

## Guest Editorial

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# Rhetorical figures, arguments, computation

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**Note:** Rhetoric has an extensive technical vocabulary. In this introduction, we explain these terms as we go along. The authors of the papers in this special issue do the same. But it can be easy to get lost in a forest of so many novel terms. So we provide a glossary at the end of this introduction.

### 1. The story of a tweet

At 6:00 PM, 3 December, 2016, @OmarjSakr, a bisexual, second-generation American from Lebanese-Turkish Muslim migrant parents, a poetry editor, an author, and a self-styled “geeky progressive,” tweeted the following:

1. Women in Middle East attacked for not wearing hijab. Women in the West attacked for wearing hijab. It’s almost like women aren’t the problem. [48]

Then he went about his regular, non-Twitter affairs. The next afternoon, fresh from a nap, he checked his account, stared at the outcome, and tweeted to @upulieto, an associate, “I just woke up. What a mess” [49]. His tweet had spiraled virally: tens of thousands of likes, retweets, endless streams of commentary. Why?

Well, lots of factors, of course. There is rarely a single factor to which one can point in rapid cultural propagation. But the pithiness of the tweet, its form/function iconicity, and its argumentative force are surely three of those factors – perhaps the three most important – and all of them are a direct consequence of the tweet’s rhetorical figures. Its figures notably capitalize on repetition, a stylistic move one might think is anathema to twitter. Repetitions are highly redundant, contributing very little new information. They should therefore be corrosive to the concision so necessary to effective tweets. Repetitions distend the ideational function, not condense it, making them very costly in twitter, which provides only a 140-character vehicle. And yet: the tweet was instantly and broadly recognized as a brilliant, incisive, necessarily brief and highly effective argument.

Most notable among its figuration is the compound figure, symploce, in which the same word or words are repeated at the beginnings and endings of proximal clauses or phrases (*Women in* and *wearing hijab*). Symploce is a compound figure because it is a combination of epanaphora (phrase- or clause-initial

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lexical repetition; example 2) and epistrophe (phrase- or clause-final lexical repetition; example 3), the two of them often sandwiching similar or identical phrasing (as in example 1 and also 5)

2. On October 29, we again entered the Palace of Justice; again the crowds were large and excited; again the security was extremely tight; again the court was filled with dignitaries from many foreign embassies. ([43]: p. 354)
3. Now, no matter what the mullah teaches, there is only one sin, only one. And that is theft. Every other sin is a variation of theft. ([28]: p. 17)

These figures of lexical repetition, distinguished by location, get their salience, their memorability, and their aesthetic effects because of human neurocognitive affinities. We naturally respond to repetitions because they re-activate recently active neural pathways. We naturally attend to category boundaries because our minds are tuned to categorization and because our perceptions are tuned to ‘edges.’ But figures don’t ‘merely stimulate’ our mindbrains. They aren’t ‘mere decorations’ that put a little rouge on the cheeks of otherwise ‘pure information.’ They serve communicative functions (including pragmatic, suasive, and argumentative functions), in addition to their aesthetic and mnemonic functions.

Figures of lexical repetition are types of *ploce*. Simple *ploce*, usually just called *ploce*, is unconstrained lexical repetition. Its primary function is to ensure stability of reference. One repeats the same word to evoke the same concept. Complex *ploce* is constrained by position, and includes *symploce*, *epanaphora*, and *epistrophe*, which all serve theme-and-variation communicative functions. Complex *ploce* include both stable elements (because they are varieties of *ploce*), to ensure a consistency of reference, and variable elements, to associate that referential stability with a circumscribed semantic range. *Epanaphora* is a figure (in English) that features a stable framing of variable predications; in the Mandela example (2), each of the predications is framed in terms of an earlier event (that is, an earlier trial).<sup>1</sup> *Epistrophe* (in English), conversely, most often puts a stable predication into variable frames; the Hosseini example (3) makes the claim that there is only one sin, then qualifies that claim by conceding that there are many other activities which are also sins, but the *epistrophe* makes the point that under proper interpretation they are subcategories of theft. Argumentation scholars might recognize *epanaphora* and *epistrophe* from their relentless appearance in textbooks, whiteboards, blackboards, exam questions and student papers, as in 4.

4. a. All humans are mortal.
- b. Mr. Jones is a human.
- c. Therefore, Mr. Jones is mortal

The major premise (4a) and the conclusion (4c) constitute an *epistrophe*. The minor premise (4b) and the conclusion (4c) constitute an *epanaphora*.

*Symploce* includes two bands of stability, putting the medial lexis into a kind of referential vise. The following prototypical instance of *symploce* (5), from Malcolm X, argues for the inexorability of racism played out in American martial geopolitics: the reference of the medial lexis is irrelevant – Germany, the South Pacific, Japan, wherever – the white man uses the black man as cannon fodder.

5. [As] long as the white man sent you to Korea, you bled. He sent you to Germany, you bled. He sent you to the South Pacific to fight the Japanese, you bled. [42]

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<sup>1</sup>Notice that for position-sensitive figures of lexical repetition language typology is important. English is a Subject-Verb-Object word-order language, so clause-initial *epanaphora* will tend strongly towards stabilizing subject reference, while clause-final *epistrophe* will tend strongly towards stabilizing object reference. Other figures, such as *simile* (a cross-domain comparison) and *polyptoton* (repetition of lexical stems with different morphology), are more uniform in their cross-linguistic functions.

@OmarjSakr's tweet has this vise-like quality as well, but there are three other figures highly relevant to its argumentative functioning: mesodiplosis (medial lexical repetition; in the tweet, *attacked for*; in 6 below, *what we did not*, with the slight variation of *what we could not*; it also occurs in 8 with *is a*); antithesis (proximal opposing predications; in the tweet, *not wearing hijab* and *wearing hijab*; in 7, *young... life* and *old... death*); and (simple) plocé (the brute lexical repetition in the @OmarjSakr tweet of *women*; in 8, of *Canadian*).

6. We used to joke that between the poor acoustics of the hall and the confused and inaccurate reports of the Special Brand detectives, we could be fined for what we did not say, imprisoned for what we could not hear, and hanged for what we did not do. ([43]: p. 232)
7. The young would choose an exciting life; the old a happy death. ([1]: p. 155)
8. Have faith in your fellow citizens my friends, they are kind and generous. They are open minded and optimistic and they know in their heart of hearts that a Canadian is a Canadian is a Canadian. [61]

Mesodiplosis unites the terms on either side of the repetition (*fine* and *not say*, *imprison* and *not hear*, *hang* and *not do* in 6, as well as the plocé *a Canadian* of 8), here emphasizing the capricious malevolence of the apartheid system (6) and the utter identity of Canadian citizenship (8). Antitheses present binaries and/or polarities to push terms apart, especially a double antithesis like 7, which drives the polarities *young* and *old* further apart by associating them respectively with the binary opposites, *life* and *death*. And the main function of plocé is to guarantee stability of reference (often full identity of reference) – in 8, the relentless insistence that there are no differences that matter with regards to citizenship if you are Canadian.

In order to see all of these figural functions at work in @OmarjSakr's tweet, we can render its component sentences as so:

9. a. Women in Middle East [are] attacked for not wearing hijab.
- b. Women in the West [are] attacked for wearing hijab.
- c. It's almost like women aren't the problem.

