The cognitivity of isocolon

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Abstract

Isocolon, a rhetorical figure in which two or more proximal cola have the same prosody, is cognitive. It has three components: repetition, parallelism, and rhythm, each corresponding to a cognitive disposition on its own; collectively, they give isocolon a uniquely powerful appeal. But isocolon also frequently co-occurs with other rhetorical figures, increasing their cognitive pull. As one example of this co-occurrence, I investigate the frequency of isocolon with which it teams up with chiasmus.

keywords: isocolon, rhetorical figures, repetition, parallelism, rhythm

1. Introduction

Isocolon is a figure of parallelism which puts two or more proximal cola into prosodic alignment. Like most rhetorical figures, isocolon goes by many names, with varying degrees of precision, including *rhythmic parallelism*, *equality*, *cadence*, *compar*, *syzygia*, *tricolon* and *parison* (Dupriez and Halsall 1991: 146; Christiansen 2013; Peacham 1971 [1577]). As Harris (2018) argues, the history of rhetorical figures is rife with "idiosyncrasy, intellectual gallimaufry, and academic ideologies". So, for purposes of this paper, I stipulate a definition of *isocolon*, drawn from the wisdom of the tradition, but not attempting to accommodate all variations: isocolon is two or more multiword sequences with the same or similar prosodic contours, which entails the same syllable count and the same suprasegmental stress patterns. It will be helpful to distinguish isocolon from another figure, its frequent travelling companion, parison, which I define as two or more multiword sequences with identical syntactic structure. Isocolon effects prosodic parallelism. Parison effects syntactic parallelism.

Isocola are clearly used in abundance in poetry, since equivalence in metre between lines exactly satisfies the definitional criteria of isocolon, but it shows up in prose, as in example (1).

1. The prayers of both could not be answered. That of neither has been answered fully. The Almighty has his own Purposes. (Lincoln 1865)

The three cola of (1) all have the same number of syllables and highly similar, though not perfectly equal, stress patterns (mostly trochaic, stress-unstress). (Instances like (1) are sometimes called tricola, because there are three consecutive isocola, but I ignore that distinction here.) For contrast, an example of parison is given in (2).

2. ["]She believes that if the Pirahãs reject the gospel it's because it hasn't been communicated clearly. I believe it has been communicated clearly and they reject it because it's utterly irrelevant." [spoken by Dan Everett about Keren Everett] It's almost tragic: Keren's beliefs impugn Everett's competence; Everett's findings attack her entire belief system. (Barkham 2008)

(2) involves parison as well as some figures of repetition for the sentences in quotation (in particular, epanaphora and mesodiplosis, clausal-initial and clausal-medial lexical repetition, respectively), and isolated parison in the second section. Both sections bring together two sentences with the use of parison; the first compares two beliefs, and the second compares two actions implied as a consequence of these beliefs.

In this paper, we argue (1) that isocolon is used in both prose and poetry because of its cognitive effectiveness; that, in combining elements of repetition, parallelism, and rhythm, expressions become memorable and salient; and (2) that isocolon serves the function of rhetorical homogeneity, a species of what Kenneth Burke calls *formal assent* (1969 [1950]: 59).

2. Repetition

In his unfortunately neglected work on the neurocognitive underpinnings of style, *Symbolic inducement and knowing*, Richard Gregg describes all mind-brain activity as symbolic, from simple neural firing patterns to all aspects of cognition. He argues that "all human experiencing is the result of brain processing which creates the structures we call 'meaning'" (Gregg 1984: 17). Neurocognitive functioning is therefore not only semiotic because of its role in the "bigger picture" of cognition, but in and of itself. With that in

