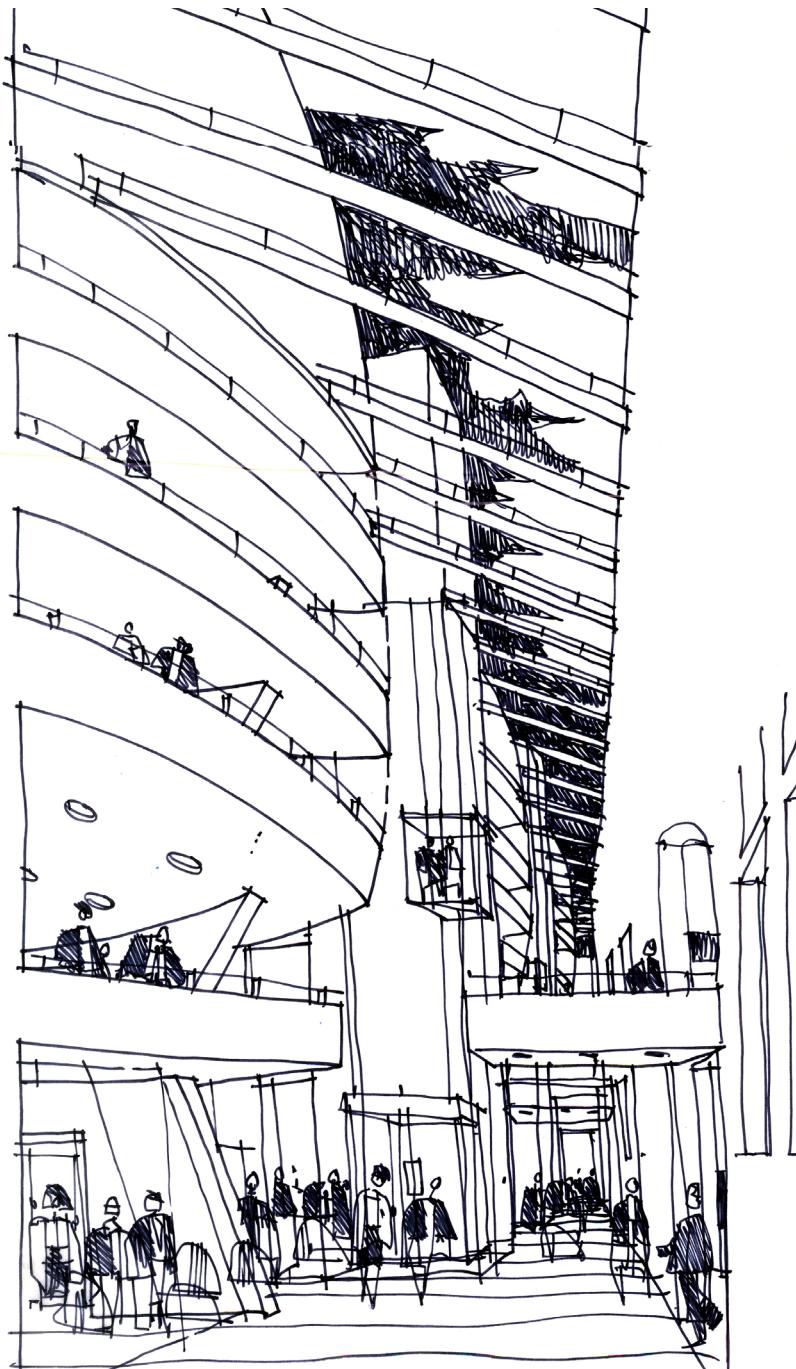


## Hand Drawing in a Digital Age

Alan Dunlop



*“God created paper for the purpose of drawing architecture on it. Everything else, at least for me, is an abuse of paper.”*

*Alvar Aalto*

*“The mother art is architecture.”*

*Frank Lloyd Wright*

I contend that hand drawing is fundamental to the mother art. It is a critical act in the process of thinking and of conveying ideas from the brain to the page.

