

MARTIN SCHWARTZ

INTERSTICES 24

Why can't architecture be more like water? Oceans, lakes, ponds, fountains, pools, puddles, droplets, multiple-meanings, complements, paradoxes, and metaphors, 1957–1994

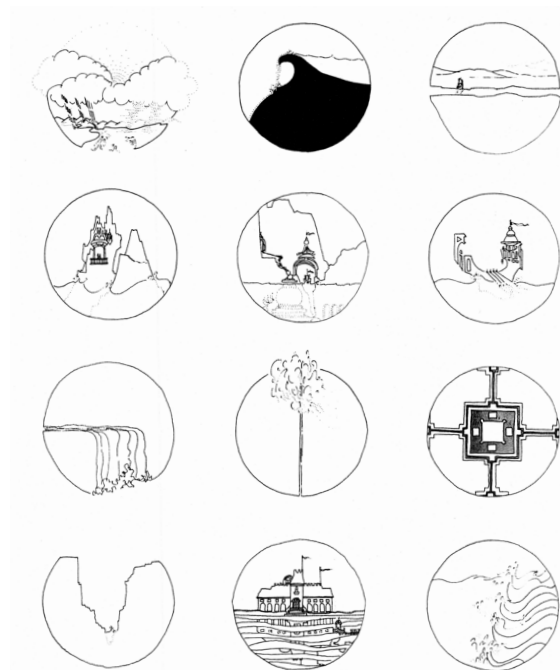


Fig. 1 “The Qualities of Water” designed by Charles W. Moore and Martin Schwartz [Hand drawing by Martin Schwartz]

From 1957 through 1993, the years that span the most productive of his professional life, the noted American architect, Charles W. Moore, taught architecture at several universities, lectured frequently at additional such institutions, and wrote a good number of articles and books. Of Moore’s books, all but two are co-authored. These two are not only individually authored but share the same title, *Water and Architecture*. The first of the two volumes was his PhD dissertation, completed at Princeton University in 1957.¹ In the second, he finally turned his thoughts into a book published in 1994, one year after his death.²

Aside from the satisfying symmetry of bookending one’s professional life, almost literally, with two books of the same name, the fact that Moore authored them himself speaks to the regard he held, over a long period of time, for the subject matter. There was a seriousness of purpose in his understanding of water, with

theoretical consequences that took architecture both back to its essentials and expanded it to encompass a modest but deep humanism, characteristic of Moore, but not of many other modern architects. As was typical of Moore, whose thinking often swerved wide of commonly held beliefs, he had something different to say about the subject of water, something worth recalling and worth better illustrations than the blurred black-and-white images, severely reduced by microfilm and xerography, available in reprints of his dissertation. He continued to think about water and its implications, in practice, in his teaching, in lectures, and ultimately in his 1994 book.

By the time Charles Moore arrived at Princeton University, in 1955, with a PhD as his objective, he already had substantial experience in architectural practice, including works he designed in Korea during a stint with the U.S. Army. Moore recalled that it was at Princeton that he and his classmates were introduced to the idea that architecture could be the source of meanings beyond the fact of even very handsomely crafted construction. Moore recalled, in an oral history conversation conducted with Sally Woodbridge, that from E. Baldwin Smith, the art historian, Princeton architecture students absorbed the idea that:

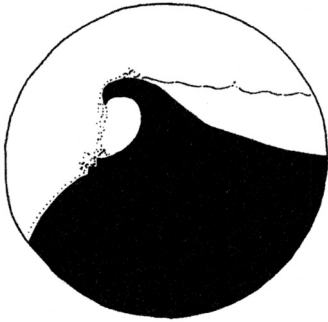
[. . .] things can suggest something beyond themselves [. . .] Smith was interested in the symbolic values [. . .] of all kinds of things [. . .] it began to be apparent [. . .] by the time I left there—that all that stuff from the history books had meaning for us.³

It was under Smith's influence and, perhaps more specifically, that of Jean Labatut, the director of Princeton's graduate program in architecture who had designed a programmed fountain, music, and fireworks installation at the 1939 New York World's Fair,⁴ that Moore determined to write his dissertation on water.⁵ Labatut was, Moore recalled:

[. . .] perceptive at developing nuances [. . .] He pointed out the kinds of things where you see this and then you see that and then they all relate.⁶

In my thesis, *Water and Architecture*, which I started at Princeton in 1956 and got done in late 1957, I saw a chance to deal with communicative and emotional and sensual characteristics of materials, surfaces and shapes and all at a time when a fairly narrow formalism was still current.⁷

In 1977, about halfway between the two water books, Moore attempted what I believe to be one of several attempts to write a book that followed up on his dissertation. I had recently graduated with my MArch, prepared under Moore's supervision at UCLA, and he asked me if I would do some drawings for a book on water and architecture. This required him to explain his expansive thinking about water to me. In conversation, Moore patiently unpacked his ideas about how water and architecture were allies. He offered a series of examples that we discussed. When I suggested that each of the characteristics ought to be accompanied by a "logo" that exemplified that character, he agreed happily. Water, it turns out, is enormously difficult to draw convincingly, but we devised a series of graphic ideas that, not surprisingly, resemble Moore's informal sketches and fantasy drawings. I executed the final drawings, in ink, to depict twelve notions as to how water and architecture are associated with each other. Those ideas and the way I would, admittedly in retrospect, explain them are:



ig. 1b "Edges"

Edges emphasises that interesting and vital things occur at the edges of bodies of water, and similarly, critically, at architectural boundaries.

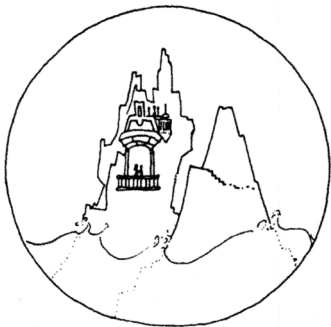


Fig. 1d "Surrounding"

Surrounding is the idea that, just as water may surround and call attention to a place of refuge in its midst, architecture may surround and establish meaningful and important places.



Fig. 1a "Fitting"

Fitting represents the idea that, as the discovery of the hydrologic cycle made evident, all of the water in the world is part of the same, essentially finite, body of water.⁸ All water is connected and continually moving through different stages of the cycle.

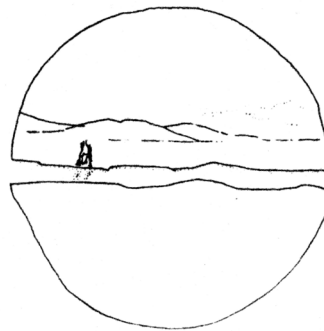


Fig. 1c "Accompanying"

Accompanying suggests that, as we are inclined to follow and explore flowing streams of water, we are similarly inclined to follow alignments, usually in the form of paths, generated in architecture.



Fig. 1e "Engulfing"

Engulfing, related to *surrounding*, extends that idea to describe how interesting and unfamiliar things become engaged and concealed, below the surface or inside, and only hinted at by what can be seen.

Fig.1a-1e "The Qualities of Water" designed by Charles W. Moore and Martin Schwartz [Hand drawing by Martin Schwartz]

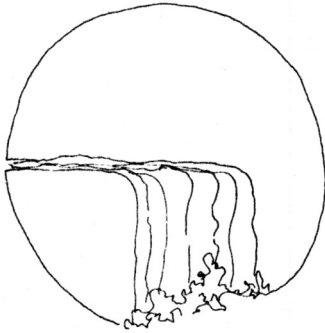


Fig. 1fg "Falling"

Falling reminds us that as water responds to gravity, plunging to create dramatic flowing curtains, gravity also causes water, properly contained, to accede and assume a stillness, in what appears to be a flat surface.

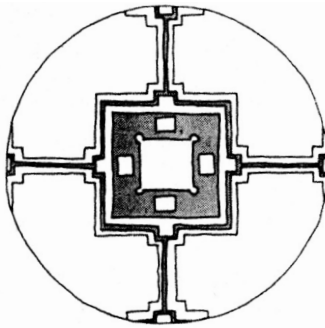


Fig. 1i "Organising"

Organising points to how water may be associated with order, in the guises described here, and in its readiness to assume forms induced upon it, under pressure, when contained, and when it falls. And water generates order around it, as it flows, accompanies, supports, engulfs, and defines edges, frequently in history convincing people to make settlements around it. We likewise rely on architecture to bring order to our lives.

