

On the argumentative vulnerabilities of metaphors

(Unrevised version)

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Metaphor, Argumentation, Refutation, Disagreement

Abstract

This paper is an empirical study based upon a collection of cases, showing how metaphor as argument behaves in an argumentative-interactive environment. The general intent is to document the fact that metaphors are not immune to refutation. The first section summarizes some positions of Aristotle's *Rhetoric* about metaphor, especially the claim that metaphor is the best instrument of persuasion; this implies that a metaphor can only be neutralized by another metaphor (section 2).

Open metaphors calling upon surprise can be rejected through manifestations of displeasure (section 3), combined with a refutation of some analogy reconstructed from the metaphor (sections 4 and 5). When they function as hidden (implicit) ideological models channeling scientific investigation, metaphors can be superseded by other metaphors, or rejected because they are descriptively and theoretically inadequate (section 6).

Metaphors can compete with criteria based re-categorization, opening an issue about the metaphorical / literal character of a claim. Metaphorical vocabulary can be rejected by scientists as leading the investigation up dead-end roads (Section 7), or as motivated by a malicious intention, and the judge has to decide upon the validity of the metaphor.

This paper discusses the claim, current since Aristotle, that, due to its great persuasive effect, metaphor can be considered as a formidable tool for argumentation, almost immune to refutation. The visions of argumentation are many; the conceptual framework implemented in this study refers to a series of classical works in argumentation studies; if needed, definitions will be found in Plantin (2018). In short, argumentative activity is defined as a two-sided activity, (1) a *monological* activity, through which the arguer develops a data-claim sequence, and (2) a confrontational *interactional* activity. The data-claim monological sequence can be considered as the first turn of speech in an adjacency pair, where the second speaker will or not ratify the argument. The unit of analysis is the first-second turn pair; the monological data-claim sequence is a sub-unit of this basic whole.

When the second speaker ratifies the argument, they *agree* with the speaker (preferred second turn). Claims are typically supported by groups of people, and unsurprisingly, the members of this group regularly tend to ratify the claims voiced by their spokesperson. Persuasion materializes as the agreement granted by a former opponent or third party. By uttering **U**, speaker **S** persuades **P** if, (1) formerly, **S**'s discourse and **P**'s discourse were not co-oriented (**P** was an opponent to **S**; or a third party in the discussion between **S** and some opponent); (2) now, **P**'s discourse is co-oriented with **S**'s discourse.

A distinction is made between rebuttal by the opponents and non-ratification by third parties. (1) Opponents can rebut the argument as such, (a) on its merits, *ad rem*; this is a typical move from logically minded opponents), or (b) through some maneuver destroying or disorienting the discourse conveying the argument on the basis of its formulation; this is a typical move of witty and/or principled opponents. The latter move is not necessarily objectionable from a logical point of view: "*if you want your claim to be examined here, first you have to make it clear and to adopt your language and behavior of*

this place and institution; ...”. (2) Third parties do not just ratify the claim; they engage in exploratory talk in order to test the claim, typically through objections. They do not renounce their doubts; they refuse to close the debate and they try to elevate the issue, etc.

The following discussion is an empirical study based upon a collection of cases, showing how metaphor as argument behaves in such an argumentative-interactive environment. It can be considered as a contribution to a “pragmatic of figures of speech”, as proposed by Bonhomme (2005). Metaphor will be taken as the key speech act of an argumentative first turn, pending ratification or non-ratification by a second turn.

The general aim is to document the fact that metaphors are not immune to refutation. §1 summarizes some positions of Aristotle's *Rhetoric* about metaphor, especially the claim that metaphor is the best instrument of persuasion; this implies, to extend this metaphor, that a metaphor can only be neutralized by another metaphor; examples are given in §2. §3 to §6 focus on metaphors rejected *qua* metaphors. In general, metaphors can be rejected as repelling and inadequate. In the scientific field, metaphors can function as models, and be rejected as such. In the same vein as §2, §6 offers a case where scientists claim that a metaphor-model can be removed only by another metaphor-model. §7 is about mechanics as metaphor-model for economics, this metaphor-model being ruined by the developments of its resource domain, physical mechanics. §8 discusses whether the re-categorization of *penance* as *torture* is adequate or is just a polemical metaphor. This is matter for the court, linguists acting here at best, as counselors.

1. Aristotle: Metaphor, the absolute weapon of persuasion

In the *Poetics*, Aristotle defines metaphor as “the application of an alien name by transferring either from genus to species or from species to genus, or from species to species or by analogy, that is proportion” (1457b5; p. 61). This definition covers more than (proportional) metaphor; the “application of an alien name” to an already named content actually covers the domain of figure of words. Typical examples of proportional metaphor are the following ones: “Thus the cup is to Dionysus as the shield to Ares. The cup may, therefore, be called *the shield of Dionysus*, and the shield *the cup of Ares*. Or again, as old age is to life, so is evening to day. Evening may therefore be called *the old age of the day*, and old age *the evening of life*”. (1457b20).