Sentences 9a and 9b are the symplocé and they also manifest the binary antithesis of *wearing/not wearing* the hijab, and all three sentences (9a, 9b, and 9c) manifest the plocé of *women*. So, we end up with an *ad absurdum* (distilling out *Middle East* and *West* and assuming *problem* throughout):

10. a.  $(x)((Wx \ \& \ Hx) \supset Ax)$
- b.  $(x)((Wx \ \& \ \sim Hx) \supset Ax)$
- c.  $\therefore (x)(Wx \supset Ax)$

Rendered this way, we see a more precise distribution of figures. We have the epanaphora of  $(x)$  in 10a, b, and c, along with the more extensive epanaphora of  $(x)(Wx \ \& \ )$  in 10a and b. There is the epistrophe of  $\supset Ax$  in 10a, b, and c, which, in turn gives us the compound figure of symplocé in 10a, b, and c (all of them begin with  $(x)$  and end with  $\supset Ax$ ). And there is the antithesis of 10a and b ( $Hx$  and  $\sim Hx$  respectively). The crucial components for the argumentative function of the tweet are the binary nature of the antithesis and the stability-of-reference of the plocés throughout.

We haven't fully explicated the argumentative activity of the tweet, of course, because there is also another figurative dimension (namely, the note of irony with *almost like*), and because the argument is enthymematic, with the covert premise that men are responsible for the attacks (so that the presence or absence of the hijab is just an excuse to exercise power), and because we have only charted the overt

style. But we do have its logical force. One of the primary functions of antithesis, when the opposing predicates are binary, rather than polar, and when it couples referential-stabilizing places, is to signal a paradox, and that's what it does in this tweet. 'The situation is absurd,' @OmarjSakr is saying. 'Women are attacked for  $x$  and attacked for  $\sim x$ , so we know the presence or absence of  $x$  is irrelevant. Women just get attacked.'

There are at least two morals here, in the story of @OmarjSakr's tweet, about the role of rhetorical figures in argumentation. Firstly, figures activate neurocognitive affinities. Figures are salient, aesthetically appealing, and memorable because they excite fundamental neurocognitive principles, like repetition and boundary prominence. Secondly, structural iconicity signals function. Repetition not only gives textual elements presence, in Perelman's sense ([52]: p. 17–18), it also guarantees a stability of reference. Endings and beginnings not only give textual elements presence, they also play crucial syntactic roles (which, of course, vary with the syntactic conventions of languages, but vary with considerable predictability). Rhetorical figures, in short, play central roles in argumentation, as the papers in this special issue amply demonstrate.

But *Argument* is only one of the defining terms of our journal's title. The other is *Computation*.

## 2. Rhetorical figures, argument, and computation

Rhetorical figures, patterns that are present in all languages, reflecting both neurocognitive affinities and communicative imperatives, are linguistic devices that serve mnemonic and aesthetic purposes, alongside informational and argumentational purposes. As examples 1–10 illustrate clearly, they very frequently do so in clusters, sometimes in quite dense clusters, of the sort we find in syllogisms. All three of these characteristics: the affinities, the imperatives, and the clustering make them immensely valuable for computational research into language and argumentation.

Our opening example for instance – @OmarjSakr's 3 December, 2016, tweet about women, oppression, and patriarchal misogyny (1, 9, 10) – incorporates the neurocognitive affinity of repetition and the communicative imperative of stabilizing reference. Repetition is such a fundamental aspect of neurocognition that we literally could not think without it. For that matter, we could not even breathe, our hearts couldn't beat, our cells would deteriorate, without the repeated firing patterns of our neurons. It's no wonder we resort to repetition in trying to remember a name, a phone number, an address, repeating them to ourselves vocally or subvocally. Repetition is a *sine qua non* of our brains. Stability of reference is so fundamental a communicative imperative that we literally could not communicate without it. Even animal communication systems with such broad referents as, in the vervet monkey call, 'danger from above' or, in the bumblebee dance, 'food source lots of wing-beats hence from the hive,' would fail utterly without a system that guaranteed the same noises or dance moves evoked the same concepts. @OmarjSakr's tweet guarantees stability of reference through repetition: *women* evokes the same concept in all three sentences, *attacked* and *wearing hijab* evoke the same concepts in two of them, and so on. The links between affinities and imperatives are not always as tight as between repetition and stability, but they can always be traced, which is what makes rhetorical figures so valuable computationally. We want to be very clear about this: because the patterns are motivated by neurocognitive affinities, they are more robustly linked to functions and meanings than the patterns of familiar syntactic analyses, even Construction Grammar, which all operate on assumptions of arbitrariness; and because they can be charted computationally, in addition to their practical value, they help us to move back towards the originary goal of Artificial Intelligence, using computers to tell us fundamental truths about the mind.

The tweet also activates the neurocognitive affinities of contrast (*East, West; not wearing, wearing*) and demarcation (*women* and *hijab* both appear at clausal boundaries), and the communicative imperatives, among others, of negation (*not, aren't*) and predication (*in Middle East* and *in the West* predicated of *women*, etc.).

Deploying affinities and realizing imperatives, rhetorical figures form into recurrent patterns: epanaphora, repetitions at the beginnings of clauses or phrases; epistrophe, repetitions at the ends of clauses or phrases; mesodiplosis, medial repetitions between distinct elements; antithesis, proximal opposing predications. The patterns and the functions correlate, which can provide computer algorithms with data on all aspects of discursive action, prominently including argumentation.

Rhetorical figures solidify and propagate arguments in revealing ways, as a major paper by Jeanne Fahnestock demonstrates. The paper, entitled “Preserving the Figure,” focuses on scientific argumentation and charts the ways in which certain figures are not just used by primary research scientists reporting on their work, but are also picked up and circulated through other reports of that research [19].<sup>2</sup> One can track the ‘same argument’ through different incarnations by its figures. Equally, one might chart out entire discursive episodes in figurative terms. For instance, the 2008 US election campaign between Barack Obama, with Joe Biden, and John McCain, with Sarah Palin, was characterized by chiasmic figures (figures in which constituents, such as words or phonemes, repeat in reverse order), as documented by *New York Times* editor and *Slate* columnist, Juliet Lapidus:

11. We were elected to change Washington, and we let Washington change us. (John McCain [38])
12. In politics, there are some candidates who use change to promote their careers. And then there are those, like John McCain, who use their careers to promote change. (Sarah Palin [38])
13. We need a president who puts the Barney Smiths before the Smith Barneys. (Barney Smith [38])
14. He has brought change to Washington, but Washington hasn't changed him. (Barack Obama, of Joe Biden [38])
15. In the end the true test is not the speeches a president delivers, it's whether the president delivers on the speeches. (Hillary Clinton [38])

Chiasmic figures manifest the neurocognitive affinities of repetition, contrast, sequence, and symmetry, from which they get their aesthetic and mnemonic appeal. Functionally, they manifest the communicative imperatives of reversal (as well as, in other contexts, reciprocity and irrelevance of order), so it was the natural figure for a campaign in which the policies and actions of George W. Bush, the incumbent, were so deeply unpopular. The arguments that characterized the campaign were to reverse everything Bush stood for. But the best known example of chiasmic reversal is perhaps John F. Kennedy's famous expression from his inaugural address:

16. Ask not what your country can do for you. Ask what you can do for your country. [33]

This expression famously includes antimetabole (the lexical chiasmic figure). Less noticed is that it includes antithesis. When two figures occur together, they often constrain each other's rhetorical functions to achieve singular effects. In this case, antithesis contributes a function of mutual exclusivity, familiar from Parmenides principle of non-contradiction, while the antimetabole contributes inverse relations,

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<sup>2</sup>Other work by Fahnestock that repays the attention of argumentation theorists include her “Figures of Argument” [20] and *Rhetorical Figures in Science* [17]. Her project of Figural Logic is an important advance in argumentation studies (see [60]: p. 69–85, [26]).

and we end up with mutually exclusive inverse relations between citizens and their country; the grammatical imperative specifies which relation Kennedy advocates.<sup>3</sup> All of the 2008 election examples function similarly. Example 11 depicts a topsy-turvy world in which one orientation (changing Washington) is clearly preferred, letting the positive valence of *elected* to carry that preference, 12 leaves that work to the formulaic epanaphora of the *there are... and then there are* construction to specify the preference, and 13 leverages the deontic modality of *need* and the *put x before y* construction. Examples 14 and 15 use the simple antithesis of negation to do the job. But they all endorse one of two opposed states of affairs, expressed chiasmically.

The 2016 US election, on the other hand, was not so much about wholesale change: Hillary Clinton largely represented a continuation of President Barack Obama's trajectory while Donald Trump represented a radical dismantling of the policies and programmes defining that trajectory. One suspects that antithesis was highly prevalent in the campaign, as the two candidates represented themselves as binary opposites (fit, unfit; honest, dishonest), and thinking only of Trump's rhetoric, hyperbole (*best, single greatest, largest, worst, ... ever, in the country, in the world, in history*) and epithets (*Little Marco, Lyin' Ted, Crooked Hillary*) would seem highly prevalent as well. But, here's the thing: the research hasn't been done. Even the 2008 campaign, the year 'of the reversible raincoat' [38] as chiasmatic figures are sometimes nicknamed, was diagnosed with conventional humanist methods. Computationally, with the right algorithms we could characterize campaigns, speakers, genres, argument styles, virtually any discursive product, process, mode or episode, on the basis of its rhetorical figures; with the right knowledge base, of how figures work together, how they combine with grammatical constructions and lexical properties, and what their functional propensities are, we could understand those discourses at a deeper level than we have so far been able to manage computationally.

Fahnestock's work in "Preserving the Figure" [19] can be seen as a pilot study. As she points out, her results confirm the expectations of rhetorical theory: "[figures] are typically used in the process of conveying the core of an argument in research articles and in versions of these articles constructed for wider audiences" ([19]: p. 14). But she looked at only pairs of articles, not multiple iterations, and only at 26 pairs in total, and only in scientific argumentation, and only in two genres. The broader scope available to computational research tools could go much further in testing the role of figures in the propagation of arguments.

We could find out, for instance, if Fahnestock's observation generalizes more broadly, if arguments frequently travel by way of figural realizations. As one test case for her thesis, we might look to see the discursive life of Gregor Mendel's formula for the distribution of dominant and recessive traits in his pea experiments (example 17), which centrally features a chiasmatic inversion of the case of a variable (the majuscule and miniscule versions of *A* switch places in the middle two ratios).

17.  $A/A + A/a + a/A + a/a$  ([26,45,46])

Certainly some of the reports on Mendel's experiment in the early propagation of his work after its 're-discovery' in the early twentieth century (e.g. [3]: p. 73–74) reproduce this formula, but how many and in which contexts? Is it still preserved, in some version, in contemporary textbooks? Corpus searches could answer questions like these for figures and their functions much more fully than traditional humanist scholarship could reveal, and tell us a good deal about argumentation in the bargain. Note that 17 is not an equation, not an expression of some relationship among theoretical entities (like, say,  $A = \pi r^2$  or  $e = mc^2$ ). It is just an elegant formal expression of Mendel's methodology, a quasi-mathematical turn

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<sup>3</sup>See [56] for some discussion.

of phrase. To the extent 17, or some variation of 17, persists in the literature around Mendel's research, it preserves a figure that in turn "preserves the research design" ([19]: p. 15), epitomizing Mendel's thoroughness in testing all the possible combinations of what would later be called *genes*.

But research of this sort has not been done, and the computational research of rhetorical figures in argumentation is just now in its very earliest stages.

Despite its ancient foundations ([51]: p. 26–31) and some remarkable work in the twentieth century, with Fahnestock's programme of Figural Logic leading the pack ([17,19,20,60], [51]: p. 169–181, [55,60]), rhetoricians and argumentation scholars have been very slow to catch on to the role of rhetorical figures in argumentation. *How* slow might be diagnosed by the two volumes of the *Proceedings of the 1st European Conference on Argumentation* [47]. The volumes include some 150 papers and commentaries, from the work of PhD students to the foremost scholars in argumentation studies, and aspire to provide "the most complete statement of the state of the art of argumentation studies today... [f]rom ancient rhetoric to Artificial Intelligence" (according its back-cover blurb). Not a single paper deals with rhetorical figures except in the most peripheral way. In Computer Science, the situation is little better. The case has been made, dating to the turn of the century, that computational argument studies have a rich potential to investigate figures ([8,9,25,54]), and there is growing success in the detection of rhetorical figures ([12,13,23,24,29,31,50,58]). But, until this volume and the groundbreaking work of Lawrence, Visser, and Reed, these two strains – the detection of the forms and the study of argumentative functions – have not been brought together.

### 3. What is a figure, and what is just some accidental, figure-like clump of linguistic properties?

One issue has dogged the entire history of rhetorical figures, and it is one that is particularly relevant for computational detection: when is some expression, *x*, a 'real figure,' and when is it just another arbitrary piece of language? The issue often comes up around notions of literality, often around tropes, and usually in discussions starring metaphor. For instance, such discussions might pick up on the use of *dogged* in the initial sentence of this section. Is it 'really' a metaphor, or just a verb that means something like 'attend closely'? (Or perhaps both, going into a third category, the dead or dormant metaphor.) While metaphor and tropes more generally are the focus of such discussions, other words and phrases are equally implicated, and they help to show how artificial the whole 'real figure' issue is. We don't ask whether words like *rolly poly* and *hoi polloi* 'really' rhyme, for instance (word-final syllable repetition), or whether *vice versa* and *ship shape* 'really' alliterate (word-initial consonant repetition). Rhetoricians, with a larger vocabulary of these patterns, don't stay up nights wondering if *very very* or *bye-bye* are 'real' epizeuxes (immediate lexical repetition, with no intervening material), whether *easy come, easy go* or *first come, first served* are 'really' epanaphoras, whether clichés like *we shall see what we shall see* or *it is what it is* are 'really' epanalepses. There are processes of familiarity and entrenchment that can make property clumps in some expressions less visible than in others. For semantic properties, which are not actually visible at all, the figural motivations can disappear quickly into history for all but the etymologists. Semantic figural motivations for words and expressions are ground down in the constant friction of linguistic commerce. Those processes, in an attrition of salience, are what give us the perceptual phenomenon we call *literality*. Formal figural motivations can grind away as well, leading to a translucent blandness that gives us clichés and other routine figurations, but they are as much a part of everyday language as the vaunted semantic motivations.

