of the whole sculpture, reversing the role we expect such structures to serve. Bernini's addition of forms that evoke struts at places where they are unneeded – stretching from the toes of Daphne's perfectly solid left foot to the ground, for example – affects the way the viewer sees others as well. The tendril cues the viewer to read the struts within the context of the statue's narrative; looking from the foot to the hand, it becomes difficult to believe that the struts there, too, are present for any other reason than to make the depicted story all the more vivid.

This is to read these motifs not for their irony but for their paradox. Elsewhere I have suggested that Bernini's *Apollo and Daphne* takes up a Cinquecento conceit, identifying the sculptor as a kind of sun god and his wondrous object as something notionally moved and even created by the work of light.²⁰ The fantasy of the *Apollo and Daphne* itself centers on an artful transformation, Daphne's metamorphosis into a tree; to believe the work's illusion is to see the "wood" between her fingers as something that has *grown* there, like a plant under the sun. Part of the fiction of the *Apollo and Daphne*, in other words, is that fingers pre-existed the struts. The statue creates a false memory of fingers with nothing between them, an effect that makes it all the more possible to imagine the connections away. That modern art historians have not seemed to notice their function only speaks to the power of Bernini's device.

The other side to the paradox, of course, is that once we see the struts as struts, it is difficult to see them as anything else. In truth, Bernini has not worked terribly hard to make them look otherwise: those bridging the middle three fingers of each hand have no attached leaves or anything else that would indicate that they are animate. The fact that they look so unfinished in comparison to the rest of the work makes them the most salient vestiges of the original block and reminds the viewer of the transformation Bernini himself has effected. In this respect, the struts seem almost to advertise their conventional function. As struts, the marble bridges between Daphne's fingers make the statue seem unfinished, and thus they explicitly solicit attention to Bernini's transformation of the block. This, as much as Bernini's virtuosity *per se*, must have delighted his earliest viewers, first and foremost his patron Scipione Borghese, who would have enjoyed trying to see for himself where the technical difficulties in Bernini's sculpture lay, inviting the sculptor to reveal what challenges were really at issue.

In all of these respects, the *Apollo and Daphne* marks a kind of conclusion to Bernini's early practice. Though recent scholarship has given a good deal of attention to the conditions in which Bernini's *Apollo and Daphne* was displayed, it was only after Bernini left the Borghese cardinal to enter the service of the newly elected Pope Urban VIII that the expectation of close inspection that that work still asserted truly began to be subordinated to a real concern with site. The years following the completion of the *Apollo and Daphne* saw broad changes in Bernini's sculpture; apart from the busts he produced more or less continuously throughout his career, Bernini leaned increasingly to the design not of autonomous works but of what

we would today call “installations,” beginning with his 1624–6 *S. Bibiana* and continuing with his work on the baldachin for the crossing of St. Peter’s. The transition would also mark a change in Bernini’s own professional identity, as he refashioned himself from a specialist in marble statues into an architect, designer, and general impresario.

Later sculptures, too, retain their struts, but their conspicuousness is telling. Consider Bernini’s 1654–68 *Constantine*. Here, as he had in his youth, Bernini gives his figures “extravagant” poses, and here again he relies on a strut, running between the rearing horse’s front legs, to stabilize the work. This time, however, Bernini does not make any effort to disguise the function of his marble brace. The most that can be said is that, from certain points of view, it would not be seen. True to Bernini’s sculptural origins, the *Constantine* stands on a pedestal, as if to announce that it should be regarded as a figure in the round, and not just as narrative relief. But unlike Bernini’s early productions, the *Constantine* is not meant to be admired especially as a transformed “object.” In a decisive rejection of the Renaissance tradition that shaped the young Bernini’s priorities, the sculpture becomes an image.

In other works, the difference becomes still more stark. The *Truth* (1646–52), the *St. Jerome* (1661–3), and the *Bust of Clement X* (c.1676) all likewise include prominent struts. In these cases, though, the works, like de’ Rossi’s and Cordier’s statues before them, simply look unfinished. What are we to make of this? It is possible that, after a certain point, the sculptor’s studio no longer commanded the talent to turn out the mesmerizingly virtuoso pieces of Bernini’s youth. The fact that the struts remain in these works may constitute further evidence that it was Finelli rather than Bernini who put the finishing touches on the Borghese statues, and that Finelli’s departure in 1628 imposed new limits on what the master could do. Equally likely, though, is that Bernini simply lost interest in blinding his viewers with skill as he had as a youth. Once Bernini went to work for the Pope, his reputation no longer depended on his ability to cut marble. With the exception of the rare portrait commission, Bernini would position himself as a conceptual artist far more than as a craftsman.