The *Rhetoric* focuses on finding the available means of persuasion in a given case; they originate in pathos, ethos and logos:

Persuasion must in every case be effected either (1) by working on the emotions of the judges themselves, (2) by giving them the right impression of the speaker's character, or (3) by proving the truth of the statements made. (1403b10; Garver, p. 397)

The latter, “logo-ic” persuasion, is drawn “from the facts themselves”, (1403b15; *id.*). Ideally, “we ought in fairness to fight our case with no help beyond the bare facts”, (1404a, p. 399), ethotic and pathemic persuasion being superfluous. But this is not possible “owing to the defects of our political institutions [...] [and] “of our hearers” (1403a30; p. 399); (1404a5; *id.*) - Normal citizens are subnormal. In short, the arts of language, action and style, “cannot help having a small but real importance” in public discourse and civic education (1404a5; *id.*) - but not in science: “nobody uses fine language when teaching geometry” (1404b10 Garver).

Thus, in the practical world, pathos and ethos are the most effective tools of persuasion. Persuasion through emotion and self-image is produced, orally, by oratorical action, especially by voice. In writing, 'it is produced' by style, because "written speeches owe more of their effect to their style than to their thought" (1404a15; after Chiron's French translation p. 428). And in all speeches, in poetry as in prose, the metaphor has the "greatest power" (1405a1; after Chiron's French translation p. 433); metaphor "gives style clearness, charm and distinction" (1405a1; p. 405). The overall conclusion is clear: metaphor is the ultimate weapon of effective persuasion.

Nonetheless, according to the *Rhetoric*, to be efficient, the instruments of persuasion must remain hidden; the writer must "disguise his art and give the impression of speaking naturally and not artificially" (1404b15; p. 403), because only "naturalness is persuasive" (*id.*). So, metaphor is persuasive insofar as it is artfully hidden in discourse. This is entirely opposed to the modern baroque concept of metaphor, as surprising and brilliant, subduing the listeners by the pleasure it gives.

2. Metaphor versus metaphor

Hence the idea that "metaphors are hardly refutable": "how to answer a metaphor if not by another metaphor?" (Le Guern 1981, p. 74). The challenged opponent accepts the duel by metaphor, "OK, *let's play metaphor!*", and twists the discourse in another direction through a new metaphor. They can (our examples):

— Substitute the original metaphor with a second one, deemed more appropriate for the situation:

S1 — *Man is a wolf to man*, homo homini lupus

S2 — *Oh no, man is a lemming to his leaders*

— Outbid the original metaphor:

S1 — *Man is a wolf to man*, homo homini lupus

S2 — *Absolutely. And women still more wolfish to women*, femina feminae lupior

— Twist the original metaphor towards another conclusion:

S1 — *Our sub-discipline is at the heart of the discipline so you must approve our candidate*

S2 — *Yes, but a discipline also needs a brain to think, eyes to see clearly and legs to move forward*

— *You know, you can grow a beating heart in a jar*

S1 — *Our institution is not a nursery.*

S2 — *Oh no, arrogant sadists aren't allowed in nurseries*

— Join the speaker and extend the metaphorical thread:

S1 — *Voters are lemmings to their party leaders*

S2 — *If only it could be true...* (said by a party leader)

These rebuttal techniques give the last laugh to the opponent. Nonetheless, a collection of actually rejected metaphors show that other strategies are actually available.

3. Unlucky metaphor: "*Guitar, singing bidef*"

Metaphor is felicitous when ratified by the listener. When taking a monological perspective on discourse, the analyst routinely applies the preference for agreement principle. They connect the metaphor to its preferred second turn, corresponding to the open intention of the metaphorist; the metaphor is then received as a pleasant surprise, acknowledging a seductive behavior; from an argumentative perspective, the analyst is literally convinced by the metaphor they are analyzing.

First turns would be followed by their preferred second turns if speech acts acted causally on the addressee. This seems to be the case in the world of Gorgias as described in his *Encomium of Helen*. Helen didn't resist persuasive discourse, because persuasive discourse cannot be resisted; it subjugates the addressee, soul, mind and body:

And if persuasive discourse deceived her soul, it is not on that account difficult to defend her and absolve her of responsibility, thus: discourse is a great potentate, which by the smallest and most secret body accomplishes the most divine works; for it can stop fear and assuage pain and produce joy and make mercy abound. ...

Persuasion belonging to discourse shapes the soul at will

The power of discourse stands in the same relation to the soul's organization as the pharmacopoeia does to the physiology of bodies.

Nonetheless, in the real world, second turns are not always aligned with the speaker's intention. Listeners do not necessarily agree with assertions, nor are they persuaded because someone wants them to be persuaded, nor seduced by would-be seducers. *Persuading* must be distinguished from *intending to persuade*, especially in the case of metaphor.

Consider the following case. Philippe Soupault considers Cocteau's metaphor "O guitar, singing bidet" as low and despicable:

I had decided never to pronounce the name of Jean Cocteau. It seemed useless to me. We do not talk about what we despise. But this gentleman has just published a book he dares call *Poetry*. He must not know what *poetry* means, he who wrote this verse (among others):

O guitar, singing bidet (sic). [*O guitare, bidet qui chante*]

What a poet, isn't he? [...] Mr. Cocteau, who could not persuade anyone that he was a poet able to write in keeping with the needs of these days, tries to discuss poetry, the poetry of Apollinaire, Max Jacob or Reverdy. [...] Let it be known that Mr. Cocteau's "pouasie" (Fargue *dixit*) represents nothing and does not mean anything (45)

Philippe Soupault, [*Literature and the rest*].