Yet, today, very few architects draw by hand and instead rely on the computer. In offices and architecture schools worldwide, digital tools like Photoshop and SketchUp have replaced the drawing board. For many, the computer-generated image has become the only means of communicating.

Why, because hand drawing is tough and requires much practice and discipline. It takes confidence to put one's ideas directly onto paper. Starting a new drawing can be difficult. The first marks on paper are hesitant, made with tension and uncertainty.

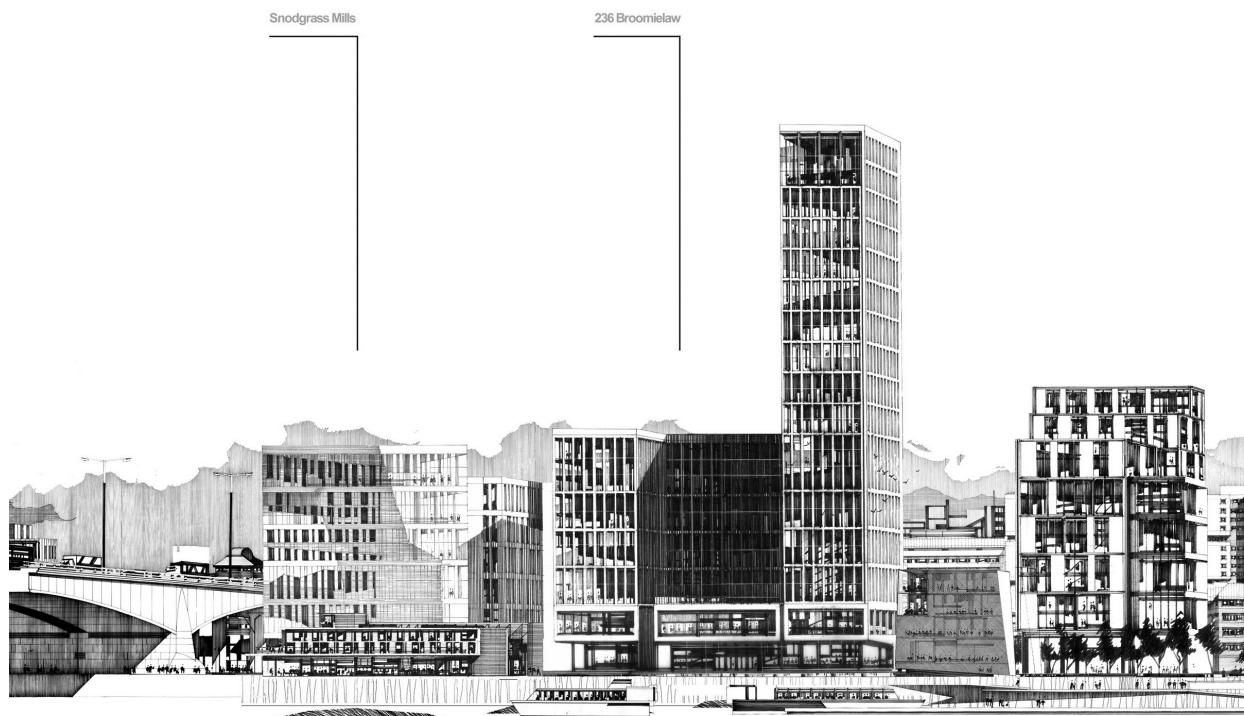
In contrast, computer-generated imagery can quickly impress inexperienced teachers, clients and picture editors. Through computer technology, a building can take shape effortlessly and can look very real.

Images can be varied, printed, coloured, cut and pasted before, it seems, you really know what you are

doing. However, in my experience as a teacher, students today know less about the practical realities of how to build than they did twenty years ago. This is a direct consequence of the focus on the fake authenticity provided by the computer. I am not a Luddite and recognise the ease and flexibility that comes from the computer, but it should not be the first and only means of initiating design or developing a project.

