

Prototypes versus Aristotelian Categories in the Teaching of Writing

by Robert D. Shepherd

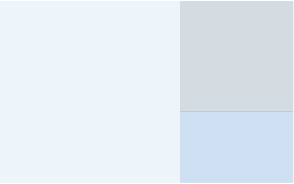
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During the last few decades of the twentieth century, rhetorical ideas dominated academic discourse in the humanities. It is difficult to overstate, for example, the influence during that time of such ideas as “All speech is political” or “Readers construct texts.” Ironically, however, all the late twentieth-century academic *Sturm und Drang* about rhetoric had very little influence on actual practice in the teaching of writing. Rhetoric in the sense of the quotidian practice of writing teachers appears to be one of those fields like the building of houses in which true innovation is extremely rare. From time to time, of course, someone comes along and suggests that favelas made of corrugated tin be replaced by homes built of discarded tires or that students’ compositions might be scored holistically, but given the long history of the teaching of rhetoric, it is surprising how rarely our basic paradigms have undergone more than minor modification. To an extent not generally appreciated, teachers of writing run their wagons in ruts produced by Aristotle two millennia ago. It’s time to get out of those ruts, which, as ruts do, keep us from going where we actually want to go. In short, practical rhetoric can benefit tremendously from throwing over concepts formulated by means of Aristotelian categorical thinking.

Aristotle is the archetypal taxonomist. Key to his thought is the notion that entities in the world can be understood by delineation of their essential properties. So, for example, a concatenation of properties such as “has



Plato (left) and Aristotle (right). Detail from *The School of Athens*, by Raffaello Sanzio, 1509.



webbed feet,” “has a bill,” “quacks,” and so on defines a **category**—a class or set—of things that we call ducks. This category has external reality—it exists in nature—and so Aristotle’s theory of categories is called the **theory of natural kinds**. An Aristotelian essential property is a *sine qua non*. Therefore, testing for class membership comes down to testing for one or more essential properties.

Beginning with Aristotle and continuing down to the present day, rhetoric, like most other fields of intellectual endeavor in the West, has been powerfully influenced by the theory of natural kinds. Thus one of the first English rhetoricians, George Campbell, delineates the kinds, or modes, of speech:

All the ends of speaking are reducible to four; every speech being intended to enlighten the understanding, to please the imagination, to move the passions, or to influence the will (Campbell, 1776).

And one finds a devolved version of this sort of thing in modern textbooks:

Descriptive writing allows you to paint word pictures about anything and everything in the world. . . . Narrative writing tells a story. . . .

Explanatory writing informs and explains. . . . Persuasive writing allows you to use the power of language to inform and influence others (Applebee, 2001).

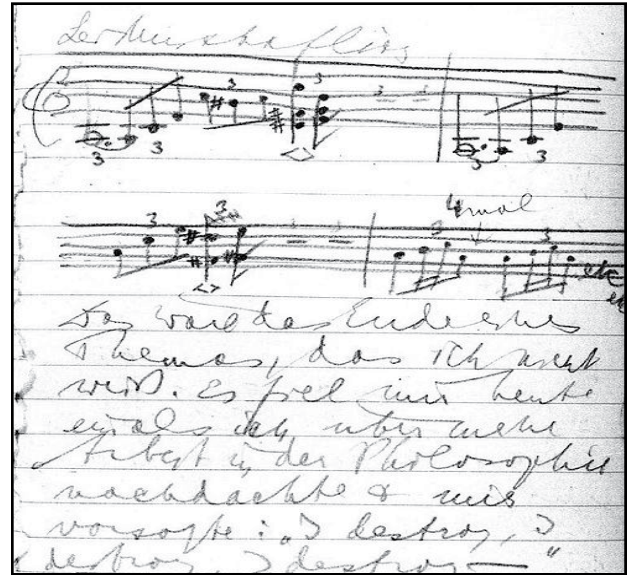
(Note that Campbell’s classification, made two and a quarter centuries ago, has distinct advantages over the contemporary one, being based as it is on an appeal to different rhetorical functions vis-à-vis an audience and on reasonably distinct human faculties, in keeping with the “faculty psychology” of Campbell’s day.)

But categorical thinking has inherent problems. Ludwig Wittgenstein famously attacked the theory of natural kinds in his *Philosophical Investigations*:

Consider . . . the proceedings that we call “games.” I mean board-games, card-games, ball-games, Olympic games, and so on. What is common to them all?—Don’t say: “There *must* be something common, or they would not be called ‘games’”—but *look and see* whether there

is anything common to all.—for if you look at them you will not see something that is common to *all*, but similarities, relationships, and a whole series of them at that. To repeat: don't think, but look!—Look for example at board-games, with their multifarious relationships. Now pass to card-games; here you find many correspondences with the first group, but many common features drop out, and others appear.