Pouasie is a paronym for "poésie", a portmanteau word agglomerating *poésie* with the interjection *pouah!*, "yuck!", expressing and communicating disgust. Metaphor has been described as "a discursive *coup*, a freak island, an anomaly, an incoherence, an incongruence, an incongruity, a rupture, a logical contradiction, an incompatibility, a power grab" (Kleiber 2016, 18-19). If such qualities are put to the fore, it should not be surprising that they may sometimes be taken at face value, and rejected accordingly. If metaphor vaunts its incoherence, it runs the risk of being rejected as incoherent, at least by all those who do not want to play the game of incoherence.

4. Repelling metaphor: "The Jesuit mentality, shameful sore"

Michelet's lessons on the Jesuits, published in 1843, begins as follows:

1. What the future holds for us, God knows!... I humbly pray Him, to strike us with the sword, if he has to strike us again...
2. Wounds [*blessures*] made by sword are clean wounds, that bleed and heal. But what to do with hidden, shameful sores [*plaies*], never healing, and always thriving?
3. Of all these sores, the most to be feared is a policeman mentality applied to God's matters, the spirit of pious intrigue, of holy denunciation, — the mentality of the Jesuits [*l'esprit des Jésuites*].
4. May God give us ten times a political tyranny, a military tyranny, any tyranny, rather than seeing such a police spoiling our France!... Tyranny has this in its favor that it often wakes up national feelings; it breaks or is broken. But when all

sentiments are stifled, when gangrene is well set in your flesh and bones, how can it be cured?

Michelet, [*On the Jesuits*]. Suspension points in the original text. Our numbering. Our (CP) translation; henceforth, *OT*.

This passage is written in the great oratorical style of argumentative rhetoric. The explicit metaphor *in praesentia*, “the mentality of the Jesuits, shameful sore”, is foregrounded in (1-2). Such preparation of key metaphors seems a rather general phenomenon, and contributes to build up a tension culminating with the metaphor. It begins with a stoic prayer to God, is justified by the opposition *clean wounds* / *shameful sores*, introducing the metaphorical resource domain / *wound, sore*. The metaphor is extended as *gangrene set in flesh and bones*.

Michelet’s deist language serves as dramatization: exclamation, suspension points, resigned prayer of petition in a meditative tone; opposition *policeman mentality* / *God matters*. This language resonates with the language of the clergy he fights and serves as an *ad hominem* strategy, opposing the Jesuits with their own tones, values, deity. Claims are systematically maximized, never modalized: *never healing, always thriving sores; the most to be feared; May God gives us ten times a political tyranny a military tyranny, any tyranny*, etc. Embedded in such a context, the metaphor “shameful sore” imposes a powerful vision of the “Jesuit mentality” as a-social, a-moral and physically repulsive.

The opposition came the same year, 1843, under the title *The Jesuits - by a loner. Reply to MM. Michelet and Quinet*; the “loner” is identified as Father Hippolyte Barbier. The argumentative metaphor is rejected first in the following passage:

M. Michelet goes on: “Of all those hidden, shameful sores, never healing, and always thriving, etc., the most to be feared is a policeman mentality applied to God’s matters, the spirit of pious intrigue, of holy denunciation, the mentality... of the Jesuits!

We hardly expected that! (Quoted after the 2nd ed., 1848, p. 28; *OT*)

Barbier repudiates the metaphor through three converging lines of refutation. The surprise provoked by the metaphor is first manifested by three suspension points inserted in the text of Michelet, then fully expressed, “*we hardly expected that!*”. But, for Father Barbier, this surprise is a nasty one, created by the incongruity, and the stupidity of the metaphor. Father Barbier shows and says that he is startled and appalled: this is the proper refutation of the metaphor *qua* metaphor.

Second, the rebuttal begins with an ironic concession about wounds made by the sword “*this is absurd, but not relevant here, so it’s OK, let’s pass over*”:

I admit that the wounds made by sword are always clear and frank, and that they always heal, as the professional swordsmen and the warlike annals of all peoples prove on a daily basis. (*id.*, p. 27; *OT*)

Third, the amplification and application of the metaphor are rejected by a disqualification of the language used by Michelet:

Some very colorful imprecations follow. “*God gives us* [a quote from Michelet’s text up to] *what a hideous sight!*” I copy textually and do not understand.

There comes a dismal picture which is only the reproduction of these fancies in a more silly and more amphigorous style, if possible, and complemented as follows “*this is not, as one might think, a picture of imagination* [a quote from Michelet’s text up to] *eternal mud.*” (*id.*, p. 28-29; *OT*)

Taken at face value, Michelet’s language could be considered as solemn and religious, as we did above. But this evaluation has just given in to preference for agreement. For Father Barbier, this “solemnity” is just a *dismal unintelligible amphigory*: “it is not enough

to know *what* we ought to say; we must also say it as we *ought*” (Aristotle, *Rhet.*, 1403b15, p. 397; italics in the text); “style to be good must be clear (...) (and) appropriate” (1404b1, p. 401-403). Father Barbier was certainly very familiar with rhetoric.

