

## The Democratization of Fallacies

### La democratización de las falacias

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**Abstract:** The contemporary theories on fallacies seem not to take into account an important distinction between two parallel approaches linked with two historical streams focusing on different pragmatic aspects of the production of a fallacy. The first can be said Ancient because it is a legacy from Antiquity: according to this scenario, a fallacy is produced by a sophist who tries to trap a victim. This is not the case with the second approach, the Modern one, for which a fallacy is not intentional: now, the mistake comes in the foreground and can be committed by anybody. A consequence is a downgrading of the role of the Ancient sophist and of his skill. Perhaps this second approach did not begin with *Port-Royal's Logic*, yet this book is a major milestone in its emergence. The paper shows that its attitude towards fallacies is new, that it is a consequence of some fundamental presuppositions of the book and that its modernity can be seen in the introduction of new fallacies and in the very way they are presented in the book.

**Keywords:** Fallacies, sophisms, Port-Royal, dialectic, logic.

**Resumen:** Las teorías contemporáneas sobre las falacias parecen no tener en cuenta una distinción importante entre dos enfoques paralelos vinculados con dos corrientes históricas que se centran en diferentes aspectos pragmáticos de la producción de una falacia. El primero puede decirse *Antiguo*, porque es un legado de la Antigüedad: de acuerdo con este escenario, una sofistería es producida por un sofista que trata de atrapar a una víctima. Este no es el caso con el segundo enfoque, el *Moderno*, para el cual una falacia no es intencional: ahora, el error viene en primer plano y puede ser cometido por cualquiera. Una de las consecuencias es una degradación del rol del sofista antiguo y de su habilidad. Si este segundo enfoque no surgió en la *Lógica de Port-Royal*, este libro es al menos un hito en su surgimiento. Este trabajo muestra que su actitud hacia las falacias es nueva, que es una consecuencia de algunas presuposicio-

nes fundamentales del libro y que su modernidad se puede ver en la introducción de nuevas falacias y en la forma en que se presentan en el libro.

**Palabras clave:** Falacias, sofismos, Port-Royal, dialéctica, lógica.

## 1. Introduction

A quick survey of the contemporary field of studies on fallacies shows several antagonist streams that make it look like an exotic market. Yet, it is oriented around two roughly consensual poles. The first is a definitional principle enhanced by Hamblin's seminal work (Hamblin, 1970): a fallacy is an argument that is fallacious. The second is not theoretical but rather empirical: it is the steady reference to a few prototypical examples, more or less explicitly inspired by Aristotle's works, especially *On sophistical refutations*, and by Locke's so called *ad arguments*. (Aristotle 1955; Locke, 1975, p. 686).

The first pole has the virtue to put aside from the field of fallacies many related products, actions or processes that are sometimes said fallacious – lies, tricks, exaggerations... – and belong to this vague category that English language calls “sophistry”. This minimal consensus on the nature of a fallacy leads most contemporary argumentation theorists to agree that, strictly speaking, these related products are not fallacies, because they lack the basic typical structure of an argument, namely premises and conclusion. Despite the agreement that fallacies are fallacious arguments, there are important and typical sticking points between fallacies theorists. There is no consensus on a more elaborate definition of fallacy, no consensus on the number and the types of fallacies (and then no agreement on a classification), no consensus on the frequency of fallacies (Are they as common as some authors say?), no consensus on the very possibility of a unified theory of fallacies, no consensus on a method to investigate their occurrences. A consequence is that when you are a newcomer in the field, you mostly have to first rely on examples calling to your “intuition”. You are invited to acknowledge that something goes wrong with some examples of arguments, or with their use, and that you can find other examples with the same kind of defect. Fallacies are considered as mistaken or unfortunate reasonings, but we also have no unified theory of bad reasoning.