When we pass next to ball-games, much that is common is retained, but much is lost.—Are they all 'amusing'? Compare chess with noughts and crosses. Or is there always winning and losing, or competition between players? Think of patience. In ball games there is winning and losing; but



Page from notebook of Ludwig Wittgenstein.

when a child throws a ball at the wall and catches it again, this feature has disappeared. Look at the parts played by skill and luck; and at the difference between skill in chess and skill in tennis. Think now of games like ring-a-ring-a-roses; here is the element of amusement, but how many other characteristic features have disappeared! And we can go through the many, many other groups of games in the same way; can see how similarities crop up and disappear.

And the result of this examination is: we see a complicated network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail.

I can think of no better expression to characterize these similarities than "family resemblances"; for the various resemblances between members of a family: build, features, color of eyes, gait, temperament, etc. etc. overlap

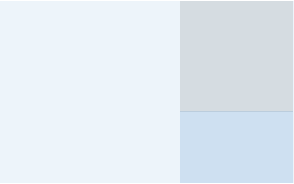
and criss-cross in the same way.—And I shall say” ‘games’ form a family (Wittgenstein, 1953).

Anyone who has thought carefully about the definitions of rhetorical terms such as *poem*, *paragraph*, *essay*, *narrative*, or *exposition* will see the application of Wittgenstein’s observations. The wide range of objects in the world that people denote using the word *poem* have no common characteristic or set of characteristics. Thus defining the term *poem* in the traditional Aristotelian way, by genus and differentia, is impossible because all the characteristics of individual poems—rhyme, rhythm, musical language, strong emotion, the voice of a speaker—fail as essential, defining characteristics. None definitively delineates the group of poems, bounding those things and only those things that are poems and therefore excluding all those that are not.

Fortunately, studies in cognitive science have provided a new approach to the description of groups that improves upon Aristotelian categorization. As George Lakoff points out at length in his fascinating work *Women, Fire, and Dangerous Things*, most sets that people actually use are ill formed in the same way that the set of poems is ill formed (Lakoff, 1967). They are like the set of women, fire, and dangerous things designated by the word *balan* in the Aboriginal language Dyrbal. Despite the bankruptcy of Aristotelian categorical thinking, people are nonetheless able to deal in a practical way with sets or categories because they think about them in a way that has more in common with fuzzy logic than with Aristotelian syllogistic. Studies by Rosch and others have shown that people tend to form categories as more or less loose associations around “perceptually salient ‘natural prototypes’” (Rosch, 1973). For example, people can easily choose from a list of birds certain species—sparrows and robins, to be precise—that they think of as “most birdlike.”



You Put Your Left Foot In. Photograph of blue-footed booby (*Sula nebouxii*).



Other species, such as owls, penguins, ostriches, rheas, cassowaries, rheas, and blue-footed boobies, are less so. They are birds, yes, but not as clearly so as sparrows and robins are. Studies of children have shown that they tend to learn prototypes and their characteristics first and superordinate or subordinate categories later.

Like the theory of natural types that preceded it, the **theory of natural prototypes** has dramatic consequences for practical rhetoric, for it invites us to revisit and rethink the taxonomic basis of writing instruction. Consider, for example, how we go about teaching the writing of paragraphs. In 1866, Alexandar Bain published his *English Composition and Rhetoric: a Manual*, the great grandfather of the writing textbooks of today. It was Bain who first characterized the paragraph as school texts have ever since, as a group of sentences related to or supporting a single topic sentence and characterized by unity and coherence. Here we have a classic categorical definition. The set of paragraphs has these essential, or defining, characteristics:

Possession of a topic sentence

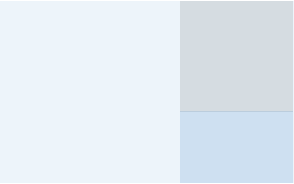
Possession of a number of sentences related to or supporting the topic sentence

Unity

Coherence

Building on this definition, a school text might provide the following heuristic for writing a paragraph: “State a general idea. Then back it up with specific details (or examples or instances). Make sure not to include any unrelated ideas, and make the connections among your ideas clear by using transitions.”

Of course, individual paragraphs in the real world simply do not fit the standard textbook definition, though that definition has been repeated with only minor variation ever since Bain. Most pieces of writing and, *ipso facto*, most paragraphs, are narrative, and rarely does a narrative paragraph have a topic sentence. Two of the most common types of paragraphs, those that make up




newspaper articles and those that present dialogue in stories, typically contain only one or two sentences. And, of course, it makes little sense to speak of a single sentence as being unified or coherent in the senses in which those terms are used when describing paragraphs.

All our writing textbooks notwithstanding, the traditional definition of a paragraph describes the fairly rare case in which a single general main idea is illustrated by specifics. Of course, few paragraphs in the real world work that way. Throw a dart at a page in *Harper's*. You will not hit a Bain-style paragraph. There are many, many other ways to put several sentences together sensibly. The narrative way is the simplest: Present one damned thing after another. But one can also write quite an effective paragraph that, for example, consists of a thesis, an antithesis, and a synthesis; such a paragraph comes to a conclusion but has no overall main idea in any reasonable sense of the term *main idea*. Many well-crafted nonnarrative paragraphs depart radically from the schoolbook model, having no overall, paragraph-level organizational scheme but, rather, only a part-by-part organization in which each sentence is connected to the one before it and to the one after it in any of a myriad ways.¹ In such cases, the writer often begins a new paragraph only because he or she has run out one head of steam. Whew!