mind, we look at the neurocognitive functions associated with repetition. Our ability to distinguish different events or to update information is dependent on the repetition or reuse of a brain's input signals. In fact, a particular neural firing pattern will potentially be reused under "sufficiently similar circumstances" (Gregg 1984: 46). Hence, the repetition of words, word strings, or some linguistic attribute of a text can activate a repetition of neural firing patterns. Fahnestock (2005: 169) reports that "psychologists have recorded quicker recognition time[s] for highly constrained, predictable sentences". What makes a text predictable? Familiarity with its conventional form is fundamental to predictability. We can predict the ending of a story if we have encountered similar ones; in other words, if we have received repeated exposure to a genre of story. We can predict that what comes at the end of the saying, "Readers don't need to write but writers do need to..." is "read" because of the repetition of the root words "read" and "write", the suggestiveness of its overall chiastic form, and the rhyme of "need" and "read" (a repetition of the final syllable in a word). The so-called Rhyme as Reason effect has clear empirical support. People routinely judge rhyming statements to be more accurate, more trustworthy, and truer than non-rhyming paraphrases (e.g., McGlone & Tofighbakhsh 2000). The phonological sameness of words with identical final syllables increases (semantic) judgements of truth and (rhetorical) judgements of credibility; that is, rhyming phrases brings a kind of homogeneity to the associated phrase (Haiman 1980: 517). This may be what Raimo Anttila has in mind when he notes that "language has a general iconic tendency whereby semantic sameness is reflected also by formal sameness" (1972 :89). Familiarity is therefore "a close relative of repetition" (Chien and Harris 2010: 166). Familiarity and its relative repetition accomplish several things, both cognitively and functionally, allied with formal assent. In a classic passage from *Rhetoric of motives*, Burke gives an example of a series of semantically vacant antitheses, built on proforms and deictics: "we do this, but they on the other hand do that; we stay here; but they go there; we look up, but they look down". He states that "you will find yourself swinging along with the succession of antitheses" and that:

> a yielding to the form prepares for assent to the matter identified with it. You might have no interest in that associated matter. You may even reject it. But on the level of purely formal assent you would collaborate to round out its symmetry by spontaneously willing its completion and

perfection as an utterance....assent on the formal level invites assent to the proposition as doctrine. (Burke 1969: 58).

And there is a lot of form to assent with in Burke's we-do-this, they-do-that passage. Burke only names antithesis, but there are several figures in his example, including alliteration, assonance, epanaphora, mesodiplosis, parison, and – of course – isocolon (Harris 2013:4). Tsur (1996) argues that the repetition of metre, which is prerequisite to our rhetorical figure isocolon, gives readers a sense of security because of its predictability – and Burke argues that predictability is key to a reader's primitive need for play and participation. Take another example that makes use of repetitive structure, including isocolon and parison.

3. Who is here so base, that he would be a bondman?

   If any, speak; for him I have offended.

   Who is here so rude, that would not be a Roman?

   If any, speak; for him I have offended.

   Who is here so vile, that will not love his country?

   If any, speak; for him I have offended. (Shakespeare 1623)

In this case, there is a lot of repetition of word strings on top of phonological and syntactic repetition. By the third question-conditional pair, readers are familiar enough with the structure that upon hearing, "Who is here so...", they will expect to hear shortly, "If any, speak; for him I have offended". The repetition also acts as a "piling on" of accusations, that to disagree would be to be a "bondman", not a "Roman", or to "not love his country". The ease of processing from repetition, therefore, makes us yield to the form and to want to agree that speaking out would be "base", "rude" and "vile".

3. Parallelism

Repetition can invoke parallelism or a similarity between two parallel cola because of their formal similarity. The parison, partial isocolon, and copious amounts of repetition in (3) from Section 2 bring together the terms "base", "rude", "vile", and the concepts "bondman", not "a Roman", and someone who "will not love

his country". The first list of terms are essentially synonyms, whereas the second list of concepts is not, but the form of the passage suggests that they are equally base, rude, and vile. Hence, the meanings of these concepts are brought together by nature of the passage's form.

4. As love, if love be perfect, casts out fear,
   So hate, if hate be perfect, casts out fear (Tennyson 1855)
5. Two thousand years ago the proudest boast was "Civis Romanus sum." Today in the world of freedom, the proudest boast is "Ich bin ein Berliner." (Kennedy 1963a)