The second pole is an indeterminate set of prototypical fallacies supposed to be a legacy from the past. They can be said prototypical because you can observe that most theorists who write on fallacies put forward something like a core of basic kinds of fallacies, although they disagree on the extension of this core which can include from a few items to more than ten or even twenty. The number of arguments they hold as fallacious sometimes spreads much further than this vague core of more or less traditional items. A look at the Internet even gives the impression of a race to the highest number of fallacies, and a recent book raises the bid up to three hundred fallacies (Bennet, 2017). This phenomenon can be seen as a consequence of the absence of an official clear-cut comprehensive definition, and of the correlated temptation to give an extensional definition of fallacies. On the other hand, the history of the theories of fallacies is not very well known: we know that it has a few bright zones and that it has a tendency to repetition; but also that it has many dark areas and a tendency to mix up different things and topics. A better knowledge of this history would likely improve this situation, perhaps by putting forward important moments and conceptual distinctions. The question of the intentionality of the occurrence of a fallacy, for instance, is one aspect that should be reconsidered from a historical point of view in order to clarify our perspective on this topic. This paper would like to be a contribution in this direction.

## **2. Ancient and Modern views on fallacies**

The paper main thrust is that you can distinguish two historical streams supporting two different views on fallacies: the first is dominant in the Ancient time, whereas the second emerged and became dominant in the Modern and Contemporary times. The claim is not that all ancient occurrences of a fallacy are of the same type, and all modern items of another type, but that the Ancient view on fallacies mostly focused on one pragmatic aspect and the Modern one on another. It is not either that the Ancient view disappeared with the rise of the Modern one: on the contrary, the Ancient view is still alive and very common among lay people, even if lay people's ideas on fallacies often are rather unclear. The Modern view is mostly dominant in the academic field.

This idea of a dichotomy between an Ancient and a Modern view raises a challenge. Is it possible to ascribe a time and a place to the emergence of the Modern view? This paper gives an affirmative answer: you can ascribe at least a symbolic date and a symbolic book to this turn, just like 1958 and Toulmin's and Perelman's books are symbols of a renaissance in argumentation studies and 1970 is a landmark in the study of fallacies with the publication of Hamblin's *Fallacies*. The proposal made here is that a decisive moment is 1662, the year of the first publication of *Port-Royal Logic* in France.

According to what I call the Ancient view, a fallacy is a tricky argument produced by a clever person to trap a naïve or inexperienced one. Typically, the clever man is a sophist, but I leave open the question whether the so-called Great Sophists of ancient Greece, like Protagoras, Gorgias or Antiphon (Tindale, 2010; De Romilly, 1988) were especially experts and prone to the production of fallacies. Odysseus is probably a more telling example of fallacies maker, just like Euthydemus and Dyonisodore, the two sophist brothers of Plato's *Euthydemus*. The first chapter of Aristotle's *On sophistical refutations* gives no proper names of examples of this kind of sophist: it just associates to the concept of paralogism a typical sophistic character. This lack of individual determination is part of Aristotle's great innovation, namely a move towards more abstraction in the study of fallacies, a move that loosens the link between a specific human character, a punctual verbal interaction and a verbal product – a fallacious argument. Yet, the first page of *On sophistical refutation* maintains a close analogical association between a fallacious character or attitude and a fallacious argument:

That some reasonings are really reasonings, but that others seem to be, but are not really, reasonings is obvious. For, as this happens in other spheres from a similarity between the true and the false, so it happens also in arguments. For some people possess good physical condition, while others have merely the appearance of it, by blowing themselves out and dressing themselves up like a tribal choruses; again, some people are beautiful because they trick themselves out. (Aristotle, 1955)

This point of view sets the Ancient standard about fallacious reasonings which is basically a tricky conversational inferential move, especially in an agonistic dialogue on the model of the *elenchos*. A summarized non

pragmatic verbal version of this approach is still used today, as shown, for instance, in the first definition given by H. Hansen in the *Stanford Encyclopedia of Philosophy*: « An argument that looks better than it really is » (Hansen, 2015). This definition immediately suggests a pragmatic question: for whom does it look better? Can it look better for one and the same person? This question sounds a bit strange. But things get clearer if you restore the Ancient dialogical situation. The argument looks good for the naïve person who grants the mistaken reasoning and then overstates the “goodness” of the argument; it does not look so good for the sophist who has bet on a possible misunderstanding, supposed to lead his interlocutor to an overstatement of the strength of the argument.