Fig.1f-1j "The Qualities of Water" designed by Charles W. Moore and Martin Schwartz [Hand drawing by Martin Schwartz]

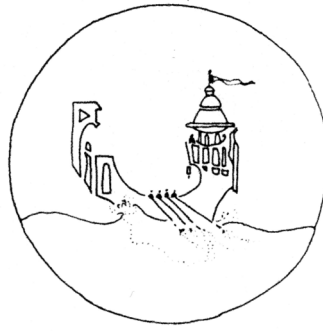


Fig. 1f "Supporting"

Supporting represents the notion that, just as water has the peculiar ability to float things at its surface, architecture, responding to gravity, strives to remain upright, frequently reserving a topmost hierarchical position for light, open, and important elements that hover, poised above all the rest.

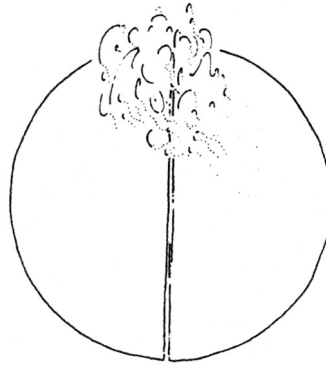


Fig. 1h "Squirting"

Squirting is something that water does considerably better than architecture, but this requires energy and external pressure, as water is induced to assume verticality and defy gravity. It would be a stretch to claim that buildings squirt, but reasonable to point out that they are required to toil against gravity to make habitable spaces.

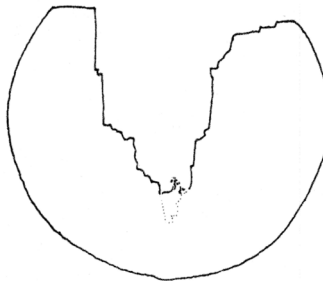


Fig. 1j "Eroding"

Eroding reminds us that water, which we typically encounter in the most helpful, domesticated, rhythmic, or pastoral situations, also possesses enormous power to create form, even as it destroys. When water erodes, it subtracts material and creates space. Space is the essence of architecture and that which distinguishes it from other related arts.



Fig. 1l "Speaking"

Speaking, Moore meant us to understand, is a reminder that things in the world, water in particular but also architecture, are capable of communicating meanings beyond themselves.

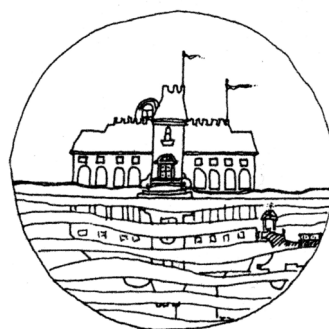


Fig. 1k "Reflecting"

Reflecting—duplicating images, expanding space, and redirecting light—is a characteristic most evident at water's stillest surfaces, but often discernible under other conditions. Architecture, at its best, also reflects its surroundings in the way it cooperates with and complements its landscape and neighbours.

Fig.1k–1l "The Qualities of Water" designed by Charles W. Moore and Martin Schwartz [Hand drawing by Martin Schwartz]

The twelve logos representing these ideas are published here for the first time.

Of these qualities of water, most are obvious and immediately verifiable. A couple of them emerge as having even greater implications for understanding how architecture is, or ought to be, a fundamentally responsive endeavour. Ideas like "organising" and "speaking" are particularly suggestive of what is essential to conjuring order from reality⁹ and bringing some significance into a small part of the world.