Next, consider (4), where much of the first part of the sentence is repeated in the second half ("if....be perfect, casts out fear"). Because "love" and "hate" are the only differing elements between the two cola, readers are forced to compare the two words. The similarity between the two cola suggest that love and hate are not so different, not only because "if perfect, they cast out fear", but because the two cola are structurally similar. There is a repetition of words, but also the repetition of syntactic structure ("love" and "hate" are both nouns), syllable length ("love" and "hate" both have one syllable each) and stress ("love" and "hate" both receive primary stress). Similarly, in (5), "Civis Romanus sum" and "Ich bin ein Berliner" have the same syllable length and stress pattern (dactylic, stress-unstress-unstress), and are both singled out as "the proudest boast". The isocolon in and the parison around the "proud boasts" brings together "Civis Romanus sum" and "Ich bin ein Berliner", and makes us compare the Roman Empire to Germany. It is worth noting that, when translated, the sayings are a parison—"I am a Roman citizen" and "I am a Berliner"—but certain efforts were made to ensure that they were also an isocolon. For example, Kennedy could have said "I am a German" instead of "Berliner", but this would have resulted in different syllable counts, a prerequisite to equal prosodies. "I am from the Roman Empire" and "I am from Germany/Berlin" also would have resulted in vastly different prosodies. We can say that the concept of being a Roman citizen and a German citizen are brought together again by the passage's form, giving rise to what we call *semantic homogeneity*.

While it can make two concepts similar by surrounding them in similar habitats, semantic homogeneity can also highlight the differences between two concepts. Returning again to (2), by using parison, Dan highlights the differences between his and Keren's beliefs on why the Pirahãs reject the gospel

("utter" irrelevance and unclear communication, respectively), whereas Barkham highlights the implications of these beliefs (Keren questioning Dan's competence on the one hand, compared to Dan "attack[ing] her entire belief system" on the other). By putting these concepts side-by-side, one of them is highlighted to be, in one case, supposedly intellectually superior, and in the other, harsher and more offensive.

6. In prosperity our friends know us; in adversity we know our friends. (Doxa, often attributed to John Church Collins)
7. As Caesar loved me, I weep for him; as he was fortunate, I rejoice at it; as he was valiant, I honour him; but as he was ambitious, I slew him. (Shakespeare, Julius Caesar, 3.2.24-27)

Again, in (6), the semantic homogeneity makes us compare *prosperity* and *adversity*, almost antithetical or antisymmetrical terms. However, the similarity in form from the isocolon, parison, and repetition of suffixes in *prosperity* and *adversity* highlight the antimetabole (*our friend*s/*us*, a mirror symmetry) in the passage. The semantic homogeneity therefore makes us compare two concepts, *prosperity* and *adversity*, and situations in which *our friends know us* and *we know our friends*.

The Shakespearean example (7) highlights both similarities and differences. The three cola in (7) have the same syntactic structure: an adverbial clause, followed by simple SVO declarative. There are other figures at play, as well, in a kind of reciprocal reinforcement with parison: epanaphora, clause-initial lexical repetition is present (*as* for all four cola, *as he* for the last three), as is epistrophe, clause-final lexical repetition (three cola end with *him*). The first part highlights how the speaker Brutus treats Caesar well, weeping, rejoicing, and honouring him for his love, fortune, and valiance, all positive actions and traits. The last part surprises us with a negative trait, making us compare it to the aforementioned love, fortune, and valiance. However, the overall form suggests that for every trait, Brutus gave a rational response: for a positive trait, Brutus gave Caesar a positive reaction, but for a negative trait, Brutus gave him a negative one. The semantic homogeneity allows us to draw parallels between each of Caesar's characteristics, highlighting both similarities and differences, and the parallels between each of Brutus's reactions, suggesting mostly similarity.

Each of the cola in parallelism "acts as a model with regard to the first: It is not identical to but also not isolated from the first", and because of its non-isolation, "the first member of a balanced pair suggests, or leads the memory on, to something parallel...in the second member" (Lotman 1972 qtd. in Christiansen 2013: 200; Robb qtd. In Gregg 1984: 75). In his description of isocolon and parison, Peacham states that the first colon is answered by the second colon, like in an echo. Fahnestock (2014: 226) argues that parallel cola "can epitomize a comparison". Furthermore, she argues that "similarity in at least one dimension...can impose a connectedness on consecutive sentences, even when their content is different" – what I am calling *rhetorical homogeneity* – as in (4) (Fahnestock 2014: 169). The similarity in one dimension creates "more redundancy, and presumably efficiency, in their consecutive construal or processing in the brain" (Fahnestock 2014: 168). Hence, parallelism does not only make it easier for the brain to process utterances, but on the cognitive level gives us the homogeneity of consecutive cola.