5. Cringing at the metaphor: “*The state, a family*”

The following passage is taken from a paper by Paul Krugman, Nobel Prize in Economics:

Politicians [are] catering to a budget, which tends to be budgeted via analogies with family finances. When John Boehner, the Republican leader, opposed US stimulus plans on the grounds that “American families are tightening their belts, but they do not see government tightening its belt”, economists cringed at the stupidity. Barack Obama's speeches [...]. Similarly, the Labor Party [...].
Paul Krugman, “The case for cuts was a lie”, 2015.¹

The “stupidity” is that of the inference from “families tighten their belts”, to “government must tighten its belt”. The justifying principle of this passage can be reconstructed as a metaphor:

A state, a nation, a country ... is a family.

The argument could also be reconstructed by composition:

The state is made up of families, so it is a family.

The state is made up of families, families tighten their belts, so the state has to tighten their belts.

The metaphor “state, family” has deep roots in economics; it is based on the etymology of the word *economy*, from the Greek *oikonomia*, “home management”. In general language, it underlies the praise of the leader as *founding father*, *father of the nation* etc.

Krugman appropriates the essential elements of the Aristotelian vision of poor institutions where politicians have to address mediocre audiences. Politicians are “catering” something entertaining to a public “that doesn't understand”: that is precisely what metaphor is for. But economists *à la* Krugman “cringed at the stupidity”, that is, they “show on their face and bodies their feeling of disgust and embarrassment” (after MW, *Cringe*). Paul Krugman's reaction to the metaphor of the supporters of austerity is not different from that of Father Barbier to Michelet: surprise and repulsion. This is exactly how metaphors can be rebutted as metaphors.

In the subsequent text Krugman addresses the substantial claim underlying the Austerian metaphor, “in times of economic crisis, the state must turn to austerity, reduce its debt, therefor its investments”. This substantial claim is rebutted in the semi-technical language of economics, (1) by a theoretical, a priori refutation: the Austerian Boehner's claims are theoretically ill-grounded; (2) by the empirical falsification of their substantial predictions, that are invalidated by the facts; and (3) by a pragmatic refutation, the policies inspired by this theory have failed. The problem remains of how to explain why these policies are still being applied. According to Krugman, the reason is that they allow the neo-conservatives to apply a program of destruction of the welfare state.

This two-step treatment of a metaphorical claim is exemplary: first, treating the metaphor as such, then refuting the underlying analogy on its own merits.

¹ www.theguardian.com/business/ng-interactive/2015/apr/29/the-austerity-delusion (15-08-16)

6. The metaphor, an outdated model

In the cases quoted in sections four and five, the language of the resource domain is used as a folk-model for the problem domain: *shameful sore* and the language of injury for the Jesuitic mentality; *tighten one's belt* and the language of domestic economy for economics. In the following cases, metaphors correspond to scientific models (Black 1955, 1962, 1979). The metaphor is now the key element steering the general vision of the domain under investigation.

When functioning as a model, metaphor is neither surprising nor pleasant or unpleasant. Actually, its persuading power is due to the fact that, embedded in the ordinary talk of the discipline, it goes unnoticed. Metaphor functions as a disciplinary ideologeme. This is the mode of functioning considered by Aristotle when he presents metaphor as the best instrument of persuasion.

6.1 “Sleeping Beauty” VS “Equal Opportunity”

The term *metaphor* is used as an equivalent of *model* in the following passage on the role of metaphor in biology

For example, let's consider two metaphors to talk about the process of biological fertilization: first, the “Sleeping Beauty” myth (penetration, conquest and awakening of the egg by spermatozoa, for example); second, fertilization expressed in the language of “Equal Opportunity” (defined for example as the egg and sperm encounter and fusion). The shift from the first model to the second occurred over twenty years, and corresponds to a radical evolution of the ideological perception of gender difference.

The first metaphor led to an intensive investigation of the molecular mechanisms of spermatoc activity (providing chemical and mechanical explanations of sperm motility, [...]) while the second has stimulated researches that have elucidated the mechanisms through which the egg could be considered active (for example, the fact that it produces proteins or molecules that facilitate or inhibit adhesion and penetration).

Sara Franceschelli, Philippe Huneman, *The Role of Metaphor in Biology*, OT.

Metaphors are considered the driving force behind research programs in biology; they “[lead] to intensive investigation” and “[stimulate] research”. These metaphors originate in an “ideological perception” of things, so, through metaphors, ideologies fruitfully mastermind research programs. In such a view, the founding metaphors steering a research trend are not refuted but supplanted by another metaphor structuring another research trend. In practice, this view leads to the same results as those set out in §2.

