Projective Construction in "Backyard Transformations"

by Rachel M. Strickland . April 1991

for Maurice K. Smith

Whatever I learned in school about filmmaking, except for its mechanics, was imparted by an architecture professor. I am not inclined to make stories and I have never written a film script. Because I was interested in using cinematic media to communicate about places—to register their dynamic and ephemeral senses, I have spent many years pursuing a way of making movies that would be more like architecture than narrative. "But what is a place," asks the television producer I know, "besides a container for stories?" If you ever explored a place or got lost somewhere, perhaps you would be willing to consider with me that it has several other dimensions.

When you observe a building, what anyone can see is the walls and the roof and the windows and doors. It is difficult for some people (including architects) to see that the subject of architectural design is not these walls and windows and doors, but rather (   )—which is the thing that you neither see nor bump into.

The means of architecture are physical materials that a designer introduces in the dimensions of space to define and shape this space as a potential for habitation. The dimensions of architectural space have direction and extension and time. Would you consider whether a place has 3 dimensions or does it have 4? Or does it have more dimensions than anyone can count and what are they? The trouble is that we are tempted to project ourselves within a closed system that would have a finite number of known dimensions. Yet experience does eventually project anyone, kicking and screaming, into those others.

> It is not easy to orient yourself in a whole which is made up of parts belonging to different dimensions. . .
>> Paul Klee, 1924 lecture, translated in *The Thinking Eye*.

I should like to mention that a lot of 20th century theory concerning architectural design has focused on algorithmic problem-solving. I should like to point out that when architects speak of solving problems, they probably don't mean yours.

Ontological dispositions implicit in problem-solving methodology include a sense of order that is hierarchical, a one to one mapping between form and function, a one to one mapping between cause and effect, a model of causality which is predominantly linear, an orientation toward explicitly predefined goals, an adherence to formulas, the premise of operating within a closed system. It is a reliable strategy for planning the layout of plumbing systems, for designing electrical circuits, for calculating the sizes of beams. As for the problem of the architect—as frequently as a new student should mention it, Maurice would parry that "there are no problems; there are only difficulties."

That is to say that a building is not a solution. Satisfying a particular set of adjacency requirements or meeting the client's budget or complying with zoning regulations and building codes or even keeping the rain out—such services that a building should perform—pose opportunities rather than problems. The proposition of defining space as a range of potential for habitation is not a problem.

Arranging some peaches on a plate is not a problem. Another method of procedure, a different sense of rules and relationships, are wanted for this kind of production. "Projective Construction" is a name for this. Let me say that you have probably discovered it everyday yourself, gleaning hints from the landscape perhaps, contemplating an arrangement of rocks in the sand, or organizing the contents of your pocketbook. Why do you take the time to do these things when you could be solving problems? Asserting a kind of order that is ambiguous, incomplete, shifting, or open-ended, such mundane collections of everyday stuff define spaces for the flights of our imagination, just as architectural form gives definition to the spaces we inhabit.

> The poet's mind, and at a few decisive moments the mind of the scientist, works according to a process of association of images that is the quickest way to link and to choose between the infinite forms of the possible and the impossible. The imagination is a kind of electronic machine that takes account of all possible combinations and chooses the ones that are appropriate to a particular purpose, or are simply the most interesting, pleasing, or amusing.
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> Italo Calvino, *Six Memos for the Next Millenium*, 1985

The projective approach is characterized by the play of a mind and a hand combining and rearranging OBJECTS that occur in a FIELD. The field is an idea from physics—the influence of some agent (electricity, magnetism, gravity) existing at all points in space and defined by the force it would exert on an object introduced at any point in the space. Several painters and poets of the 20th century have appropriated this idea of fields to explore methods for composing with dynamic rules. The combinatorial play with objects reveals forces operating in the field, and these forces establish potential relationships and tensions between the objects.

The objects at a poet's disposal are things like syllables and lines. The line is an issue of the breath. "Let me just throw this in," adds poet Charles Olson:

> It is my impression that *all* parts of speech suddenly, in composition by field, are fresh for both sound and percussive use, spring up like unknown, unnamed vegetables in the patch, when you work it, come spring.
>
> Charles Olson, "Projective Verse," 1950

Tuning into field properties of architectural space is a way of imparting physical form to immanent possible relationships. The field is not isotropic and uniformly distributed like geometric space, but more or less concentrated at different zones within it (think of Chinese landscape paintings), and infused with directions that anticipate movement. Anything projected into the field not only responds to, but also alters the energies moving through the field.   The field provides an additive, extensible basis for architectural design that does not readily yield symmetrical organizations, or one-to-one hierarchies of form and use.