You may admire (or despise) the sophist’s skill and be impressed by the risk he takes. But you may also focus not on him, but on his victim and consider that the utterance of the fallacy is just a contingent matter and the most interesting aspect is the mistake made by the one who assents to its overvalued version. Does the victim assent because she does not or cannot see the possibility of the weaker version that the sophist is supposed to perceive? This epistemic divergence is the crucial difference between the two interlocutors: one commits the error, the other does not. Both events can occur in the same exchange. In *The Sophist*, Plato notoriously finally characterized a sophist as someone who masters the art of imitation and the image-making art. He rightly stressed a family resemblance between a fallacy and a lie but did not stress an important difference: the victim of a fallacy does not grant the fallacious argument like the victim of a lie grant the proposition of the liar. The victim of a fallacy is supposed to make the unfortunate inference for herself and to agree that it is good with no other qualification. For her, it does not look “better than it is”.

This focus on the error of reasoning rather than on a possible preliminary trick is an essential aspect of many modern and contemporary definitions like Trudy Govier’s: « A fallacy is a *mistake* in reasoning, a mistake which occurs with some *frequency* in real arguments and which is characteristically *deceptive* » (Govier, 1987, p. 177).<sup>1</sup> Notice that this definition and Hansen’s one are more abstract than Aristotle’s one, in the sense that they disregard any character and verbal interaction in the background of

<sup>1</sup> The italics are mine.

the fallacy. The quasi disappearance of the two extreme Ancient characters, the cunning sophist and his naïve victim, opens the possibility that, deliberate or not, a fallacy can be made by any human being. Since not everybody has the sophist's training or skill and granted that average rational human beings are prone to err because err is human, it is likely that "a mistake in reasoning occurs with some frequency in real argument". In the Modern view, to utter a fallacy is not the privilege of an aristocratic sophist anymore; it has become a sin, a common sin made by ordinary people. Its production has become democratic and impersonal.

We are left with deception. Something like a will to deceive is present in most Ancient texts that draw the reader's attention to something deceptive in a particular reasoning, whereas a typical feature of the kind of definition typical of the modern approach, is that there is no deceptive intention or that it has become a contingent feature. The modern view stresses another aspect: in practice, a fallacy only occurs when someone grants an argument that belongs to a fallacious kind of argument. A preliminary typology of fallacious arguments, perhaps non-exhaustive and non-exclusive, is then necessary to say that mistaken arguments happen "with some frequency". Did Euthydemus and Dyonisodore frequently use the fallacies they used against the young Clinias? They probably did, in the sense that we imagine that they had already used them with other young people and were ready to use them again with other victims. But this frequency is probably not the kind of frequency Govier has in mind when she speaks of "a mistake in reasoning which occurs with some frequency in real argument". The frequency she talks about does not seem to be restricted to the mere repetition or resumption of the same argument, especially by the same person, but rather is the frequent production of similar arguments in different places and times by different persons in different contexts.

You can see a midway between these two approaches. It already emerges in Aristotle's writings and can be found in most medieval writings that stayed faithful to the Philosopher. It can be said logical in the sense that it focuses on the *logos* (what is said) rather than on the *ethos* of a sophist or the *pathos* of a naïve character. In this case, the focus is less on the dialectical interplay between the arguers than on the argument itself which provides part or the whole of the explanation of the way something can go wrong. However, unless you grant the paradoxical view that the same per-

son can make the contradictory recommendation that the argument is at the same time good but not so good, the double assessment that is typical of the Aristotelian traditional definition also requires two distinct points of views about the argument: for instance two different interpretations of what is meant, like in a case of equivocation, or two different sets of implicit premises, or two different arguers with different epistemic backgrounds like in the paradigmatic case of a sophist and his inexperienced interlocutor.

