

Architectonic Criticism: Re Form in the Literature Classroom

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Having retired from the classroom and begun reflecting on my career, I am, in the spirit of “better late than never,” offering some suggestions for use in teaching literature courses. I taught at the undergraduate level largely in institutions that offered liberal arts courses and majors but certainly could not be considered liberal arts institutions. Many of my “objectively oriented” students undoubtedly were uncomfortable with the subjectivity they perceived in the discussion of literature. I have come to recognize that I probably shortchanged those students interested in careers in engineering, technology, mathematics, science, and so on, not because I didn’t expose them to a wide variety of humanistic approaches to the literary arts but because I never attempted to incorporate an approach to literature that might have truly engaged them and played to their intellectual interests and strengths. The following presents the kernel of such an approach.

The Basics

Let me begin with some basic assertions: I’m really just proposing a renewed emphasis on an old approach to literary analysis and an extension of the techniques associated with that approach. I’m going to introduce a new term or two to try to capture conveniently the focus of my efforts, but these will not change the fundamental approach. And, to reassure committed

deconstructionists and their contemporaries, my proposal involves only an auxiliary methodology. I'm not trying to displace or supersede anyone but to introduce an aid to understanding, a complementary tool kit—a kit that has been used occasionally, but not regularly and systematically, by many teachers and critics.

The familiar approach is usually termed formalism—and in its traditional forms has been in regular use for decades. The “new and improved” version could be termed architectonic criticism or morphometric (“form measuring”) analysis. While formalism in many varieties, including New Criticism, has an extensive history of dealing profitably with poetry and has provided concepts for critical analysis used in numerous textbooks on fiction, architectonic criticism would aspire to facilitate the analysis of the structure of fiction in its shorter and longer forms in a manner different from that typical of the New Critic.

Our intensified formal criticism involves the sort of detailed but relatively abstract analysis characteristic of some areas of linguistics (stylostatistics particularly) and musicology. The architectonic approach employs techniques similar to those of content analysis found in fields such as communications and the social sciences but with a differing focus or goal—the quantification of form rather than the explication of content.¹ And our approach is not without precursors in the narrower field of literary analysis: the familiar Freitag's Pyramid would represent a simple geometric analog to literary development, and John B. Carroll's “Vectors of Prose Analysis” would illustrate a major mathematical examination of literary style.² Despite a mathematical emphasis, our approach allows the critic considerable flexibility.

In essence, the procedure involves selecting a feature (perhaps to be designated an “enumereme”—a word, a phrase, an image, the paragraph unit, the chapter unit, and so on) and carefully counting its unambiguous instances—tabulating them, perhaps diagramming them, considering their location and duration, examining their sequencing and their patterns of repetition and variation.³ We could envision the tapestry of the literary work revealed by a static visualization of a temporal art in the manner of the musical score—seeing the structural patterns holistically rather than encountering them sequentially. By considering multiple features of a given work, we might reveal, as did those old transparent maps of America’s westward expansion, layers of underlying structure.

The critic or student, therefore, has flexibility in identifying the feature or features to be examined but is bound by the counting regimen and the requirement that the delineated elements be identified consistently. The selection of the literary component to be defined and tabulated will be critical to determining the structures of a literary work, for selecting differing components can lead to very different but wholly justified judgments of underlying patterns. The identification and selection process will not, however, be constrained by, for example, the binaries typically associated with the structuralists.⁴

A Prelude

To illustrate, let me perform a basic architectonic analysis of the music of the familiar piece “Frere Jacques”—a work connected with only the most elementary of literary efforts. (I’ll use the traditional English translation of the lyrics to help locate the musical segments.) Taking

the familiar elements of melody, rhythm, and harmony, we can see how musical structure might be identified—and how differing elements may reveal differing structuring possibilities.⁵

Let us first look at the familiar melody. The words suggest that we have four different phrases each repeated twice in succession: Are you sleeping? Are you sleeping?; Brother John, Brother John; and so on. Melodic analysis would confirm the pattern. Musicologists might represent it as an “aabbccdd” pattern. We could also say that, at a somewhat more abstract level, it is an ABCD pattern. But notice that looking at the melody linked to lyrics in this fashion argues for a four-part structure, non-repetitive between major segments. (Yes, musicians, I recognize that A and B segments illustrate the concept of *sequence*—the immediate repetition of a melody a fixed pitch distance from the original—very well. I’m focusing on the repetition of an identical melodic phrase.)

