

The Role of logical Thinking in Daily Life

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Abstract

This paper aims to show the importance of logical thinking in daily life- it is important to think logically in everyday life. Logical thinking is very important because it can help our reasons to generate creative ideas. Descriptive method and evaluative methods will be used in this paper. Research principle is deduction. The contribution of this paper is to become a good life and will point out what logical thinking is and will explain the relationship between logic and other areas of human studies.

Keywords: Logical Thinking, Right Decision, Good Life, Reasons

INTRODUCTION

The purpose of logic is to discover the criteria that can be used to test arguments for correctness. This point of view is found in Irving M.Copi's "Introduction to Logic". Logic lays down the law of thought as the science of logical thinking for all human beings.

Logical thinking can be defined as the act of analyzing a situation. He uses a lot of logical thinking such as **Arguments, Contradictions, Dilemma** in our daily life. Logical thinking is useful for acquiring knowledge. Logic helps us to know the difference between what is sound or reliable and what is unsound or unreliable. It is similar to critical thinking. Logical thinking means it is a systematic, scientific, and sound. Logical thinking uses needs reasoning skills to objectively study any problem.

Logic is the science of argumentation and reasoning. It is derived from the Greek word "Logos" which means reason or to think. So, logic is the "art of reasoning" or "art of thinking". There are in human's mind always thinking and judging. Whatever he thinks and reason, he expresses it in language and this language is only the means to logic. Traditionally logic is the branch of philosophy and sub-branch of axiology which recognizes its three fundamental values; truth, goodness and beauty. Logic is the study of one of its values i.e. principle of "truth". Truth is the attribute of thought and thought is the crux of argumentation. Not every thought is logical, only those thoughts are logical that are expressed in the form of propositions. Logic is the science of truth and always protects us from committing fallacies.

Logic is the epitome of philosophy. Without logic, philosophy is incomplete. Logic is in our thoughts, which we express in languages. Aristotle credited to be the founder of logic. He wrote his work "Organon" in Greek which when translated means "tool" or "instrument". Thus, logic is the tool or instrument which tries to distinguish between "truth and falsehood", correct and incorrect; "valid and Invalid". Sometimes the science of logic means to explain things with clarity and validity which everyone can understand easily. Logic deals with premises, arguments and inferences and tries to study inductive and deductive reasoning.

Definitions of Logic

Dewey and Stabbing: Reasoning is a reflective thinking.

Aldrich: Logic is the art of reasoning.

Averroes: Logic is the tool for distinguishing between the true and false.

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Scope of Logic

The Following points, are highlighted as the scope of logic.

1. Logic is the science, which distinguishes between true and false.
2. Logic deals with various intellectual processes like; thinking, reasoning, understanding, reflection and judgment.
3. Logic studies inductive, deductive reasoning.
4. Logic studies about premise, inference, propositions and arguments.
5. Logic deals with, how to avoid fallacies and develop critical thinking.
6. Logic checks the validity and invalidity of various arguments.

Nature of Logic

Logic is the branch of philosophy concerned with analyzing the patterns of reasoning by which a conclusion is properly drawn from a set of premises, without reference to meaning or context. Logic is the science that investigates the principles governing correct or reliable inference. Logic is a systematic study of valid reasoning.

Human knowledge is obtained from two sources, perception and conception (reasoning). Perceptual knowledge is obtained through our sense- organ- eyes, ears, nose, tongue and body. But if he had to rely on knowledge obtained through the senses alone, it would be very limited especially for human beings. But human beings have the advantage of a mind that can think and reason. Human beings now possess a store of knowledge.

Critical Thinking and Logic

Critical thinking is not just thinking since it involves analyzing information and identifying logical links between ideas. It is not about merely memorizing and recalling facts; instead, a critically thinking person relates new facts to the already existing knowledge and uses new information to make rational decisions and predict possible consequences. Furthermore, a critical thinker can identify and evaluate arguments in other people's speech, as well as find inconsistencies between them and common logical fallacies. At the same time, a critical thinker is able to demonstrate valid logical reasoning in constructing his or her own arguments.

Critical thinking is based on logic, which is the study of correct reasoning principles. Logic studies the process of argumentation that is, constructing valid arguments to support a particular idea. This process includes taking a certain position, making claims that reflect it, and supporting the claims with reasons backed up with evidence. Argumentation is used to persuade someone, explain something, reveal the truth, and make inferences.