6.2 Mechanics VS “Mechanistic Economics”

The importance of the mechanistic metaphor in economics is well known (Resche 2016). To refute the metaphor is to invalidate the scientific claims that the model metaphor supports; this is what Bernard Maris does in his *Anti-manual of Economics* (OT). He claims that economic theory is steered by a *metaphor* of physical mechanics based upon a now superseded state of this discipline:

Walras strives for “social physics”. He is the co-discoverer [...] of the concept of economic equilibrium in one or more markets. The equilibrium and its fundamental corollary, the stability of the equilibrium, the return to equilibrium if we move away from it (as the ball always returns to the bottom of the bowl), are borrowed from the first formulations of mechanics in physical science. (Bernard Maris [*Anti-manual of Economics*] 2003, p. 32; OT)

According to Maris, in order to found economics as a science, the first economists, including Walras, “adopt” (*id.*, p. 33) the model of mechanics, they “copy” from this “model”, they “tell in a mathematical language the myth of the self-regulating market”. They “pirate” mechanics (*id.*, p. 34) in order to “give substance to their energetic metaphor in the social field” (*id.*, p. 38).

This founding metaphor of economics is invalidated by its model. According to Maris, mechanics as a physical science has evolved, while economics sticks to a now outdated vision of mechanics. This is made clear by the fact that economics cannot integrate “the second principle of thermodynamics”:

In classical mechanics, the concept of equilibrium is based upon the concept of *return* to equilibrium. Classical mechanics ignores time, the “arrow” of time does not exist; to quote Maxwell, “the past has the same value as the future”. Physicists have pulverized this a-historical conception of their science by the second principle of thermodynamics, the “entropy” principle, or energy degradation, in which a system evolves towards a caloric uniformity. The heat is transmitted to cold, and both become lukewarm. Have economists ignored the irreversibility of phenomena and the notion of entropy? Yes, almost all. (*Id.*, p. 35; (2003, p. 32; OT)

To reject the “energetic metaphor”, Maris cuts off the problematic domain, economics, from its metaphorical resource domain, mechanics. The mechanistic model metaphor in economics is dismissed, as any model would be, for an external and an internal reason: (1) Economists work with an outdated vision of mechanics; and (2) they cannot account for an essential characteristic of economics, the fact that it is a social and historical science.

7. Naked mole rats “societies”, human society: metaphor or identity?

7.1 An episode in the “sociobiology war”

Naked mole rats (NMR) are described as follows:

The naked mole-rat (*Heterocephalus glaber*) is a mammal with a truly bizarre appearance, looking like an elongated cocktail sausage with large, protruding teeth. Naked mole-rats live in large underground colonies of approximately 80 animals, which are dominated by a single breeding female, the queen; this social system is highly unusual in mammals, but is similar to that commonly observed in bees and termites and is termed *eusocial*. (*The University of Cambridge Naked Mole-Rat Initiative*)

The following discussion originates in a scientific research divulgation paper by S. Braude & E. Lacey, “A revolutionary monarchy: the society of mole rats”. Their description of mole rat behavior is attacked in a response paper²:

In addition to the transmission of knowledge about mole rats, S. Braude and E. Lacey's paper strives to situate their observations in the field of neodarwinian evolutionary theory, and if possible in the narrower, but very fashionable one, of sociobiology. I would like to highlight a number of rhetorical gimmicks [*artifices*] that serve this last objective. (Gilles Lepape, *Comments on Braude & Lacey*, 1992; OT)

Sociobiology is defined as the “systematic study of the biological basis of all social behavior” (Wilson 1975, p. 4)³. The “rhetorical gimmick” is the application of the

² Braude, S. & Lacey E. (1989). Une monarchie révolutionnaire: la société des rats-taupes. *La Recherche* [Investigation], a journal of general scientific information] July-August 1989. Comments by G. Le Pape, and the reply of the authors in the same journal, dated Oct. 1992.

³ “Non-human animal behavior was not the only subject addressed in *Sociobiology*; famously, the first and last chapters of the book addressed Wilson's views about the amenability of human behavior to be studied by a similar sort of project. These were developed to some extent in his later book, *On Human*

vocabulary of human social relations to NMR behavior; Lepape considers that such vocabulary is the Trojan horse of socio-biology propagandists:

The phrase “division of labor” is used four times; the word “task” also appears four times; the term “responsible” also appears four times, and “they take care of” once; the terms “cooperation” and “subordinate” are used once each. The expression “sexual status” is used three times to refer to the reproductive state of the animals. (*Id.*)

The scientific issue is about the objectivity of the vocabulary. On the one hand, words such as “division of labor”, or “task”, can be considered as taking human relations as a resource domain, used to investigate mole rats behavior. Like the solar system model of the atom, such a metaphor can be used for pedagogical, explanatory purposes. It remains benign when kept under control, that is, to the extent that the analogy is limited and not mistaken for a true homology.

On the other hand, the human society metaphor suggests that there is a true homology between “animal societies” (mode of interaction between animals), and human societies. In other words, animal and human societies are assimilated on the basis of their common biological foundations. As a result, the relationship problem / resource is reversed. Mole rat interactions, formerly the investigated field, provide now an animal model for the study of human society, formerly the resource field. To use the vocabulary of §6.1, this new perspective can lead “to intensive investigation” and “[stimulate] research” in the field of the biological foundations of human social structure, furthering a socio-biological theory of inter-human relations.