Because they emerge from our cognitive dispositions, and because they satisfy functional needs, figural patterns arise naturally in all communicative contexts. Lawrence, Visser, & Reed's contribution to

this volume shows that very clearly for the communicative context we know and love as argumentation. For us, therefore, rhetorical figures are not specialty devices reserved for orators, poets, and rap artists. While craft and talent can produce distinctive figural realizations, figures do not require deliberation or design. A figure *is* its pattern, and no pattern is more authentic than another.

Concerns about authenticity and design, however, lead many researchers to worry about false positives in figure detection [12,13,29,58]. Dubremetz and Nivre, for instance, rank the examples they find on a scale of figural prototypicality ([12]), while Lawrence, Visser, & Reed, in this volume, talk in terms of *quasi-* and *non-instances* of figures in their results – things that aren't 'really' figures, just accidentally figure-like. The concerns underlying these designations are genuine, and the algorithmic activity that finds and even ranks these differences in the texts they plumb is very important. We need to know what to call, and how to treat, the pieces of data the algorithms return. But these researchers are *not* finding and categorizing differences among individual figures.

In our research, we adopt the policy that figures are defined only by their linguistic properties (such as the repetition or the cross-domain mapping of words). Or, in the slogans of our lab, "Figures are what figures are," and "a plocce is a plocce is a plocce." If an algorithm comes back with proximal reverse occurrences of at least two words, it has come back with an antimetabole. Period. In fact, what detection researchers are finding is not better or worse versions of given figures, but sites of more or less figural action. Take the following examples, from Dubremetz and Nivre [12]:

18. A comedian does funny things, a good comedian does things funny.
19. We are all European citizens and we are all citizens of a European Union which is underpinned[, politically speaking, by a basic set of principles].

Dubremetz and Nivre are on the hunt for chiasmi, figures of reverse constituent repetition, and we agree with their intuitions that 18 'feels' more chiasmic than 19. We also agree that the notion of prototypicality seems to catch what is triggering our respective intuitions.<sup>4</sup> Now, we are sure Dubremetz and Nivre would agree with us (since they use it as their illustrative prototype in all three of their papers) that an even more prototypical and cognitively satisfying chiasmic instance of antimetabole is the following widely known expression, made famous in the Dumas novel, *Les Trois Mousquetaires*, and in related cultural artifacts (comic books, movies, television programmes, and so on):

20. [T]ous pour un, un pour tous. ([15]:129)  
All for one, one for all. ([16]:80)

But if we map our intuitions against the data, we find they cannot be based on the presence (or absence) of a single figure, because all of these examples manifest multiple figures (multiple clusters of specific linguistic properties). Example 20, in particular, features not just the central member of the chiasmic suite, antimetabole, but also isocolon (prosodic repetition), parison (syntactic-structure repetition) and mesodiplosis (as above, medial lexical repetition). Notice that the somewhat less satisfying example, 18, does not include parison: in the first clause, *funny things* is a Noun Phrase, featuring an adjective

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<sup>4</sup>Dubremetz and Nivre ([12–14]) use the term *chiasmus* to refer to the figure antimetabole, not an uncommon usage in the rhetorical tradition, but we seek more precision in the terminology of rhetorical figures than they (or frankly, most rhetoricians, let alone computer scientists) are interested in. In our work, we have found multiple reverse-constituent-repetition patterns, which we regard as different figures, adapting and coining a variety of labels for them, grouped in our chiasmic suite. For instance, their example 18 is chiasmic, since it involves reverse repetition of constituents. It is not an antimetabole, however, because those constituents are not words, but only signantia (words are signans/signatum pairings). We categorize it with the blended neologism *antanametabole*, since it is a combination of antanaclasis (repetition of the 'same' word with different senses) and antimetabole. We have also used the term *pseudo-antimetabole* for this pattern, since it closely mimics an antimetabole.



and noun; in the second clause *things funny* is a Noun Phrase (the single noun, *things*) and an Adverb Phrase (*funny*). These syntactic differences also throw the prosodic repetition out of whack, because of the different stress patterns of the phrases; so, no isocolon either. Our next example on the Dubremetz-Nivre scale, 19, falls yet further out of parallelism. The two key phrases, *European citizens* and *citizens of a European Union* have very different prosodies, the syntactic differences are greater, and the extra words, especially the head word of the last noun phrase, *Union*, alter the semantic reference notably. Example 19 is not, in our terms, less of an antimetabole than 18 or 20. But it is less figuratively dense (and less figuratively elegant). The antimetabole of 19 is not presented in the syntactic and prosodic settings that stage the antimetaboles of 18 and especially 20. The matter is not quite so simple as adding up the number of figures present in an expression, however. Some figures work together; some work against each other. Figures of parallelism, in particular, like isocolon and parison, seem to have a special role in augmenting other figures [18], while tropes can get in the way of other figures, sometimes degrading coherence. Example 18, for instance, includes antanaclasis, a trope in which a *signans* repeats but with a different *signatum*. The *funny* of the first clause is an adjective. The *funny* of the second clause is an adverb. They are different words (that share the same *signans*).

Despite the thousands of years that figures have been studied, organized, and theorized, there is considerable research remaining to do into how they combine, and what sorts of functions they serve in specific combinations (the discussion of antithesis-antimetabole combinations in connection with 16, is one such combination). Luckily for us, computers are the best tools for doing such research.

#### 4. The papers in this special issue

This issue features four rather different papers, organized around the intersection of rhetorical figures and argumentation, all of them with an eye on computational research, all of them major contributions to computational rhetoric. They are nicely split among the disciplines. Two are by rhetoricians, with their emphases on context, historical development, and linguistic nuance. Two feature teams in computer science, with their attention to application, tractability, and testable results.

“Rhetorical figures as argument schemes – The proleptic suite,” by Ashley Rose Mehlenbacher, is an important bridging study that helps integrate the category of figures known as moves with the extensive research in argument schemes. Mehlenbacher works through the distended and terminologically inconsistent scholarship on figures of anticipation and rebuttal, in literature and in argumentation, to reveal a tractable set of such figures, aligning that set with the classical tradition of *topoi* and its contemporary descendants, argument schemes.

Ying Yuan’s “The argumentative litotes in *The analects*” finds not quite a suite of figures, but through its careful study of a subtle trope of negation in an ancient Chinese text, alongside Aristotle’s not-quite-as ancient semantic analysis of opposition, finds three distinct subtypes: contradictory, contrary and relative litotes. Among the many virtues of rhetorical figures for the study of argumentation is that their neurocognitive dimensions point strongly to a universalist, cross-cultural approach to the form arguments take. There is perhaps an infinite variety of argument realizations, and languages all have different grooves in which they flow, but since arguments are all the products of human minds engaging other human minds, there are also important patterns of commonality. We see those patterns in language (the presence of nouns and verbs, for instance, and subjects and predicates, and morpholexical-syntactic relations). Figures provide a way to see those patterns of commonality in argumentation. So, a study based in a language like Chinese, with such different grooves from the familiar European languages in which argumentation has been investigated, is always a welcome addition to the field.