If, however, we look at the “story line” of the melodic movement, we will see movement generally away from the tonic (in this case, starting or home) tone through the “Brother John” lyrics followed by movement generally back toward the home tone through the “Ding, dang, dong” lyrics. Found in many tunes, this “journey” away from and back to the home tone might well be taken as evidence of an essentially two-part structure: an A segment of melody moving away from the home tone and a B segment returning to that home tone.

When we turn to the rhythmic component of “Frere Jacques” and compare it with the ABCD structure suggested by the repeated melodic phrases attached to the lyrical repetitions, we find a slight divergence. We can conventionally count the rhythm of the A (aa) portion as 1, 2, 3, 4; 1, 2, 3, 4—one count for each quarter note (and each syllable) and the B (bb) portion as 1, 2, 3

hold, 1, 2, 3 hold—with the “3 hold” representing the half note (and the long syllable) of “John.” The C (cc or “Morning bells”) portion might be counted as 1 and, 2 and, 3, 4; 1 and, 2 and, 3, 4 to account for its notes and syllables. The final D (dd) portion has the same 1, 2, 3 hold pattern as the B (bb) portion. But this means that our rhythmic analysis suggests an ABCB pattern since the “Brother John” and the “Ding, dang, dong” portions are rhythmically identical. Whether we choose to treat the “Morning bells” portion as wholly different from the “Are you sleeping?” portion (C and A) or decide that the “Morning bells” portion involves merely a variation of the 1, 2, 3, 4 pattern of the “Are you sleeping?” portion and should therefore be treated as A₁, our rhythmic analysis offers support for a two-part, AB conception of the piece.

A simple, most unoriginal harmonization for the melody of Frere Jacques would result in a IVI (one, five, one) chord pattern for each phrase (and each measure) of the song. (The simplest harmonization would employ only I chords—as a sort of tonic drone.) Non-musicians need not be concerned about the technical meaning of I’s and V’s. The point is that the analysis of harmony would yield a monotonous AAAA pattern to the piece—all repetition and no variation. This lack of harmonic variation is critical for synchronizing the melodies of the piece when it is sung, as it often is, as a round.

The interesting result of this musical analysis is that choosing one element (harmony) suggests that the segments of the piece are all the same; choosing another element (melodic phrases corresponding to the verbal phrases) suggests that we have four different segments; and choosing either of two other elements (melodic movement; rhythm) suggests that the basic order

of the piece is binary. It seems that what you decide to measure determines what structure you discover.

If we can find such a divergence of results when dealing with the components of a simple example from the relatively abstract realm of music, it should not be surprising to find even greater divergences in the structural analyses of the far more complex verbal relationships found in literary art. Architectonic criticism retains the critic's responsibility to select the elements of the literary work that are to be examined and also retains the possibility of contradictory conclusions regarding the structural patterns of the work. The systematic counting of a carefully defined element of a work should, however, encourage agreement on the patterning of that particular element—its frequency, intensity, duration, and distribution—though not necessarily on its significance (even though discussions of significance could be both inspired by and constrained by the numbers found in the analysis). And while the close analysis of individual works may disclose unexpected details of structuring, such analysis may well also confirm the reader's sense of large-scale form. Beyond this, comparative detailed analyses of multiple works may reveal unexpected commonalities of underlying construction.

