

The Four Master Schemes

The scores of figures found in the elaborated manuals offer significant problems in definition and categorization, so that anyone browsing through a catalog of figures will wonder, first of all, how they can be united by any family resemblance.

—Jeanne Fahnestock
Rhetorical Figures in Science (page 6)

0.0 Argument

I want to do 4 things in this paper.

1. Remind you of the Four Master Tropes tradition
2. Give you a grounding for that tradition
3. Build a bridging argument that there is a similar foundation for schemes
4. Sketch out a Master Schemes proposal

1.0 The Four Master Tropes

We all know the tradition of the Four Master Tropes. Its most famous appearance in contemporary rhetoric is Burke's (1941) paper, included as an appendix to *Rhetoric of Motives* (Burke 1950), but it goes back at least as far as Ramus, who in turn finds evidence for it in Quintilian.

The Four Master Tropes are metaphor, metonymy, synecdoche, and irony.¹ They are Master Tropes firstly because of the way they help organize the topography of tropes. Metaphor is a Master Trope, for instance, because it has a range of realizations, many of them concretizing the abstract: ideas as people (personification), ideas as terrain (topification), ideas as objects (reification). Metonymy is a Master Trope for exactly the same reason. Its various instantiations don't have precise names for specific mappings, but it operates in the same categorical ways (CONTAINER FOR THING CONTAINED, PRODUCER FOR PRODUCT, PLACE FOR INSTITUTION, ...). Synecdoche's categorical patterns include part for whole, whole for

¹ Sometimes they are pared down to three (Foucault, 1970, 110-11; 113-4, with irony the odd man out) or even two (Jakobson 1956, irony and synecdoche out), but usually it is four.

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part, species for genus, genus for species, class for member, and member for class). Irony has such realizations as sarcasm, hyperbole, and meiosis.²

2.0 Cognitive Rhetoric: Grounding the Master Tropes

But there is more to it than that. There are broader patterns behind the organization; the Four were not picked out of a hat. Burke said that each of these figures has a scientific realization. Vico said that they reflect cultural history. Ramus saw them as reflexes of inventional patterns; Rice and Schofer, as endemic to persuasion itself, the four basic operations of rhetoric; John Quincy Adams, to the structure of the mind.

To put it rather quaintly, that is, these four tropes are not “just” figures of speech, not just linguistic devices at the lexical level. The reason that each of the Four Master Tropes have such a large range of instantiations is that they follow from general principles. We might also note that each of these principles is also realized in *topoi* and genres.

Some scholars might be happy with an agnostic operations-of-rhetoric or endemic-to-persuasion account. *Some* scholars, but not *you*, and I’m on your side. We want answers! We want explanations, and the word *explanation* is fatuous in such it’s-there-because-it’s-there accounts. They amount to a kind of mysticism, as if Moses, or Ramus, or Heston, had descended from Mount Sinai holding tablets inscribed not with the Ten Commandments but with the Four Master Tropes.

Personally, I’m with Adams on the psychological character of the general principles underlying the Master Tropes, with something of an update. Adams’s psychology was Associationist. Ours is cognitive. For immediate purposes, an architecture-of-mind explanation allows us to open the door to other figurative ways in which cognition shapes our traffic in symbols; that is, it provides my warrant for the Four Master Schemes.

We think—by that, I mean we categorize, discriminate, understand, know, and reason— analogically. We know and understand X because of its similarities to Y. That style of thinking gives rise to metaphor. We think correlationally. We know and understand X by way of the company it keeps. That style of thinking gives rise to metonymy. We think meronymically. We know and understand X by way of the parts it has, and equally, by what it is part of; that is, by its participation in hierarchical structures. That style of thinking gives rise to synecdoche. We think contrastively, oppositionally. We know and understand X by knowing what it is *not*. (Let’s pause just a moment here, to note that Burke defines us as not

² I argued a few years back at CSSR that Ramus, Burke, and virtually everyone between them, had the membership wrong, that the four master tropes are ‘really’ metaphor, metonymy, synecdoche, and *antithesis* (not irony). I am not renouncing that argument here in the slightest, but I set it aside for present purposes, even to the point of perjuring myself somewhat and offering testimony in connection with respect irony that more properly belongs to antithesis. Forgive me.

just the symbol users, but also as the inventors of the negative.) That style of thinking undergirds irony.

