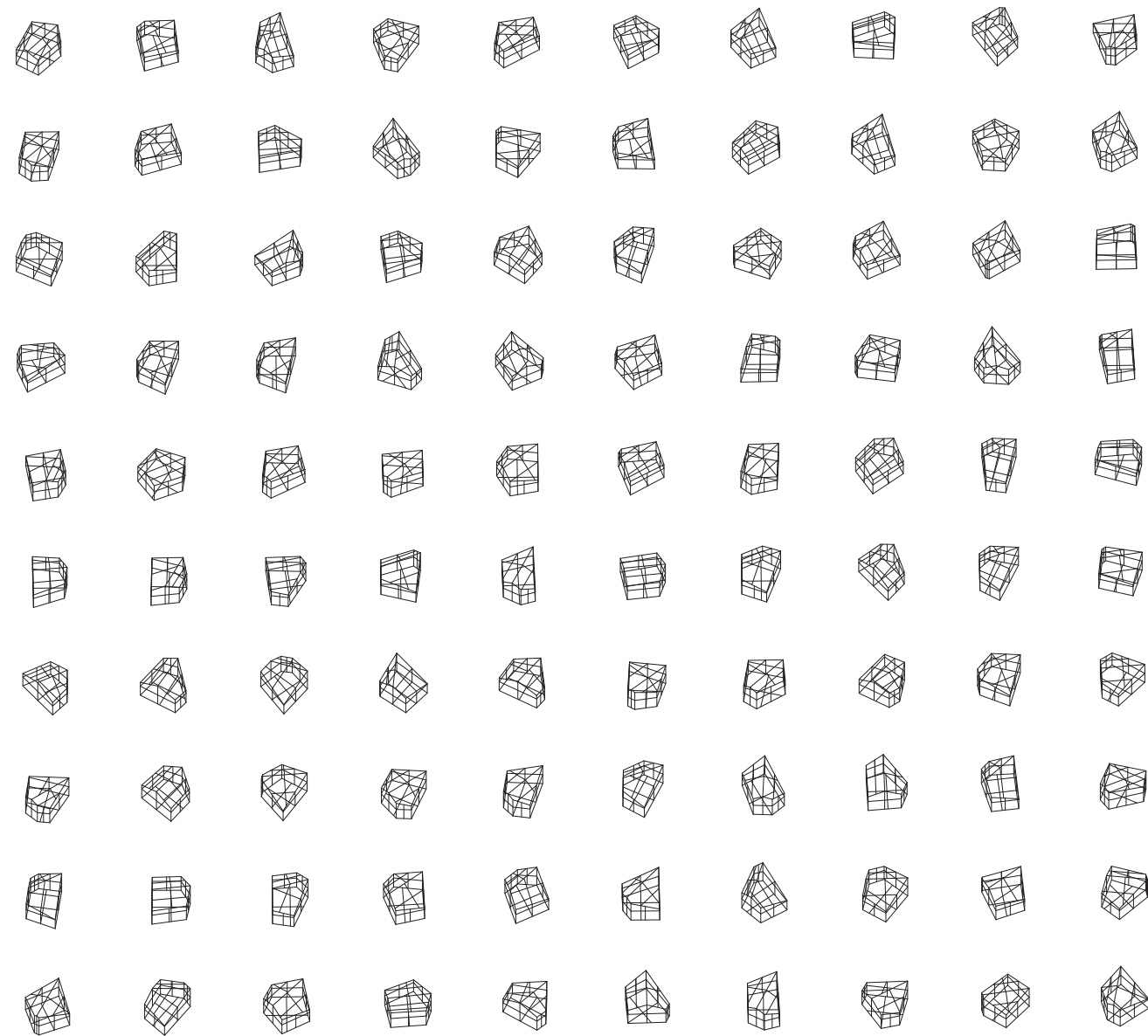


Stan Allen in conversation with Enrique Walker

January 18–25, 2016 via email



Opposite: Tainan Art Museum, Scripted Form Array
Below: Tony Cragg, Stone Circle, 1972