In 1989 I collaborated with a storyteller whose name is Jill Wright and a filmmaker named Benjamin Bergery on a research project that would transfer methods of projective construction (such as I had explored in architecture and filmmaking, and such as Jill had pursued in the dimensions of improvisational theater) to a computer-based environment where children might generate stories.

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Produced with the support of Apple Computer, BACKYARD TRANSFORMATIONS was an exploration in story generation and the morphology of narrative, integrating motion picture, sound, and text elements in a prototype story construction environment for children. Introduced through a series of games that elicit spontaneous, improvisational creation, the child's experience afforded opportunities for learning about fundamentals of story structure, for exercising the synthesis of visual and verbal skills, for empathetically probing and articulating the dimensions of a mythological universe, and for practicing a projective approach to story composition.

The video material comprises a collection of fanciful characters, unexpected events, and imaginary viewpoints that were fabricated in the storyteller's own backyard. Shuffled and revealed like a deck of Tarot cards, 174 movie intervals furnish scenes and threads from which children construct and narrate original stories. The computer screen is a virtual card table where the children select and arrange the movie intervals in sequences by pointing and dragging digitized keyframes, and combine these sequences with their own voices and text. Results are displayed on a video monitor with text overlay.

A word on the Tarot. Plenty of literature and a staggering amount of nonsense have been published regarding this ancient system of divination. Tarot cards date with any certainty from the 14th century, and evidence suggests that they were used in those days for gambling. No documents survive which might help us guess how the Tarot cards developed as a medium for fortune-telling, but by 1900 their usage was almost exclusively associated with this application.

There are people who identify characters and scenes depicted on the Tarot cards with mythic archetypes, such as Carl Jung proposed, that supposedly unlock the collective unconscious. Although I am not qualified to argue with mystical interpretations, I do suggest that what has distinguished the Tarot as a user interface is not magic. Neither is it the content of individual cards but rather the *system* in which these cards are deployed. It's the way that cards happen to fall into one of various predetermined arrangements called a "spread". It's the way that the reader observing pictures on the cards infers their meanings according to the sequence of cards into which each individual card is inserted. What's at work in this system of the Tarot is a complex process of interaction between suggestion and a reader's projective imagination. Ambiguity is an essential ingredient.

Improvising on the ways of the Tarot archetypes and spreads, we designed a collection of characters and situations that were commonplace and yet unaccounted for. "Who is this guy? What is he doing here? Why?" The sense of what's happening in individual scenes must be supplied by the viewer's imagination, or else inferred through their combinations, permutations, and transformations. Hopefully the scenes might be just odd or evocative enough that the children couldn't resist telling us about them.

The drift of this storymaking procedure is neither that of a pre-defined problem to be solved, nor that of a diagram (plot outline, genre formula) with empty slots to be filled in; rather it is a potential which gradually reveals its scope, directions, and internal connections as the child introduces, arranges, and interprets the details. "Projective composition" is contextual. One perception leads to the next, because what's already there sets the stage for the next event. Each addition has the opportunity to contribute fresh and different definition to the whole work, and the effect of each decision furthers the process by forming a new basis for reflection.

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E.H. Gombrich's classic work on the psychology of pictorial representation proposes that the roots of art may be found in this mechanism of projection. Images in the clouds and Hermann Rorschach's ink blots furnish evidence of the mind's strategy for reading meanings into ambiguous forms and accidental combinations. "What we read into these accidental shapes depends on our capacity to recognize in them things or images we find stored in our minds." With regard to painting, Gombrich observed that

> there are . . . two conditions which must be fulfilled if the mechanism of projection is to be set in motion. One is that the beholder must be left in no doubt about the way to close the gap; secondly, that he must be given a "screen," an empty or ill-defined area onto which he can project the expected image.
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> <div align="right">E.H. Gombrich Art and Illusion, 1956.</div>

The first prototype of BACKYARD TRANSFORMATIONS employed an extremely simple-minded user interface. The computer embodied no narrative expertise whatsoever, but merely facilitated the interchanging and rearranging of parts of the story, so that the process of exploring and identifying possible relationships in an open-ended order became paramount to the storymaking activity. As the storymaker selected and shuffled scenes, episodes would begin to cohere into a more or less unified narrative shape, although not necessarily through a linear progression of reasoning. Testing this prototype with fourth grade students prompted the surprise speculation that an interface which is simple, suggestive, and ambiguous may do a better job of supporting improvisational narrative creation than one which strives to model the predilections and formulas of an expert storyteller.

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