Commonly inspired by Aristotle, most medieval writings on fallacies share his defensive approach: a careful examination of the content and/or of the form of the argument can suffice to show its hidden weakness, the origin of which is traced back to a sophist's maneuvering. So, a full analysis of the whole process requires supplementing the logical analysis with a dialectical analysis leading to a sophist's bad intentions. In his short work on fallacies, Aquinas, for instance, strictly follows Aristotle's idea that there are five ways to ruin an opponent's argumentation (refutation, falsity, paradox, solecism, babbling). He then goes on by saying that he will examine "the ways by means of which the sophist tries to lead his opponent into mistake" (Aquinas, 1857, p. 121). A similar view can be found in Buridan's *Summulae de dialectica* where you can learn how to recognize that an argument is not a genuine syllogism. But here again, the general explanatory background is a dialectical confrontation, and the origin of the fallacy is "the proximate end intended by the sophist, namely, to drive the respondent by the force of his argument into a manifestly unacceptable position" (Buridan, 2001, p. 502).

### **3. Democratization, naturalization and moralization**

The modern democratization of fallacies goes hand in hand with a naturalization and a moralization. By naturalization I mean that the making of fallacies is linked to our human nature. According to the Ancient view, the sophist has an expertise that is not common and this is why he sells it at an expensive price. Yet, he is an optimistic trader: he pretends to believe that anybody can acquire this virtue. In the modern view, you need no special training or expertise: every human being is naturally endowed to produce

fallacies. This naturalized view that is supposed to be common (at least in the English tradition in the study of fallacies) is summarized by an influential author like J. Woods who writes: “fallacies are errors which people in general have a natural tendency to commit, and do commit with a notable frequency [...] They are like bad habits. They are hard to break.” (2013, p. 5) All the key-words of these sentences, *errors, natural, general, habits, hard to break* are at the core of the acronym EAUI that he forged to mean Error – Attractive – Universal – Incurrible. According to him this represents “the traditional conception” (p. 135); according to me, it only represents what I have called the Modern conception of fallacy that did not dethrone the Ancient one, well alive in some places<sup>2</sup>. I will not discuss whether we can say that this tendency is “universal” because it is “natural” or “natural” because it is “universal”, or whether it is “frequent” because it is “attractive” and because it is “incurrible” or conversely. This kind of questions is certainly interesting and deserves a close investigation, but here, the main point that does matter is the contrast with the Ancient view.

What about moralization? In the contemporary view, as exemplified by Woods’ quotation, to make a fallacy is commonly held to be a bad thing. Yet, we can wonder, for instance, whether there is anything bad in a simplistic circular argument like “*p*, therefore *p*”. It will probably be judged stupid, but inoffensive. Woods raises the same kind the question and notes that the B of “badness” could be added to his acronym EAUI since it is part of the “tradition” which assumes that fallacies are bad.

Were they bad for the Ancients? We know that Socrates had sometimes hard words against rhetors, but he also had a remarkably friendly attitude when he discussed with Protagoras, Gorgias and even Euthydemus and Dionisodore, who interested him. If we keep in mind the analogy made at the very beginning of *On sophistical refutations* between, on the one hand, a syllogism and a paralogism and, on the other hand, a beautiful and a cosmetized body, it seems reasonable to conclude that for Aristotle and his friends paralogisms were not good things and sophists not virtuous people.

<sup>2</sup> According to me, a typical example of the vitality of the Ancient view is the very common tendency to suspect one’s opponent of bad faith. As shown, for instance, by many examples of old and more recent books’ titles, it is quite frequent to accuse one’s opponents to be sophists.