7.2 Catachresis: naming nameless phenomenon

The metaphorical language, or “rhetorical gimmick”, is not a mere presentation device used for didactic purposes. It is now fully in use to describe NMR interactions, as shown by the presentation of the Cambridge Naked Mole-Rat Initiative (see above), and has become embedded in the scientific language about the NMR behavior issue since the inaugural scientific paper on the topic:

Eusociality in a mammal: cooperative breeding in naked mole-rat colonies.

Abstract: Laboratory observations on a field-collected colony of 40 *Heterocephalus* have shown that only a single female breeds. The remaining individuals constitute two or three castes, each containing both sexes and distinguishable by size differences and the tasks they perform. These features, together with long life-spans, overlap of generations, cooperative brood care, and possible age polyethism⁽⁴⁾ provide parallels with the eusocial insects. (Jennifer U. M. Jarvis, “Eusociality in a mammal”, 1981)

Nature (Wilson, 1978). For a variety of reasons, primarily because Wilson was perceived to be arguing that many problematic social behaviors were unchangeable, the contents of these two chapters provoked an extremely acrimonious debate sometimes referred to as the “sociobiology wars” (...). Because this debate attracted so much attention, the term “sociobiology” has come to be associated with this early proposed *human* project, or at least the description of it set up for attack by its critics (...). The critics claimed that “Pop Sociobiologists” were committed to a form of genetic determinism, an overly strong adaptationism and had a tendency to ignore the effects of learning and culture. (<https://plato.stanford.edu/entries/sociobiology/>)

⁴ *Polyethism* is defined as “the functional specialization in different members of a colony of social insects, which leads to a division of labour within the colony. The various functions may be carried out by individuals of different morphology (caste polyethism) or of different ages (age polyethism)” *polyethism*. A Dictionary of Zoology. *Encyclopedia.com*. 7 Apr. 2018 <<http://www.encyclopedia.com>>.

To sum up, the basic vocabulary used by researchers when speaking about eusocial insects and NMR borrows heavily on the vocabulary of human society organization. This core vocabulary includes the following words, taken from the quotations above:

- social, social system, eusocial
- colonies dominated by a single breeding female, the queen
- two or three castes
- perform a task
- cooperative care of juveniles (individuals care for brood that is not their own)
- division of labor, functional specialization within the non-reproductives (e.g., soldier and worker castes in the army ant *Eciton burchelli*).

The meaning of these words is basically about humans, for example:

“**colony, 1a:** a body of people living in a new territory but retaining ties with the parent state” (M-W, *Colony*)

“**caste, 1:** one of the hereditary social classes in Hinduism that restrict the occupation of their members and their association with the members of other castes”(M-W, *Caste*)

“**queen, 1a:** the wife or widow of a king” (M-W, *Queen*)

Such words crucially imply self-consciousness and intentionality: *Task* implies a hierarchical differentiation between two human individuals, the capacity of the first to design a project, to give orders and instructions to the second, who has the capacity to understand and accomplish the task:

“**task, 1a:** a usually assigned piece of work often to be finished within a certain time”.

Care implies a complex psychological inner life, combining emotional, cognitive, states with a sense of moral responsibility:

“**care, 1:** suffering of mind: grief — **2a:** a disquieted state of mixed uncertainty, apprehension, and responsibility. b: a cause for such anxiety”

Division of labor implies an intentional planning of a process, its division into autonomous subtasks, and their strategic repartition:

“*Division of labor* is the separation of tasks in any system so that participants may specialize. (Wikipedia, *Division of labor*)

Are these features secondary and parasitic upon the meaning of the words used for the study of NMR behavior, the metaphor being a *noncommittal naming device*? Or are they used in the perspective of a full assimilation, the metaphor being then a full model for NMR studies? In other words, is such a naming a pure metaphor or a catachresis of metaphor? Catachresis is defined as the extension of the use of a signifier already having its proper signification, to refer to a new content, formerly lacking a signifier; the transfer is operated through metaphor, metonymy or synecdoche. Catachresis is a routine instrument of neology.

The debate can be translated in linguistic terms, as a discussion about the strengths and perils of metaphorical naming:

- Pros — *New phenomena must be given a name. If the name can, by analogy or metaphor, convey a first understanding of the thing, all the better!*
- Cons — *New phenomena must be given non-committing names or new expressions coined. For example, ‘reproductive status’ is not connoted, while “sexual status” is. Your societal naming representing NMR as intentional agents, having a mental life analogous to human mental life is misleading. Pathetic fallacy!*

So, opponents denounce this naming metaphorical system as not only unscientific, but slippery, wrongly suggesting an a-cultural and a-historical vision of human

societies. Whatever the case, the risk here is to forget that analogy “is never more compelling than when it is abolished and ceases to be perceived as an analogy. Becoming invisible, it merges with the order of things.” (Gadoffre 1980, p. 8). The discussion is left to scientists.