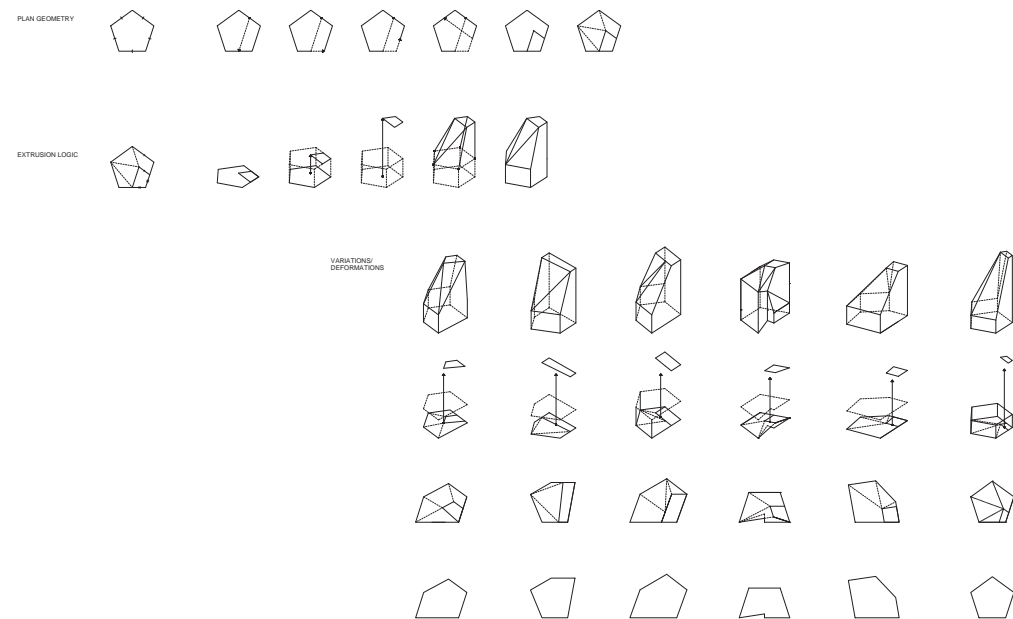
STAN ALLEN: You and I have had an extended conversation around the question of rules and constraints, in particular going back to the piece you wrote for the Mansilla + Tuñón book *From Rules to Constraints*, as well as our shared interest in the Oulipo group. And while there are larger claims to be made for this work in terms of its formal coherence, its relationship to landscape, to diagrams and urbanism, what for me unifies these projects is the way we work, day-to-day in the studio, to generate formal solutions or make design decisions. I refer to this approach somewhat reluctantly as *algorithmic*. But my dictionary defines an algorithm as “a set of rules for solving a problem in a finite number of steps.” I have no specialized expertise in scripting, and there were algorithms before there were computers. So this remains the best description I can give.

What this means in practice is that as we are developing a design, we have a reliable mechanism to make changes and adjustments that will always be consistent with the logic of the project. The test of a good rule-set is its ability to absorb change without compromising its internal logic. Decisions are always made at one step removed from the material. If one corner of the roof needs to be higher, for example, or if we need more space for a particular program, we don’t push forms around in plan or section, we go back to the

rule-set and adjust the variables that need to be adjusted, which in turn affects other variables. It becomes a simple little black box. Over time we get to know the system—change this input and this will change in reality. It’s not really linear, as there are never more than three or four steps. I like that immediacy. The accumulated knowledge of the problem means that the solutions, which always resemble one another, become more refined and specific over time.

ENRIQUE WALKER: Perhaps we could start by discussing the specific rules of the game in the series of projects you have gathered for this publication. I am particularly interested in the interplay between the rules for the series and the constraints in each brief. In other words, the way in which voluntary and involuntary constraints lead to the formulation of each design problem.

SA: Faced with a problem, our approach is not to map data or site forces, or to sketch a plan *parti*, but rather to define a simple set of procedures capable of generating formal solutions that work toward solving the problem at hand. The Hudson River Studio might be the best example. The givens were a compact