The master tropes are realizations of cognitive affinities for similarity, correlation, meronymy, and discrimination. Put another way, the Master Tropes are what you get when you add symbolic capacity to a mind whose architecture features analogic, contrastive, correlational, and hierarchal thought, thought that categorizes on the basis of these principle.³

I won't pursue it here, but I am confident that a cognitive account will subsume the other accounts of the Four Master Tropes—certainly Adams's account, but also Rice and Schofer's 'operations of rhetoric' account (from where do the operations arise if not the mind?), Ramus's inventional account (*invention* is an inherently mentalist term), possibly even Vico's cultural-history account, since history is a human creation and culture arises from social cognition.⁴

3.0 Cognitive Rhetoric: Grounding the Master Schemes

So, the master tropes are masterful because of their symbolic realization of the architecture of the mind. But there is more to the architecture of our minds than similarity, correlation, meronymy, and discrimination.

At this point, let's quickly rehearse the difference between tropes and schemes, the most basic distinction in rhetorical figures; for some scholars, the only distinction. Tropes are turns or bends or shifts or deviations—choose your term of divergence—away from an idealized conceptual default of entrenchment and expectation in language. We will call that default, *literal language*, realizing that absolute literality (what Group μ call "degree zero" language; Dubois, et al. 1981:30ff) is as unrealistic and hypothetical and methodologically essential as frictionless planes in physics.

³ By the way, while I make no claims in this area, I am pretty confident that all of the affinities I note in this paper are not restricted to humans, several of them perhaps not even to mammals. Certainly repetition would seem to hold of any organism with a nervous system, sequence of any organism with a memory; probably the tropic affinities (similarity, contrast, meronymy, and correlation) hold of any organism with a cortex. What's missing with these other animals, pace Burke, is symbolism, and it is the combination of these affinities with our unique symbolic ability that gives us figuration. Metaphor is what you get when you add symbols to a mind wired for similarity; ploche is what you get when you add symbols to a brain wired on repetition, ... er, that is, a brain.

⁴ Vico's account is a special case, however, because it's just wrong. He structures history in four stages, each characterized by the tropes criterial to the period: the divine stage was metaphorical, the heroic stage metonymic, the feudal stage, synecdochic, and the democratic stage, now, is ironic. While there is a lovely poetic feel to this structure, there is no evidence that any one trope was more widespread in one stage than another, and even the sequence of stages is questionable.

Schemes are turns or bends or shifts or deviations away from an idealized *formal* default of entrenchment and expectation in language. Tropes concern the meaning—the *signatum*, the *signifié*. Schemes concern the form—the *signans*, the *signifiant*.

Schemes, therefore, are more immediately material in their operation, more immediately associated with direct perception and material stimuli. So, it is to the class of cognitive affinities most immediately associated with material perception that we turn for guidance on the Master Schemes. Specifically, I nominate five: proximity, repetition, closure, presence/absence, and order. The first is essential to all schemes, the remaining four provide us with the cognitive grounding for the Four Master Schemes.⁵

3.1 Proximity. Proximity is fundamental. Associationists often called this affinity *contiguity*, to signal that understanding many relations among phenomena depends on encountering them contiguously in time and/or space. This affinity is so fundamental it is often overlooked. We know that Jonathan Toews has scored a goal for instance, because the puck was proximal physically to his stick and also proximal to the back of the net, and that those physical proximities are temporal: he shoots, he scores.

All schemes rely on some degree of proximity. We perceive assonance for instance, because we hear the same vowels *in proximal syllables*. We perceive alliteration because we hear the same initial consonants *in proximal words*. We perceive antimetabole because we encounter the same words *in proximal clauses*.