8. Metaphors under trial

Aristotle points out that metaphors can reverse the argumentative orientations:

If you wish to pay a compliment, you must take your metaphor from something better in the same line; if to disparage, from something worse [...] say that a man who begs ‘prays’ and a man who prays ‘begs’ (*Rhet*, 1405a, 1,15, pp. 405-407)

Note that, whatever the assimilating force of the metaphor, the latter will not be *fined* under the pretext that *begging is prohibited*. Similarly, neither the judge nor the doctor can decide whether the *Jesuits mentality* is really a *shameful sore*.

Nonetheless, metaphor can sometimes compete with criteria based re-categorization, opening an issue about the metaphorical / literal character of a claim. The newspaper *El Pais* reports a case of a complaint about physical abuse, filed by an ex-Carmelite sister against their former Mother Superior, who answers that this is not a question of *bad treatment, torture or punishment*, but of *penance, or discipline*:

“This is not punishment, but discipline. Keep in mind that monasteries have different rules. This is the rule of Santa Teresa, so to speak, the old, way of life of the Carmelite sisters”

Smiling, standing or sitting in a room decorated with religious motifs, they told the camera, “Torture is an invention. This is a life of penance, not torture that is a totally distorted term”, said one of them. (*El Pais*, 2016/09/05; OT)

Speaking of a surgeon who carries out benign but painful operations without anesthesia, the indignant patient can swear that they will never again “be tortured by this sadist”, designated as “a butcher”. This is clearly a metaphor. The surgeon is not a butcher, and operating on a patient is not torture. The metaphor of “torture” and “executioner” is trivial when someone is held responsible for the pain.

What is categorized as *penance* in the religious discourse can be metaphorized as *torture*. Like *praying / begging*, this re-naming, is a good fuel for polemics: *penitents > bodies tortured by penance* (metaphor) > *tortured bodies* (re-categorization).

Re-categorization implies de-metaphorization. Here, the re-categorization of a bodily practice as torture eliminates all the background justifying the existence of the category *penitence*, defined as an expiatory pain, voluntarily accepted, reproducing the pain of Christ on the cross; penitence as such is meaningful for the suffering person and for the community to which they belong. Fighting against the *recategorization* of their penances as tortures, the nuns denounce an ill-intentioned *metaphor*. Their “smiling” attitude is oriented towards the same conclusion — in an argumentative interaction, all signs have an argumentative value.

Here, the courts will have the last word on the issue if, or under which conditions, penitence is literally torture or ill-treatment, thus confirming or removing the metaphor, that is rejecting the defense of the nuns.

9. In short: How to get rid of metaphors.

Like any first turn of speech, metaphors solicit agreement, that is ratification by the addressee; when lucky, they get it, the formerly skeptical addressee ratifies the metaphor and thereby expresses their new alignments and persuasions, and the analyst rightly concludes that the metaphor was indeed persuasive. When examining a metaphorical first turn, the analyst is easily tricked into the default solution, acceptance, especially when they are not really involved in the issue. They can even

argue that, since alignment materializes the speaker's linguistic intention, misalignment is not linguistically relevant. The problem is that in argumentative contexts, the preference for agreement is limited to the spokesperson's allies, while opponents prefer *dis*agreement (Bilmes 1991); when the argument is a metaphorical sentence, the opponents routinely counter the proposed metaphor. According to their position on the issue, other participants align with the metaphorist or with their opponent.

The empirical study of the argumentative functioning of metaphor must resist the temptation to automatically supplement the metaphorical first turn with its preferred second turn, acceptance. Failed metaphors, collected or intuitively reconstructed, are key to such a study, and show that the audience is not helpless when solicited by a metaphorical argument.

The first weapon in the anti-metaphor arsenal is over-metaphorization and counter-metaphorization; if the metaphorist cannot extend their metaphor accordingly, they are beaten at their own game.

Secondly, metaphor can be received and rejected as such. What constitutes the strength of the metaphor can be turned into a weakness. The force of metaphor can be attributed to an isotopic rupture, creating a surprise, a prolegomena of an emotion; but this emotion is not necessarily *pleasant*. *Submissive pleasure and acceptance* are not a response automatically attached to metaphor. The metaphorical shock can be negative, as shown by the reactions of Philippe Soupault, Abbé Barbier and Paul Krugman, who are not particularly receptive to the metaphors of, respectively Max Jacob, Michelet and the Austerians.

Thirdly, argumentative metaphors are amenable to analogy, and they can be undermined through the weaknesses of this analogy; the metaphorical claim can be specified, limited, or invalidated, always keeping in mind the domain under discussion. It can be said that reducing a metaphor to an analogy is not playing by the rules of metaphor. This is precisely why the tactic is interesting: Analogy does de-metaphorize the talk; metaphor is *playful* talk, analogy *serious* talk, and serious talk is good at countering *playful* talk. Serious talk denounces metaphorical talk as histrionic discourse, and the speaker as playing to the gallery (Hamblin 1970). The de-metaphorization move is certainly relevant when the discussion is on the merits of the case.

In the cases presented above metaphor is open; surprise and pleasure / displeasure are key elements to its success / failure. In the following cases, metaphor is hidden in the fabric of discourse; it is no less efficient but open to new kinds of vulnerabilities.