Logic uses two methods of reasoning: deductive reasoning and inductive reasoning. Deductive reasoning means making a specific conclusion based on general premises. Inductive reasoning, on the contrary, involves making a generalized conclusion based on specific premises. Logic is also divided into two categories: formal and informal logic. Formal logic uses deductive reasoning and is focused on the form of arguments rather than their content. It means that formal logic is not concerned with the truthfulness of arguments; rather, it checks whether the structure of the argument is valid or invalid. Formal logical arguments follow such rule: they have at least two premises, the first of which marks a formal logical argument, and how its validity is defined. In contrast, informal logic uses inductive reasoning and is focused on assessing to what extent evidence is weighty and relevant. Sometimes, informal arguments can be translated into formal arguments to check the validity of their form.

Kinds of arguments

Argument

It is a piece of reasoning which is made up of at least one premise and a conclusion.

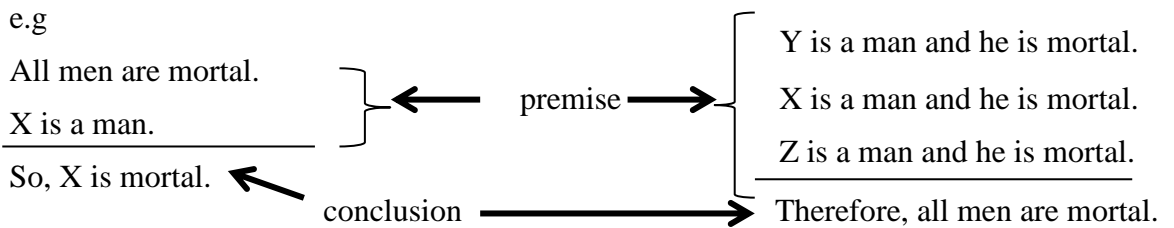
A is a greater than B. So B is smaller than A.

Argument Form

A is a greater than B. (premise)
So B is smaller than A. (conclusion)

Premise and Conclusion

A premise is a statement that is used as an evidence for the conclusion. And a conclusion is a statement which is derived from the given premise or premises.



Mixed Syllogisms

Furthermore, we can study the Mixed syllogisms. There are three kinds of Mixed syllogisms. There are,

- Mixed Disjunctive Syllogism
- Mixed Alternative Syllogism
- Mixed Implicative Syllogism

Mixed Disjunctive Syllogism

Mixed Disjunctive Syllogism has the disjunctive proposition as its major premise. The minor and the conclusion either affirm or deny the constituent disjuncts of that premise. The rule for the validity of Mixed Disjunctive Syllogism is “Affirm one disjunct in the minor premise and deny the other in the conclusion.”

Symbolic Form;

~ (M. P)
 M
∴ ~ P Valid M.P.T. (Modus Ponendo Tollens)

Mixed Alternative Syllogism

This has the alternative proposition as its major premise. The minor and the conclusion either affirm or deny the constituent alternant of that premise. “Deny one alternant in the minor premise and affirm the other in the conclusion”.

(p v q)
 ~ q
∴ P Valid M.P.T. (Modus Tollendo Ponens)

Mixed Implicative Syllogisms

This is an argument in which the major premise is a hypothetical or conditional proposition. The minor and the conclusion either affirm or deny the antecedent or consequent of that major premise. “One rule that affirm the antecedent in the minor premise and affirms the consequent in the conclusion”. Another rule is that deny the consequent in the minor premise and deny the antecedent in the conclusion”.

Symbolic Form;

$$\begin{array}{l} p \supset q \\ P \\ \hline \therefore q \quad \text{Valid M.P.P. (Modus Ponendo Ponens)} \end{array}$$

$$\begin{array}{l} p \supset q \\ \sim q \\ \hline \therefore \sim p \quad \text{Valid M.T.T. (Modus Tollendo Tollens)} \end{array}$$

Inductive argument

In inductive argument, premise asserted more than what is inferred in conclusion. This is why inductive argument is based on probability and observation. Inductive argument claims to support its conclusion only with some degree of probability.

For example

Crows in Myanmar are black.

Crows in India are black.

Crows in Asia are black.

Therefore, all crows are black.

