# Moro's Fallacies: between paralogisms and sophisms

The book "Falácias de Moro: Análise Lógica da Sentença Condenatória de Luiz Inácio Lula da Silva" ["Moro's: Logical Analysis of the Sentence of Luiz Inácio Lula da Silva"], authored by Euclides Mance, philosopher, is to be released in Brazil.

Mance is Professor of Logic and of the Philosophy of the Scientific Method, former professor of Federal University of Paraná and currently a member of the general coordination of the Institute of the Philosophy of Liberation.

The 276-pages book, written in Portuguese, will be launched in a few days by IFIBE, and is now available for access from

https://drive.google.com/file/d/1BsSkXPLZltZBe3dnNsmMJZyoanfxPwy7/view

Logic is the science that studies the relation of consequence between propositions, responsible also by theories of correct argumentation in the domains of common and scientific language. Particular sciences will have their specific rules for their proper jobs; but, as much as their calculations have to be made according to the rules of arithmetic, their arguments need to be valid consequence relations, otherwise they will only be instruments of rhetoric lacking in rationality. A legal judgement that intends to be fair cannot ignore, thus, the requirements of valid and correct inference, whether of an abductive, inductive or deductive nature.

In his book, Prof. Mance presents a well-reasoned logical analysis of the reasoning and argumentation used by Judge Sérgio Moro in the sentence issued by him, concerning the process in which the former President Lula is defendant, in the case of the triplex apartment in Guarujá, São Paulo. The philosopher studies, in detail, the long sentence - which seeks to prove the guilt of the defendant and to justify his condemnation - showing that the use of several fallacious inferences disqualifies the conclusions obtained.

In the Initial Considerations, the author, in a didactic way, presents the definition of the concept of fallacy - error of reasoning, argument without any formal guarantee that the conclusion follows from the premises; and presents some basic logical notions, such as conditional and biconditional, discussing when a condition is necessary, when it is sufficient, and when it is necessary and sufficient. The correct understanding of the meaning of these notions, among others, is fundamental for those who intend to correctly derive conclusions from hypotheses or true premises.

Mance also points out that, when committed involuntarily, the fallacy is referred to as a 'paralogism', but when purposely deployed in a reasoning with the intention to confound the interlocutor, it is called a 'sophism'. The Sophists were itinerant teachers and intellectuals who frequented Athens and other Greek cities in the second half of the fifth century before Jesus Christ, teaching the art of influencing people through rhetorical persuasion. From there, since 25 centuries ago, the practice of sophistry has been understood as seeking to influence

citizens in politics and in other areas, through deceptive persuasion.

In the sequence the book is divided into two parts. In the first chapter, ten relevant parts of the convicting sentence are discussed, where the author finds, and analyzes with property, fallacies of various kinds: Appeal to Common Belief; Circularity; *Argumentum ad Hominem*; *Non Sequitur*; Appeal to Prescience, or Fallacy of the Possible Worlds; Appeal to Possibility; Equivocation; Shifting the Burden of Proof.

In the second part, the philosopher deepens his analysis on the implications of the discussed fallacies, and how they are articulated in the judge's argumentation to justify the conviction.

In our quality of university professors and researchers in the area of Logic, we decided to publicly express our support and agreement with the analysis and conclusions by Professor Euclides Mance. Indeed, we are convinced that Mance demonstrates, with perspicacity and competence, that Judge Sérgio Moro has incurred in innumerable logical errors in his reasonings and argumentations, committed misconceptions in logical applications of inference rules, in addition to having taken for granted multiple assumptions without strict veracity criteria.

In short, the sentence of the judge surprises us, and haunts us, as professionals, with the series of unacceptable arguments it presents.

It is in the condition of members of the community of an area of knowledge in which Brazil stands out in the international academic scenario, that we believe our duty as citizens and professionals to contribute to the justice of our country, in order to prevent any defendants from suffering unjust convictions, based on conclusions of arguments whose fragility, widely denounced since ancient Greeks, is widely known.

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