I very much agree with Professor Robert McCarter that the hand-drawing is the place, where thinking and making are joined together...and was disappointed recently when I was invited to lecture and critique the student work of a very prestigious school of architecture in Germany. I sat through numerous, repetitive presentations, where the emphasis was as much on computer-generated imagery and architectural graphics than any understanding of context, materiality or how to make a building. When I suggested that the work of one student looked good but lacked rigour and analytical depth and that I would be more impressed if they knew how to construct their project, the student replied, that such knowledge was not needed in architecture today. When qualified, they would simply pass their “concept” on to a technician or executive architect to make it a reality.

I sense though that in some schools this misguided idea of what an architect should be is beginning to change. During my tenure as the Dis-



tinguished Victor L. Regnier Visiting Chair at Kansas State University, I was greatly impressed with the positive attitude of the faculty in encouraging hand drawing and in the understanding among their students of how to build, with impressive results.

Universities that foster making and drawing as a way of studying and representing architecture, of communicating architecture, do their students a great service. The drawing and the hand-sketch relay an architect's intention in a way that digital representations cannot. When done skillfully, a drawing communicates an architect's intention with an undeniable clarity. The delicate weighing of

value and the subtle balance between elements to create a harmonious drawing reveal an unmistakable deliberateness. The process of creating the drawing, of an idea vibrating to the surface of an architect's mind and being expressed through the hand, invites the viewer to connect and engage at a level that is difficult for the digital drawing to attain.

As a medium, hand drawing and drafting communicate at a particularly human level. The response of the artist and the response of the viewer reciprocate each other in an ideal situation, with both being equally informed by the drawing. When the work begins to talk back, expressing

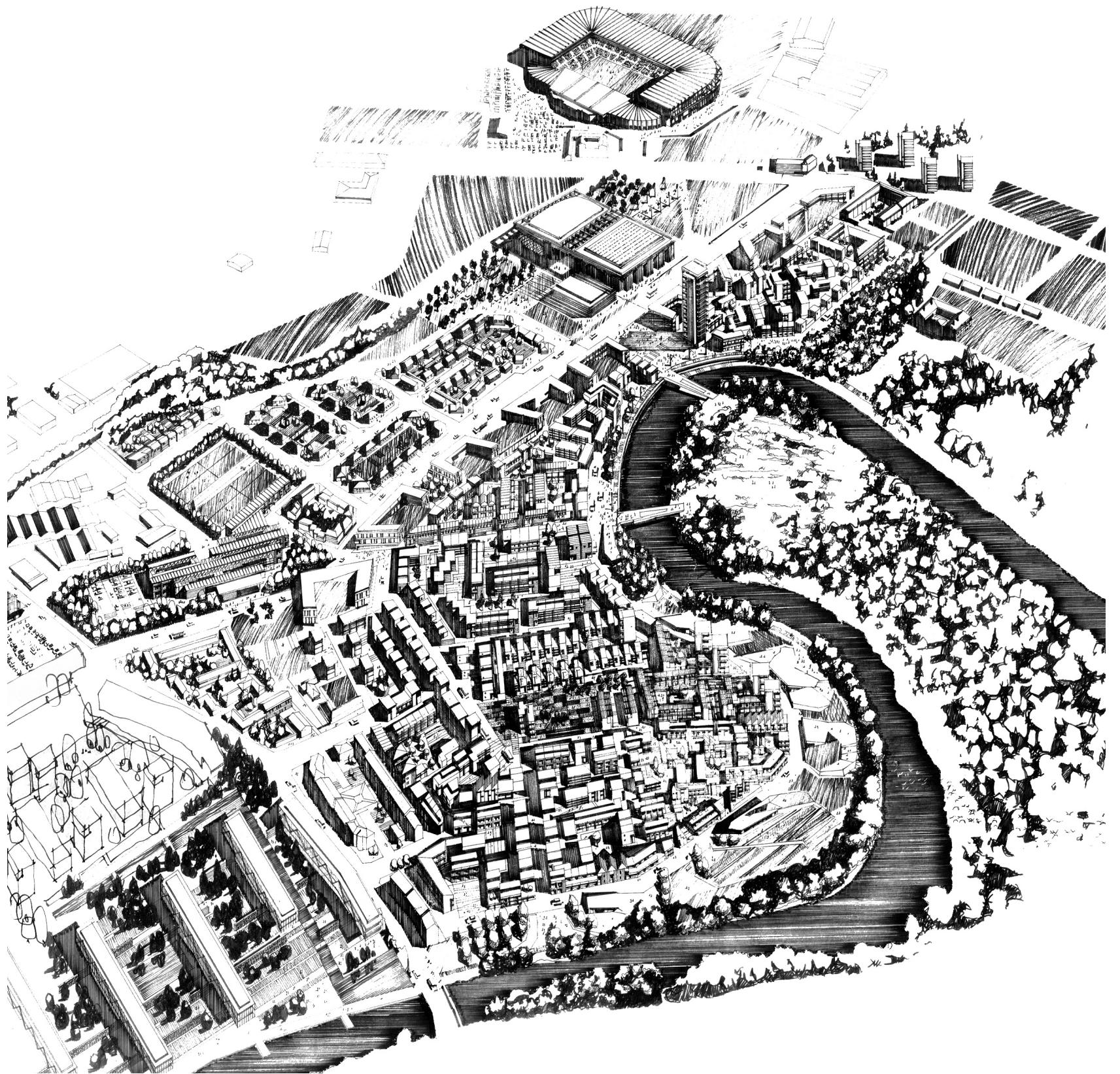
its intentions in a way that is both logical and beautiful, it can be appreciated by the architect as a study of the built possibility and by the viewer as art in its own right.