“Ontological representations of rhetorical figures for argumentation mining,” an international collaboration by Jelena Mitrović, Cliff O’Reilly Miljana Mladenović, and Siegfried Handschuh, also has cross-linguistic virtues. It surveys several early projects ontologically modelling rhetorical figures, including the most ambitious such project, in Serbian. It also attends seriously to the application of ontologies in the detection of figures, as well as the detection of the semantic relations of Rhetorical Structure Theory, the inferential relations of argument schemes, and other relevant text relations and structures – the necessary first step in using them for argument mining. In connection with this paper in particular, we should note a discrepancy in the use of the word *rhetorical* in the important text classification and analysis research coming out of Mann and Thompson’s Rhetorical Structure Theory (RST) [44]. As we have noted elsewhere [56], we regard that work as vitally important, and RST more generally as a valuable set of insights into the semantic organization of texts, especially at inter- and intra-clausal levels, but the adjective *rhetorical* in the name of the theory is gratuitous. The theory, and the research it has sponsored to this point, has no serious connection to the rhetorical tradition at all, as it is understood to date back to the 5th century BCE. RST would be more accurately labelled if it were *TST* (Textual Structure Theory) or *DST* (Discourse Structure Theory), or the like. We certainly don’t wish Mann and Thompson now to rename their approach, but we caution readers to be aware that the use of *rhetorical* is wholly equivocal – between a vague and generalized signifier and a technical, disciplinary term – whenever RST and genuinely rhetorical notions are discussed together. Mitrović and her colleagues are aware of this difference, of course, and work to keep the usages distinct, but the pitfall is there all the same for readers.

All of the papers in this issue bring together rhetorical figures, argument analysis, and computation in productive ways that help set the agenda for this emerging confluence, but the final paper is groundbreaking. In “Harnessing rhetorical figures for argument mining: A pilot study in relating figures of speech to argument structure,” John Lawrence, Jacky Visser, and Chris Reed, all of them affiliated with the Centre for Argument Technology, bring for the first time the form-function alliance of rhetorical figures into serious commerce with computational argument studies. It has been a fruitful decade since Jakub Gawryjolek initiated computational figure-detection work ([23,24]). Important innovations have appeared, both in terms of the detection strategies and the diagnostic deployment. Claus Strommer [58], for instance, makes headway into document intent, finding correlations with pathos (emotional appeal), and James Java reports promising results with a range of figures for authorship attribution ([31]). Daniel Hromada added feature constraints ([29]) for a small set of repetition schemes, while Marie Dubremetz and Jakob Nivre zeroed in on the tricky but rich and fascinating chiasmic figures (primarily antimetaboles, though they do not distinguish among them), charting them in terms of prototypicality ([12]), increasing precision by including syntactic structure (augmenting their shallow-feature approach [13]), and have corpus-trained a chiasmus classifier (rather than the previous hand-tuning methods [14]).

But no one before Lawrence, Visser, and Reed has directly investigated the argumentative functions of rhetorical figures computationally. It is a pilot *study*, but – since we’re talking about rhetorical figures, we hope you’ll forgive the conceit – we think of it more as a pilot *light*, one that can now ignite two tremendously important and mutually informing lines of research that are nascent in earlier work. The first line tests ancient and modern claims about the general purposes of rhetorical figures, and about the specific purposes of many individual figures; very likely, we are confident, uncovering new purposes as well. Much as computational methods and corpus studies revolutionized lexicography by validating, improving, and replacing aspects of traditional dictionary writing, computational corpus research that finds figures and investigates the surrounding text can renovate the field of rhetoric. The second line more directly implicates argumentation studies, by providing subtle and powerful new tools for argument mining. As empirical rigour grows and results accrue and we build an inventory of rhetorical figures to serve as dis-

course diagnostics, we can use computational methods to develop a deeper understanding of the cognitive and social dimensions of argumentation, and more robust methods to probe argumentative discourse.

## 5. Glossary

The terminology of rhetorical figures, and rhetoric more generally, is arcane and, with the exception of a few terms (such as *metaphor* and *irony*) largely unfamiliar beyond the discipline of rhetoric. This glossary includes all the rhetorical terms in the volume, most prominently all of the figures, with examples (in parentheses, with relevant elements highlighted, many of them taken from the articles in this volume). A word about the examples, however: since rhetorical figures very often travel together, a passage that exemplifies one figure will also exemplify others. One needs to map the definitions against the examples to identify the elements that represent the specific figure at hand; and, equally, to disregard the other figures that might be present.

Please note that the terminology of rhetorical figures is quite complex, and many of the figures in our glossary have synonyms, near synonyms, or alternate spellings that might be encountered elsewhere; equally, the definitions you find elsewhere for some of these terms may be at variance with the definitions here. Many terms might refer to the same configuration (an embarrassment of synonyms); conversely, one term might refer to multiple configurations (an embarrassment of negligent referential inconsistency). There is, in short, a pressing need for the standardization of figurative terminology. In this volume we adhere to precise one-term-one-configuration definitions and adopt the four-way taxonomy of figures defined in the Waterloo Rhetorical Figure Ontology [5,26]: schemes, tropes, chroma, and moves. The scheme and trope categories are among the oldest in figuration, and, construed according to a simple *signans/signatum* division, the most basic and the easiest to see. Schemes are formal deviations, shifts away from conventional expectations in the usage of *signantia*. Protoypical examples include rhyme and place. Tropes are conceptual deviations, shifts away from conventional expectations in the usage of *signata*. Protoypical examples include metaphor and metonymy. Chroma are deviations from conventional expectations of speaker intention. Protoypical examples include erotema (“rhetorical question”) and sarcasm. Moves are deviations from conventional expectations of discourse patterns. Protoypical examples include anemographia (descriptive passages evoking wind) and paralipsis (pretending to ignore something while giving it salience).

While this glossary no doubt feels exhaustive (if not exhausting) to non-rhetoricians, it is only comprised of the terms used in this special issue, including a relatively small (but highly representative) slice of the available figures. Also, while there is an abundance of technical terminology in this volume, and in any scientific journal, this glossary only concerns itself with rhetorical terms, on the reasonable assumption that the vocabulary of computational linguistics and argumentation theory is familiar, or easily accessible, to our readership.