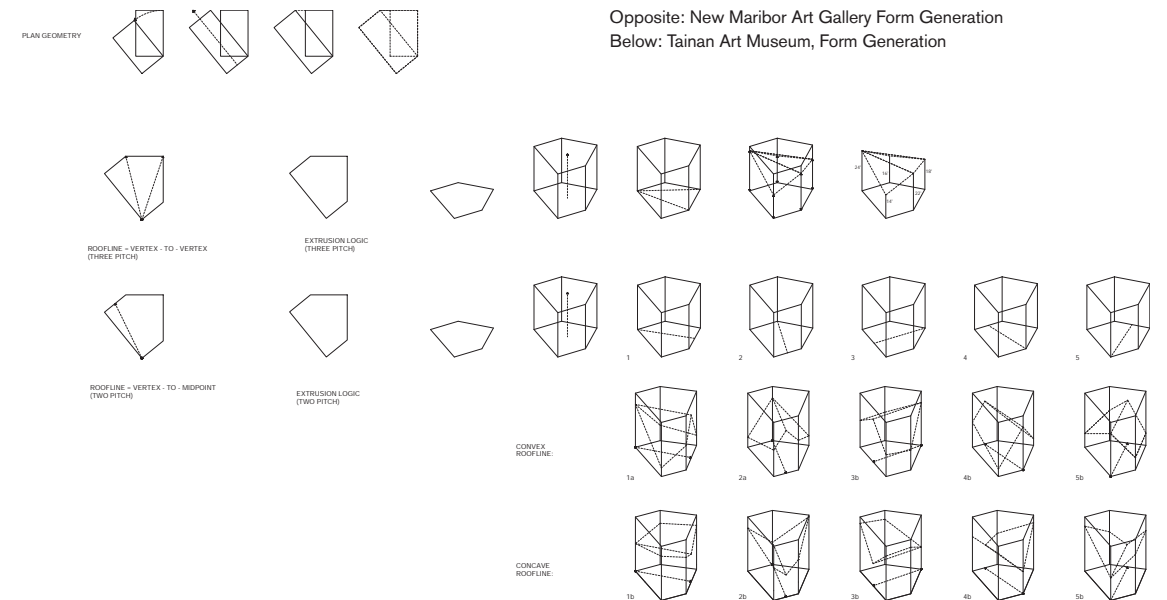


footprint and a pitched roof for both practical and symbolic purposes. Consistent with local construction practice it was to be built with wood framing, wood siding, and punched windows. The hard limits imposed by construction and budgets are very real, but I also had in mind Vincent Scully's description of balloon frame construction as a specifically American way of building. He recounts the way in which the balloon frame appears in both vernacular and high-style architecture, and is always expressed as a thin, taut membrane. The plan form—a five-sided figure with a right-angled base that traces out the archetypal house form—was also a given. This is of course a self-imposed constraint. It created a series of problems that needed to be solved, in particular the roof. And in solving that problem, a certain formal interest is created. Without employing curves or ruled surfaces, (another self-imposed constraint), projecting up from the five-sided figure and maintaining the form of the pitched roof dictates that the roof geometry will always resolve into three triangles. There are in fact a finite number of possible configurations (twenty-five by my count), but by moving the vertexes up and down in space there is an infinite adjustability. At this point the design can be "scripted," but in a simple, analog manner. In practice we make a lot of paper massing models at this stage.

EW: Would you say that some of these rules preceded the projects they were respectively applied to, or were they formulated around their circumstances? Has this series of projects become a series in retrospect, or was the series suggested beforehand?

SA: That's an important question and I have two slightly conflicted responses. I think every project deserves to be addressed on its own terms; so I am skeptical of the idea of a set of ready-made rules that might be applied a-priori, before the facts of the problem are known. The rules emerge out of the process of working itself, and in response to specific constraints. Otherwise you are just illustrating an idea. That said, some constraints are self-imposed, and expertise is cumulative. We have, over time, developed a catalog of rules and procedures that we turn to as appropriate. So in the case of Maribor, for example, we were fairly deep in the design process, and working already with part-to-whole aggregations when I realized that this was a field conditions problem. So an old idea could come back, but in response to a specific project, without forcing the rules in an arbitrary way.

EW: To what extent are these rules a series of design operations to perform and to what extent are they a series of limitations within which you make design



Opposite: New Maribor Art Gallery Form Generation
Below: Tainan Art Museum, Form Generation

decisions? In other words, are they instructions to be followed or constraints to be met?