4. Rhythm

Up until this point, many of the things we have argued for the cognitive effects of isocolon also apply to its cousin, parison. However, in this section, we argue that there are certain things isocolon can do, by virtue of being a rhythm-based figure, that parison, a grammatical figure, cannot.

At the mind-brain level, just as Gregg (1984: 50) argues that repetition is fundamental to many neurocognitive functions, he states at *all* neurocognitive functions are dependent on rhythm. Rhythmic activity is fundamental to the vertebrate brain, as demonstrated by Waller's 2007 study of rhythmic productions by dolphins and coyotes. In humans, it was found that if auditory rhythm is impaired, "the stability of other sensory and allied systems may suffer as well" (Gregg 1984: 106). In an experiment by Nygaard et al. (2009), participants learned novel words more easily when introduced with words of similar prosody than when the prosodies were mismatched. Hence, speakers "use prosody to process word meaning" (ibid.). Our brain takes in, processes, and transmits data rhythmically. Gregg claims that rhythm is

rhetorical, and Waller (2007: 109) claims that "rhythm is a precedent to language and symbolic meaning" altogether. Symbolic meaning, in turn, creates abstract thinking. A lullaby-like poem could inspire a reader to imagine "a lulling woman, a rocking-horse, or garden swing", and in general rhythmic patterns provoke an "aural image of bombardment" (Bernhart 1999: 163; Gregg 1984: 143). For some readers, Bernhart (1999: 163) argues, the rocking of a lullaby could be an "intrinsically coded act", in that a reader could "feel" the corporeal reenactment of the lullaby's rocking, suggesting an embodied dimension to formal assent. For Bernhart, speech itself is a "movement system", and an essential expressive feature of rhythm is its "energy expenditure". Rhythm is, after all, not only neurocognitive, but neurophysiological. Furthermore, both Bernhart and Gregg agree that music, like language, can be influence one's brain, body and mood.

Vuust and Roepstorff (2008) summarise some of the literature comparing music and language. There are some clear differences, like the "temporal periodicity" in music that is not frequent in language, except as uncommon figures. There are, however, many similarities: music and language share some neuronal resources, especially under particular circumstances; music and language both group together phrases; musical rhythm has a syntax "analogous to language"; and musical metre "establishes predictive patterns that are similar to those of language" (Vuust & Roepstorff 2008: 149). As Burke points out, "music...is by its nature" heavily reliant on "the psychology of form" (1925:38), setting up recurrent patterns of collaborative expectancy. As a part of these predictive patterns, music enables the constantly creation tension and relief, much in the same way that Burke (1968 [1931]) describes narratives doing in the creation, rejection (tension), and satisfaction (relief) of appetites. Rhythm also encourages play and participation, another Burkean concept. Because rhythm is neurophysiological, "even parts of the body could feel the invitation to participate in the rhythmical pattern" (Gregg 1984: 75). Because it is so fundamental to our cognition, repetition, especially acoustic repetition, can make things more memorable. According to (Gregg 1984: 73), "[c]oncrete events and acts are vivified and remembered by means of stylized verbal forms". Furthermore, just as language can leave an imprint one's perception of the world (such as with "conceptual metaphors" or analogic frames), spoken prosody can have a lasting impression on the music of a culture. In a study, Patel and Daniele (2003) compare the nPVI (normalized Pairwise

Variability Index, measuring durational variability) values of French and English with the nPVI values of French and English classical music. They found that "English and French classical music have significantly different nPVI values, and that this difference is in the same direction as that observed for language" (Patel & Daniele 2003: B42). In another study, Vuust and Roepstorff (2008) describe jazz as having similar communicational practices as in verbal language.