ADJUNCTIO	A synonym for EPIZEUXIS.
ADNOMINATIO	A synonym for POLYPTOTON.
ALLITERATION	A SCHEME: the repetition of a consonant or consonant sequence at the beginning of proximal words (“The terrorists of the Islamic State of Iraq and Al-Sham (ISIS) have proven themselves to be a <u>b</u> rutal, <u>b</u> loodthirsty <u>b</u> and of <u>b</u> rigands.” [27])

ANADIPLOSIS	A SCHEME, and a type of (COMPLEX) PLOCE: the repetition of a word or word sequence on either side of a clause or phrase boundary. (“... you won’t prevent poverty. Poverty being more than income...” Example from Lawrence, Visser & Reed’s essay, in this issue.)
ANALEPSIS	A MOVE: the disruption of a narrative to relate prior episodes, sometimes very brief, sometimes quite distended; colloquially, <i>flashback</i> . (“In my younger and more vulnerable years my father gave me some advice that I’ve been turning over in my mind ever since. ‘Whenever you feel like criticizing any one,’ he told me, ‘just remember that <u>all the people in this world haven’t had the advantages that you’ve had.</u> ’” [22]:1)
ANAPHORA	A synonym for EPANAPHORA (avoided particularly for its potential confusion with linguistic anaphora)
ANEMOGRAPHIA	A MOVE, and a type of ENARGIA: a vivid description invoking properties of wind. (“[T]he wind was raging like a shivering old devil, its roar punctuated by groans, screams, and wild laughter.” [36]:152–153)
ANTANACLASIS	A TROPE: the repetition of a <i>signans</i> with a distinct <i>signatum</i> , one of Perelman and Olbrecht-Tyteca’s [52] QUASI-LOGICAL figures. If the repetition is covert or unintentional, the ANTANACLASIS is a logical equivocation. Overtly, it is often used for humour or PRESENCE. (“In America, there is plenty of light beer and you can always find a <u>party</u> . In Russia, <u>Party</u> always finds you.” [66])
ANTANAMETABOLE	A TROPE and a member of the CHIASTIC SUITE, also known as a <i>pseudo-antimetabole</i> : the reverse repetition of at least two <i>signantia</i> at least one of which is paired with a different <i>signatum</i> , usually for humorous or enigmatic effect (“[Y]ou can <u>prick</u> your <u>finger</u> , but don’t <u>finger</u> your <u>prick</u> .” [4])
ANTEOCCUPATIO	A synonym for PROLEPSIS.
ANTIMETABOLE	A SCHEME, a type of (COMPLEX) PLOCE, a central figure in the CHIASTIC SUITE, one of Perelman and Olbrecht-Tyteca’s [52] QUASI-LOGICAL figures: the proximal occurrence of the same two words or word-strings in reverse orders. (“ <u>We</u> were elected to change <u>Washington</u> , and we let <u>Washington</u> change <u>us</u> .” [38])
ANTIMETATHESIS <sup>5</sup>	A SCHEME, a figure in the CHIASTIC SUITE: the proximal occurrence of the same two sounds (phonemes or phoneme clusters, including syllables) in reverse orders, also known as <i>acoustic chiasmus</i> . (“Speaking as a Christian, I would like to say that I find the Apostle <u>Paul appealing</u> and the Apostle <u>Peale appalling</u> .” Stevenson [1952], qtd in [11]: p. 118.)

<sup>5</sup> ANTIMETATHESIS is one of the many figure names that are used for very different linguistic devices. The paper by Mitrović et al. in this volume, referencing Perelman and Olbrecht-Tyteca [52] use it as a synonym for ANTIMETABOLE, one of their QUASI-LOGICAL figures. ANTIMETATHESIS is also sometimes used for a compound figure combining ANTIMETABOLE and ANTITHESIS, as in the famous Kennedy/Sorenson phrase (“Ask not...”). See also COMMUTATION.

ANTIPROSOPOPOEIA	A type of METAPHOR, and therefore a TROPE: the depiction of a human as an object. (“ <u>Juliet</u> is the <u>sun</u> ” [57]: <i>Romeo and Juliet</i> , act 2, scene 2.)
ANTITHESIS	A TROPE, both a figure and a class of figures: proximally opposed predications, through antonyms or affirmatives and negations. (“... isn’t there an element in this of Christianity fetishising poverty? Doesn’t Christianity have a problem with <u>wealth</u> creation?” Example from Lawrence, Visser & Reed’s essay, in this issue.)
ANTONOMASIA	A TROPE: the use of a description in place of a name, often METONYMIC (“Every self-mover, as the <u>Philosopher</u> [Aristotle] proves... is composed of mover and moved” [2]: p. 152.)
APANTESIS	A synonym for PROLEPSIS.
APHAERESIS	A SCHEME: the omission of a phoneme or syllable at the beginning of a word (“The King hath cause to <u>plain</u> [for <i>complain</i> ]” [57]: <i>King Lear</i> , act 3, scene 1.)
APOCOPE	A SCHEME: the omission of a phoneme or syllable at the end of a word (“What <u>oft</u> [for <i>often</i> ] was thought but ne’er so well expressed” [53]: Alexander Pope, <i>Essay on Criticism</i> 2.)
ASYNDETON	A SCHEME: the omission of conjunctions or disjunctions in a list (“He was a bag of bones, a floppy doll, a broken stick, a maniac” [34]: p. 106.)
CATACHRESIS	A type of METAPHOR, and therefore a TROPE: often called a ‘vice’ rather than a figure, CATACHRESIS is the name given to METAPHORS perceived as egregiously bad cross-domain mappings, sometimes called <i>mixed metaphors</i> (“We can’t continue to allow <u>China</u> to <u>rape our country</u> , and that’s what they’re doing.” [62])
CATACOSMESIS	A TROPE: ordering words in terms of the decrease of some semantic property (also known as <i>decrementum</i> ). (“[H]e matured, grew out of his confining literalism, developed a spirit of informed and skeptical inquiry, advanced in wisdom and rounded judgement, <u>got old</u> , <u>declined</u> , <u>died</u> ” [10]:143.)
CHIASMUS	Often used as a synonym ANTIMETABOLE (as in [51]), sometimes used as a synonym for other members of the CHIASTIC SUITE (as in [17]: p. 123 <i>et passim</i> ). In the Waterloo Rhetorical Figure Ontology, it is recognized as a general pattern of reverse repetition of any linguistic constituent, with different figures defined by which constituents are implicated. See the CHIASTIC SUITE.
CHIASTIC SUITE	A group of figures, including SCHEMES, TROPES, and MOVES in which constituents repeat in reverse order, prominently including ANTIMETABOLE.
CHROMA	A major category of figures, CHROMA are deviations of conventional expectations of speaker intention.
COMMUTATION	Also <i>commutatio</i> , a term Pereleman and Olbrecht-Tyteca [52] use for a compound figure of ANTITHESIS and ANTIMETABOLE, one of their QUASI-LOGICAL figures. (“We should not judge <u>rules</u> and <u>duties</u> by <u>morals</u> and <u>customs</u> , but we should judge <u>customs</u> and <u>morals</u> by <u>duties</u> and <u>rules</u> ” [52]: p. 428.)
COMPLEX PLOCE	See PLOCE.