Moore, I have since realised, was an accomplished categoriser. One supposes that this aptitude may either precede or be an unintended consequence of earning a PhD. In any event, Moore's approach to this tactic was as particular to him as his choice of subject matter. His categories were frequently labelled with verbs appended with an "ing" ending to become present participles as adjectives, active word forms, implying the presence of change or motion. Remember that water is, perhaps above all, in motion continuously, sometimes very slowly, but always adjusting, changing in infinitely small ways even when it appears to be still. It would be difficult to say if Moore's understanding of water inspired his use of language or if the way he spoke and wrote invaded and found a home in his ideas about water. Moore's architecture echoed how he spoke and wrote: all incorporated motion. He was keenly aware of and intentionally made places that seemed to be set in motion as you walked through them. That is, even when still, they incorporate one of the most startling characteristics of water: constant transformation.

Moore's two *Water* books, closely related, if meant for different audiences and separated by more than 35 years, are broadminded and insightful. In his

development of the later book however, he deemphasised the individual qualities of water he had explored a few years earlier, opting instead for a text that is a perceptive, personal journey through water events and distant places. However, something of a gap remains in the broad, embracing message I think he wished to convey, an important point left as implication, a notion that resides in the many visible forms and personae of water: its paradoxes. In his 1957 dissertation, Moore acknowledged that the multiple dual and seemingly competing characteristics of water are extraordinary, meaningful, and delightfully puzzling. He wrote:

Water [. . .] has a symbolic content as powerful in the twentieth century [. . .] as it had been in the works of Plato and Heraclitus. Its symbolic content is rich to the point of paradox.¹⁰

The paradoxes, to be specific, refer to the several and distinctly different states that water assumes, all of them familiar to us, but seldom fully considered. These paradoxical qualities of water and its duelling potentials, appear to compete with each other but might be more usefully thought of as complements, which, when experienced together, form a more meaningful whole:

Water is both assertive and receptive.

Water is creative and destructive.

Water may give or receive form.

Water is a necessity for life, but may be, at other times, a threat to life.

Water both separates and connects.

Water may engulf or itself be surrounded: it may define a space or be defined.

Water is, concurrently, stable and everchanging.

Water is characterised by coherence—the tendency of its molecules to be attracted to each other—yet it flows, as the molecules trade allegiances.

Although, at a given moment, one of its characteristics may prevail, water typically exhibits its multiple personalities and paradoxical conditions flashing at the same time.

And, water is ubiquitous; it is the most ignored stuff around,¹¹ except maybe for air. It is usually thought to be “tasteless, odourless, and colourless,” and if it’s not, we worry about its purity. Yet part of its magic is that it assumes the tastes, aromas, and aspects of other things. One of my favourite superheroes is said to have made water into wine, a neat trick. But, to our great satisfaction, humans have been doing this for centuries: it just takes us a bit more time. Visually, when water appears to lie still, its surface seems absolutely level and, in the manner of a mirror, takes on images of scenes opposite or adjacent to it: the sky, the land, vegetation, the face of anyone who looks straight down into it. Another favourite of mine, in one version of the myth, is said to have been so taken with the beauty of the human face looking back at him on the still surface of a pond, that he attempted to kiss it and, in the process of doing so, drowned.

Because of its paradoxes, watching water is as hypnotic as watching a fire blaze. As it flows, it assumes unprecedented forms. The pull of the moon, 380,000 kilometres away, persuades the ocean to pulse, rhythmically, in evolving, twisting,

whitened curls of waves, susceptible to riding with long, polished, fibreglass planks, which in turn inspire us to song and widely celebrated good vibrations. “Yes,” Herman Melville wrote in *Moby-Dick* and anticipating Brian Wilson,¹² “as everyone knows, meditation and water are wedded for ever . . .”¹³

These paradoxes deserve close attention as it is certain that our fascination with water and readiness to attribute meaning to it reside firmly in its astonishing simultaneities. These overlapping relationships, its complementary states, characterise architecture, as well.

Over the course of his career, Moore designed several fountains in which he sought to incorporate the voices he discerned from his observations about water. He collaborated with landscape architect Lawrence Halprin to design the Lovejoy Fountain in Portland, Oregon (1963–65). He designed the notorious Piazza d’Italia fountain in New Orleans, Louisiana (1975–78). And, least known but wonderful in its own way, there was the small, perhaps too economical, fountain in the courtyard of the Faculty Club he designed for the University of California, Santa Barbara. At this building, completed in 1968, Moore’s fountain consisted of a common, oscillating lawn sprinkler that sent water upward and side-to-side, allowing the spray to fall lightly onto a multi-coloured, geometric flower pattern painted on a raised, circular, concrete pad. The fountain was excised quickly by an unsympathetic Club management.