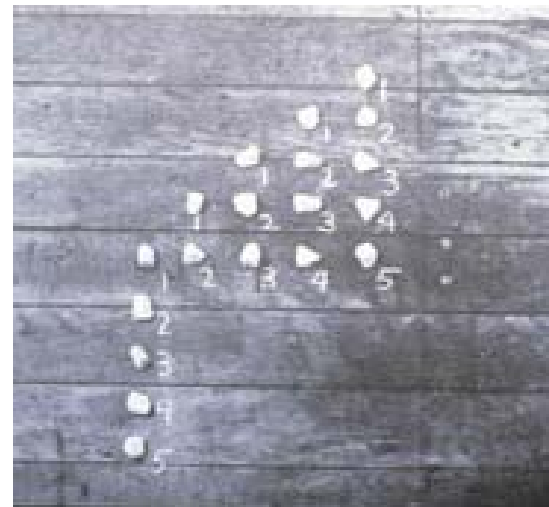
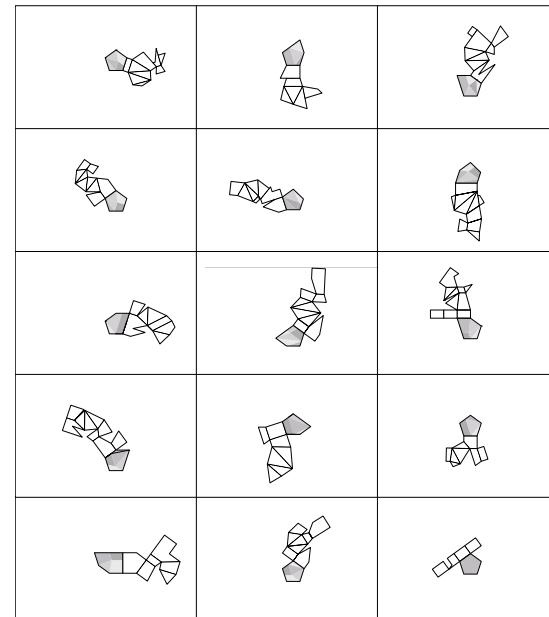
SA: I think there is an important distinction to be made between constraints that are imposed by a particular problem or a particular author (site, program or geometry) and the constraints that belong to the discipline as a whole. Certain patterns of thought and ways of working are part of a shared disciplinary legacy. You never start a project from scratch. My sense is that every building should take its place as part of an extended conversation with the history of the discipline. That idea itself imposes a kind of constraint: you have to speak in a language that is intelligible to the discipline as a whole. For me the more constraints the better; nothing is harder than to work in a vacuum.

But your question gets at a more nuanced distinction. I would say that we try to solve problems—meet constraints, in other words—by following a set of instructions. So in a *meta* sense you could say that one constraint is that we try to limit our design methods to those that allow themselves to be described as a set of instructions. But those operations also need to be intelligible in terms of the discipline. We can only work through geometry, and the geometry serves to establish a certain level of abstraction. The Tainan Museum and

the Hudson River studio, for example, could be seen as abstract crystalline forms, but at the basis of the geometry is the recall of the pitched roof and its connotations of shelter. I value the external reference, but if the forms are not also legible as architecture they fail.

EW: I would share your reluctance to use the term algorithmic to refer to your design approach, and have, in fact, argued for the use of rules to stage a conflict that must be negotiated rather than a system that must be followed. Interestingly, you and I also had a conversation some time ago on the notion of the difficult whole, and on compromise as an inevitable activity in architectural design.

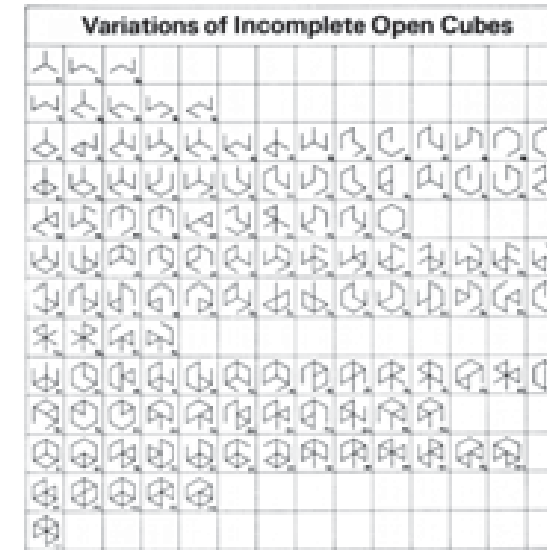
SA: Right; it's easy to be seduced by the mystique of the computer, and I wish there were a better shorthand. But I want to emphasize that it's not the machine, it's the way of thinking. I would even say that it's a sensibility more than a theory—a fascination with dry, serial, iterative procedures. There is a wonderful passage in Samuel Beckett's novel *Malloy* that consists entirely of the title character's monologue around an invented problem. It's his habit to suck on round stones picked up from the beach, perhaps to stave off hunger. His dilemma is how to distribute the sixteen stones among