This morphometric approach is, obviously enough, not how any reader is likely to approach the reading of fiction except in the simplest instances (the title said that there would be three pigs and here comes pig number three). Action, character, philosophy and morality, language, symbolism, social issues, mimetic veracity—these and many other aspects of the work are likely to engage the reader's attention on a first reading and quite possibly persist through further readings. As with the skull behind the face, we typically observe the effects of underlying

structure without being particularly inclined to focus on the structure itself. More importantly, ordinary reading involves a restricted linear process—we don't know what's going to happen next; we make guesses as we go as to the path the story may take.

Architectonic criticism is thus quite different from reader response criticism. And you catch more readers with narrative than with statistics, as they say. But, as I have noted, the morphometric approach can be radically de-familiarizing and, in the classroom, can engage those students who are number-inclined rather than word-inclined. Math majors and those mathematically inclined science, engineering, and computer science students can suddenly see a place for themselves in the literary-critical realm.

Into the Fairy Tale Realm

Now let's take a look briefly at a few of the possibilities and problems of the architectonic method in dealing with a literary work. The structure of even such a simple story as that of the Three Little Pigs can pose questions as to the proper method of classification. Is the pattern of first pig/straw house, second pig/stick house, and third pig/brick house better classified as an ascending three-part structure (ABC) in the manner of good, better, best, or is it rather to be thought of as essentially a binary pattern (AB) of failure and success, with the failure of the second pig basically duplicating that of the first: A_1, A_2, B ?

The Three Little Pigs can also illustrate the sort of question that enumeration of an element can prompt. Without engaging in a sentence-by-sentence or paragraph-by-paragraph count, we would guess that the Wolf would appear in more explicit instances than any other

character in the tale. (The first little pig, we might note, would be present, would appear explicitly and implicitly throughout the tale, for as great a duration as any character.) Generally this preponderance of explicit appearances would be characteristic of the protagonist of a story. Of course, students, particularly those who would identify protagonist and “hero,” would likely see the prudent, clever, sympathetic, and late-entering third little pig as the hero/protagonist and the Wolf as the antagonist. Among possible resolutions to this minor dilemma: we could consider that the preponderance of appearances by the Wolf simply illustrates the fact that danger constantly threatens, or, since to revisionists every protagonist is an antagonist from the putative antagonist’s viewpoint, we could treat the Wolf as indeed the (non-heroic) protagonist—seeing the tale as the Wolf’s and his defeat as a fairy tale failed quest. Regardless of our resolution, the point is that, in even the simplest instances, counting appearances of a given element—and trying to balance issues of “intensity” versus “duration”—can lead to interesting questions. (An aside here: if a student should engage in an analysis at the word level, counting the instances of a given word will likely generate the discovery that the word “the” is the most common word, the “frequency winner,” in the text. Since the mere frequency of the definite article is not likely to make it the “most important” word in any lengthy segment of text, an instructor can use the occasion to point out that, while significance may often be reinforced by frequency, it is not dependent upon frequency and it may even be generated by a “startling” rarity.)

Now for a somewhat more extended illustration from the world of Grimm: the short, highly formulaic story “The Queen Bee,” which immediately follows the familiar

“Rumpelstiltskin” in the old text I have on my desk (*Grimm’s* 239-41). The work is obsessively triadic in its architecture although, interestingly enough, it does not use the number three or enumerate three items or three characters as so many of the Grimm tales do. Given this feature of the tale’s title, we might begin to answer one typical classroom question of a New Critical sort (what is the connection of the title with the story?) by observing that the Queen Bee appears in the second half of the tale to help the central character meet a crucial third challenge.

While the line and the stanza are the preferred mid-level units of structural analysis in poetry (the sound, the syllable, the word, and the metric foot constituting the more basic units of construction), the paragraph is the obvious visual means of segmenting prose and a convenient unit for conducting a morphometric analysis of the short story. A paragraph-by-paragraph examination of the tale might proceed as follows.