Yet, they too discussed with them and were interested in their ideas and in their tricks, and perhaps had fun with some of them. Book VIII of the *Topics* and chapter XV of *On sophistical refutations* provides famous examples showing that Aristotle was not afraid to use sophistic or eristic technics against his opponents. Of course, the development of this ability can be seen as part of the training of the expert dialectician, but the imitation of a bad behavior is not necessarily a bad behavior, just like the imitation of a good syllogism is not necessarily a good syllogism! Even if they sometimes admired the guile or the cleverness of sophists (as we still do), the Ancient authors seem to have condemned the use of fallacies. In any case, it seems that the Moderns were the first to postulate a connection between the badness of fallacies and a presumed badness of human nature. They were the first to root the badness of fallacies into the badness of human nature.

Written around 1830, Schopenhauer's famous essay *The art of being always right* (Schopenhauer, 2017) establishes a most explicit link between these two aspects. His argument is based on the vitality of the human will, especially the will to be right at any rate. So, contrary to an author like Douglas Walton (1998) who mainly conceives an eristic attitude in the context of a specific kind of dialogue – his “eristic dialogue” – Schopenhauer thinks that an eristic attitude is underlying any kind of dialectical (agonistic) dialogue: we want to be right at any rate and this naturally leads us to the use of fallacies. This use may not be the result of a “sophisticated” previous calculation but rather, according to Schopenhauer, a consequence of the innate badness of human nature since “with most men, innate vanity is accompanied by loquacity and innate dishonesty. Men speak before they think; and even though they may afterwards perceive that they are wrong they want it to seem the contrary” (Schopenhauer, 2017, p. 24). A contemporary interpretation of some fallacies, illustrated by the works of psychologists like Kahneman or Gigerenzer, shares Schopenhauer's naturalistic view but does not share his pessimism and its consequent moralization of fallacies (Kahneman, 2011; Gigerenzer, 2007). According to this view, they could illustrate a natural tendency “to speak before thinking” or, more precisely, a spontaneous cognitively economic slant to speak fast but sometimes a bit wrong instead of taking the time to think slowly but more surely. Yet, it is not certain that this kind of interpretation can account for all the different kinds of fallacies.

#### 4. *Port-Royal's Logic's* breakaway

Schopenhauer is not the first author to support a systematic naturalization and moralization of fallacies. The pessimistic orientation of his short essay has at least one major predecessor, *Logic or the Art of Thinking*, which may not be the first text that goes beyond the Ancient approach to fallacies, but is certainly a major milestone in the new approach to this phenomenon.

Arnauld and Nicole's book, better known as *Port-Royal's Logic*, was first published in France in 1662 (Arnauld & Nicole 2014, 1996).<sup>3</sup> Several aspects of its publication provide important information for the history of the theories on fallacies. The first publication went through several steps. About two years before, a manuscript existed; but several corrupted copies hastened the need for an official publication. The printed book was a largely modified and enhanced version of the manuscript which paid no attention to fallacies. So, the two chapters on fallacies, among other additions, seem to have been written for the first edition. We don't know for sure who wrote what, but it seems that the manuscript has been written by Antoine Arnauld who belonged to a very influential family of theologians and of lawyers close to the Parliament. Arnauld's father was already a state counselor. Most of the writing of the book posterior to 1660 is ascribed to the other author, Pierre Nicole, a priest who also came from a family of lawyers but that did not belong to the first political circles. Nicole, who also wrote a very influential book on ethics, likely wrote the chapters on fallacies.

A new edition was published two years later, in 1664. Changes were introduced, especially in the second chapter on fallacies, the most innovative one, which was totally reorganized. Other modifications were introduced in later editions, especially in 1683, but the chapters on fallacies stayed unchanged; so, the new approach to this topic approximatively bloomed between 1660 and 1664.