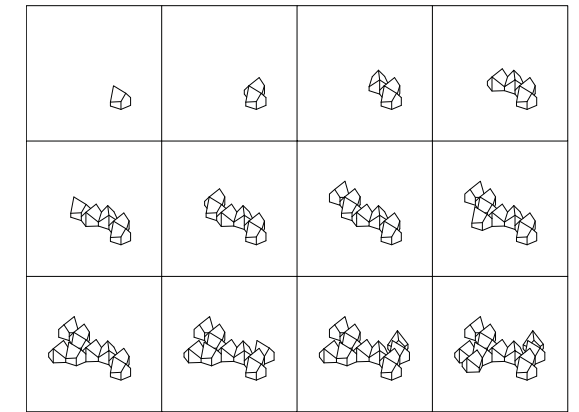
his four pockets (trousers and greatcoat), and then suck each one in turn, without sucking the same stone twice. The passage goes on for several pages as Malloy details the permutations of the distribution of the stones and the sequence of the sucking. It's an absurd problem of course and a problem that tells you more about the obsessions of the character than about mathematics or stones. Perhaps more important is the way in which language itself becomes rhythmic and repetitive in describing the process: "Taking a stone from the right pocket of my greatcoat, and putting it in my mouth, I replaced it in the right pocket of my greatcoat by a stone from the right pocket of my trousers, which I replaced by a stone from the left pocket of my trousers, which I replaced by a stone from the left pocket of my greatcoat, which I replaced by the stone which was in my mouth, as soon as I had finished sucking it." Rosalind Krauss refers to this passage in an essay on Sol Lewitt, arguing that Lewitt was not so much interested in rationality and mathematical precision but rather used simple structures pushed to an absurd limit to question our faith in rationality. I'm not so sure that is the case either; I think it's an indifference to rationality more than a critique. It's something he can use to his particular aesthetic end. But either way, I'd locate my interest in iterative procedures in that territory, much more than the rationality of computer algorithms.

On the other hand, the reference to Sol Lewitt also speaks to the difference between architecture and sculpture and the question of the difficult whole. A sculpture by Donald Judd or Lewitt can be singular and reductive: a simple, self-sufficient whole. That is impossible in architecture, which always operates in a complex social milieu, divorced from the control of the author. A building will always be a complex assemblage of different systems and materials, despite how "minimal" the formal language might be. I'm not interested in bricolage or formal complexity, but I think any successful piece of architecture has an obligation toward the difficult whole. I would differentiate between the complicated (the multiplication of parts and systems) and the complex, where simple rules can generate unanticipated effects. Any system or procedure needs to solve more than one problem, so it becomes about the complexity and robustness of the rules rather than about layering system on system.

EW: In other words, the rules are refined throughout the process. This was at the core of the argument I articulated in my text for *From Rules to Constraints*, and its subsequent versions. In brief, the text suggested that self-imposed constraints could operate as a supplement to given constraints in order to set up unexpected



Opposite left: New Maribor Art Gallery, Unfolded Surfaces
Opposite right: Mel Bochner, *Five and Fifth*, 1972
Left: Sol Lewitt, *Variations of Incomplete Cubes*, 1974
Below: Hudson River Studio, *Aggregation Strategy*