COMPOUND FIGURE	A specific figure comprised of other figures, to be distinguished from a passage of text which includes, for various reasons, multiple figures. Only a few specific combinations of figures are compound figures (e.g. GRADATIO and SYMPLOCE).
COMPUTATIONAL RHETORIC	Computationally mediated research into persuasion, credibility, affect, arrangement, topical structure, style (including rhetorical figures), or other notions informed by the rhetorical tradition.
CONCEIT	A TROPE: an ‘extended metaphor or simile,’ drawing out a cross-domain mapping by explicating the details (“ <u>Thicke was a breakfast buffet. Hash brown hair, egg yolk eyes, soft butter lips, and short stack of pancakes for a chin</u> ” [35]:89)
CONCILIATIO	A MOVE: the use of an opponent’s argument to support one’s own case (“I agree that training and court speed and strings all distort head-to-head comparisons. But, again, these factors cut both ways. <u>Rod Laver didn’t have the benefit of NetJets and a phalanx of coaches and on-site masseuses. Then again, neither did his opponents.</u> ” [41])
CONTENTIO	A synonym for ANTITHESIS and other TROPES of opposition.
CONVERSIO	A synonym for EPISTROPHE.
DICAEOLOGIA	A MOVE, a type of PROCATALEPSIS, and so a member of the PROLEPTIC SUITE: the admission and rebuttal of a fault or guilt that might be used in a counter-argument. (“I was trying to get people to get into the boats in an orderly fashion. Suddenly, since the ship was at a 60–70 degree angle, <u>I tripped and I ended up in one of the boats. That’s how I found myself in the lifeboat.</u> ” Spoken by the captain of a sinking ship who did not stay aboard until all passengers had been evacuated. [7])
DIRIMENS COPULATIO	A MOVE, the juxtaposition of two statements, one of which qualifies the other in a superficially negative environment, frequently incorporating the <i>not only...but also</i> construction. (“ <u>Trust not only requires moral integrity, but also competence.</u> ” Example from Lawrence, Visser & Reed’s essay, in this issue.)
ENARGIA	A class of MOVES: the general term for vivid descriptiveness. There are many, quite specific subtypes, including ANEMOGRAPHIA. (“Never was there such a town, I thought, for <u>the smell of fish and chips on Saturday evenings; for the Saturday afternoon cinema matinees where we shouted and hissed our threepences away; for the crowds in the streets with leeks in their hats on international nights; for the park, the inexhaustible and mysterious, bushy red-Indian hiding park where the hunchback sat alone and the groves were blue with sailors.</u> ” [59]: p. 7)
EPANAPHORA	A SCHEME, and a type of (COMPLEX) PLOCE: the occurrence of the same word or word sequence at the beginning of proximal clauses or phrases. (“ <u>It can be</u> a way of demonstrating independence. <u>It can be</u> risk averse. <u>It can be</u> conservative.” Example from Lawrence, Visser & Reed’s essay, in this issue.)
EPIPHORA	A synonym for EPISTROPHE.

EPISTROPHE	A SCHEME, and a type of (COMPLEX) PLOCE: the occurrence of the same word or word sequence at the end of proximal clauses or phrases. (“If I lend you money, I’m taking a <u>risk</u> . And I should carry that <u>risk</u> .” Example from Lawrence, Visser & Reed’s essay, in this issue.)
EPITHET	A MOVE: the use of a word or phrase with a noun, often a proper noun, often METONYMIC, but also METAPHORICAL, SYNECDOCHAL, or IRONIC. Similar to ANTONOMASIA except that the name is augmented rather than replaced. (“ <u>swift-footed Achilles</u> ,” “ <u>wine-colored sea</u> ,” “ <u>laughter-loving Aphrodite</u> .”)
EPIZEUXIS	A SCHEME, and a type of (COMPLEX) PLOCE: the immediate repetition of a word or word sequence with no other words intervening. (“... the system seems to be <u>very, very</u> heavily weighted against them.” Example from Lawrence, Visser & Reed’s essay, in this issue.)
EROTEMA	A CHROMA: the use of a question to serve some other purpose besides the request for information, often to assert; colloquially, <i>rhetorical question</i> . (“Willis stopped in midsentence, and a smile spread across his face ‘Oh!’ he said. ‘Oh! Yeah, I get it! I ain’t <i>supposed</i> to know who done it. That way I’ll be tryin’ to figure it out.’ ‘ <u>Aren’t you the brilliant one</u> , though,’ Atwood said” [32]: p. 201.)
EUTREPISMUS	A MOVE: The numbering and ordering of phrases or clauses. (“The growth of what you call ‘welfarism’ is to do with, <u>firstly</u> the disappearance of so many skilled middle income jobs; and <u>secondly</u> due to the failure to build social housing.” Example from Lawrence, Visser & Reed’s essay, in this issue.)
GEMINATIO	A synonym for EPIZEUXIS.
GRADATIO	A SCHEME, and COMPOUND FIGURE consisting of a sequence of ANADIPLOSES. (“The stories seem sadly familiar. They are becoming almost routine, which is frightening. Man behaving strangely is confronted by <u>police</u> . <u>Police shoot man</u> . <u>Man dies</u> . Details are sketchy. Repeat” [30]: p. A15.)
ICONICITY	A semiotic characteristic of language and other systems of representation such that the form of the <i>signans</i> resembles the <i>signatum</i> in some way, such as in sound, in proportion, or in sequence.
IRONY	A CHROMA, both a figure and a class of figures: deviations of conventional expectations of speaker intention, often in an exaggeratedly opposite way (“O, baš sam srećan što je Dr Igi najavio svoj povratak! (= O, <u>how happy</u> I am to see Dr Iggy’s comeback!) [uttered in a situation where the <u>speaker is not happy</u> at all to see Dr. Iggy’s comeback]” cited in by Mitrović et al. in this volume)
HYPERBOLE	A TROPE: distending the valence of a characterization to an extreme. (“This is the <u>greatest Witch Hunt in political history</u> . Sad!” [63])
HYSTEROLOGIA	A SCHEME of syntactic interruption: the insertion of a prepositional phrase between naturally consecutive constituents. (“[I]t was suddenly possible to detect if not objections then questions about what in <u>bloody hell</u> Rupert was doing.” [65])

LITOTES	A TROPE which ‘reduces’ the valence of an assertion through double negations (see Yuan’s essay in this volume for considerable charting of three subtypes – contradictory, contrary and relative). (“His wife was <u>not</u> always <u>out</u> of humor, <u>nor</u> his home always <u>uncomfortable</u> .” Example from Yuan’s essay in this issue.)
MEIOSIS	A TROPE: the characterization of something in terms lower than its expected semantic valence; understatement; sometimes, mistakenly, <i>meiosis</i> is used synonymously with <i>litotes</i> . (“Ay, ay, a scratch, a scratch. Marry, ‘tis enough,” in reference to a mortal wound. [57] <i>Romeo and Juliet</i> , act 3, scene 1)
MESODIPLOSI	A SCHEME, and a type of (COMPLEX) PLOCE: the occurrence of the same word or word sequence in the middle of proximal clauses or phrases. (“We were elected to <u>change</u> Washington, and we let Washington <u>change</u> us.” [38].)
METAPHOR	A TROPE, both a figure and a class of figures: a cross-domain property mapping with no overt comparative construction. (“if he only found the right <u>book to suckle from</u> , he would be saved.” [64]: p. 55)
METASTASIS	A MOVE, a member of the PROLEPTIC SUITE: the evocation and rebuttal of a known counter-argument. (“ <u>I will not make age an issue in this campaign</u> . <u>I will not exploit, for political purposes, my opponent’s youth and inexperience</u> ,” spoken by the elderly presidential candidate, Ronald Reagan; example cited in Mehlenbacher’s essay, this volume.)
METONYMY	A TROPE: a word correlated with a domain used to represent the domain. (“The <u>pen</u> is mightier than the <u>sword</u> .” [40]: p. 37)
MOVE	A major category of figures, MOVES are specific discourse strategies, deviations of conventional expectations of discourse patterns.
OCCUPATIO	Traditionally a synonym for PROLEPSIS; used by Mehlenbacher in the present volume to distinguish aspects of the PROLEPTIC SUITE.
ORDINATIO	A synonym for EUTREPISMUS.
OXYMORON	A type of ANTITHESIS, and therefore a TROPE, one of Pereleman and Olbrecht-Tyteca’s [52] QUASI-LOGICAL figures: The juxtaposition of words with opposite semantic properties, often in adjective-noun pairs. (“I like a smuggler. He is the only <u>honest thief</u> .” [37]: p. 154)
PARALIPSIS	A MOVE: asserting something while affecting not to assert it. (“[W]hen, by procuring the death of your former wife, you had made room in your house for another, did you not add to the enormity of that crime, by a new and unparalleled measure of guilt? <u>But I pass over this, and choose to let it remain in silence</u> , that the memory of <u>so monstrous a piece of wickedness, or at least of its having been committed with impunity, may not descend to posterity. I pass over, too, the entire ruin.</u> . . .” [6]:1.159.)
PARECBASIS	A MOVE: an interruption of some ordered presentation with a seemingly irrelevant story of exposition, a digression (no example provided for reasons of space).