Proximity governs all schemes, including the Four Master Schemes.⁶

3.2 Repetition. If proximity of the data is essential on the stimulus side, repetition is essential on the brain side. All discussion of brain activity must start in some way with

⁵ The “trope affinities” (similarity, contrast, correlation, and meronymy) are also implicated in immediate material perception as well, of course. Nowhere is this more evident than in the Gestalt principles, which focus on perceptual categorization. We judge objects as belonging together, or not, on the basis of whether they are *similar* (or inversely, whether they *contrast*) in terms of perceptual dimensions such as shape, colour, size, and proximity. And these “trope affinities” are also highly evident in the schemes. Take polyptoton and homeoteleuton, for instance, which operate in theme-and-variation terms, which, in turn, are an amalgam of similarity and contrast. Indeed, I am doubtful that the “trope affinities” and “scheme affinities” distinction will hold up to closer scrutiny in the end. Repetition, for instance, may ultimately be seen as a special case of similarity (identity as something like “absolute similarity”). But until we understand more about the wet stuff between our ears, especially in terms of how electrochemical physicality and symbolic understanding interface, we make what progress we can with the rough principles we have.

⁶ The Associationist term, *contiguity*, by the way, is often used in connection with metonymy, since correlations arise from experiencing phenomena in physical and/or temporal proximity. See, for instance, Bain (1867: 21, 41-46), DeMille (1882:134-151), Hill (1883: 226-286).

repetition. Brains operate on a basal substrate of repetition. For most of what I am calling cognitive affinities, we have only scattered and poor guess work for their neural bases. We have extensive evidence that the *mind* relies on similarity, correlation, contrast, and so on, but little to none about the *brain's* relation to these affinities. It is notoriously difficult to link most cognitive processes or inclinations to the wetware that enables them—some cognitive scientists even talk of an “incommensurability between the languages of neuroscience and psychology” (Kagan and Baird 2004: 100).

There is no such uncertainty with repetition.

Neurons fire repetitively. Neural pathways build up by repetitions of the same firing patterns. The most elemental stuff of cognition is brain rhythms; that is, highly repetitive neuronal firing patterns. The brain repeats, endlessly, cyclically, elementally, even in sleep or coma; when it doesn't repeat, it is not a brain any longer, not a live one. The mind, similarly, repeats inherently. We return to themes, terms, images, faces, perspectives. We think.

Repetition is so fully enmeshed in moment-to-moment cognition that its importance is virtually self-evident, and thoroughly embodied. Want to develop a great wrist shot, or inside fastball, or jeté? Repeat the moves over and over and over. Want to remember a phone number or an address? Repeat it over and over to yourself. Want to learn the times tables? The alphabet? The sequence of months?

Repetition is a cognitive affinity of even greater provenance than similarity. Many schemes rely on repetition. The relevant Master Scheme—perhaps the Überscheme—is *plоче*: simple, brute lexical repetition.

3.3 Closure Another important cognitive driver, one without clear neurological correlates but with plenty of evidence, is the inexorable pull of closure. Associated most directly with the Gestaltists,⁷ closure names the way we are compelled to wrap things up wherever possible, close them off, even when we don't have all the physical evidence, the data, to do so. There are no triangles in Figure 1, for instance, no circles:

⁷ Most rhetoricians, and all scholars of professional communication, are aware of the Gestalt Principles. They explain our cognitive responses to perceptual stimuli—our tendencies to aggregate or discriminate on the basis of certain features, such as size, shape and proximity. They are a good guide to our cognitive dispositions. Indeed, several of them speak directly to the Four Master Tropes. *Similarity* in size and shape speaks to metaphor, which ascribes likeness. *Proximity* in space and/or time speaks to metonymy, which leverages correlation.