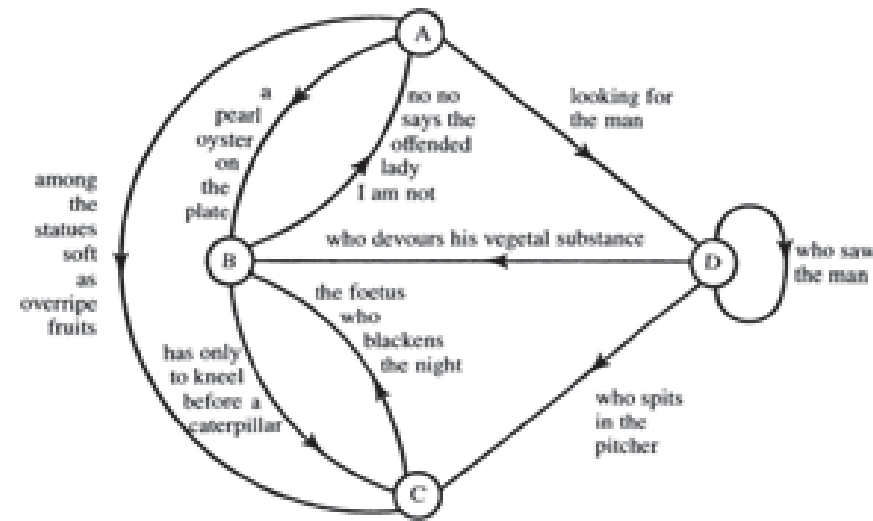
design problems, or defamiliarize recurrent design problems, and instigate at best findings, and at least awareness. In turn, those constraints would disappear without leaving a trace. The point was that self-imposed constraints are actually not a tool to design, but precisely the opposite, a hurdle. To appropriate an example from literature, automatic writing was arguably not a rule to instigate good writing, but an obstacle to prevent good writing. Which could in turn prompt, potentially, a finding, or awareness of one's writing (or one's received ideas). So the emphasis in my text was on the strategic formulation of problems. Hence my interest in the difficult whole. And on work produced in conversation with the history of the discipline, as you suggested, particularly regarding the question of judgment. If we go back to the example of automatic writing, one could argue that only the learnt writer might exploit the technique fruitfully, that is, both undermine their writing skills and assess the outcome against their own writing and the history of literature.

SA: I agree completely; at one level it's about breaking habits. The habitual is like a disease of our time, and I think its paralyzing design today—we see the same moves repeated endlessly, proliferating everywhere, so little invention, so little that's fresh or new. But don't

misunderstand me, this is not an argument for personal expression, or unleashed creativity, which often means reverting to unexamined habits. The value of these procedures is not to smooth the process or generate more efficient solutions, but rather to complicate and enrich the design process. The phrase "As long as I can play I know the rules are in place" is like a mantra to me.¹ Rules and constraints open up a space of free play, which often leads to discovery. And play can be—should be—deeply serious. In the first of his *Six Memos*, on "Lightness," Italo Calvino writes: "Above all I hope to have shown that there is such a thing as a lightness of thoughtfulness, just as we all know there is a lightness of frivolity. In fact, thoughtful lightness can make frivolity seem dull and heavy."²

None of these rules are absolute, but what is important to me (and I readily admit this may be very personal) is the balance this way of working maintains between systematicity and subjectivity. Compromise, as you suggest, does not have a negative connotation for me. This is not a rigid self-generating, authorless system; nor is it an exercise in diagrams, found objects or appropriated shapes. There are plenty of subjective decisions at work here, and I would say openly that there is a preferred formal language. Throughout the process, we are making judgments. And the first criterion in making

Below: Claude Berge, *Oulipo*: Combinatory Literature Diagram, 1986
 Opposite: Unfolded Surface Array: Four Projects



those judgments is how the forms and ideas resonate with the history of the discipline, that is to say, with a deep history that encompasses geometry and typology, but also the work of my peers who might be working on similar problems.