Moore’s fondness for the irreverent and complementary truths inherent in water drew him to recall this story:

Four hundred years ago, a wise Japanese Zen master named Sen no Rikyū designed a legendary tea garden on a dramatic cliff site overlooking the Inland Sea. Despite the spectacular view over the broad expanse of murmuring ocean, the tea master carefully planted a high screen of hedges and trees all around the garden and blocked out the vista to the sea. In front of the hedge, Rikyū placed a small stone font for washing the hands, an important prelude to the tea ritual. Just above the bowl, he clipped a tiny opening through the leaves [. . .] As visitors knelt down to the bowl, their eyes would catch a fleeting glimpse of sea through the leaves just at the moment when their hands mingled with the cool water.

[The garden has long since vanished [. . .] but the lesson he leaves us is that, with only a scant amount of water and spirited design, all the water in the world can be called to mind.¹⁴]

If you have read Moore’s writings, if you heard him talk about water, or if you have seen his fountains, you already may know much of this and are certainly familiar with examples of the appearance of water in nature, in architecture, and the founding of great cities. What he never quite comes around to saying is that water and its characteristic qualities are metaphors for architecture, the way it has worked so well for us in the past, and might yet work, if we cared enough. Water vividly illustrates the requisite paradoxical but entirely sensible qualities we need in our lives: assertiveness and receptivity, an inclination towards the expansive and the satisfaction of enclosure. Water realises our creative and destructive impulses, our need for stability and transformation, connection and distinction, coherence and entropy.

Why can’t architecture be more like water?

NOTES

1. Charles W. Moore, "Water and Architecture" (PhD diss., Princeton University, September 1957).
2. Charles W. Moore; and Jane Lidz, photographer, *Water and Architecture* (Harry N. Abrams, 1994), 15.
3. Sally Woodbridge, "Oral History Interview With Charles Willard Moore," 28 December 1984, transcript pages 37–38.
4. The display took place at the Lagoon of Nations, New York World's Fair in 1939. School of Architecture Archive, Princeton University School of Architecture, accessed 8 October 2024, <https://soa.princeton.edu/content/school-architecture-archive>.
5. Woodbridge, "Oral History," 42.
6. C. Ray Smith, *Supermannerism: New Attitudes in Post-Modern Architecture*, (E. P. Dutton, 1977), 79.
7. Woodbridge, "Oral History," 37
8. "The water on our Earth today is the same water that's been here for nearly 5 billion years. So far, we haven't managed to create any new water, and just a tiny fraction of our water has managed to escape out into space. The only thing that changes is the form that water takes as it travels through the water cycle." "Are We Drinking the Same Water As The Dinosaurs?," <https://www.castlewater.co.uk/blog/are-we-drinking-the-same-water-as-the-dinosaurs#:~:text=The%20water%20on%20our%20Earth,travels%20through%20the%20water%20cycle>.
9. "For it is ultimately the function of art, in imposing a credible order upon ordinary reality, and thereby eliciting some perception of an order *in* reality, to bring us to a condition of serenity, stillness, and reconciliation." T. S. Eliot, "Poetry and Drama," *Atlantic Monthly*, February 1951, <https://tseliot.com/essays/poetry-and-drama>.
10. Moore, "Water and Architecture."
11. "[E]ventually one [fish] looks over at the other and goes, what the hell is water?" David Foster Wallace, "This is Water," commencement speech delivered at Kenyon College, 21 May 2005, <https://www.youtube.com/watch?v=DCbGM4mqEVw>.
12. Brian Wilson and Mike Love, "Good Vibrations," Irving Music, Inc., released on Capitol Records, 10 October 1966.
13. Herman Melville, *Moby-Dick, or The Whale* (The Arion Press/University of California Press, 1983), 3.
14. Moore, *Water and Architecture*, 1994, 15.