These days, I am more and more being asked to lecture and write on my drawings as essential elements of my built work. Recently, the biggest cheer in the University of Washington's lecture hall went up when I said SketchUp was the tool of the devil. The University of Washington is where Frank Ching taught for many years and a school where hand drawing and craft is considered very important. But even there, faculty often find it hard to pull students away from the

computer. The answer is to show that there is a real opportunity to communicate through drawing and that craft can be the basis of dynamic and influential design. Believe me, acquiring this essential skill is challenging, but any aspiring student or architect can find joy and reward in conquering the blank page.

My own career is predicated on producing pencil, pen and ink drawings and sketches. I have found that many clients are attracted to the authenticity of this approach. When I draw, the act itself is a means to consolidate my thinking on practical issues for the building: where will the light be, what should be solid or void and most importantly, can this idea exist in the built sense? Students should apply themselves to this discipline as a basic skill. I believe that schools and teachers who avoid drawing are doing their students a disservice.

My commitment to hand drawing has grown since I first started practising and teaching in schools in the UK and the USA and I am saddened by the reluctance of most students to draw. In my own Master's degree unit in the UK, students are not allowed to use the computer to design or present their work. They must draw by hand and are encouraged to keep everything. I tell my students that it is important to experiment and to find your own style. With this conviction, I have had some success with students who have retreated from drawing and returned to hone that skill. For others, though, there is a lack of capacity



and reluctance to hand draw that amounts to a phobia. Those that cannot draw by hand are allowed to develop their design through model making.