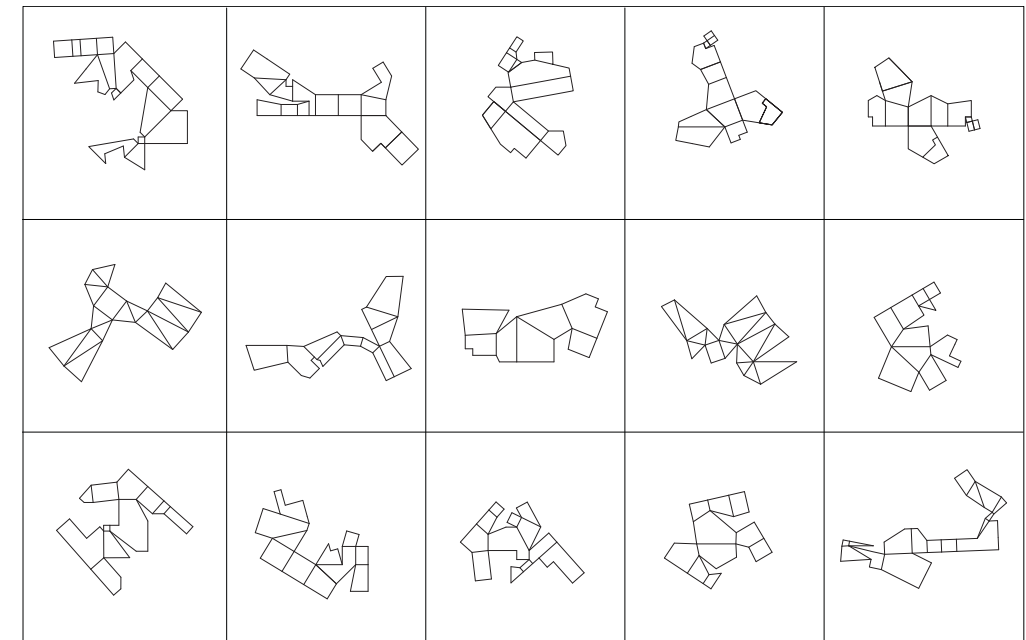
So it's not about personal expression, or about getting down to a deep phenomenological core. I've already mentioned Calvino's *Six Memos*. Lightness; Quickness; Exactitude; Visibility; Multiplicity—these are positive values that I try to cultivate in my work. I'm interested in a certain level of diagrammatic abstraction, and the evocative potential of geological form. But more importantly, there is a displacement at work here that locates the author and the hand at one step removed from the material.

EW: In retrospect, to what extent would you say that the common denominator for this series of projects is an approach, and to what extent is it a series of findings? In other words, do these projects as a whole articulate a design theory, or advance an argument?

SA: I am definitely not interested in proposing a general theory of design. I would say instead that it's about the internal coherence of a body of work. In that sense I

would say it is more of a *finding*, something that has emerged over time as we develop a body of work (in this case over a five year period) rather than an approach, which for me runs the risk of an a-priori theory to be applied. When I talk about the difference between practice and project (and my suspicion of the project) it is to say that rather than forcing a consistency onto the work from outside—conforming to a theoretical project—I have a confidence that it is the discipline itself that provides that internal consistency, as long as the architect is attentive to the constraints imposed by the discipline. Architecture, we have to say, traffics in contingency; the challenge is not to let the contingencies of commissions, clients, regulations or budgets pull you first one way and then another. So you need something to push back against contingency, and that is necessarily going to be some set of consistent operating principles.

But the operations I've described here are, for better or worse, particular to my work and my way of working. I'm not really interested in a general theory and in fact get slightly nervous when I see others working in this way. That said, these principles are not valid if they are not legible within the larger terms of the discipline, if they don't speak to past architectures and problems



specific to architecture. If I've succeeded, it is in creating a catalogue of operations that are at once personal and distinctive, yet at the same time resonate with the history of the discipline within which I work.

EW: I would also share your skepticism about an architectural practice developed alongside an overall project, one formulated beforehand and independently of circumstances. One of the pitfalls is in fact that the work tends to simply illustrate such project, and represses the potential of circumstance. However, a body of architectural evidence, or a series of buildings, generally points to an argument or articulates a project. Retrospectively, the work tends to become more consistent than it may have appeared, or one may have thought. In my opinion, this is the actual worth of the monographic effort. Monographs tend to privilege architectural evidence, but, by the same token, usually suggest architectural arguments. Which may or may not be subsequently applied to future work. Interestingly, this series of projects, even if brought together to make a point about the way in which you work, and regardless of scale, site, or program, ended up prompting you to revisit your earlier notion of, and some of the original design operations for, field conditions.

Notes

1. I usually credit this phrase to Ludwig Wittgenstein, I seem to recall it in the Blue and Brown books. But an internet search does not turn up this phrase or anything like it. I wrote it down many years ago, and perhaps it's been mangled in memory and transcription. Or I imagined it.
2. Italo Calvino, *Six Memos for the Next Millennium*, (Cambridge, Harvard University Press, 1988), 10. The sixth lecture, "Consistency" was incomplete at the time of his death in 1985.