No one in the 1960s produced livelier, more infectiously playful sculpture than the British artist Anthony Caro, five of whose works now grace the Metropolitan Museum of Art’s rooftop garden. Pursuing possibilities opened up by David Smith’s welded steel works, Mr. Caro took sculpture off the pedestal, stretched it out across the floor and expanded it into airy concatenations of brightly colored lines and planes made with industrial metal sheets, pipes, tubes and beams. Perfectly composed yet seemingly freely improvised, they gave the impression of color liberated from physical support, like paintings in space or visual jazz. Nothing in Pop Art came as close to capturing the decade’s groovy mood.

The authoritarian, arch-formalist critic Clement Greenberg was an admirer, friend and studio consultant. With characteristically imperious self-assurance, he told an interviewer in 1968, “Anthony Caro is a major artist — the best sculptor to come up since David Smith.” The Queen of England evidently concurred. She has knighted him and awarded him the Order of Merit.

A more surprisingly insightful fan is Charles Ray, the Los Angeles sculptor whose work deals in mind-altering manipulations of perception. As an undergraduate in the 1970s, Mr. Ray studied with Roland Brener, a former student of Mr. Caro’s.
Mr. Caro’s “Early One Morning” (1962) (which is not in the Met’s show) had a revelatory impact on the young Mr. Ray. This bright red sculpture offers a loose arrangement of rectangular metal pieces; thin, gently bent tubes; and I-beam sections arranged along a horizontal axis more than 20 feet long. In an interview with the art historian and critic Michael Fried, a long-time advocate of Mr. Caro’s work, Mr. Ray recalled being amazed by the sculpture, which seemed to him to be “compressing and expanding space in such a hallucinogenic way.”

“Not that this sculpture was prophetic of the coming youth culture involvement with drug experiences,” Mr. Ray added, “but it was so born in its time. It is so alive in its making that it seems unlikely ever to die. ‘Early One Morning’ is a work that I gauge myself by.”

The wrap-around cover photograph of the catalog for a retrospective of Mr. Ray’s work at the Los Angeles Museum of Contemporary Art in 1998 shows the nebbishy younger sculptor meditating on “Early One Morning,” courtesy of Photoshop.

Only one work selected for the new Met exhibition, “Anthony Caro on the Roof,” has that startling, newborn feeling. Sporting a brand-new coat of shiny, taxi-cab yellow paint, “Midday” (1960) has the look of a jaunty, industrial dinosaur. Raised on stout, rectangular legs at either end, an inclined I-beam bristling with nut-and-bolt fasteners supports two squarish steel elements — one lifted at a corner — and an upswept curved piece.

It was the breakout sculpture for Mr. Caro, who worked as an assistant to the British sculptor Henry Moore in the 1950s, and it still exudes a powerful, coiled animation. It seems crouched and ready to spring into an anything-is-possible era.

The Met’s show skips over the polychrome works of the early and mid-’60s to “After Summer,” an elephantine piece from 1968 that furthers the horizontal and fragmenting motifs of previous years while anticipating a consolidating, conservative turn in the ’70s and thereafter. Painted a nondescript pale gray, it consists of a series of cupped, quarter-circular sections bolted to a pair of beams extending 24 feet along the floor. It has an oddly militaristic feel, as if it were based on a design for an ancient Roman battle apparatus repurposed to take on Minimalism, the emphatically prosaic style by which Mr. Caro’s kind of sweet, formal lyricism would be totally eclipsed by the end of the decade.

After the ’60s, the idiosyncratic exuberance and delight in sensory experience of Mr. Caro’s early work is overridden by a determination to uphold the presumably enduring values of high Modernism. You wonder if the influences of friends like Greenberg and Mr. Fried, who dismissed most new art of the ’60s as merely entertaining novelties, may have helped to suppress Mr. Caro’s more imaginatively innovative side and to inflate a more grandiose ambition.

Remarking on Mr. Caro’s roots in English tradition, Greenberg wrote in a 1965 essay, “Without maintaining necessarily that he is a better artist than Turner, I would venture to say that Caro comes closer to a genuine grand manner — genuine because original and un-synthetic — than any English artist before him.” No artist should take that kind of statement seriously, but it seems that Mr. Caro found it hard to resist.

The show’s last three works find him looking more to the past than to the present or the future, and striving, ponderously, for a grand manner. “Odalisque” (1984) — a chunky, compacted assemblage of
hemispherical shells cut from big nautical buoys, giant old chain links and part of a steel boat deck — is
undeniably suave, but dully so. Its Cubist, harmonious dissonance would not have shocked anyone in the
avant-garde of the 1950s.

“Blazon” (1987-90) is overtly and all too literally architectural. With a column at left that’s almost
12 feet tall, an arch-shaped slab above inwardly angled walls and a railing of thin rods across the front, it
resembles an oversize model for a Postmodern hotel balcony. The brick-red paint covering the grainy steel
only enhances an unintended air of kitschy, Italianate Neo-Classicism.

More intriguingly enigmatic, albeit still heavy-handed, is “End Up” (2010), a boxy, Dumpster-size
construction of rusted steel plates, cast iron and wooden timbers. It looks like something that was hauled
up from the bottom of the sea — part of an ironclad from the Civil War, maybe — varnished for a history
museum display. The rounded shoulder of a ship’s bollard emerges on one side, adding a vaguely
surrealistic, organic element. A rectangular window admits a view into a shadowy but empty interior;
there is no mystery there. For better or worse, the gratifications of Mr. Caro’s art have always been on the
outside.

At 87, Mr. Caro is still going strong. He is now working on an immense, multipart sculpture that
will occupy three blocks of Midtown Park Avenue traffic medians next year. No doubt it will be a thing of
imposing grandeur. All the more reason for an enterprising museum curator to revisit the time half a
century ago when Mr. Caro and the Western world were momentarily possessed by a spirit of joyful, devil-
may-care optimism.

“Anthony Caro on the Roof” runs through Oct. 30 at the Metropolitan Museum of Art; (212) 535-7710, metmuseum.org.