*Port-Royal's Logic* is a textbook on Logic, but it is also much more than a standard textbook and this is probably one of the reasons why many his-

<sup>3</sup> I refer to the most recent French edition of the book (Descote). It is based on the 1664 edition but also includes the chapters of the 1662 and 1683 editions which present important differences. Unless specified, I quote from Buroker's English translation published in 1996 and based on a recent French edition of the 1683's edition.

torians of Logic felt embarrassed by its status. It is sometimes very explicitly influenced by the thoughts of contemporary philosophers, like Descartes and Pascal, who were very critical about Logic and Dialectic and their traditional teaching, especially the practice of disputation. Yet, this contempt for traditional logic is an attitude that had already become common at this time. Just like Descartes, Pascal or Gassendi, *Port-Royal's Logic* scorns the sterility of dialectic because, among other reasons, it allows at best the discovery of what is already known by one of the arguers. It lacks the virtue to discover new truths, the supreme virtue that all these mathematicians found in geometry. The authors of the *Logic* also belonged to a reaction movement against Aristotle: although they recognized the importance of his achievement in Logic, they doubted its practical and didactical interest. This is why, in their own book, they explicitly play down the interest of most of the chapters on classical syllogistic which they judged useless and they try to summarize them as much as possible. According to them, these chapters could only be useful to train the mind of young people who would not find them too boring.

The book is divided in four parts: on ideas, on judgment, on reasoning (which includes the chapters on fallacies) and on method. A look at the evolution of the third part in the various editions confirms not only this tendency to eliminate or summarize the most classical logical topics, but also an opening to new or marginal topics. Fallacies, for instance, are not a new topic but usually were one of the last chapters, if not the last one, in previous treatises on Logic. In *Port-Royal's Logic* they will finally become an important and original part of the third section "On reasoning". They are a good example of a general tension of the book between tradition and modernity and we can understand the embarrassment of historians of Logic in front of a book claiming to teach a general "Art of Thinking" instead of an art of reasoning or, as far as Dialectic is concerned, an art of debating. According to our disciplinary categories, the book deals as much with cognitive Psychology and normative Epistemology as with Logic. In the second "Preliminary discourse" that opens the 1664 edition, the authors explicitly claim this hybrid style and a moral goal that is an essential aspect of the chapters on fallacies, especially the second which is also the most innovative.

There is a strong connection between this ethical aspect and the politi-

cal and religious background of the publication of the *Logic* whose two authors, like their friend Pascal, were leading figures of the Jansenist movement which was more a fuzzy movement than a party organized around precise theoretical claims. Jansenists did not claimed to be Jansenists: only their opponents dubbed them so. Jansenists introduced themselves as good Catholics, but according to their most famous adversaries – the Jesuits – their very strict reading of Augustine made them suspect of a heresy associated with Protestantism. They thought that the Fall of man made him unable to be good by himself and that any good action would require God’s grace: in practice, man cannot freely choose between good and evil. So, in a quite different intellectual context, Jansenists shared the same pessimistic presupposition as Schopenhauer about human nature: man, any man, bears an innate badness that can be said rooted in his nature. As expected, this presupposition has dramatic consequences on his use of reason which, then, has a strong disposition to wander astray. *Port-Royal’s Logic* is said to be a Cartesian work, but its authors have a much more mitigated opinion than Descartes about the natural goodness of “common sense” that Descartes notoriously identified with reason in his *Discourse on method*.

A remarkable feature of *Port-Royal’s Logic* is the structure of its contribution on fallacies. The first of the two chapters on this topic can be said rather conservative whereas the second is more innovative and illustrates the turn between what I have called the Ancient and the Modern views on fallacies.