Deductive argument

Deductive arguments are evaluated based on validity and invalidity. A deductive argument makes the claim that its conclusion is supported by its premises conclusively. When the claim is made that, the premises of an argument (if true) provide incontrovertible grounds for the truth of its conclusion. That claim will be either correct or incorrect. If it is correct, that argument is valid. If it is not correct, the premises when fail to establish the conclusion irrefutably although claiming to do so, then that argument is invalid.

For example

All bachelors are unmarried.

Mg is a bachelor.

Therefore, Mg is unmarried.

Valid argument

A valid argument is one in which the truth of the conclusion necessarily follows from the truth of its premises.

Example: X is shorter than Y.

Y is shorter than Z.

Therefore, X is shorter than Z. It is a valid argument.

Invalid argument

An invalid argument is the premises do not imply the conclusion.

Example: All Europeans are mortal.

All Myanmar are mortal.

Therefore, All Myanmar are Europeans.

Logic and Life

Logic can help us in various ways to deal with conflict and decisions in a more reasonable and satisfactory way than to be possible without the understanding and skills provided by such study.

The study of logic and be of relatively direct value is the area of relations between individual persons and between groups of individuals. Two inescapable facts of human existence as we all must live today are-

- (1) The reality of conflicts which is often hostile and even violent between individuals and groups of individuals and
- (2) The necessity to make difficult judgments and decisions that affect our own lives and well-being as well as the lives and well-beings of others.

When faced with a difficult decision having potentially significant effects, we usually want to make every effort to consider the pros and cons of the various alternatives from which ultimately, we must choose.

Logical systems should have three things. They are consistency (which means that none of the theorems of the system contradict one another); soundness (which means that the system's rules of proof will never allow a false inference from a true premise); and completeness (which means that there are no true sentences in the system that cannot, at least in principle, be proved in the system).

Assuming question concerns the practical importance of logic in dealing with all our daily routines and ongoing activities; I would only add that it is actually quite impossible to make any decision with logic. More to the point, it is exceedingly difficult if not impossible to even have an "everyday life" without constantly making decision, from the trivial and mundane to the urgent, critical and cataclysmic and everywhere in between. Both cases, where we're going is the result of most or all of the choices human beings have made up that point in time and space, and where he will and up will be the result of the choices he makes from here.

If he makes decisions based on our purposes, plans, and promises, relative to our values, beliefs, knowledge, understanding and wisdom, however then he reasons about our options and makes decisions based on rules or principles inference for weighing, assessing and evaluating options and alternatives and their outcomes. He may adopt a more rigorously analytic approach and actually rely on deduction, induction structured modes of inferences.

Practical Application of Logic

Logic has a wide application in various spheres of life. Formal logic is used in game, essay writing, answering test questions, and programming. People apply informal logic in

everyday life while assessing the information they get from various sources, such as TV, advertisements, and other people. Informal logic is also used in legal reasoning since each party in the court tries to persuade the judges of the invalidity of the opposite party's evidence and reach a favorable verdict. Public policy analysis also involves informal logic since government officials should identify problems, find solutions, and assess their consequences.

CONCLUSION

All human beings of the mental process or thought of all human beings are different from reasoning. Reasoning is a special kind of thinking in which thoughts are connected to each other and it aims to reach a goal or a solution of a problem. Reasoning can attain "should do" or "should not do", "good or bad" "right or wrong" etc by criticizing the phenomena's actions. Several problems are being faced in daily life, man must decide and criticize them by using the pursuit ways of logical methods or rules. For Socrates, man is a social animal. So, man will also be face the several manners concerning his or her along life. These times, man is solving the suitable ways with the equal of his or her. So, logical thinking is essential things for all human beings. Logic is to teach us to avoid mistakes in our own reasoning and to detect errors in the reasoning and thought of other people. The study of logic cultivates the power of abstract thinking, trains, and develops the reasoning powers.

In everyday life, human beings are consciously or unconsciously thinking or reasoning in many ways about what they experience- they reason and think about what they need, what they want or what they must do. All human beings have to study the basic principles of reasoning to provide norms for correct reasoning or in logical terms how to think validity. It is concerned with how we ought to reason if we wish to reason correctly or validity, deductive reasoning is concerned with valid reasoning, that is, how we reason from what we have already known in order to apply and utilize this knowledge correctly to new cases, which we can later experience in daily life.

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