

TOULMINIAN ARGUMENTS

TOULMINIAN ARGUMENTS

The argument structure, proposed by Stephen Toulmin, is based on syllogistic forms of reasoning, yet his structure contains additional components which help to “ground” and “back” the primary claim (in a sense, they insure the reasoning and its corresponding validity).

Toulminian arguments can work in support of a larger argument structure (being a form of artificial support or sub-argument), or Toulminian arguments can work on their own as the structure of the entire argument.

Toulmin arguments rely on different parts to work together to form a solid argument. They include: Claims, Grounds, Warrants, and Backing.

CLAIMS

The claim is the “destination” of the argument, essentially an assertion (comparable to a thesis).

FOUNDATIONS

Foundations are the foundation of the argument: experimental observations, data from instrumentation or measurement, matters of common knowledge, statistical data, testimony, previously established claims, and facts.

Foundations (G) support Claims (C).

Foundations are usually factual (thus Fact 1 = F1, Fact 2 = F2, and so forth).

EX:

Claim (C)

Gerald should not come to school.

Foundations (G)

Gerald is ill. (F1)

Gerald has been coughing and sneezing. (F2)

Gerald has also been nauseated and has a fever. (F3)

WARRANTS

Warrants are connections between the FOUNDATIONS and the CLAIM. In a sense, Warrants allow us to use the foundations.

For example, if a CLAIM can be supported by the FOUNDATIONS, we consider it to be “warranted.”

Warrants rely on authorized arguments from different fields or different sources of information to make the argument valid. Thus, constitute information, such as: laws of nature, legal principles, statutes, rules, procedures, licenses, scientific formulas, and such, may be considered WARRANTS as well.

In legal proceedings, a warrant represent a simple law (a statue or ordinance), a precedent (legal opinion), or an ethical/moral code.

EX:

Claim (C)

The student should be issued a parking ticket.

Grounds (G)

The student parked in a faculty parking space.

Warrant (W)

Any students who park in a faculty parking space may be issued a ticket.

In science (or more deductive works), the warrant may play a different role, representing the laws of nature.

For example,

Grounds may represent values of known variables.

Warrants may represent a relevant formula.

Then, the claim would represent the value of an unknown variable.

In medicine (or more inductive work), the warrant may again play a different role (allowing for a good inductive reasoning to connect GROUNDS and CLAIM). Furthermore, the warrant may represent diagnosed symptoms or effects.

EX:

Claim (C)

This patient is very possibly suffering from a Rattlesnake bite.

Grounds (G)

The patient displays rapid heartbeat, nausea, and has two large bite marks on his leg. He was walking in the desert, and he sat on a rock when he felt a sharp pain.

Warrant (W)

Rapid heartbeat, nausea, and two large bite marks often means some form of venomous snakebite, particularly Rattlesnake bite.

BACKING

Warrants cannot validate themselves (that is, just because you have some facts which can connect to the claim doesn't mean you always have a stable argument); therefore, Backing may be needed.

Because WARRANTS cannot be trusted on their own for providing certainty for an argument, Backing is used to help to justify/validate/insure the WARRANT.

EX:

Claim (C)

This patient is very possibly suffering from a Rattlesnake bite.

Grounds (G)

The patient displays rapid heartbeat, nausea, and has two large bite marks on his leg. He was walking in the desert, and he sat on a rock when he felt a sharp pain.

Warrant (W)

Rapid heartbeat, nausea, and two large bite marks often means some form of venomous snakebite, particularly Rattlesnake bite.

Backing (B)

Medical science has a large corpus (or body) of scientific experience on the treatment and diagnosis of snakebites, particularly rattlesnake bites.

HOW DO ALL THESE PARTS WORK TOGETHER?

Essentially, a Toulminian argument works like this:

A Claimant or Assertor puts forth a claim. This claim is supported by grounds (e.g., data, facts, etc.). These grounds are connected to the claim by a warrant (e.g., a law, known values, or procedures), where backing (e.g., experience or other work on the topic) provides certainty for the warrant, which secures that the claim and grounds can work together without error/fallacy/concern.