The only distinction made by the 1662 edition between the two chapters is that the first one deals with “the bad reasonings which are called sophisms or paralogisms”, while the second one is about sophisms<sup>4</sup> “committed in everyday life and in ordinary discourse”. In the 1664 edition, the second chapter explains that the focus of the first chapter was “scientific matters”, which are not important because “the main use of reason is not in these sort of subjects, which have little to do with the conduct of life and in which it is less dangerous to be mistaken”. The ethical priority of the second chapter is stated very clearly: “this plan [i.e. the complete indication of the mistaken uses of reason] would require a separate work that would include practi-

<sup>4</sup> *Port-Royal Logic* never uses the old French word “fallace” that was still common to speak of bad reasoning at the beginning of the XVII<sup>th</sup> century.

cally all of ethics, [so] we will be satisfied here to indicate generally some of the causes of these false judgments that are so common among people. We have not made it a point to distinguish false judgments from unsound arguments, and we have paid equal attention to the causes of each" (p. 203).

What are the main differences between the first "scientific" chapter on fallacies and the second one, much more important, according to the authors, because of this ethical priority of everyday life? In the first chapter we find a revised version of the traditional account of "Aristotelian" fallacies. Furthermore, we find the same critical attitude towards the Aristotelian legacy as in many other chapters of the book: Aristotle's intellectual achievements are impressive, but he is just a man among others and his philosophical positions are open to a critical discussion. This justifies the revision of his views on fallacies and its consequences: the division between fallacies *in dictione* and *extra dictionem* is dropped and some fallacies are also dropped because they are "so obvious that they are not worth mentioning". On the other hand, two non-Aristotelian fallacies are added to the list: the first one, imperfect enumeration, seems to be inspired by Descartes' fourth rule on method (pay attention to make exhaustive enumerations), the second is uncomplete inductions that may lead to mistakes, for "induction alone is never a certain means of acquiring a perfect science". All these changes lead to a list of nine "scientific" fallacies. But, in what sense are they "scientific"? Only because they do not bear on daily life matters? Most of the examples used by *Port-Royal's Logic* are borrowed from the positions of major opponents to its authors, namely Aristotle, Sceptics, Atheists and Stoics (including Cicero), Epicureans (especially Gassendi). If we consider that Science, Philosophy and Theology can be broadly identified because they are "elevated topics" and, then, far from daily life, the fallacies discussed in this chapter can be said scientific. Yet, all its examples can hardly be said scientific as shown by the discussion of the *secundum quid* fallacy which uses the example of "a peasant, who never having seen houses covered with anything but thatch, and having heard that in cities there are no thatched roofs, would infer from this that there were no houses in cities". You can object that this argument is just a comparison showing the stupidity of a genuine philosophical argument against God's existence, reported in Cicero's *De Natura Deorum*. It argues that God cannot be said supremely intelligent or virtuous, since he never faces the circumstances,

typical of human life, that require the use of intelligence or virtue, for instance to choose between good and evil. The argument of the peasant nevertheless shows that the “scientific” character of the fallacies of the first chapter is at least dubious.

This does not affect the distinctive presumption that federates the fallacies of the second chapter: the corruption of human nature and its consequences on human reasoning. According to *Port-Royal's Logic* this corruption has two possible origins – internal and external - that justify distinguishing two categories of ordinary fallacies and, accordingly, the division of the chapter into two subchapters. The first one registers about nine fallacies which are different faces of “self-love, interest and passion”, the “internal” origin of fallacies. They are not always very different one from the other, and this is why they are not always easy to distinguish and to count. In this category we find arguments ranging from “I am right, therefore you are wrong” to the obsequious servility of “persons who haunt the court” and then drop the vulgar spirit of contention – itself at the origin of ordinary fallacies – for flattery leading them to approve any argument. The second broad category of ordinary fallacies has an external origin: it concerns “fallacious arguments arising from the objects themselves”, illustrated by about seven examples. These fallacies, however, are not immediate consequences of a possible obscurity of objects: here again the human will is at work in the background, pushing an insufficiently enlightened mind to draw hasty conclusions about an object allowing confusion. The new fallacies introduced by this subchapter range from wrong conclusions based on an insufficient attention paid to the situation, to arguments relying on the authority of a person, typically the arguer, or his good (or bad) manners. The claim made by the whole chapter of an intimate connection between bad reasoning and natural psychological human tendencies opened the new approach to fallacies. As shown by most examples, less attention is paid to the formal structure of the argument or to the traditional dialectical interplay between arguers than on material, psychological or institutional aspects of the context of use of the argument.

