Rhetorical *schemes and* algorithms

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University of Waterloo
(The Rhetoricon Database)

for

LACompLing2021 / MALIN 2021

← epanalepsis

kenzie Loggins ❤️❤️ Retweeted
Hillary los
12:15 AM · Jan
51 Retweets
Peter Daou
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Harsh re
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3 Likes
Blueskydriving
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Replying to @Franktheshank88 and @CramptonRobin
Yes. In a functioning democracy, Trump is threatening his jury. In our current form of government, Trump is just “being Trump.”
11:44 AM · Jan 26, 2021 · Twitter for iPhone
2 Retweets
1 Quote Tweet
18 Likes

Rhetorical schemes

"durable syntactic frames … fixed and predictable structures … prepared iconic forms" (Fahnestock 2011, p.223),

Extra-grammatical linguistic patterns (figures)

Form / Meaning

Neurocognitive biases

Communicative / Argumentative / Pragmatic functions

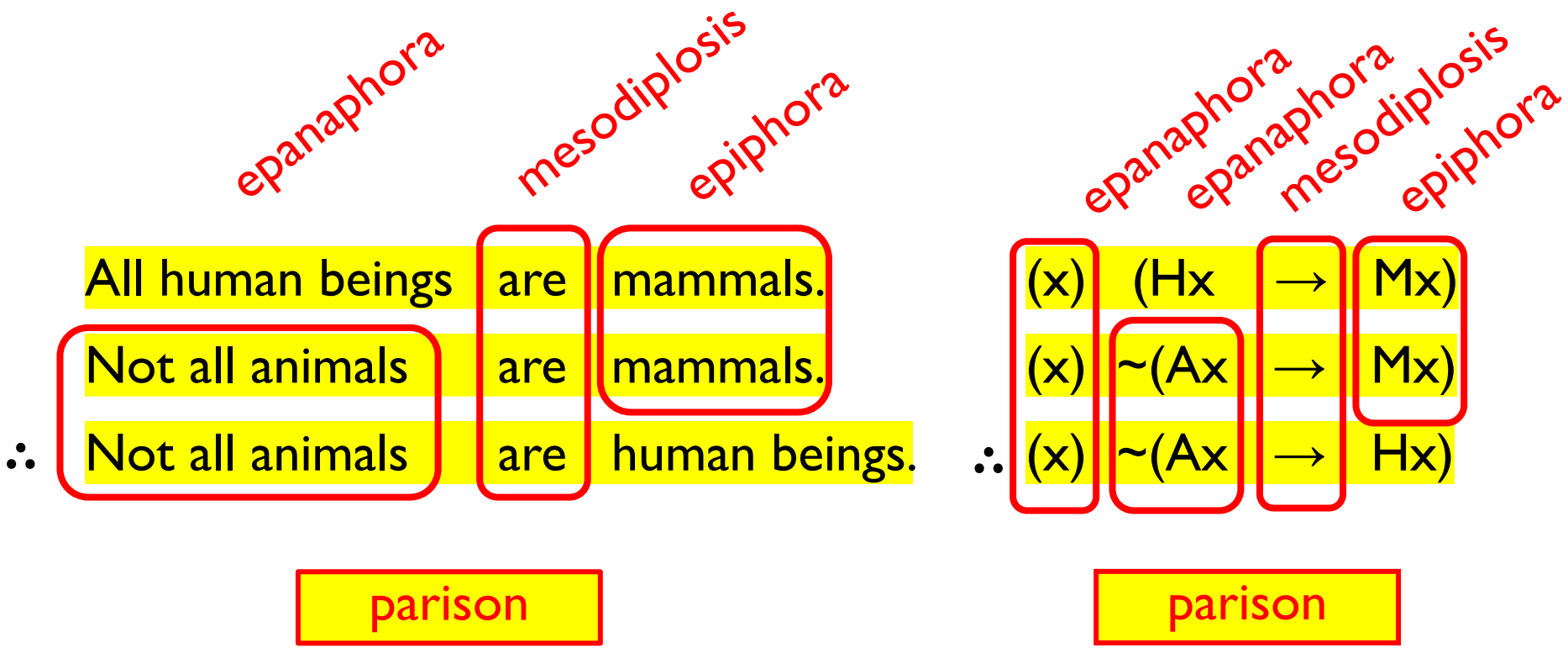
Work together

Rhetorical *schemes* as algorithms

- Rhetorical schemes
  - Form / function, neurocognitive, …
  - Syllogistic figuration
  - Two schemes: epanalepsis & antimetabole
- Figure detection
  - Survey
  - Dubremetz & Nivre
  - The bottleneck
- The Rhetoricon
  - Database
  - GoFigure

Rhetorical schemes ✓
Figure detection
The Rhetoricon

Syllogistic figuration



Epanalepsis

The cooccurrence of one or more words at the beginning and ending of the same phrase or clause ; promote semantic features; kill an argument.