The first paragraph is of medium length (given the lengths of the paragraphs in this translation of the story). The human characters include a king (merely mentioned), two older brothers described as “reckless,” and a younger brother named Witling (“one having the quality of wit or cleverness”). The ants of the anthill mentioned we might categorize as “non-human characters” or, given the future role they play, as “animal helpers.” The actions in the paragraph include the older brothers beginning a journey from which they do not intend to return, Witling catching up with them, the older brothers proposing to stir up the anthill, and Witling defending the creatures with the initial version of his “Let [sic] the little creatures alone, I will not suffer them to be disturbed” refrain.

The second paragraph is short and involves all three brothers as well as ducks on a lake. The older brothers propose to catch and cook the ducks; Witling delivers the second version of his refrain.

The third paragraph is short and features all three brothers and a bee's nest overflowing with honey. The older brothers propose to "stifle" the hive with smoke; Witling delivers the third and final version of his refrain.

Paragraph four is twice the length of any other paragraph in the tale. All three brothers are present. They come upon a castle. They find horses of stone in its stable. They continue their journey through the rooms of the mysterious castle until they encounter a door with three locks. They peer through an opening in the door and see a new human character: a little gray-haired man. They call three times. The little man comes out but does not speak. He provides the brothers with food, drink, and sleeping quarters. In the morning he directs them to a table of stone upon which are written the three things required to deliver the castle from its enchantment. The first of these things (and the only one revealed at this point) is the 1000 pearls belonging to the Princess (another human character). These must be collected by sunset or the searcher will, not surprisingly, be turned to stone. The first brother collects only 100 pearls and is turned to stone. The next day the second brother collects 200 but is likewise petrified.

The fifth paragraph is short. Witling attempts to collect the pearls but despairs of success. The ant king and 5000 of the ants saved by Witling's pity collect the pearls.

The sixth paragraph is similarly brief. Witling must retrieve a key belonging to the Princess from a lake. The ducks that he has saved bring up the key.

Paragraph seven is of moderate length. The third and most difficult challenge remains: Witling must choose the youngest and loveliest of three identical sleeping Princesses. (We might also note that this third challenge moves from retrieving something to selecting someone.) The three Princesses differ only in that each ate a different sweet: sugar, syrup, or honey. The Queen of the hive that Witling rescued finds the honeyed lips of the youngest and loveliest Princess. Witling chooses her, the spell is broken, and all return to their rightful states.

In the last paragraph, the shortest, Witling marries the Princess and becomes King when her father dies. (Again, a king is mentioned but not described in any detail.) The two older brothers get the two remaining sisters. (We are not told how much the Princesses are changed by the breaking of the spell, but getting a Princess seems to be a pretty generous reward for being mean and failing a trial. Apparently it's the default reward when you're a prince.) There is no return home.

Our observations could receive tabular presentation: paragraphs numbered across the top of the page and categories down the left side—paragraph length (perhaps by word count); location and time of action; characters (number and description; significant features); items; events/actions; narrative presentation (for example, presence or absence of dialogue, limited or extensive description of the environment, identification of point of view, and so on). We might also move to a more abstract notation in the categorization of elements, for example, by identifying a character such as Witling as Character 4 (if we treat the unnamed first King as Character 1, the first brother as Character 2, and so on) or perhaps C4, in order to simplify pattern representation and recognition. As suggested previously, visual representations

employing graphs or profiles or colored icons could be developed, and comparative graphing of multiple stories could be attempted (probably, as a practical matter, focusing on limited or large-scale features).

