## What is Symmetry

A growing interest in Near and Middle Eastern rugs has made me question notions I previously held on what is symmetrical and what is not. In Anatolian village and nomadic rugs, there appears to be considerably less concern with the exact accuracy of the mirror image than in most other rug-producing areas. The detail of an Anatolian symmetrical image was never mechanical, as I had expected, but idiomatically drawn. Even the classical Turkish carpet was not as particular with perfect border solutions as was its Persian counterpart.

- Morton Feldman, Crippled Symmetry, in Give My Regards to 8th Street: The Complete Works of Morton Feldman

Symmetry is more general than how it usually appears in aesthetics under the sign of "reflection." To approximate the formal definition of group theory, you get symmetry when you have some structure-preserving action you can take on an object that, when undertaken enough times or in the correct order, gets you back to the same place you started.

Let's proceed to what motivates Feldman about this structure:

The rhythmic structure of the block consists of four uneven bar lengths with four permutations that incorporate the instrumentation of the quartet. I must caution the reader not to take the bar lines here at face value. This passage becomes rhythmically obscured by the complicated nonpatterned syncopation that results. Only after rehearsals, and by following the score, could I catch an individual pattern as it crisscrossed from one instrument to another.

In *Spring of Chosroes* for violin and piano, the "pattern" of one section consists of heightening the effect of the plucked violin figure (encompassing three pitches) by not establishing any clear-cut rhythmic shape except for its constant displacement within the quintuplet. This allows for five permutations, which are then juxtaposed in a helter-skelter fashion as the series continues. The use of three pitches against five uneven beats created, in my ears, a *crippled symmetric constellation of "eight"* as I was writing it. Against the violin's pattern, the piano has an independent rhythmic series of the same three pitches, played in a symmetric unit of four equal beats to a measure. This functions as still another deterrent to the natural propulsion of the quintuplet.

So we have a collection of operations that can be composed in various orders, some collections of which may reconstitute (through symmetry) something like an original state. Critically, we have a new introduction: *crippling*. Crippling alters, and in doing so, introduces the idea that the alteration contains an inverse action: the alteration underscores that which was altered. Deviation necessitates

normality; and of course, each such instance of alteration highlights a core invariant: that which was altered is also preserved by the alteration. So crippling is an action with an inverse.

What is interesting here is that Feldman does not reject anything like a naive notion of "program," "formula," "pattern," or "paradigm." The issue he takes with symmetry is not the underlying set of operations or their group structure (he clearly loves the permutational and compositional structure). It is that classical symmetry naively returns to the same by presenting the symmetric. This is the Bachian paradigm that Cage rejected, and there is an analogue in Guston's rejection of "pure" abstract forms in favor of signifiers and transformations between them. In Feldman and Bach (and Cage and Guston), there are a set of group operations by which the piece is elaborated. However, the modern rejection each gives does not aim at the elimination of the groupoid structure, but rather indicates a higher-order principle: instead of operating on arrows between sets of musical objects (transformations mapping onsets, motives, durations, voicings; figures, shoes, hoods, clocks, mounds, heads), we map transformations to transformations, arrows to arrows. From this perspective, crippling forms a higher-order groupoid where 0-cells are musical denotations, 1-cells are transformations between 0-cells, and 2-cells are crippling transformations of 1-cells which weaken strict equalities. The 2-cell "crippling" is also higher-order in the sense that it explicitly composes the lower groupoids: it has been elevated to a compositional principle in the aesthetic sense.

The effect of this shift to higher-order consideration is unmistakably "modern": going up a level marks a clear change in the classical notions of identity and order. A piece by Bach, with all its "wonderful symmetries" (Cage), is in the end boring if you only ever return to or orbit around where you started. Each Feldman composition, more so than Cage's or Guston's, is particularly marked by all the ways it *could have been*, and this gives Feldman his halting, ambulatory, haunted affect.

I do not want to overdetermine Tomás's work, but I do want to note a couple of important points:

- 1. Guston shows how signifiers can work as morphisms, but these are pictorial signifiers, not images; Tomás has an image of Brigitte Bardot on his preferred magazine paper. As the only image in the show—and as a Pop sex-bomb contemporaneous with Feldman's invention—it's a funny outlier in the expected set of group actions. It's like a *cone* that goes far out in order to return the limits of what is inscribed below it.
- 2. There are contemporary moves added to the pictorial operations: Morgan Fisher's discursive monochrome program (filtered through Rodchenko's RYB) and "post-studio" installation moves.

In a way, the show lifts these historical trajectories into a new structure with a lighter affect: Feldman has a very serious insistence on the other ways that weren't. This show is much more amused by the other ways that were.

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