As for closure specifically: again, I don't want to claim that affinities align EITHER with tropes OR with schemes—cognition is too intercommingled for that, with the various affinities mutually entangled in multiple ways—and closure may well be related to Conceptual Integration Theory (AKA *CIT*, *Conceptual Blending Theory*, *CBT*, *Blending*), which Cognitive Linguistics and Cognitive Poetics aligns with tropes, especially with metaphor (Fauconnier and Turner, 2002).

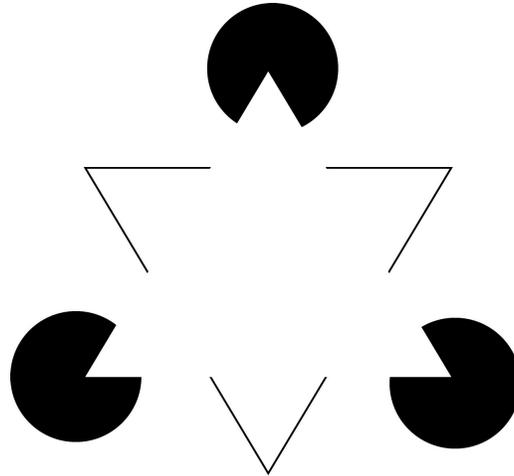


Figure 1: "Triangles" and "circles."

But perceptually, we ‘fill in’ the missing line segments and circle pieces and ‘see’ three dark circles arranged along the sides of a triangle, all of them overlaid with a second, all-white triangle. The data massively underdetermines this perception. We have only three angles and three Pac-man™ shapes. But the mind projects geometrical and spatial relationships out of those shapes, biasing the visual resolution, closing off the perception into triangles and circles.

Closure might be the most definitive principle of the Gestaltists, above even *Prägnanz*, since their name comes from ‘whole,’ and closure drives us to resolve stimuli into whole organizing patterns rather than a collection of individual parts.⁸

The relevant Master Scheme is zeugma: the “filling in” of missing word tokens on the underdetermined data of a single token.

3.3 Presence/absence Human perceivers are sensitive to difference generally—a blue object in a field of red objects, a red one in a field of blue objects; a large object in a field of small objects, a small one in a field of large objects; movement in a static scene, stillness in a moving scene—and to a kind of presence/absence ratio. At its core, this type of salience is a matter of presence and absence of qualities. The salience is not based on blueness per se, but on the fact that it is not-red (red is absent), and that the blueness is only present in one object.

Even more immediately, think of a blinking light: illumination is present, absent, present, absent, ... The light would be less salient if it were on steadily (light continuously present) or left off (light continuously absent).

⁸ *Prägnanz* (German, ‘succinctness,’ or ‘pithiness’), you recall, is the principle of perception that says we seek to resolve experience into regular, orderly, symmetrical, and simple patterns; that is, to package up and close off perceptions into practical arrangements.

In language, presence and absence operate against a background of expectations. If one expects some feature of language but does not encounter it, the feature is activated in a salient way as a felt absence. If one is not expecting some feature of language but then encounters it, the feature gets heightened salience as a perceived excess of presence.

The relevant Master Scheme is the one Quintilian calls *acervatio*, which comes in two flavours, *acervatio dissoluta*, in which an expected conjunction is omitted, and *acervatio iuncta*, in which unexpected conjunctions show up.⁹

3.4 Order Relative location is a crucial factor in perception. Again our friends, the Gestaltists, have something to say on the matter. They sometimes talk about the centrality of orderliness in our cognitive economics, but mostly they just assume it. Take a famous pattern array like Figure 2.

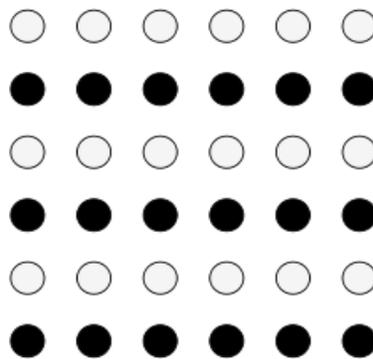


Figure 2: Gestalt image for grouping according to "similarity."