You can produce a Toulminian argument form by asking:

What is your Claim (What is the assertion)?

What are your Grounds (Factual statements, Data, Evidence, or valid/true statements)?

What are the Warrants for the argument (What laws/assumptions/codes permit the connection of the CLAIM to the GROUNDS)?

What is the Backing (What is the foundation for the warrant)?

REBUTTALS

Conclusions of Toulminian arguments usually contain rebuttals. Rebuttals are the extraordinary or exceptional circumstances that might undermine the force of the supporting arguments.

Two reasons are provided by Toulmin in regards to using rebuttals:

- 1) Either, because GROUNDS, WARRANTS, and BACKING lend their support to the CLAIM only partly or weakly.
- 2) Or else, because GROUNDS, WARRANTS, and BACKING only support the CLAIM in certain conditions.

Furthermore, a rebuttal may be used when a general presumption is set aside in light of certain exceptional facts; furthermore, an argument should be "strong" becomes invalid as a result of the discovery of special circumstances indicated by the rebuttal.

EX:

Claim (C)

Building a house in this new area is unwise.

Grounds (G)

Earthquakes frequently occur in this new area.
Residential property is destroyed frequently in this new area.

Warrant (W)
Seismographs typically find steady plate movement in this new area.

Rebuttal (R)
Unless, I have low cost earthquake insurance...

Some people confuse a rebuttal with a counterargument; make note that these components of argumentation are separate components.

MODALITY (QUALIFICATION/QUANTIFICATION)

Much of Stephen Toulmin's work is concerned with universality. One of the main tenets of universality claims that something may apply to all circumstances. However, we know that such statements are not true.

For example, a person cannot say that when apples fall from a tree, apples always hit the ground. For instance: If an apple falls to earth from a tree, we know that gravity acts on it. But, if the tree were in space (say on a space station in an orbit high above the earth), then gravity will not work on the apple when it falls. Therefore, we can say, that when an apple falls, gravity does not always work on it.

To say that "Apples always fall to the ground" is a universal, since a person claims that in every context, in every condition, and in every situation, this statement is true. The inclusion of the word "always" leads us to believe that this statement is true/factual/valid in every circumstance.

Universal words, such as: All and Always, usually lead readers to such universal statements, which we know cannot be true all the time.

Stephen Toulmin suggested that a way to move away from this idea of universal statements was to add a sense of modality to an argument. In a sense, he suggests to add qualifiers or quantifiers to the claim.

Qualifiers/Quantifiers are words which "soften" the claim in order to make it truer (in every context, condition, and situation).

Qualifiers are words like: Presumably, Likely, Possibly, and Maybe.
Quantifiers are words like: some, most, oftentimes, and sometimes.

If we add a qualifier or quantifier between a CLAIM and its GROUNDS, then we take a step towards making a more valid argument.

EX:
All men are stubborn. [Not true]

Vs.

Some men are stubborn. [More true]

-OR-

Grounds (G)

The concert is today.

The weather is bad.

Qualifier (Q) [Modality]

So, presumably...

Claim (C)

The concert will be cancelled today.

In a sense, Toulmin recognizes that a statement is most true when it contains a sense of modality to it. To clarify, modals are verbs which help to show particular conditions which allow for special circumstances to make an argument valid or not. For example, if a person runs into an argument where movement from the GROUNDS to the CLAIM is based entirely on probability, then a modal may be needed.

EX:

Grounds (G)

Earthquakes frequently occur in this new area.

Residential property is destroyed frequently in this new area.

Warrant (W)

Seismographs typically find steady plate movement in this new area.

Qualifier (Q) [Modality]

So, presumably...

Claim (C)

Building a house in this new area is unwise.

Rebuttal (R)

Unless, I have low cost earthquake insurance.

Having a sense of modality in your argument helps the writer and the reader to recognize any possibilities which might affect/hinder the claim.