Acknowledgments

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Notes

- 1 Charles Avery, *Bernini: Genius of the Baroque* (London: Thames and Hudson, 1997), p. 17.
- 2 Peter Rockwell, “La tecnica scutorea di Apollo e Dafne,” in Kristina Herrmann Fiore (ed.), *Apollo e Dafne del Bernini nella Galleria Borghese* (Milan: Silvana, 1997), pp. 139–47, at p. 139.
- 3 Howard Hibbard, *Bernini* (New York: Penguin, 1982), p. 54.
- 4 Jennifer Montagu, “Bernini sculptures not by Bernini,” in Irving Lavin (ed.), *Bernini: New Aspects of his Art and Thought* (University Park: Pennsylvania State University Press, 1985), pp. 23–43. For the debate over whether Bernini or Giuliano Finelli carved passages including the leaves that Daphne sprouts, see most recently Kristina Herrmann Fiore, “Apollo e Dafne del Bernini al tempo del Cardinale Scipione Borghese,” in Herrmann Fiore (ed.), *Apollo e Dafne*, especially pp. 103–4 (with further references). The standard monograph on Finelli is Damian Dombrowski, *Giuliano Finelli: Bildhauer zwischen Neapel und Rom* (Frankfurt am Main: Peter Lang, 1997).
- 5 Rudolph Preimesberger, “Themes from art theory in the early work of Bernini,” in Irving Lavin, *Bernini* (University Park: Pennsylvania State University Press, 1985), pp. 1–18.
- 6 Anna Coliva and Sebastian Schütze (eds.), *Bernini scultore: la nascita del barocco in casa Borghese* (Rome: Edizioni de Luca, 1998).
- 7 On the importance of the monolith to Renaissance sculptures, see especially Irving Lavin, “The sculptor’s ‘Last Will and Testament,’” *Allen Memorial Art Museum Bulletin* 35 (1977–8), pp. 4–39, and *idem*, “Ex uno lapide: the Renaissance sculptor’s *tour de force*,” in Matthias Winner, Bernard Andreae, and Carlo Pietrangeli (eds.), *Il cortile delle statue. Der Statuenhof des Belvedere im Vatikan* (Mainz am Rhein: Philipp von Zabern, 1998), pp. 191–210.
- 8 Quoted in Hermann Fiore, “Apollo e Dafne,” p. 76.
- 9 See Anna Coliva (ed.), *Bernini scultore: la tecnica esecutiva* (Rome: De Luca, 2002), pp. 153–5, 174.
- 10 See Orfeo Boselli, *Osservazioni sulla scultura antica*, ed. Antonio P. Torresi (Ferrara: Liberty House, 1994), p. 152: “istorie e statue grandi si possono fare di più pezzi ogni volta, che le commissure vengono occultate dentro panni, nuvoli, architetture, o altra cosa a ciò atta e sufficiente al bisogno, come è il colosso dell’Apostolo Sant’Andrea in Vaticano, opera del non mai abbastanza lodato Francesco du Quesnoy Fiammingo, da me in altri luoghi nominato e la Santa Veronica del Mochi e il San Longino, opera del Bernino con altre che io non mi ricordo.”
- 11 See Coliva, *Bernini scultore*, pp. 174–5.
- 12 For Proserpina’s finger, *ibid.*, p. 153.

- 13 Benvenuto Cellini, *Due trattati, uno intorno alle otto principali arti dell'oreficeria, l'altro in materia dell'arte della scultura...* (Florence: Velente Panizzij and Marco Peri, 1564) (anastatic reprint, Modena: Edizioni Aldine, 1983), p. 57v: “Pigliasi poi i Trapani, i quali si adoperano quando le lime, saluo se si hauesse à cauare in qualche difficile sottosquadro di panni, ò in qualche attitudine strauagante della figura.”
- 14 See the letter published in Paola Barocchi, *Scritti d'arte del Cinquecento* (Milan and Naples: Riccardo Ricciardi, 1973), pp. I, 504.
- 15 See the useful illustrations in Coliva, *Bernini scultore*, pp. 194–5, as well as Rockwell's comments, “La tecnica scutorea,” p. 197, on Bernini's novel use of the rasping file (*raspa*) like a saw (*sega*).
- 16 Compare the discussion in Montagu, *Roman Baroque Sculpture: The Industry of Art* (New Haven: Yale University Press, 1989), pp. 44–5.
- 17 For the *pentimento*, and for Bernini's technique generally in the work, see Rockwell, “La tecnica scutorea,” pp. 139–47, at p.142 and fig. 5.
- 18 Compare the diagrams in Coliva, *Bernini scultore*, pp. 194–5 and *passim*.
- 19 See Frits Scholten (ed.), *Adriaen de Vries, 1556–1626*, exhibition catalogue (Amsterdam: Rijksmuseum, 1998), pp. 201–9, 243–7.
- 20 Michael Cole, *Cellini and the Principles of Sculpture* (Cambridge: Cambridge University Press, 2002), p. 155. For a much fuller treatment of closely related ideas, see Frank Fehrenbach, “Bernini's Light,” *Art History* 28 (2005), pp. 1–42.