Figure 2 illustrates our cognitive affinity for similarity, because we tend to “see” it not as 36 circles, half of which happen to be lightly shaded, half of them darkly shaded, but as six horizontal rows of circles, three of them light, three of them dark, because the similarity of shading over-rides other perceptual tendencies and orders our understanding.

That is, while Figure 2 illustrates our similarity affinity, it also necessarily illustrates our tendency for order. We would not group the elements into rows if they were not side-by-side, if they weren’t located in the figure relative to each other in certain ways (light beside light, dark beside dark, rather than randomly scattered in the array).¹⁰

⁹ I freely confess that choosing Quintilian’s term here is a bit of a cheat. *Acervatio dissoluta* is better known as *asyndeton*, *acervatio iuncta* as *polysyndeton*. But using it seemed mildly preferable, because of its lineage, to coining a figure named *syndeton* (a term which does have a minor presence in prescriptive grammar, designating any construction utilizing conjunctions, but no presence in the theory of figures), with two subtypes.

¹⁰ Figure 2 also illustrates repetition (we have multiple iterations of each element), of course, and proximity (the elements are near each other), and, therefore, perhaps most importantly, the *interdependence* of the affinities.

It is not just order *per se*, of course; certain orders, certain arrangements, are more salient than others. We are, for instance, particularly well attuned to ‘edges,’ to beginnings and endings of stimuli (note that figures like epanaphora and epistrophe, or prozeugma and hypozeugma, illustrate this, since the repetitions, on the first hand, and the governing word, on the second, occur at the beginnings and endings of phrases; alliteration and rhyme occur at the beginnings and endings of words).¹¹ We are also attuned to precedence and sequence (which is a chain of precedents); also to inversion; and to symmetry.

Order is inevitable. Language is a sequence of symbols, either temporally (in speech) or spatially (in writing), and specific orders, for whatever reasons, become entrenched.¹² For present purposes, I am interested only the sheer inevitability of order and the related expectations.

A metaphor is a metaphor because there is an expected denotation for a given word, an expected signatum, but a different signatum is introduced—a deviation from the literal denotation, usually called the source (or vehicle) denotation—and fused with that of the target (tenor).

Well, there are expected orders in language, too, and deviations from those orders are figural. Our Fourth Master Trope is hyperbaton: a deviance of syntactic order.

4.0 The Four Master Schemes

What follows is a simple list with examples, definitions, and minor discussion of my Four Master Scheme candidates, each with subordinate schemes. As we noted above, the Four Master Tropes each have a range of instantiations (metaphor has personification, reification, topification, anthropomorphism, and so on; metonymy has CONTAINER FOR THING CONTAINED, PRODUCER FOR PRODUCT, PLACE FOR INSTITUTION, and so on). The Master Schemes have the same kind of multiplex categorical realizations.

4.1 Ploche I am tempted to call ploche *The Master Scheme*, the *Überscheme*. Scholars of all sorts—philosophers, psychologists, linguists, historians, anthropologists, you name them, as well as literary critics and rhetoricians—frequently take metaphor to be *The Master Trope*, the *Übertrope*, often to the exclusion of the other three. Ploche feels much the same for the schemes. It is at least as spontaneous, ubiquitous, and various in the realm of schemes as is metaphor in the realm of tropes. Children, for instance, when they are really hungry will say they are “really, really, really” hungry. Many languages reduplicate words to signal plurality

¹¹ The study of edge-detection in visual perception dates at least to Mach (1865; translated as Ratliff, 1965). Studies of auditory edge-detection are more recent (see, e.g., Fishbach, Nelken and Yeshurun 2001, and references therein).

¹² Even in relatively free word-order languages, such as Greek, and so-called word-salad (or non-configurational) languages, like Warlpiri, there are statistical preferences, perhaps governed by pragmatic (and ultimately cognitive) principles.

or collectivity. People will repeat words when they have lost their train of thought, just because they are close to hand, to maintain their figural grip on the talking stick. The simplest and most robust form of redundancy to protect a signal from noise is repetition. Yadda, yadda, yadda (which is a repetition to signal the potential to keep going on). A definition and an example for *ploche* follows.