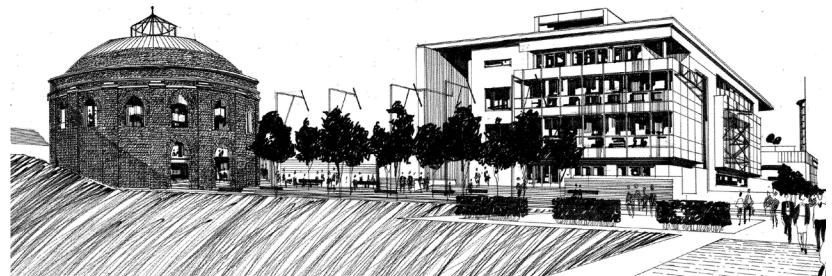
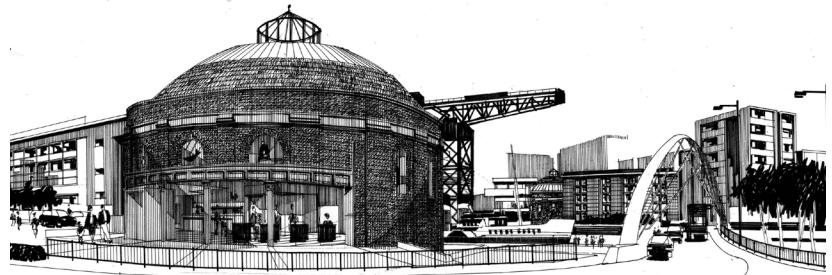
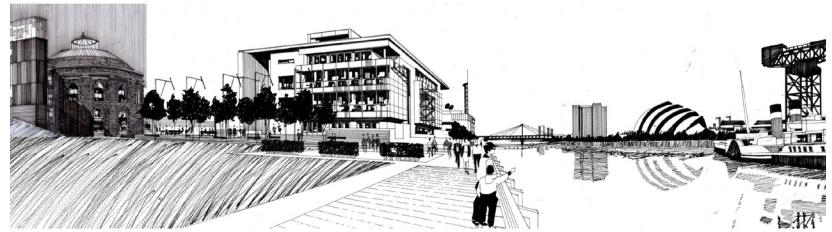
In practice, *The Thinking Hand* by the renowned Finnish architect Juhani Pallasmaa is now seen on many architects' bookshelves. I usually avoid books written by architects and for good reason—most of them make for a dismal read. Much of the writing in *The Thinking Hand* is, for me, impenetrable but the drawings are excellent. This reflects Pallasmaa's talents and reputation as an architect. Many of his words may have been lost in translation but Pallasmaa's message of "draw, don't think" is very important, perhaps fundamental, and is conveyed in his well-crafted drawings.

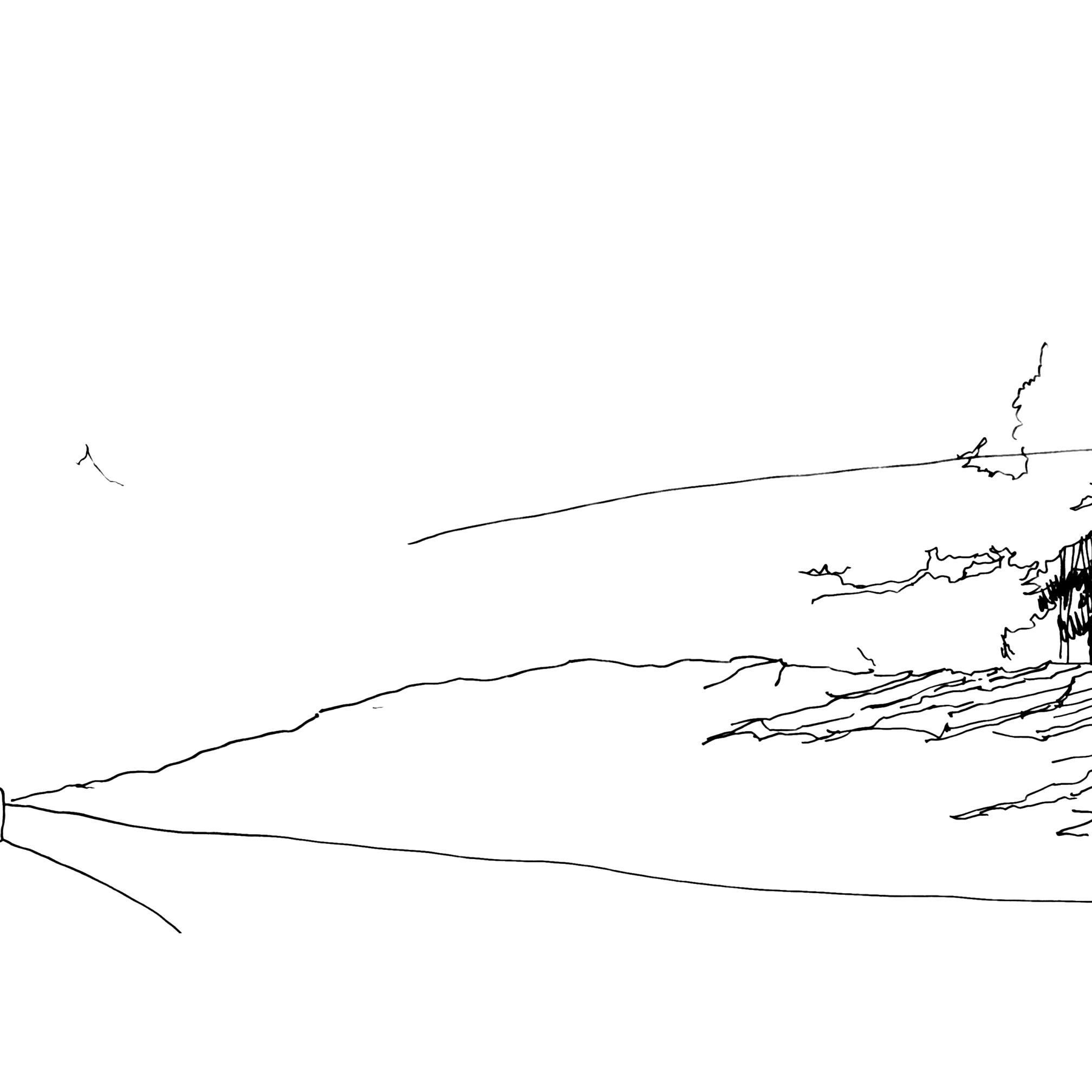
In the last few years I've become very familiar with the work of architect and master draughtsman Paul Rudolph. He saw architecture as "a personal effort" and articulated his ideas in complex, richly textured and intricately detailed drawings. Like pupils of a Renaissance studio, his students at Yale were "encouraged" to fill in elaborate texture and shadow for the master, sometimes working through the night in preparation for presentations to clients the next day. In response, they included their names in the drawing of bushes and trees, leaves and grass. Doubtlessly, this was laborious and tedious, but worth it. Compare the output of Rudolph and

