

BACKING FORWARD

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I teach architectural history and I teach design. I have yet to resolve the relationship of the two to my satisfaction. Accept that, while attempting to clarify the relationship in this paper, my conclusions as presented are tentative. I am persuaded of a few things, however. First, that, if history is to be of use, then it cannot remain ancillary to design or engineering. And, second, in its usefulness history must be like science is to engineering. By this I mean that history should provide laws or at least be a discipline aspiring to that position. Furthermore, if there is to be accountability in proposals from designers, this will not be possible without the certainty of laws or at least knowledge that is law-like.¹

I began my teaching career some twenty five years ago. Undaunted and coming fresh from the heady experience of responsibility for major projects, I was full of desire to help my students understand design and I wanted to pass on to them my enthusiasm for architecture and art. I assigned many different exercises asking my students to make proposals for a variety of buildings and objects. With these earlier exercises I had some successes and some failures.

In this paper I want to talk about the failures mostly. I was stubborn in the face of them. There were times when I refused to submit to the evidence my students provided and I repeated exercises even though I did make some modifications aimed at improving them. My reasons for assigning these exercises are not important here. I'm more interested in telling you about the lessons I have learned, lessons that might be of value to those involved in criticism, as I am, or those interested in restoration, or those who believe that design procedures can be codified and automated. I remain interested by the possibility of history, or perhaps, by the impossibility for it.

Allow me to give you the examples of the exercises I assigned to my students that involved history. In the interest of time I will set aside definitions and elaborations. All five come directly from my teaching experience although I'm presenting them now in a different and very condensed form. I present them in an order only related to this paper and not as chronological or otherwise.

One. Give a student as much information as has been written about a building without description of it. Any building will do. One by Frank Lloyd Wright is as good as one by Michaelangelo. One by an anonymous person is as good as one attributed. The naming of the architect is simply a convenience, a shorthand, which substitutes for the facts about a building's design and construction. After giving the student some written information ask the student to design the building. Then, with student designs in hand divulge the name of the building and descriptions of it and compare the student proposals with the real thing. (I remember selecting San Vitale at Ravenna, for example, because I liked the building and thought I knew something about it.)

Two. Take everything from your professional files pertaining to a commission you've executed, except your own design, of course, and give this in writing to your students and, then, compare the results of their effort with your own and the design which had been approved by your client. I had tons of information on my hospital designs, for example, because I not only designed them but I also did what we call the programming or planning and this included projections of financial feasibility as well.

Three. Find something written and preferably fictitious, examples abound, and ask for designs that represent, say, the first chapter of John Fowles' novel, *Daniel Martin*² or the hotel where Lucius, Boon and Ned stayed overnight on their way to Memphis in Faulkner's *The Reivers*.³ Ballenbaugh's was the name of the place if I remember correctly. Or, if you like, try the greenhouse in Walter Percy's *The Second Coming*.⁴ You get the idea.

Four. Ask every fourth student to write a description of some place within walking distance of the classroom. Demand that the writing of the description be accomplished only while sitting in the place. Demand as well that the name, location and occupancies of the place not to be a part of the description. Next, with these written, distribute each to three other students who are required to accept them as specification for a design. Then, compare the designs to each other and these to the specification and walk to the place and compare to the real thing.

Five. Write the following: Design a *BLANK*. Nothing more, except that you must fill in the blank with the name of a building or a part thereof. Examples are window, room, house, tower and island. Then, compare the results each to the others.

Writing is an important component of four of the exercises. Comparison plays a role in the pedagogy of all five. All of these exercises underscore some worthwhile intention and I could, if pressed, rank order them in relation to one pedagogical criterion or another. While I've already said they were failures, four of them anyway, in the hands of another teacher all might have been successful although I doubt this. While pedagogical features are interesting and I could talk about them, I want to focus on something else. In each of the exercises I asked

my, students for buildings to be built that required them to depend on returning to stories.