## 5. Conclusion

I have argued that the contemporary field of fallacies studies is based on two mixed traditions focusing on different pragmatic aspects of the production of fallacious arguments. The Ancient approach mostly focuses on the use of tricky arguments by a clever character, typically a sophist, aiming at fooling an opponent who is supposed not to be very clever. The Modern approach is democratic in the sense that anybody can (and do) produce fallacies, deliberately or not. Now, the leading character is not a sophist but any victim of a fallacy. In this approach, the production of a fallacy is a process that is natural because it is rooted in human “nature”. For some supporters of this approach, a moral connotation links the badness of fallacious arguments to a presumed innate moral badness of human beings.

I have suggested that a decisive moment in the emergence of the modern democratic approach to fallacies, perhaps its very birth, is the publication of *Port-Royal's Logic* in 1662. A significant feature of this path breaking work is its long and revolutionary contribution to the study of fallacies, divided in two chapters. Although the first one stays more or less faithful to the Aristotelian tradition, it also includes new items. The second chapter has a strong moral orientation: it gives a list of typical fallacious arguments which are supposed to show the perverse influence of an innate human badness on the everyday practice of reasoning and arguing.

### Works cited

- Aquinas, Thomas. *Opuscles de Saint Thomas d'Aquin*. Transl. M. Vadrine, M. Bandel, M. Fournet. Paris: Louis Vives, 1857.
- Aristotle. *On sophistical refutations*. Transl. E. S. Forster. Harvard: Harvard University Press, 1955.
- Arnauld, A. & Nicole. P. *La logique ou l'art de penser*, ed. Dominique Descotes. Paris: Honoré Champion, 1662/2014.
- Arnauld, A. & Nicole. P. *Logic or the art of thinking*, ed. Jill V. Buroker. Cambridge: Cambridge University Press, 1662/1996.
- Bennett, Bo. *Logically fallacious*. Sudbury, MA.: Archieboy Holdings, 2017.
- Buridan, John. *Summulae de Dialectica*. New-Haven: Yale University Press, 2001.

- De Romilly, Jacqueline. *Les Grands Sophistes dans l'Athènes de Périclès*. Paris: Editions de Fallois, 1988. English transl. by Janet Lloyd. *The Great Sophists in Periclean Athens*. Oxford: Clarendon Press, 1992.
- Gigerenzer, Gerd. *Gut feelings*. London : Allen Lane, 2007.
- Govier, Trudy. *Problems in Argument Analysis and Evaluation*. Dordrecht-Holland: Foris Publications, 1987.
- Hamblin, Charles. *Fallacies*. London: Methuen & Co, 1970.
- Hansen, Hans V. Fallacies. *Stanford encyclopedia of philosophy*. <https://plato.stanford.edu/entries/fallacies/>. Access 25 December 2017.
- Kahneman, Daniel. *Thinking fast and slow*. London: Allen Lane, 2011.
- Locke, John. *An Essay concerning Human Understanding*. P.H Nidditch (Ed.). Oxford: Clarendon Press, 1991.
- Schopenhauer, Arthur. *The art of always being right*. London: Gibson Square, 2017.
- Tindale, Christopher. *Reason's dark champions*. Columbia: University of South Carolina Press, 2010.
- Walton, Douglas. *The New Dialectic*. Toronto: University of Toronto Press, 1998.
- Woods, John. *Errors of reasoning: Naturalizing the Logic of Inference. Studies in Logic Series (45)*. London: College Publications, 2013.