To go beyond our initial identifications and tabulations and offer an abbreviated architectonic analysis of “The Queen Bee,” we might examine the pattern of its paragraphs by length. The overall pattern (with L for “long,” M for “medium,” and S for “short”) is MSSLSMS. Looking at the general content or action in the paragraphs, we might say that the paragraphs proceed as follows: initial situation plus first major action, the kind deed (M); second kind deed (S); third kind deed (S); central extended situation including the identification of the trials and second major action, the failure of older brothers (L); first successful trial (S); second successful trial (S); final situation and third successful trial (M); final rewards (S). Beyond the final, very brief paragraph, there is no need for further development after the third longer paragraph.

We could certainly see the overall structure as a pattern of three: MSS, LSS, MS; beginning, middle, end; exposition, complication, resolution. However, the pattern could also be viewed as substantially binary: a mirror structure, MSS-L-SSM, with a concluding tag S—the tag S acting as a sort of “they lived happily ever after” postscript, a balancing prologue having been omitted. The long central paragraph, with its mysterious mid-journey castle and its little gray man (both of which do not reappear in the tale), would provide a fulcrum for the action. Such a view would be supported by the balanced action (kindnesses given paralleled by kindnesses repaid), by the passive animals reappearing as animal helpers, and by the “frame” of

the two nondescript kings. As with our earlier musical example, reasonable arguments may be made for more than one overarching structure in a given work.

We could also, for example, use our counting approach to identify the main character, Witling. Witling appears in every paragraph while no other character does so; he is the only named character; and he is the only character with a “voice,” which we hear in his refrain. We could consider an A₁, A₂, B order encompassing the brothers, the animals, the sweets, and the princesses: two essentially interchangeable first instances followed by a singular third instance. Looking at this patterning of the piece may also help us to answer an interesting question: how would the reader know that the honey was associated with the youngest, loveliest daughter? Honey is not necessarily the sweetest of the three sweets. While the third animal helper, the Queen Bee, would logically be connected to honey and would give us one clue as to the likely resolution, parallel patterning (third animal to third sweet) would also require the honey-to-youngest-daughter connection. Apparently mere location in the narrative lets the third sweet correspond to the third daughter. This parallel patterning illustrates the fact that recognition of form may set up expectations of narrative development independent of the specific content of a work.

As I indicated at the outset, an architectonic approach need not rule out other approaches: moral critics would likely emphasize the reward for kindness and good deeds (see also, for example, *The Lion and the Mouse*); feminists would probably note and decry the passive princesses; folklorists would probably focus on oral sources and the resulting formulaic nature of the tale, remark that oral presentation does not package events in paragraphs, and remind us of

the frequency of royal characters, animal helpers, and enchantments in Grimm's and other folktales; myth critics would observe the pattern of the journey and the quest (in this case, a successful quest with no return home); and so on. The architectonic critic would simply offer an additional, detailed perspective and present information that could generate questions and perhaps provide support for answers to these questions.

Into the Classroom and Beyond

So formulaic a tale as "The Queen Bee," with its insistent repetitions and parallels, may be dismissed as offering an unfairly easy demonstration of the viability of an architectonic procedure. Of course most literary narratives are longer, more complex, and much less structurally rigid than "The Queen Bee." Investigating more sophisticated works in any detail would require more extensive and elaborate operations than those necessary for our illustrative examples.⁶ However, with a more substantial work in the classroom, we could imagine twenty students each assigned to look for certain elements in specifically assigned paragraphs from a short story. Alternatively, each student could be asked to look for one or two specific elements in each of the paragraphs of the story. This census of elements, perhaps presented in tabular or other visual form, would then provide a baseline of evidence for discussion and analysis but would not, any more than any other census, provide an explanation or interpretation of the work—a census does not so much provide an explanation as ask for one. Tackling a novel in the classroom morphometrically would almost certainly require a significant narrowing of focus, a

limiting of the number of features to be considered, for the tabulation approach to be practical.

Such a consideration need not, however, preclude the attempt.