Instances

- Hilary lost because she was Hilary. (@ReaganWorld 2017)
- Harsh realities are harsh realities. (@peterdaou 2016)
- Trump is just being trump. (@betdor 2017 / doxa)
- [H]e's an asshole being an asshole. (@betdor 2017)
- The facts are the facts. (doxa)
- Business is business. (doxa)
- A deal is a deal. (doxa)
- The law is the law. (doxa)
- Boys will be boys. (doxa)

Epanalepsis

Rhetorical schemes ✓
Figure detection
The Rhetoricon

Antimetabole

The cooccurrence of at least two words, first in one order, then in the opposite order; reciprocal force.

Instances

All for one, one for all / Tous pour un, un pour tous. (Dumas 1849)

[A]sk not what your country can do for you—ask what you can do for your country. (Kennedy [& Sorensen] 1961)

Women are changing the universities and the universities are changing women. (Greer 1988, 629)

[W]hen you look into the abyss, the abyss also looks into you. / [W]enn du lange in einen Abgrund blickst, blickt der Abgrund auch in dich hinein. (Nietzsche 1899,105)

[Y]ou can communicate with your pet dog, and your pet dog can communicate with you. (Chomsky 2013)

A place for everything and everything in its place. (doxa)

Antimetabole and its friends

Antimetabole (reverse lexical repetition)

All for one, one for all

Mesodiplosis (medial lexical repetition)

All for one, one for all

Anadiplosis (lexical repetition directly across phrasal or clausal boundaries)

All for one, one for all

Epanalepsis (lexical repetition at the beginning and ending of a phrase or clause)

All for one, one for all

Parison (repetition of syntactic structure)

$[_N\ [_P\ [_N]_{NP}]_{PP}]_{NP}\ [_N\ [_P\ [_N]_{NP}]_{PP}]_{NP}$

Isocolon (repetition of prosodic contour and/or syllable structure)

ól fór wən wən fór ól

Rhetorical schemes ✓
Figure detection
The Rhetoricon

Antimetabole and its friends

Antimetabole (reverse lexical repetition)

All for one, one for all

Mesodiplosis (medial lexical repetition)

All for one, one for all

All for one, one after all

Anadiplosis (lexical repetition directly across phrasal or clausal boundaries)

All for one, one for all

Epanalepsis (lexical repetition at the beginning and ending of a phrase or clause)

All for one, one for all

Parison (repetition of syntactic structure)

$[N\ [P\ [N]_{NP}]_{PP}]_{NP}\ [N\ [P\ [N]_{NP}]_{PP}]_{NP}$

All for one; one, all for

Isocolon (repetition of prosodic contour and/or syllable structure)

ɔ́l fɔ́r wə́n wə́n fɔ́r ɔ́l

Antimetabole, friendless

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Figure detection
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Antimetabole without Mesodiplosis, Parison, Anadiplosis, Epanalepsis, or Isocolon

> all in the service of one, at the same time as one serves the interests and success of all, if you know what I mean.

Dubremetz & Nivre (2018)

Rhetorical figure detection: Chiasmus [Antimetabole], epanaphora, epiphora. *Frontiers in Digital Humanities* 5

- "a book consisting of 150,000 words, with 66,000 examples of criss-cross patterns but only one real chiasmus"
- "chiasmus … can be seen as a graded phenomenon with prototypical examples and controversial/borderline cases."
- "not be a binary classification task"
- "a chiasmus detector should extract criss-cross patterns and rank them from prototypical chiasmi to less and less likely instances"

Rhetorical Figure Detection: Chiasmus, Epanaphora, Epiphora

Dubremetz & Nivre (2018)

Rhetorical figure detection: Chiasmus [Antimetabole], epanaphora, epiphora. *Frontiers in Digital Humanities* 5

#1 There are only two kinds of men: the righteous who think they are sinners and the sinners who think they are righteous.