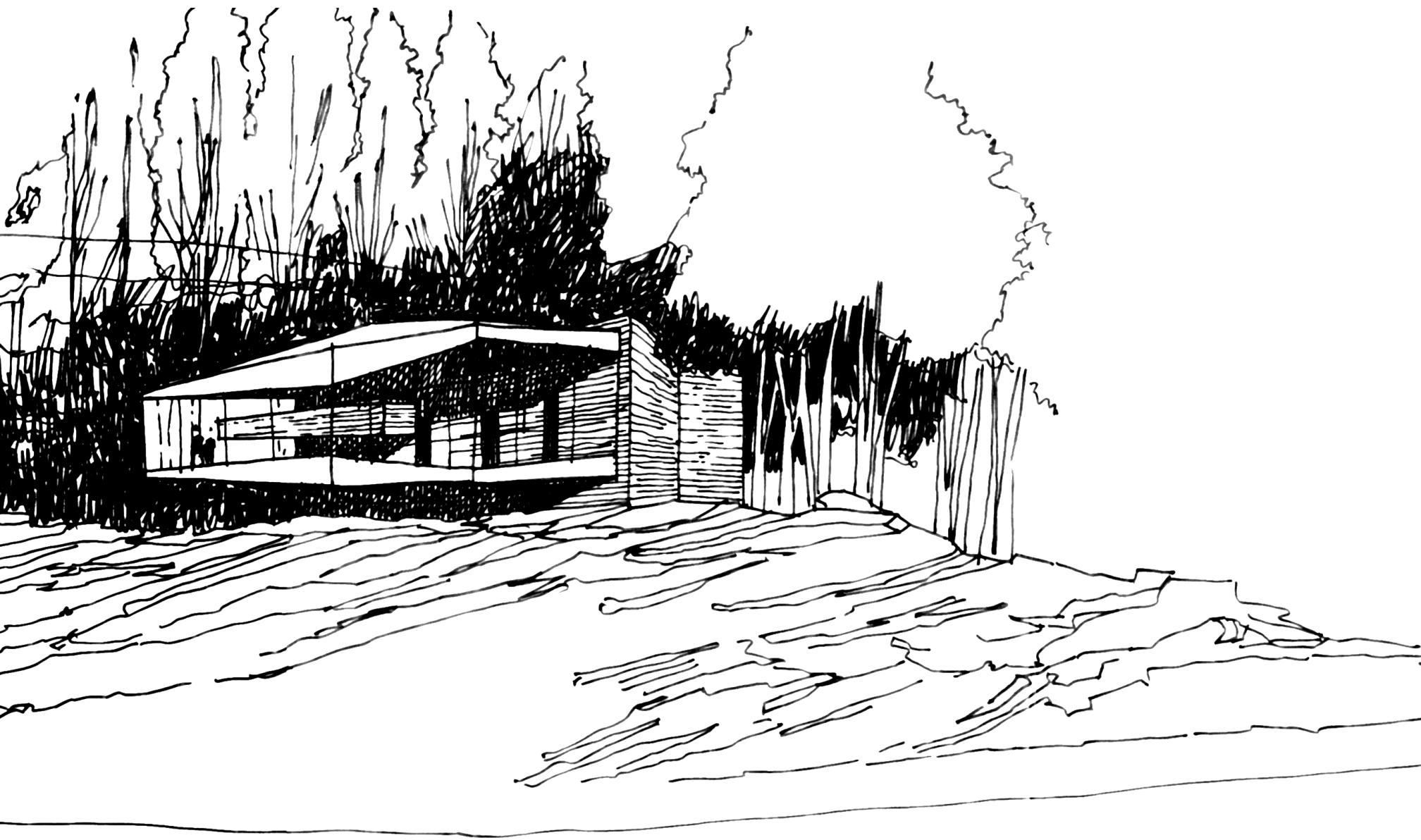
his students at the Yale School of Architecture with Gwathmey's lifeless, computer generated rendering of his extension to Rudolph's Yale building. The former stands as a testimony to the architect's art for years to come, the latter, instantly forgettable and only worth recording as a comparison.