PARELCON	A TROPE: the use of multiple terms with little ideational variation and high redundancy. (“She was young <u>in the way an actual young person is young.</u> ” [67]: p. 97)
PERIPHRAISIS	A synonym for ANTONOMASIA.
PARISON	A SCHEME of syntactic repetition, often referred to as <i>syntactic parallelism</i> : the proximal repetition of the same syntactic pattern. (“My life is spent alone, <u>without wealth, without status, without love, and without hope</u> ” ([39]: p. 354.)
PLOCE	PLOCE are SCHEMES of lexical repetition (a common alternate spelling is <i>ploche</i> ). The term PLOCE refers by default to SIMPLE PLOCE: the occurrence of the same word or word sequence two or more times proximally. COMPLEX PLOCE include a number of specific figures naming occurrences of the same word or word sequence two or more times constrained by relative position, syntactic position, or sequential order.
POLYPTOTON	A SCHEME: the repetition of words derived from the same root but with different lexicomorphology (possibly null). (“Every <u>self-mover</u> , as the Philosopher proves. . . is composed of <u>mover</u> and <u>moved.</u> ” [2]: p. 152)
PRÆMONITIO	A synonym for PROLEPSIS.
PRESENCE	A term from Perelman and Olbrecht-Tyteca’s [52] framework for the salience given to aspects of an argument through linguistic style, frequently correlated with rhetorical figures.
PROCATALEPSIS	A MOVE, a figure in the PROLEPTIC SUITE: the evocation and rebuttal or refutation of anticipated counter-arguments. (“Thanks to the ubiquity of text on the Internet, not to mention the popularity of text-messaging on cell phones, <u>we may well be reading more today than we did in the 1970s or 1980s, when television was our medium of choice. But it’s a different kind of reading, and behind it lies a different kind of thinking – perhaps even a new sense of the self. ‘We are not only <i>what</i> we read,’ says Maryanne Wolf, . . . ‘We are <i>how</i> we read.’” – This passage, in an argument about how the Internet reduces literacy, anticipates the objection that the quantity of reading must be improving literacy and begins the rebuttal by shifting to the quality of reading on the Internet. Example cited in Mehlenbacher’s essay in this volume.)</u>
PROLEPSIS	See PROLEPTIC SUITE.
PROLEPTIC SUITE	A set of MOVES pivoting on anticipation and rebuttal of arguments, charted in detail for the first time by AR Mehlenbacher in this volume. (For examples, see PROCATALEPSIS and METASTASIS.)
QUASI-LOGICAL	Perelman and Olbrecht-Tyteca’s [52] term for arguments that appear demonstrative but do not have the rigour of genuinely (mathematical or logical) demonstrative arguments. They designate several figures as potentially having this characteristic, including ANTIMETABOLE, COMMUTATION, OXYMORON, and ANTANACLASIS.
REDUPLICATION	A synonym for ANADIPLOSIS, avoided because of possible confusion with linguistic reduplication.

REPETITIO	A synonym for EPANAPHORA, EPANALEPSIS, and other forms of (COMPLEX) PLOCE.
RHETORICAL QUESTION	See EROTEMA.
RHYME	Proximal repetition word-final syllables ( <u>hoi polloi</u> and <u>rolly poly</u> , above).
SARCASM	A type of IRONY (and colloquially often a synonym for IRONY), therefore a CHROMA, which demeans through expressions that distend semantic properties. (“Willis stopped in midsentence, and a smile spread across his face ‘Oh!’ he said. ‘Oh! Yeah, I get it! I ain’t <i>supposed</i> to know who done it. That way I’ll be tryin’ to figure it out.’ ‘ <u>Aren’t you the brilliant one, though,</u> ’ Atwood said” [32]: p. 201).
SCHEME	A major category of figures, SCHEMES are deviations of conventional expectations in the usage of <i>signantia</i> . SCHEMES as figures are distinguished from Argumentation Schemes, from the schemas of Rhetorical Structure Theory and from such other phenomena as the image schemas of cognitive science, but they have in common with those concepts an attention to form, structure, and arrangement – abstract patterns – as opposed to content.
SIGNANS	(plural, SIGNANTIA) The material aspect of a sign (the spelling or pronunciation of a word, for instance), also known as the <i>form</i> , or (in Saussurean semiotics) as the <i>signifier</i> .
SIGNATUM	(plural, SIGNATA) The conceptual aspect of a sign (the definition of a word, for instance), also known as the <i>meaning</i> or the <i>sense</i> or (in Saussurean semiotics) as the <i>signified</i> .
SIMILE	A TROPE: a cross-domain property mapping that includes an overt comparative construction. (“her <u>eyes</u> [were] <u>like cornered rats</u> ” [21]: p. 132).
SIMPLE PLOCE	See PLOCE.
SYMPLOCE	A SCHEME and a COMPOUND FIGURE, combining EPANAPHORA and EPISTROPHE: The occurrence of the same word or word sequence at the beginnings of two or more proximal phrases or clauses while another word or word sequence occurs at the ends of those same phrases or clauses. (“ <u>Women in</u> Middle East attacked for not <u>wearing hijab</u> . <u>Women in</u> the West attacked for <u>wearing hijab</u> ” [48]).
SYNCOPE	A SCHEME: the omission of a phoneme or syllable in the middle of a word (“What oft was thought but <u>ne’er</u> [for never] so well expressed” [53]: Alexander Pope, <i>Essay on Criticism</i> 2)
TOPOI (TOPICS)	Tools of invention and analysis related to the structure of the argument, many of them related to figures. For example, argument from analogy is related to METAPHOR, argument from opposites is related to ANTITHESIS, argument from association is related to METONYMY. Traditionally, topoi can be common (applying to arguments in any domain) and special (applying only to arguments in particular domains).

TROPE	A major category of figures, TROPES are conceptual deviations, shifts away from conventional expectations in the usage of <i>signata</i> .
ZEUGMA	A class of SCHEMES in which one word or word sequence ‘governs’ at least two phrases, often indicated with a null pro-form. (“ <u>Trust not only requires moral integrity, but [trust] also [requires] competence.</u> ” Example from Lawrence, Visser & Reed’s essay, in this issue.)

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