#3000 You hear about constitutional rights, free speech and the free press. Every time I hear these words I say to myself, 'That man is a Red, that man is a Communist!'

Dubremetz & Nivre (2018)

Rhetorical figure detection: Chiasmus [Antimetabole], epanaphora, epiphora. *Frontiers in Digital Humanities* 5

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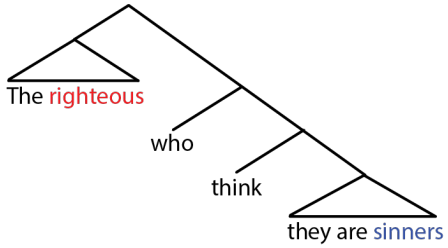

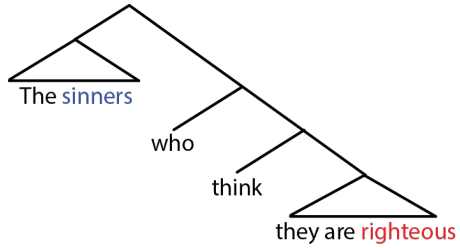

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Rhetorical figure detection: Chiasmus [Antimetabole], epanaphora, epiphora. *Frontiers in Digital Humanities* 5

"a book consisting of 150,000 words, with 66,000 examples of criss-cross patterns but only one real chiasmus"

"chiasmus … can be seen as a graded phenomenon with prototypical examples and controversial/borderline cases. "

"not be a binary classification task"

"a chiasmus detector should extract criss-cross patterns and rank them from prototypical chiasmi to less and less likely instances"

Grading criteria:

- Stopwords
- Position ← parison
- similarity of n-gram context ← mesodiplosis
- syntactic role identity ← parison

Dubremetz & Nivre (2018)

Rhetorical figure detection: Chiasmus [Antimetabole], epanaphora, epiphora. *Frontiers in Digital Humanities* 5

The good news

- High reliabili
- Figu ion is

The less

- They
- They ctions at all

The great n

- They have laid the foundation

antimetabole

(an tee muh TAH boh lee)

figure of speech in which two or more words are repeated in a successive clause, but in reverse order

a type of chiasmus

Examples:

"All for one, and one for all." (*The Three Musketeers*, Alexandre Dumas)

"Absence of evidence is not evidence of absence." (*The Demon-Haunted World*, Carl Sagan)

Dubremetz & Nivre (2018)

A serious bottleneck in the creation of a system for ranking chiasmus candidates is the lack of annotated data. [Antimetabole] is not a frequent rhetorical figure. Such rareness is the first reason why there is no huge corpus of annotated [antimetboles]. It would require annotators to read millions of words in order to arrive at a decent sample.

Another difficulty comes from the requirement for qualified annotators when it comes to literature-specific devices.

etabole], epanaphora,

action is

Confession: I lied about epanalepsis

love is love

done is done

enough is enough

war is war

I said what I said

dog eat dog

a lie begets a lie

nothing will come of nothing.

one on one

head to head

face to face (f2f)

follow4follow

day after day

little by little

side by side

"dicks who go out of their way to let the world know they're dicks." (@KBAndersen)

"A Canadian is a Canadian is a Canadian." (Trudeau 2015)

"Corporations aren't people. People are people." (Obama 2012)

"[A] dark Satanic mill ought to look like a dark Satanic mill and not like a temple of mysterious and splendid gods." (Huxley, qtd in Orwell

"In times like these, it is helpful to remember that there have always been times like these." (Harvey, n.d.)

Confession: I lied about antimetabole

Equum versus lapidem, ac lapidem versus equum

If you press a stone with your finger, the finger is also pressed by the stone. If a horse draws a stone tied to a rope, the horse (if I may so say) will be equally drawn back towards the stone: for the distended rope, by the same endeavour to relax or unbend itself, will draw the horse as much towards the stone as it does the stone towards the horse. (Newton, 1803/1687, 1.15)

[A]sk not what your country can do for you—ask what you can do for your country. (Kennedy [& Sorensen] 1961)

Thus the expression "men and women" is, conventional meanings set aside, equivalent with the expression "women and men." (Boole 1854, 23)

$x + y = y + x$; $xy = yx$; $p \& q \rightarrow q \& p$; $p \vee q \rightarrow q \vee p$

The reason women are critiqued for being too loud or too meek, too big or too small, too smart to be attractive, too attractive to be smart is to belittle women out of standing up publicly. The goal is to critique into submission. (@AOC 2019)

Whether we bring our enemies to justice or bring justice to our enemies, justice will be done. (Bush [& Gerson] 2001).