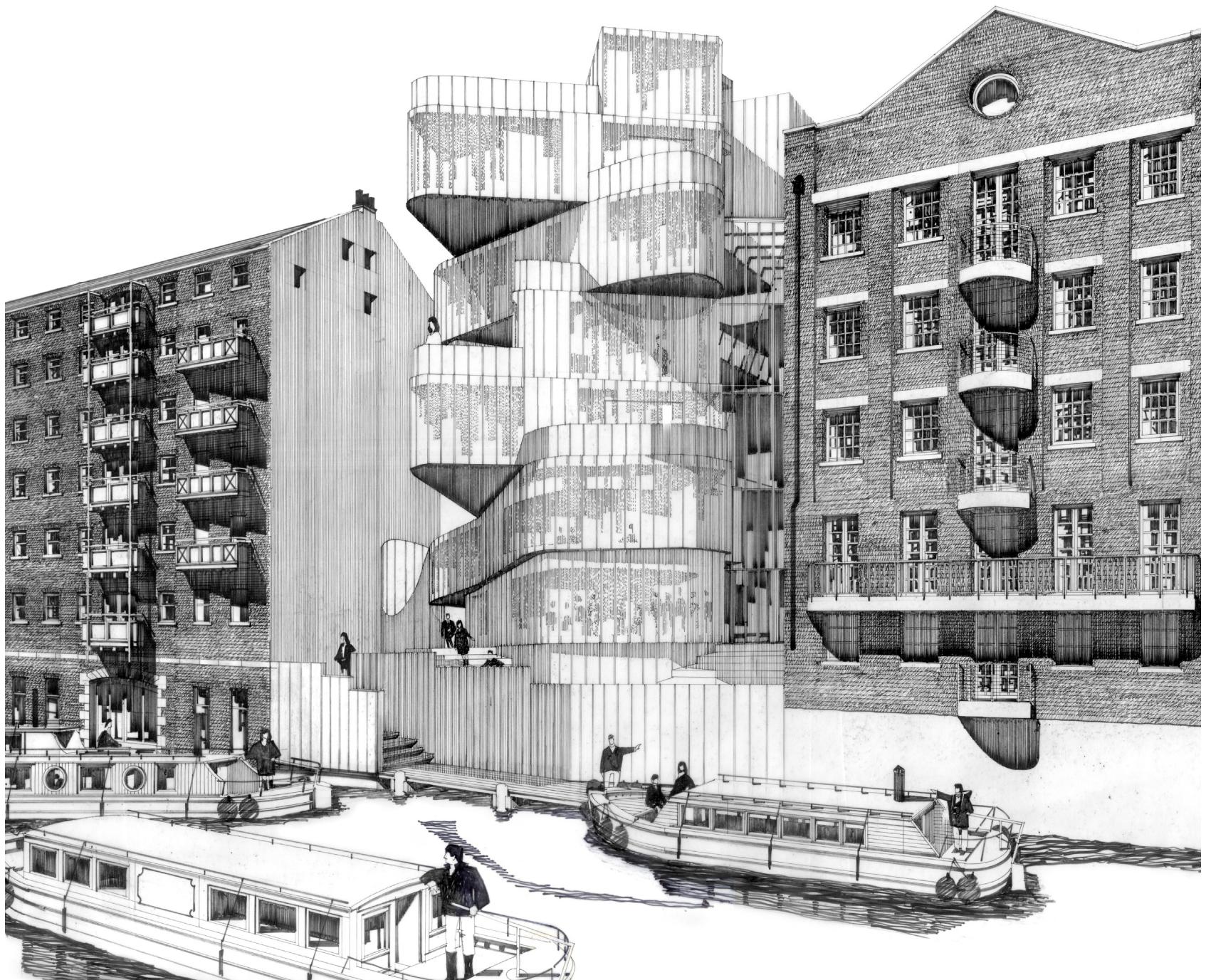
If you study the work of the great architect draughtsmen, you will see that the elemental nature of a finely crafted line drawing stands the test of time. They are a measure of the passion and the care that the architect feels for the commission and can stand scrutiny as works of art in themselves. No computer-generated image gets close to the spirit of a great drawing. Look at the craft of Wilhelm Wohlert, who with Jørgen Bo, was the architect of Denmark's Louisiana Museum of Modern Art in Copenhagen. Each of his drawings, no matter how sketchy or tentative, evidences extraordinary sensitivity in composition, weight of line and detail.