Now, allow me to evaluate the five in this way. The first, the recreating of San Vitale, the Robie House or The Medici Chapel and the fourth, the representing of a local place are worthwhile exercises to demonstrate the enormous difficulty, if not the futility, of transferal from one form of representation to another when there are no rules for translation so to speak.⁵ Of the second there is amusing anecdotal benefit as well as belief in command of recovering recent experience but only the anecdotes seem to have value perhaps because they represent something other than procedure. The third is a playful reinterpretation of a feature of one fiction into the whole of another. The fifth exercise requires that students begin with little specification and resolve their designs by a strategy of successive approximations. This strategy allows successive adjustment of emerging quasi-rules for the transferal of talk or writing to objects. It may be this that accounts for the partial success of this exercise.

My characterization of these exercises may be taken as a clue to my inclinations. Each of the assignments had as its aim the representation of an object that did not exist even when a real one served as the basis for the exercise. The students were asked to make proposals for an object that could be constructed, one that might exist. All proposals are modal and proposals for building are no different. Proposals from students constrained by the five assignments are no different. These, too, are modal but complicated further by my introduction of other situations requiring that students pretend more than once or in different modes. Each exercise is a world of its own made up of other worlds. In professional practice or with exercises that are practice-like the designer has to pretend only one way. The proposal will be constructed. The designer says, "If I propose this, then what will happen?" In addition to this normal expectation, my assignments add something like the following to each of the five: What if these are the facts?; What if this is your procedure?; What if this were to become real?; What if this is an accurate representation to begin with?; and, What's in a name? These are worthwhile questions but they do complicate matters for students who are at an early stage in their careers. And, what is more, these questions obscure more fundamental concerns, for example, those belonging to construction or occupancy. On top of this, I am willing to bet that there is no building that can answer them, however, this is an aside that will have to wait for another day for elaboration.⁶

Allow that my characterization of these sample questions is facile and that with time I could refine toward greater precision. Of more concern and interest here is the issue of recovery which is present in all five exercises and is dependent on and specified by the writing related to each. A very long-term goal may be in writing or specifying for design. In so far as modality is understood as comparative, I would want proposals for buildings to represent what will occur. Or, at least, that proposals will be less and less contingent and more and more law-based objects. I think there may be a clue for achieving this through understanding what the problems of recovery are. Yes, I could argue with the skeptics among you that this long-term prospect cannot be achieved, or, I could argue that our representations are suspect to begin with. Regardless, when, with Beckett, "I can't go on, I'll go on."⁷

Allow me to introduce two points about recovery. One is connected to Beckett. Again, don't expect elaboration. The first point is in the very long *Remembrance of Things Past* and, specifically, in Proust's discovery in the last chapter.⁸ The second point is the very short *Valedictory Lecture* given by Hugh Trevor-Roper in 1980 and published by Oxford with the title *History and Imagination*.⁹ The points I'm about to recapitulate may not be exactly those of either author and, if so, it's my fault, not theirs.

Trevor-Roper argues for playing the "what if" game with evidence from the past. He suggests that his effort will produce an understanding of the alternative possibilities related to the events that did happen.

Proust concludes that the past cannot be recovered, that sensation is forever here and now and that lifetimes are wasted in an attempt to revive the past as the past when, instead, the past is recoverable only through present sensations prompting recall of those previous.¹⁰ Samuel Beckett's work is directed at the question of recovery, too, especially his *Endgame*.¹¹ I accept Proust's conclusions about about the recovery of sensations but I do not accept his proposal for their location. Allow me to say further in this aside that recovery is not possible regardless of location. Sartre said something similar.¹²