- 4.1.1 **Ploche** is any full lexical repetition, as in:
Let bygones be bygones. (Traditional)

But *ploche* has a number of more specific realisations, keyed especially to phrasal location (AKA, as above, *edge-detection*), to wit:

- 4.1.1.1 **Epanaphora**, where the repetition happens at the beginnings of successive clauses or phrases:

What the hammer? what the chain? / In what furnace was thy brain? / What the anvil? what dread grasp / Dare its deadly terrors clasp? (Blake 1794)

- 4.1.1.2 **Mesodiplosis**, where the repetition happens in the middle of successive phrases or clauses:

You go your way. I'll go mine. (Traditional)

- 4.1.1.3 **Epistrophe**, where the repetition happens at the endings of successive clauses or phrases

When I was a child, I spake as a child, I understood as a child, I imagined as a child. (Corinthians 1.13)¹³

- 4.1.1.4 **Anadiplosis**, where the repetition bridges phrases or clauses, the end of one phrase or clause and the beginning of the subsequent on:

The Conservatives are focused on Justin Trudeau while Justin Trudeau is focused on Canadians. (Liberal party email)

4.2 **Zeugma** is the scheme that most obviously manifests closure. A good visual representation can be found in the panels of a typical comic strip (McCloud 1993:63). In panel one of Figure 3, for instance, we can't see Archie and Veronica's legs, but we project their existence because that's how we 'close off' perceptions of human beings. In panel one, they are facing each other and standing still; in panel two, they are side by side, strolling down a walkway; then, all of a sudden, they are in a car; and, presto-changeo, a Bentley appears next to them. But we follow the flow effortlessly. We fill in the visual gaps: they have turned and started walking, climbed into a car, driven up to another car—even though there is no representation of those actions. Closure might best be seen as a kind of instinctual

¹³ Technically, of course, this passage exemplifies both *epanaphora* (clause-initial repetition of *I*) and *epistrophe* (clause-final repetition of *as a child*); together, they are called *symploche*. But the heavier semantic and formal presence of *as a child* draws greater attention to the clause-final repetitions.

inference—the quickest, most natural, most logical completion of a perception on the basis of perceivable evidence.¹⁴

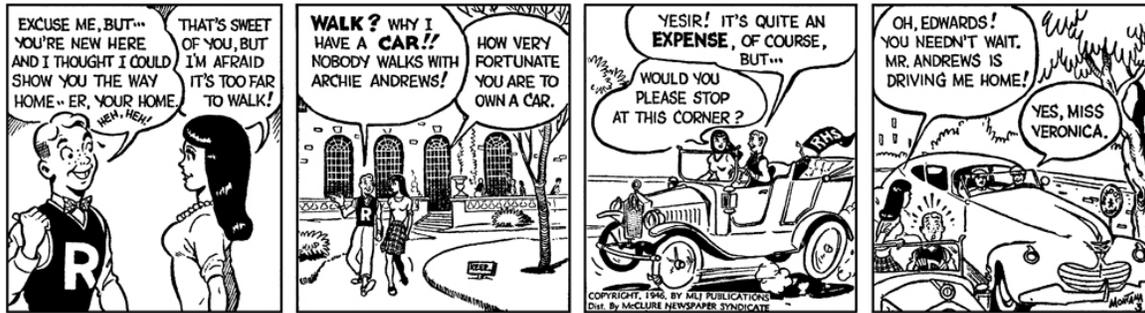


Figure 3: Typical comic-strip panels

With zeugma, we fill in not a visual gap, but a lexical one. The figure is often defined in terms of government or omission; linguists, who do not use the word *zeugma*,¹⁵ treat these phenomena explicitly in terms of gaps. But the zeugmatic bottom line is the occurrence of one token of a word (usually a verb, sometimes an adjective or another term that governs predication, like a genitive noun) participating in grammatical relationships (government) with multiple other words (usually nouns, sometimes verbs).