Fourth, metaphor functions as an explanatory model, when the language of the resource domain it introduces is systematically applied to the domain under discussion. In a hazy context, everything is fine, metaphor plays its stimulating role smoothly. But a structuring metaphor can then be tested and rejected as any other model.

Fifth, participants in the language game have their say in deciding whether an expression is metaphorical or must be taken literally. The case of the *praying/begging* man is clear (see §8), but that of the nun *doing penance/being tortured* is not. To determine if *penances* are *tortures* is the judge's business; they will reject the plaintiff's claim, arguing that *torture* is metaphorical, and metaphorizing is a basic human right, or accept it, therefore consecrating the re-categorization of *penance* as *torture*.

References

- Aristotle (*Rhet.*)
- 2005 *Rhetoric*. In Aristotle, *Poetics and Rhetoric*. Introd. and notes by Eugene Garver. *Rhetoric* trans. by W. Rhys Roberts (1924). *Poetics*, trans. by S. H. Butcher (1911). New York: Barnes and Nobles.
 - 2007, *Rhétorique*, Introd., trad. etc. par P. Chiron, Paris, Garnier-Flammarion.
- Barbier Hippolyte, 1843, *Les Jésuites*. Paris, Appert, Amyot, Pilou. Quoted after the 2nd ed., 1848, p. 28.
- Bilmes J. (1991). Toward a theory of argument in conversation. The preference for disagreement. In van Eemeren F. H., Grootendorst R., Blair J. A. & Willard C. A. (eds.) (1991). *Proceedings of the Second International Conference on Argumentation*. Amsterdam: SIC SAT. 462-469.
- Black, Max 1955. Metaphor. *Proceedings of the Aristotelian Society, New series*, vol. 55, 273-294. <http://web.stanford.edu/~eckert/PDF/Black1954.pdf> (10-08-2016)
- Black, Max 1962. *Models and Metaphors*. Ithaca, NY, Cornell University Press.
- Black, Max 1979. More about Metaphor. In Ortony Andrew (ed) 1962, *Metaphor and Thought*. 19-43. Cambridge: Cambridge University Press
- Bonhomme, Marc 2005. *Pragmatique des figures du discours*. Paris, Champion, 2005.
- Gorgias, *Encomium of Helen*. Translated from the Greek by Brian R. Donovan, 1999. <http://caseyboyle.net/3860/readings/encomium.html> (03-12-2019)
- Gadoffre
- Hamblin C. L. (1970). *Fallacies*. Londres, Methuen.
- Kleiber, Georges 2016. Du triple sens de métaphore. *Langue française* 189. 15-33.
- Le Guern, Michel 1981. Métaphore et argumentation. In *L'argumentation*, Lyon, Presses Universitaires de Lyon. 65-74
- MW, *Merriam-Webster Dictionary*. <https://www.merriam-webster.com/>
- Plantin, Christian 2018. *Dictionary of Argumentation*. London, College Publications.
- Plantin Christian 2017. Contre les métaphores : une approche par la réfutation de la métaphore argumentative. In Philippe Wahl, Marc Bonhomme & Anne-Marie Paillet (eds), *Métaphore et Argumentation*. Paris, l'Harmattan. 169-186.
- Resche, Catherine 2016. Termes métaphoriques et métaphores constitutives de la théorie dans le domaine de l'économie, *Langue française* 189. 103-116.

References of the examples

- Braude, Stanton & Lacey, Eileen (1989). Une monarchie révolutionnaire: la société des rats-taupes. *La Recherche [Investigation]*, a journal of general scientific information] July-August 1989. Comments by G. Le Pape, and the reply of the authors in the same journal, dated Oct. 1992. [Barbier Hippolyte], 1843, *Les Jésuites Jesuits - by a loner. Reply to MM. Michelet and Quinet* Paris, Appert, Amyot, Pilou. Quoted after the 2nd ed., 1848, p. 28.
- Franceschelli Sara, Huneman Philippe, *The Role of Metaphor in Biology*. École de Berder, mars 2006. P 3/8. <http://www.lptl.jussieu.fr/user/lesne/PhiSa.pdf> (15-08-16)
- Jarvis Jennifer U. M., Eusociality in a mammal: cooperative breeding in naked mole-rat colonies. *Science*, 212 (4494), 1981, p. 571-3.
- Krugman, Paul. The case for cuts was a lie. Why does Britain still believe it? The austerity delusion. *The Guardian*, Wednesday 29th April 2015. www.theguardian.com/business/ng-interactive/2015/apr/29/the-austerity-delusion (15-08-16)
- Lepape, Gilles, see Braude & Lacey
- Maris, Bernard *Antimanuel d'économie*, Rosny, Bréal, 2003, p. 32
- Michelet Jules, *Des Jésuites*, 1843. Quoted after J.-J. Pauvert, Paris, 1966, pp. 41-42.
- Soupault, Philippe *La littérature et le reste*. Quoted after Béatrice Mousli, in *Les Cahiers Max Jacob*, n° 8.
- The University of Cambridge Naked Mole-Rat Initiative*, www.phar.cam.ac.uk/research/NMRI

Wilson Edward O., *Sociobiology: The New Synthesis*. Cambridge, Mass., Belknap Press, 1975.