

## IS LOGIC USEFUL FOR DOING PHILOSOPHY?

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**Abstract.** Providing some basic arguments and a historical context, I introduce the special volume *What can we do in Philosophy using Logic?* In this introduction, I discuss whether logic is useful for understanding, evaluating or building arguments in philosophy. I argue that, although there has been research supporting the idea that logic can serve as a philosophical instrument, this has not shown completely its utility. This is the reason I offer to discuss the importance of logic in philosophy, trying to show that philosophers employ logic when they work with arguments and also obtain worth benefits by applying it.

**Keywords:** logic • philosophy • arguments • formalization • logic proofs

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From ancient to nowadays, there is the belief that we can use logic as an instrument to deal with a diverse type of arguments in philosophy. If we want to analyse, evaluate or produce sound arguments, logic can help us to reach this goal successfully.

For example, Aristotle (1889) designed logic syllogisms to enhance philosophical arguments, no matter what topic was discussed. Gottlob Frege (1967), Bertrand Russell (1956) and Ludwig Wittgenstein (1953) also provided quantificational operators, rules of inferences and transformation, and truth-tables looking for obtaining an ideal language, which was able to reflect the structure of thought and reality. All these logic structures were also and have been used for translating philosophical arguments from natural language into symbolic logic in order to state or found intrinsic relations between premises and conclusions.

As the years were gone, there were also important contributions to other aspects of logic, which were related to deontic, epistemic and temporal discourses. These new logic devices were used for understanding contents where social norms, knowledge or time were involved. Two classic examples of philosophers who developed this kind of logic were Saul Kipke (1963) and Arthur Prior (1957), providing logic operators to deal with modal arguments.

Clearly, it is and has been debatable whether logic is an instrument that can help us to work in philosophy. For instance, George Wilhelm Friedrich Hegel (2007) supported the belief that we do not need an instrument to acquire any kind of knowledge,



no matter if it is related to science, ethics, aesthetics or religion. According to Hegel, we just need to “jump to the swimming pool and learn to swim”. Friedrich Nietzsche (2001) was another philosopher who reacted against any kind of instrument to obtain trusted information. He claimed that logic is a political instrument to obtain social and psychological control over population.

Notwithstanding some philosophers’ objections, there are and have been different supportive examples along the history showing that logic is a good instrument to work in philosophy. A basic and practical one can be drawn from the subjects the departments of philosophy offer in the world. From North America<sup>1</sup> and Latin America<sup>2</sup> to Europe<sup>3</sup> and Asia,<sup>4</sup> logic is part of universities’ curriculum, being a fundamental subject in philosophical education, as it helps students to deal with the arguments they learn or work.

Without a doubt, departments of philosophy could merely lecture logic in a historical way, as part of the subjects some scholars are interested in, which is really a worth issue. Nevertheless, if this were the main aim, the knowledge and skills that students acquire would be poor and worthless. To put it in different words: all scientific and social disciplines look for outstanding instruments to obtain trusted information. Philosophy is not out of this aim. As the rest of disciplines, philosophy counts with an instrument to guarantee reliance information. Logic, including all non-monotonic logics, is this instrument. Hence, we learn or lecture logic as a device that helps to understand and evaluate arguments throughout proofs that guarantee their validity, which is quite a virtue.

There are, therefore, several books where we can learn basic or advanced logic resources. A considerable number of them, however, do not use philosophical arguments when they teach students to translate arguments from natural language into symbolic logic. They just use examples that are not directly related to philosophical subjects, such as Irving Copi (1973). Others work partially with philosophical arguments, like Copi (2014). Thus, this does not let to show and get the idea that logic is a proper instrument to work in philosophy.

Recently, Michael Bruce and Steven Barbon have tried to tackle the problem mentioned above, selecting one hundred philosophical arguments from the western tradition, passing from philosophy of religion to philosophy of mind, in their compendium book *Just the Arguments* (2011). With them, a group of scholars have shown that we can use logic to systematize and give proofs to any philosophical argument, including those arguments provided by philosophers who were against logic, such as Hegel and Nietzsche.

However, Bruce and Barbon have left a gap: they have not offered a logic proof for each argument they have worked on, at least not in the standard manner. It is true that they have given the structure of the arguments in natural language. They have even supplied a symbolic logic formalization when they have structured the

philosophical arguments. Nevertheless, they have not come up with a logical proof for each argument. This would have been useful not just for verifying the validity of each argument, but also for showing that we can obtain important philosophical results using logic. Furthermore, they have not shown any philosophical consequence after structuring and formalizing each argument. The purpose of this special volume is to mend this gap. The main aim is to show two basic ideas: philosophers use logic as an instrument when they work with arguments and they obtain worth benefits when they apply logic in philosophy.

The volume is built in four sections. In section **I. Philosophical Arguments, Formalization and Proofs**, Héctor Hernández-Ortiz, José Martínez-Fernández and Sergi Oms, Pedro Ramos Villegas, Juan Diego Moya Bedoya, and Vincenzo Ciccarelli formalize five classic arguments in philosophy, providing their logic proofs and discussing some philosophical consequences. In section **II. Some Uses of Logic Devices in Philosophical Debates**, Ludovic Soutif and André Pontes, Rafael Testa, Lorenzo Boccafogli, Alba Massolo and Hugo Enrique Sánchez López discuss some applications of logic devices in current philosophical debates. In section **III. Discussing Logic Devices for Philosophical Uses**, Lourdes Valdivia Dounce, Víctor Cantero-Flores, Mariela Rubin, Paula Teijeiro and Luis Estrada González focus on some apparent logic limitations, trying to evaluate if we can trust in logic as a good instrument when we do philosophy. Finally, André Leclerc and Dirk Greimann show in section **IV. Other Logic Resources by Doing Philosophy** a discussion on other logic devices which can appear long away from classic logic, intending to show that, although logic has different faces, it can be useful in different discourses.

Thus, there are seventeen papers discussing different aspects of the uses of logic in philosophy. Although we aspire to reach scholars interested in discussing the importance and relevance of logic when we do philosophy, this volume can also be of interest for undergraduate, graduate, and young researchers who can find a utility in logic formalization.

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## Notes

<sup>1</sup>For example:

<https://cas.nyu.edu/academic-programs/bulletin/departments-and-programs/department-of-philosophy/course-offerings.html>.

<sup>2</sup>For instance: <http://colegiodefilosofia.filos.unam.mx/inicio/acerca-del-colegio/plan-de-estudios-2/>.

<sup>3</sup>As an example:

<https://www.lse.ac.uk/study-at-lse/Undergraduate/degree-programmes-2024/BSc-Philosophy-Logic-and-Scientific-Method>.

<sup>4</sup>An example: <https://english.bnu.edu.cn/schoolsdepartments/byx/113278.htm>.

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