While Trevor-Roper's point isn't about sensation, it could be said to be about the prospect of imagining it. Actually, his point is about decisions. He implies that evidence of an event is also evidence of a decision in the face of alternative outcomes. We can say that a building is evidence for the decision between building or not building if I may lift the procedure to this level in order to make my point quickly. A building is really evidence of a procedure in the guise of sticks and stones, no more than an instrument to achieve objectives. Viewed this way a building is considered the best prospect for successful intervention, one among other possible objects, or impossible ones. In other words a building has predictive capacity and this can be said of any instrument. A building represents agreement in relation to some quandry for which there were other candidates to resolve it, whether or not these are variations or alternatives to buildings. The building event emerges from a contest between one alternative and others and, whether or not this contest is made explicit in other evidence, is of little import. There is little to be gained from playing the kind of game of the sort: What if Muhammad had been Christian? But, there is prospect for discovering principles by imagining that alternatives exist at every decision point. By considering alternatives to the Dome of the Rock at Jerusalem we may arrive at a better formulation of the reasoning that allowed for it to exist at all.¹³ Abd al-Malik's building like any other was an instrument. I do not doubt for one minute that Abd al-Malik was persuaded that the Dome of the Rock would

achieve his objective. I have little doubt that Abd al-Malik would have liked some way to predict the outcome of his decision to build.

I, too, would like to know what's coming. If we could find something governing choices, then, some representation, be it eternal or nearly so (since representations may not qualify as eternal), some rule that delimits going forward from here might follow. Because the transfer from one form of representation to another is so complicated, we should avoid writings about objects and depend on the objects themselves to reveal their own rules or the rules of their formation. Even though we delight in hearing stories we should avoid their comfort. The constraints on development of and choice among alternatives have to exist in the objects themselves or in as precise a representation of them, as is possible with the caveat that these representations avoid "the myth of simplicity".¹⁴

My own work on the development of buildings from the earliest period of Islam, those from the middle of the seventh century and the middle of the tenth, and their relationship to those of early Christianity, especially in their eastern Mediterranean forms and more especially the Egypt ones, is a testing ground for this exploration of alternatives and choice. While it is too early to present my findings, I have chosen this period because there are large gaps in the evidence, and it is my hope that I will find some rules for filling them. With these better stories may be told.

Products, arguments, speculations and stories aside, my experience with design instruction and its difficulties suggests that recovery of objects through representations of them, regardless of focus or level or character seemingly is impossible. The analogy of stepping into the same river twice is apt. and yet, there is a knowing feeling that this cannot be true, that something is amiss. Maybe damnation looms if an attempt is not made to find more than the sensual, the momentary, the playful, the erotic. There must be more than just response whether this comes in the form of exegesis, an unraveling or some other moves like them.¹⁵ Will my failures with my students help us? Are there any additional things to be learned from them?

The design exercise that used the work of Fowles or Faulkner presented fewer problems for recovery because there was no one to say how close the students had come to making a correct or acceptable proposal or one that failed. In other words there was no authority. With the project taken from my own drawing board, I was authority and without challenge more or less. The description of a place only seemed to be authoritative but it was discovered soon enough that the only authority was the place described. Like the exercise with San Vitale only the object remained after all was said and done. When I asked for an object only by name, the best results were produced, that is, results which were understood by the students and which could be justified by them with reasonable talk. When compared to the rest of the exercises the lesson may be here. Explanations, iconographical analyses and theological purport all pale alongside the object in its becoming.

Recovery, if it is possible at all, can only be an approximation of the grossest sort. In *Change and Habit* Arnold Toynbee identified five ingredients in human nature that he thought contributed to permanence and change and of these only man's curiosity, says Toynbee, can guarantee change.¹⁶ Each glance in the rear-view mirror includes us more or less. The difficulty is in removing ourselves from the view. These are, at most, meager patterns or weak structures we think we find. The patterns and chains are our own impositions, our hope for verification or confirmation of what we hypothesize, what we hope to prove.

What do we hope to prove? We cannot answer this question without knowing that proving is a mode. We must be reminded that explaining is a kind of proving. We ask that explanations be meaningful. We know that meaning is the fulfillment of a wish to find it somewhere. What we want to prove is meaning. Hume said that there is no utterance which cannot be conditional excepting those of closed systems that contained their own internal eternal laws.¹⁷ Accepting this, the trick is to find the systems and their laws. What if artifacts are considered to be systems? What would the laws of such systems be or be like? In pursuing answers it is important to remember that the predictiveness of closed systems is a dominant characteristic of them and that at the same time the systems are themselves artifacts. We know this but it should not dissuade us. Thanks to Kant, this is Pierce's lesson as it is Quine's.¹⁸