4.2.1 **Zeugma** is any utterance in which a single word holds the same predicate relation with multiple other words, as in:

Mr. Stiggins ... took his hat and his leave. (Dickens 1837:405)

The old-fashioned deep-structure account of such sentences makes the one-to-multiple predications clear, since it would have two instances of *took* for Dickens's sentence, with the second one deleted by a transformation.

As with ploche, there are several locationally differentiated zeugma, what we might call the Zeugmatic Suite of figures.

4.2.1.1 **Prozeugma**, where the predicate term occurs before the words it 'governs;' Dickens's example above is therefore more technically a prozeugma, the standard in English since our default ordering is verb-object, but here's another one:

You held your breath and the door for me. (Morissette 1996)

4.2.1.2 **Mesozeugma**, where the predicate term occurs medially between the words it 'governs,' as in

¹⁴ I don't mean to suggest that there are not noetic factors at play here as well, that 'reading' a comic strip does not require some familiarity with conventions (left-to-right flow, for instance, or the acceptance of simultaneous temporal and static representations with the speech balloons and imagery), just that these conventions require a substrate of cognitive affinities to work; in this case, predominantly closure.

¹⁵ A rare exception is Uriagereka (2008:68).

What a thing is this, that neyther hope of reward, nor feare of shame could kindle him, neyther desyre of renowne, nor yet the loue of his country. (Peacham 1577:np)

4.2.1.3 **Hypozeugma**, where the predicate term occurs after the words it ‘governs,’ as in

Neither a borrower nor a lender be. (Traditional.)

4.3 **Acervatio**, the omission or addition of conjunctions, most naturally manifests the presence/absent cognitive affinity. It comes in two flavours, the presence of extra conjunctions (with respect to conventional expectations), and the notable absence of conjunctions (with respect to conventional expectations).

4.3.1 **Acervatio iuncta** (“a conjoined heap”) is, the presence of extra conjunctions, as in:
Let the whitefolks have their money and power and segregation and sarcasm and big houses and schools and lawns like carpets, and books, and mostly–mostly–let them have their whiteness. (Angelou 1969:110)

4.3.2 **Acervatio dissoluta** (“a loose heap”) is the omission of expected conjunctions, as in:
We saw no houses, no smoke, no footprints, no boats, no people. (Golding 1954:29)

4.4 **Hyperbaton**, a shift of conventional syntactic sequence, most clearly manifests the cognitive affinity of order. Here’s a famous example:

Strong is Vader. Mind what you have learned. Save you it can. (Kasdan et al. 1980)

Hyperbaton does not have a range of specific realizations, as the other Master Schemes and the Master Tropes do, but it is clearly related cognitively to figures such as metaplasm and antimetabole, schemes whose degree-zero deviation concerns the order of constituents.

The Four Master Schemes, in sum, are:

Ploche

Zeugma

Acervatio

Hyperbaton

They rest primarily on five cognitive affinities:

Proximity (all)

Repetition (ploche)

Closure (zeugma)

Presence/Absence (acervatio)

Order (hyperbaton)

Q.E.D.

Graphic sources

Figures 1 and 2 from <http://commons.wikimedia.org/wiki/Category:Gestalt>

Figure 3 from <http://www.westfieldcomics.com/blog/interviews-and-columns/interview-bruce-canwell-on-idws-archie-classic-newspaper-comics/>

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Appendix

The Four Master Tropes

Metaphor

Personification

Topification

Reification

Metonymy

CONTAINER FOR THING CONTAINED

PRODUCER FOR PRODUCT

PLACE FOR INSTITUTION

Synecdoche

Part for Whole

Whole for Part

Species for Genus

Genus for Species

Class for Member

Member for Class

Irony

Sarcasm

Hyperbole

Meiosis

The Four Master Schemes