

Toulmin Argument Model and Its Application in College English Learning

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Abstract. Toulmin argumentation model consists of six elements, including proposition, basis, justifications, support, qualifiers, and refusal. Basic principles of Toulmin's argumentative logic thought are rationality, preserving reasoning, domain principle, principle of practicality. Toulmin's argumentation model can be learned and used by students when learning College English to improve their critical thinking ability.

Keywords: Toulmin argument model, application, College English learning, decision-making competence.

1. Introduction

Logic is one of the seven United Nations' fundamental disciplines, providing tools for logical analysis, criticism, reasoning, and argumentation for all sciences. Its main task is to provide standards for identifying effective reasoning, argumentation, and ineffective reasoning, argumentation, and teaching people to correctly reason and argue, identifying, exposing, and refuting erroneous reasoning and argumentation. Induction and deduction are the core methods of logic.

The syllogism of deductive thinking is not only used in natural sciences, but also derived from social sciences, which are more complex. The precision of syllogism in natural sciences cannot be derived from social sciences, because social sciences are vague, complex, and uncertain. So syllogism cannot cope with the complexity of social sciences, which is also due to the limitations of traditional formal logic.

The famous British philosopher Toulmin believed that syllogism has two serious problems. Firstly, it is too simplistic, with many blurries and hidden intermediate links. Secondly, formal syllogism only focuses on analytical arguments in theory and cannot handle substantive arguments in real life.

In his book "Application of Argumentation", Toulmin forcefully discusses the limitations of traditional formal logic, advocates using "practical logic" to supplement the shortcomings of formal logic, and proposes the influential "Toulmin Argumentation Model" in international logic and argumentation research. The model proposed by Toulmin aims to address the limitations of formal logic in daily argumentation, break free from the complex situations that syllogism cannot cope with, and showcase the various elements involved in the argumentation process.

2. Toulmin's argumentation model

Toulmin argumentation model consists of six elements, including proposition, basis, justifications, support, qualifiers, and refusal.

2.1 Proposition

Proposition refers to the conclusion we want to prove and establish. An assertion is an assertion, a proposition, a requirement of a person expressed in language, and the person making the assertion must prove its validity. This proposition can be controversial and challenged, but the proposer of the proposition must defend it in the face of the challenge. This is the starting point of the argument.

2.2 Basis

Basis is the fact or data that supports the "proposition". Generally, it belongs to objective facts.

2.3 Justification

Justification explains how to obtain a 'proposition' from the 'basis', that is, the correlation between the 'proposition' and the 'basis', and it provides a 'guarantee' for this process. The most important difference between 'basis' and 'justification' is that 'basis' is clearly pointed out in the argument. And 'justifications' are implicit indications.

2.4 Support

Support refers to further support for justifications, meaning a certain event status and legal provisions. It has variability and domain dependency.

2.5 Qualifier

The term qualifier is used to indicate the strength or degree of justification for proposition. The function of qualifiers is to provide a relatively accurate expression of propositions.

2.6 Refusal

Refusal refers to refuting from the basis, legitimate reasons, and support, suspecting its correctness and legality. And raise objections to verify the correctness of the argument from the reason to the proposition again.

3. Four conditions for good argumentation

Toulmin pointed out that a good inference must meet four conditions and together they are sufficient conditions for good reasoning. If any condition is missing, reasoning is not good, and therefore the rationality of the conclusion cannot be derived. These four conditions are a proven basis, adequate information, reasonable and justifiable reasons which have been proven that there are no reasonable exceptions.

3.1 Justified basis

There are many resources that have been proven to be reasonable premises, such as direct observation, transcripts of direct observation, memories of individuals who have previously made observations or experienced events, personal testimony, previous good reasoning or arguments, expert opinions, and authoritative reference resources. But these resources are allowed to be corrected and may go wrong.

3.2 Adequate information

The acquisition of information needs to be comprehensive and multi-dimensional. If information can be obtained from multiple people, multiple places, and multiple dimensions, it will definitely be more reliable than obtaining information from a single person and a single dimension.

3.3 Proved reasonable and justifiable reasons

The rationality of legitimate reasons must be proven by support. Legitimate reasons and support must withstand the scrutiny and questioning of everyone.

3.4 A reasonable assumption which has been proven that there are no exceptions

Many legitimate reasons may encounter rebuttals, in which case the legitimate reason lacks authority or the conclusion is false. For example, "A swan is white. If a swan is found in Australia,

it must be white. In fact, some swans in Australia are black, so this is a counterexample and cannot be used as a reasonable assumption.

So a good argument that meets certain standards is a good argument, based on reliable sources or supported; Strong correlation between premise and conclusion; The premise provides strong support for the conclusion; The entire reason for the argument excludes all other possible conclusions to the contrary.

4. Basic principles of Toulmin's argumentative logic thought

Basic principles of Toulmin's argumentative logic thought are rationality, preserving reasoning, domain principle, principle of practicality.

The characteristic of strong rationality is the pursuit of mathematical accuracy, aimed at grasping inevitable connections, definite and eternal truths. Toulmin summarized the characteristics of rationality and reasonableness in "Returning to Reason": if rationality is more manifested in the use of abstract concepts to analyze theoretical arguments, adhere to universal laws, and combine formal, universal, timeless, non situational, and value neutral arguments to explain, then reasonableness tends to be more substantive, local arguments that rely on scenarios and have ethical implications. It is a flexible and light rationalism. The rational principle that encompasses differences, diversity, and controversies, coordinated with the contingency and uncertainty of scientific practice, is a dogmatic rationalism.

Toulmin believes that justifiable reasoning is a form of "substantial reasoning", and that substantial and effective reasoning is not logical truth or fidelity reasoning, but rather a form of "preserving reasoning".

The Toulmin argument model indicates that for any argument, the strength of the argument, as well as the form and structure, are all based on the premise of domain invariance.

5. Application of Toulmin's Argument Model in College English Learning

Cultivating students' ability to discover problems, propose viewpoints, collect and analyze data to obtain evidence, and have the ability to communicate with others is also a reflection of the humanistic nature of college English. Argumentation is a behavior that makes students' thinking and reasoning processes explicit, providing opportunities for interaction and timely feedback for classroom activities between teachers and students. The argumentative teaching method is actually a constructivist teaching method, which believes that knowledge is constructed, not instilled. Argumentation is different from ordinary discussions, as it places more emphasis on the support of evidence and advocates for the refutation of viewpoints. There are many methods of argumentation, from rhetorical questions, Aristotle's syllogism, to the Toulmin argumentation model, Gill's scientific reasoning model, Lawson's hypothesis deductive validity model, and Walton's hypothesis reasoning model. Currently, in scientific education research, the Toulmin argumentation model is relatively universal and popular, often serving as the basis for the scientific classroom argumentation process.

6. Summary

Compared with traditional mathematical and logical thinking, Toulmin's argumentation model is no longer limited to the fields of formal logic. Its application is more extensive and has also produced a wider range of application value such as College English learning, helping students improve their decision-making competence. More classroom learning activities should be used based on Toulmin's argument model.

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