https://doi.org/10.46344/JBINO.2025.v14i03.18

LOGIC IN PHILOSOPHY

Nida tabassum khan [1]
Department of Biotechnology, Faculty of Life Sciences & Informatics, Balochistan University of Information Technology, Engineering and Management Sciences, Takatu Campus, Airport Road, Quetta, Balochistan

ABSTRACT

Logic, derived from the Greek word "logos," which can mean word,thought,idea,argument, account,reasonor principle, is the study of reasoning or the standards and guidelines of reasonable inference and proof. It makes an effort to differentiate between sound and flawed reasoning. In a nutshell, logic is the study of the fundamentals of sound reasoning. "New and necessary reasoning" is how Aristotle described logic; it is "necessary" because its conclusions are unavoidable, and "new" because it enables us to learn things we do not already know.

KEY WORDS: Logic; Knowledge;Inference; Formal; Informal

[1] nidatabassumkhan@yahoo.com

INTRODUCTION

Using both the analysis of formal systems of inference and the analysis of arguments in common language, logic examines and categorizes the structure of assertions and arguments [1].It deals only with statements that have the potential to be true or false, known as propositions (declarative sentences used to make an assertion as opposed to questions, instructions, or words expressing wants) [2].It is unaffected by the psychological mechanisms underlying thought, feelings, visions, and similar experiences. It covers core topics such as the study of fallacies and paradoxes, as well as specialized analysis of reasoning using probability and arguments involving causality and argumentation theory [3].

Logical systems should have three things:

- Consistency (which means that none of the theorems of the system contradict one another) [4].
- Soundness (which means that the system's miles of proof will never allow a false inference from a true premise) [5]
- Completeness (which means that there are no true sentences in the system that cannot, at least in principle, be proved in the system) [6].

Logic is not the psychology of reasoning: The former discipline is logic, which instructs us on how to think correctly if that is our goal. Whether or if people actually adhere to these guidelines for sound thinking is an empirical question unrelated to logic [7]. **The principles of logic**: Although there are numerous such rules, the primary ones that we learn in logic are those that control the validity of arguments regarding whether or not specific conclusions flow from presumptions [8].

Types of logic: Informal logic is often used to mean the same thing as critical thinking. Sometimes it is used to refer to the study of reasoning and fallacies in the context of everyday life [9]. Using logic and logical reasoning outside of a formal context is referred to as "informal logic [10]. Arguments in daily life are analysed and evaluated using informal logic. Informal logic is generally regarded as a substitute for formal or mathematical reasoning. They go by the names informal logic and critical thinking as well [11].The idea that logic's methods might be used to understand and improve thinking, reasoning, and argument in contexts that are relevant to daily life such as public discourse and debate, education and intellectual exchange, interpersonal interactions, law, medicine, and other professions, has often been fostered by the study of logic [12]. Informal logic aims to construct a logic suitable for this purpose. It combines explanations of argument, evidence, proof, and justification with an instrumental perspective that emphasizes their utility in the study of actual disputing [13]. Informal logic is an effort to create a system of logic that may be used to evaluate, analyse, and enhance every day (or "daily language") thinking. It crosses paths with efforts to comprehend such thinking from the perspectives of formal logic, cognitive

psychology, philosophy, and a variety of other fields [14]. Moreover, most research in informal logic concentrates on the reasoning and argument (in the premise-conclusion sense) one encounters in interpersonal communication, advertising, political discourse, legal argument, and the social commentary that distinguishes newspapers, television, the Internet, and other forms of mass communication [15]. Formal logic is mainly concerned with formal systems of logic. These are specially constructed systems for carrying out proofs where the languages and rules of reasoning are precisely and carefully defined [16]. Logical conclusions are drawn from premises that are known or presumed to be true using formal logic. Different procedures are used by different types of formal logic to-transform claims made in plain language into formal representations. After the reasoning is articulated in a formal language, it can be assessed for precision and employed to derive conclusions [17, 18]. The intricacies of natural language are beyond the scope of any logical framework. Consequently, informal logic can be used to evaluate ideas that are outside the purview of formal logic [19]. The formal logic system was developed by mathematicians and philosophers as a set of rules for proving or disproving statements. Furthermore, the goal of formal logic is to assist us in creating sound arguments (or proofs) and evaluating the soundness of others' arguments (or proofs) [20].

Conclusion

Studying logic is important because it teaches people how to think clearly and concentrate so they can solve problems logically. One can make more reasonable decisions if they can develop their logical reasoning. An individual can adjust and make wise decisions by applying reasoning. Learning logic is essential because it develops critical thinking skills. It is via critical thinking that we can evaluate and improve our capacity for sound judgement. It gives us the ability to walk into almost any circumstance and understand the logic of whatever is going on there. It gives us a method to keep evaluating ourselves in order to gain knowledge from fresh encounters. Thus, critical thinking gives us the foundation for a "rational and reasonable" emotional existence by helping us to create sound beliefs and judgements.

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