Language has many traits in common with what we know about music than only music with language. Rhythm, music, and aurality are fundamental to language. According to Fahnestock (2005: 170), research shows that when reading words, people "rehears[e] the speaking of those words without being aware of doing so". Hence, language always has an aural side, even when being read silently. Human children do not learn to develop speech until they develop the frequency of their rhythmic motor to about 7 clicks per second or faster, which occurs around age two (Gregg 1984: 102). In Waller (2007: 104), Brandt explains that prosody plays a role in language: conversations and speech acts consist of "dialogical rhythms of turn-taking" and "[i]n all known languages, regular intonation patterns connect lexical items and syntactic constructions". According to Perlman et al. (2015), prosody is "constrained by a multitude of factors, including the syntax and phonology of the utterance, as well as paralinguistic factors like the speaker's attention, emotion, and attitude", and that, "taken together, [this shows] that people have a tendency to modulate their prosody in iconic correspondence with certain meanings." Language and rhythm are closely related and interdependent.

Music, or rhythm in general, and language share many common characteristics, capable of producing meaning; encouraging play, participation, and turn-taking; creating tension and relief; and imprinting on culture and perception. This is because rhythm is prerequisite not only to neurophysiological functions, but to neurocognitive functions like speech and language as a whole. Consider the following example:

8. Those who don't do anything are encouraging disgrace and violence. On the other hand, we recognize right as well as truth when we act boldly.

Now consider this one:

9. Those who don't do anything are encouraging disgrace as well as violence. On the other hand, we recognize right as well as truth when we act boldly.

And this one:

10. Those who don't do anything are encouraging disgrace as well as violence. Those who act boldly are recognizing right as well as truth.

And finally:

11. Those who do nothing are inviting shame as well as violence. Those who act boldly are recognizing right as well as reality.

All of (8)–(11) are examples of two cola, with increasing similarities as the number gets higher: (8) has little to no similarities between the two cola, and as a result does not seem particularly notable; (9) has mesodiplosis (*as well as*) added to it, and this repetition gives a sense of parallelism between *disgrace as well as violence* and *right as well as truth*, pushing the reader to compare disgrace with right and violence with truth; (10) rearranges the sentences to have the same syntactic structure, so that it is a parison, which invokes yet more parallelism between them, making readers compare *those who don't do anything* with *those who act boldly* along with the differences between *encouraging disgrace as well as violence* and *recognizing right as well as truth*; finally, (11) evens out the stresses of the nouns and verbs, giving us the harmonious formal version of largely the same matter. Although *reality* has one more syllable than *violence*, it has a similar stress pattern with an extra unstressed syllable at the beginning, which makes it sound like it has the same number of syllables. Similarly, *recognizing* has one more syllable than *inviting*, but their stress patterns are similar enough, or at least no less similar than *recognizing* and *encouraging* from (10). Altogether, the alliterations of "*recognizing*", "*right*", and "*reality*" is another form of repetition that only helps the saliency of (11). Of course, (11) has all of the parallelism invoked by repetition and parison from (9) and (10). Although dactylic metres are usually associated with jerkiness, the roughly-dactylic metre (stress-unstress-unstress) of (11) gives it a sense of command, especially since the stresses always fall on the most important words (*nothing*, *inviting*, *shame*, *violence*, etc.). The use of dactyls in (5) gives it a similar feeling. (1), which has a trochaic or "falling" metre, gives it a sense of sombreness. (11) (and [5] and [1]) are more memorable than (10) because

of all of the mnemonic functions attributed to rhythm, and more effective because of the neurocognitive and neurophysiological roles that rhythm plays. I may have ruined it a bit for you, starting with the least appealing version, and dragging out my analysis so long, but perhaps it will not come as a surprise to learn that the most elegant version, the most conceptually congruent version, comes from a speech by John F. Kennedy (1963b).

6. Conclusion

Isocolon takes advantage of the overlapping notions of repetition, parallelism, and rhythm and their key role in human (and vertebrate) neurocognitive and neurophysiological functions. Rhythm is prerequisite to and fundamental to language, and repetition to our understanding of concepts like narratives and forms. Repetition of rhythm, among other things, invokes a sense of parallelism so that the similarity in form invites readers to consider a similarity in matter; that is, rhetorical homogeneity. All rhetorical figures are cognitive in some way, and when combined together, become much more effective. In particular, we found that a significant portion of "prototypical" chiasmi also contained isocola, suggesting that isocolon is an important measure of prototypicality in chiasmus.

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