Confession: I lied about antimetabole

Rhetorical schemes
Figure detection ✓
The Rhetoricon

[L]a vie c'est le germe et le germe c'est la vie. / [L]ife is the germ and the germ is life. (Pasteur 1886/1883, 33)

In America, race is class and class is race. (Darnell Hunt, qtd on *Sunday Edition* 2014)

Hamas is ISIS and ISIS is Hamas. (Netanjahu 2014)

Gay rights are human rights, and human rights are gay rights. (Clinton 2013, 0:08-0:12)

$P \rightarrow Q \;\&\; Q \rightarrow P$

$P \leftrightarrow Q$

Ultrabooks are laptops after all, but not all laptops are ultrabooks. / In essence, Ultrabooks are just a special type of laptops. (Ultrabooks vs Laptops 2013)

All compounds are molecules … but not all molecules are compounds (Volpe 1975, 7)

$P \rightarrow Q \;\&\; \sim Q \rightarrow P$

The morals of these stories

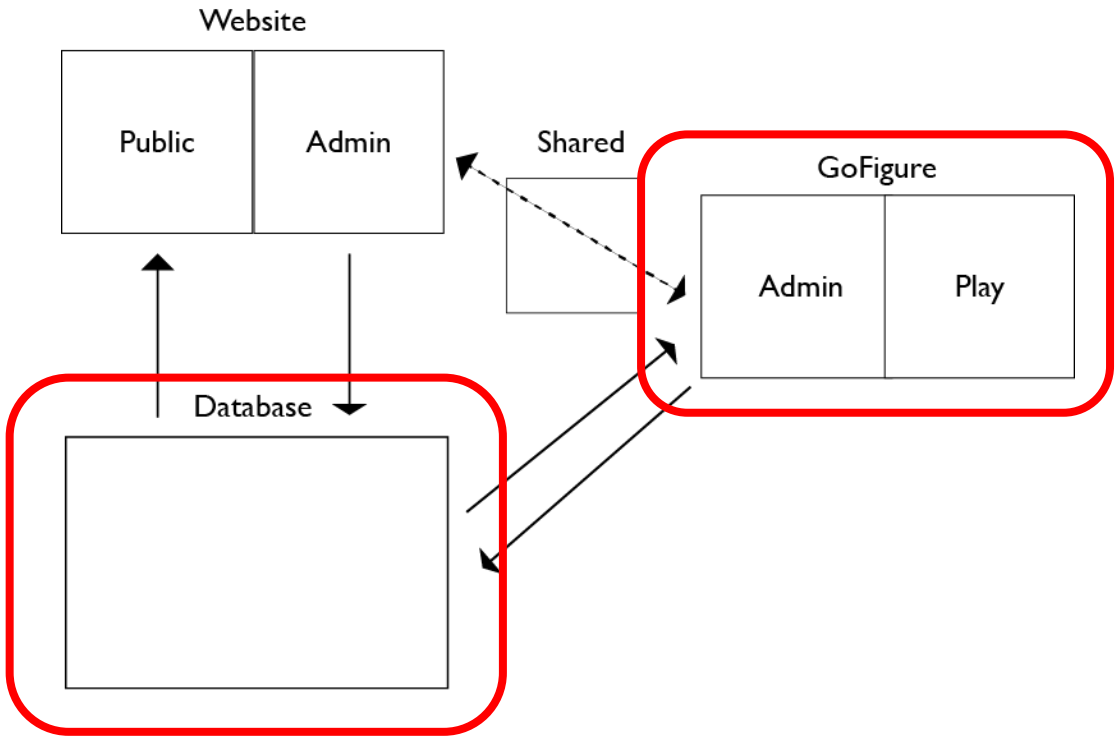
The rhetorical functions are a product

- Collocation
- Interaction with grammatical features (lexical type, phrase structure, …)

Corpus research is needed to

- Test the sorts of claims I've been making here
- Discover new collocation / interaction rhetorical functions

But there's a bottleneck

- We need tons of annotated instances
- Trained annotators

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