Sadly, few working architects now use pencil and paper in the same way and these tools no longer centre in the creative act. Many of today's designers often appear detached from the drawing process and usually it shows. It is the default mode in most offices for working drawings to be developed from concept on screen or reliant on computer-generated images of photographic quality that pass for originality and rigour. Hand drawing should have intrinsic









value. It should be an effort of artistic production—the delivery of a drawing worth having. The output of great architectural draughtsmen, Paul Rudolph, Wilhelm Wohlert, Frank Lloyd Wright and Charles Rennie Mackintosh, have specific distinction and style that attest to the quality of their thinking as well as their artistic capacity. Their drawings have become iconoclastic because of the duality of their approach and clear testimony that no effort in preparatory analysis is wasted.

While digital drawings can communicate a great deal of information, they often fail to provide the completeness of vision that a hand drawing relates. With each pen stroke the image and meaning of a project are revealed and reinforced, communicating not only the essence of an architectural proposition but also the resolve, disposition, and identity of the architect. There is a certain naked honesty to a hand drawing that digital drawings often conceal, resulting in a flatness and regularity that may excite the imagination and senses, but rarely ignites the soul.

One can learn everything they wish to know about an architect by studying their hand drawings, the degree of rigour and research that they bring to their projects, their attitudes and their sensitivities. It is no overstatement to suggest that hand drawing represents the stain of the true architect's soul on paper.