An example may help to make this clearer. Geometry is an artifact that is law-ridden. Assume that it is a manifestation of some constraining structure, one, perhaps, that is only partly revealed. This structure could be what we call our reasoning. In order to reason, or if you prefer, in order to function in our surroundings or, in order to respond and manipulate our surroundings, we require what we have designated as geometry. We could think of applied geometry and regard architecture as an instance. However, applied geometry may in reality be revealed geometry. I am not proposing geometry in either newer or former kinds as the closed system with internal eternal laws to provide us with the answers we seek. It is a model, however, and one that Husserl thought worth pursuing especially if we are interested in origins.¹⁹

I don't know much about you but I worry about what I've said to my students. Maybe I should not give such import to what I've said. Maybe I should give my students more credit and let it go. Maybe I should join Foucault and announce that it is not my responsibility to be a policeman for my own work.²⁰ But his approach won't do. When I gave my students an exercise, they were conned by my enthusiasm for it. Their own enthusiasm for the meaningful allowed them to suspend their form of skepticism. In our joint desire to go forward I assigned exercises that imposed that they go back and they did so dutifully. So long as it was playful and there was no concern for the rules, there was little despair and only emptiness because authority was absent. When it became a search for apparent rules as with San Vitale or a commission of mine or their writing for a

description as specification, then the absence of rules left them and me with the feeling that time had been wasted. How simple it is to understand what happened. If I had said to them: "Design San Vitale," they could have laughed or said: "How are we to do that?" or "It's already designed." However, when I asked them to design a tower or an island the question was: "What's that?" They answered the question by backing forward little by little until with confidence they could propose an answer and one they thought could be built. In a way similar to that of Saul Kripke who has connected necessity with naming²¹, my students discovered that a form of proving exists in an object that lives up to its name.

So, where are we?

With this little bit of your time I am aware that I have only begun to touch the subject I am introducing. The relevance of statistical analyses and theories of estimation and forecasting have to be considered and I have not included these. Nor has the problem of covering law which Hempel developed²² and subsequent argument about it been brought to bear on the subject. The reconstruction of wholes from bits of evidence for them and the restoration of objects, that is, the return of whole or nearly whole objects to an earlier stage in their lives must be considered. These are for another day. But in the minutes I have left allow me to conclude, even if prematurely.

There can be no looking back without recognizing that we are going forward at the same time. Or, that the only direction is forward and we cannot go back except by going forward. The past events as hypotheses themselves and the competing hypotheses that are rejected in the process are the only prospect we have for what we call history. What I am proposing is to write forward and not backward for, if we do otherwise, ours will be no different than any other time: one generation's hypothesis substituted for the hypothesis of another without prospect of rule or law. If history is to be other than this substitution of one story for another, then, it can only be written as the testing of the manifestation in representation of constraining structures, the ones called the name reasoning. Such history will be a science of objects that no longer exist. Such is history that its object cannot exist. So, even though, there is only what lies ahead, by backing forward we may be able to tell ourselves what's coming.

1. Law-like is reserved for statements that are contingent in the world but are necessary relative to a component or sub-systems of the world or are of some other world or some sub-system thereof.
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3. Faulkner, William, *The Reivers*, Random House, New York, 1962.
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5. Highlands, Delbert, "Translation", in Akin & Weinel, *Representation*, Silver Spring, 1982.
6. This paper is constrained by format so that footnotes have to be a minimum. Asides are frequent throughout and the author apologizes for the absence of elaboration.
7. Beckett, Samuel, *I Can't Go On, I'll Go On*, Grove Press, New York, 1976.
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11. Beckett, Samuel, *Endgame*, Grove Press, New York, 1958.
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21. Kripke, Saul, *Naming and Necessity*, Harvard University Press, Cambridge, 1980.
22. Hempel, Carl G., "Reasons and Covering Laws in Historical Explanation," in Hook, S., ed., *Philosophy and History: A Symposium*, New York University Press, New York, 1963, pp. 143-163.