Unencumbered by any rigid traditions of architectonic criticism, instructors will be free to experiment. Some may wish to provide more guidance to their students, perhaps in the form of a framework of categories for use in building a story profile: the percentage of words in dialogue, the number and location of paragraphs devoted to character A, and so on. But all instructors can encourage student ingenuity in a relatively uncharted field. If a visually oriented student suggests color-coding geometric shapes, the diagram of the story will be that much more vivid—and perhaps more usable. If the computer science major suggests that an algorithm could be developed to identify and tabulate features, a nice semester project has arisen. The architectonic approach opens up opportunities for an exciting originality.

To sum up, this era of Big Data and Digital Humanism seems an opportune time to combine quantitative analysis and literary criticism. Obviously, what I have presented is merely a rudimentary proposal for an auxiliary critical approach. We would have an enormous distance to go to develop a general architectonic theory of the sources and purposes of fictional structuring—to move from tabulating what we find on the surface to explaining how the structures we find there arose. But by combining flexibility of focus with a methodology emphasizing detailed tabulation augmented by visual presentation, the critic, instructor, or student employing morphometric procedures may find new perspectives on and uncover new aspects of fictional works and the less verbally oriented student may be actively engaged in the enterprise. As with investigations of musical form, examining form and discovering structure in

literature can lead to a deeper understanding of how a particular art operates and ultimately to a greater enjoyment of that art—a result that all of those interested in literature should strive for.

Good luck with your classroom experiments.

Notes

¹ James Jasinski explains close reading in rhetorical studies as follows: “Close readers linger over words, verbal images, elements of style, sentences, argument patterns, and entire paragraphs and larger discursive units within the text to explore their significance in multiple levels” (93). The range of elements considered and the detailed care taken in the examination of these elements are certainly features shared with architectonic criticism but, again, the focus on “significance” rather than on patterns of form distinguishes the two general approaches.

² Carroll employs “vector analysis” of a large sampling of prose passages in an attempt to determine the basic dimensions of style and develop a “typology of style.” Carroll, it should be noted, strongly reinforces our initial caveat with the following statement: “Although the style of literary passages can be indexed in certain ways mechanically, it cannot be *evaluated* mechanically!” (289). A further example of the wide range of mathematical analyses being conducted on literature may be found in Alison Flood’s article “Scientists find evidence of mathematical structures in classic books.” A study conducted by the Institute of Nuclear Physics (!) in Poland examined variations of sentence lengths in works of various authors and discovered fractal patterns, particularly in Joyce.

³ Although she is ultimately interested in treating character relationships, Marie-Laure Ryan thoroughly surveys the history of visual representations of narrative development (including mapping, tables, and bar graphs, among others) and offers a solid theoretical basis for the employment of a variety of such techniques.

⁴This is not to say that binary arrangements would not appear. Content can generate form, of course, and how the critic chooses to classify semantic elements can make a critical difference in the tabulation and representation processes. A story involving a Queen, a Princess, and Mother and Daughter commoners could lead to a representation in four quadrants with, say, Female Parent and Female Child designations in a left hand column and Royalty and Commoner designations across the top. The critic would, at the most basic level, necessarily count the characters as four females but might choose to categorize and discuss them two by two using the four designations mentioned. Semantic categories count.

⁵The analysis of a song in conjunction with analyses of works of fiction suggests the interdisciplinary nature of the morphometric venture. The cross- or interdisciplinary tendencies of analytic approaches can be observed in the relatively recent development of “musical narratology,” the application to music of approaches originating in the study of literature as found, for example, in the work of Tarasti.

⁶For those interested in pursuing the architectonic approach with a short fictional work, I would suggest Hemingway’s “A Very Short Story.” Steven Lynn, in a section entitled “The Writing Process: A Sample Essay” (80-91), includes the complete text of the story and a detailed illustration of how a reader response criticism of the story can be developed in contrast to the semiotic criticism of Robert Scholes. “A Very Short Story,” with its seven paragraphs and limited characters and scenes, offers a very viable starting point for the classroom application of morphometric analysis.

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