What the theory of natural prototypes allows us to do is to posit a prototypical paragraph—Bain's model, for example—and then present variations on the theme. So, after presenting the prototypical Bain-style paragraph, we might present variations like these: Topic sentence first. Topic sentence last. Embedded topic sentence. Implied topic sentence. One-sentence paragraph. Two-sentence paragraph. Paragraph that is just a series of events with no topic sentence. Dialogue paragraph. Introductory paragraph. Clincher paragraph. Transitional paragraph. One-sentence paragraph for emphasis. And so on. And it would certainly be worthwhile to combine this study of paragraph-level structures with activities that expose children to and give them practice in

1. The study of these part-by-part connections that hold ideas together in writing and in speech is known, in contemporary linguistic studies, as *discourse analysis*.




creating pairs or groups of sentences with a wide variety of relations: addition, negation, conjunction, generalization and example, generalization and deduction, examples and inductive generalization, whole followed by parts, parts followed by whole, cause and effect, effect and cause, entity and its characteristics, opinion and support, nonsequitur, entity and judgment or evaluation upon it, ascending hierarchy, descending hierarchy, relation in space or time, and so on (These possible relations between utterances can be multiplied indefinitely, but implicit familiarity with of the most common of these relations is surely a large part of the toolkit of a skillful writer).

What I have suggested be done for paragraphs can, of course, be done for most of the ill-formed traditional rhetorical categories. So, for example, we might present Robert Frost's "Stopping by Woods on a Snowy Evening" as a prototypical (lyric) poem. It rhymes. It has a regular meter. It presents the strong feelings of a speaker. It deals with nature. Then we could present variants up to and including found poems and concrete poems and epic poems and verse plays and dramatic monologues and rap songs and prose poems like those of Margaret Atwood, and all the other types of poems that do not match the prototype precisely.

The vexed concept of modes of composition is ripe for such theme-and-variations treatment. We might begin, say, with a prototypical narrative—a fictional narrative with a standard plot structure, one that observes the unities of time, place, and action; one with an antagonist and a protagonist; one with a conflict that is introduced, developed, and resolved. Something like Stephen Vincent Benet's "The Devil and Daniel Webster" or E. B. White's *Charlotte's Web* springs to mind. Then, having worked with our students to analyze and/or emulate the prototype, we might then explore with them a number of variations with increasing remoteness from that prototype, down to and including nonlinear, open-ended, or recursive metafiction.

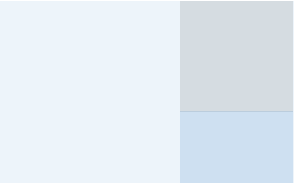
Such an approach would allow writers of composition textbooks and teachers of writing to avoid telling overreaching falsehoods to their students (e.g., "Most paragraphs have topic sentences" or "An essay is a short nonfiction



composition with a controlling purpose.”) because it would replace general statements about categories with specific statements about specific prototypes and specific variants. Furthermore, in writing instruction, **specification**, as opposed to generalization about whole categories, has virtues far beyond simple truthfulness. Whatever is specified can be described in terms of *concrete operations for students to perform*. (Invent a character by filling out this attributes sheet. Think of a conflict or struggle that this character might face. Invent a situation—a time, place, social setting—in which the character might be introduced to this conflict or struggle. And so on.)

The **theme-and-variations approach to practical rhetoric** would allow students’ development of understanding of rhetorical categories to proceed naturally, as in real-life learning about practical matters such as chairs and trees and birds. Such an approach would lend itself naturally to true integration of writing and literature instruction and would make models, which are intrinsically interesting because of their concreteness, even more central to our teaching than they are now. Another advantage of this approach would be that it would encourage fruitful, creative thought about the differences among variants. If we begin with a prototype for short fiction and move to a prototype for a particular kind of nonfiction story—say one that, like the fictional story, involves a conflict—then we have created an occasion for posing penetrating, evocative questions that compare the two prototypes. If our students are old enough and sophisticated enough, we might ask, for example, to what extent any nonfiction story is fictionalized by virtue of having a narrative frame, such as that of the hero’s journey, imposed upon it. This is the fascinating and fruitful question posed by historiographer Hayden White thirty-five years ago: When we say we understand history, is that because we have imposed an archetypal narrative frame upon past events, and don’t we choose the very events to fit the frame, and doesn’t the framing therefore necessarily falsify (White, 1974)?

At any rate, reworking our textbooks to replace the instantiated theory of natural types with a theory of natural prototypes should amount to that rare thing, a real revolution in writing pedagogy. Couple that with some serious work



in stylistics and in sentence combining and modification, and our classes would be really cooking. But those are subjects for other essays.

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