The Toulmin Model: A tool for diagramming “informal” arguments

by Sergei Naumoff
Plan

1. Anticipating *Sherlock* Series 4
2. Basic elements of the Toulmin model
3. Practice of elements identification
4. Types of claims, evidences and links
5. Real-life debate applications
Make some inferences based on this picture, my dear Watson!
Possible Inferences

• The lady is the child’s mother because…

• It is a hot day because…

• The lady is middle to upper class because…

• It is summer because…
Claim- Evidence- Warrant

The lady is the child’s mother because she is holding the child’s hand.

Mothers often hold their children’s hands to protect them.

The lady is middle to upper class because she is talking on her cell phone.

Cell phones are expensive, so they are typically owned by people in the middle to upper class.

It is summer because the little boy is wearing shorts.

Temperatures are hot during the summer, so people wear lighter clothing.
Why Warrants are Necessary?

It is hot outside because the lady is holding an umbrella.

Why is it so necessary to explicitly state your warrant in this argument?
Stephen E. Toulmin

- philosopher and logician
- born in England in 1922
- M.A. at King’s College, Ph.D from Cambridge
- Taught at the University of Southern California from 1993 - 2009
- In 1958 offered his model of argumentation because formal logic and theory cannot explain everyday practical arguments

“For a good argument to succeed, it needs to provide good justification for a claim”
Basic Elements of the Toulmin Method

- **Claim (Conclusion, What?)** = conclusion, proposition, or assertion an arguer wants another to accept.

- **Ground (Data, Fact, Evidence, Why? How do you know?)** = Evidence, facts or grounds for the claim independently proven.

- **Warrant (Link, Bridge, So What? How did you get here?)** = underlying assumption that connects your evidence to your claim, legitimizing the claim by showing the evidence to be relevant.
Supplemental Elements of the Toulmin Method

- Rebuttal, Exception, Reservation = statements recognizing the restrictions (exceptions, criticisms, alternatives) which may legitimately be applied to the claim.

- **Backing (Foundation)** = Additional logic or support for the warrant’s reliability if the audience challenge it.

- **Qualifier** – key words making claim more likely to be true (“sometimes”, “often” “frequently”, “some”, “most”, “a few”, “many”, “may”, “might”, “could”, “commonly”, “usually”, “probably”, “possibly”
The Toulmin Model of Argument 1958

Qualifier ("probably")

Ground

Warrant ("since")

Claim

Rebuttal ("unless")

Backing ("because")

The modified Toulmin Model 1988

The Structure in a Wordy Sentence

Because (support/ data), therefore (claim), since (warrant) because/on account of (backing).

Because the woman is holding an umbrella on a sunny day, therefore it must be hot outside, since people use umbrellas to shield themselves from the hot sun on account of the shade provided by the umbrella being cooler than the sun beating down.
A Sample Argument

Link
(unstated) Generalization:
people born in the United States generally are United States Citizens

Evidence
He Jing was born in Los Angeles

Exception
unless He Jing’s parents were Chinese citizens

Claim
He Jing is a United States citizen
People should become vegetarians because vegetarianism is a healthy choice since it eliminates the cholesterol from red meat.

American Sniper won several Academy Awards. Since world-renowned movie experts choose these awards, they are evidence of a movie’s greatness. Therefore, American Sniper is an excellent film.
Needle exchange programs should be abolished because they only cause more people to use drugs.
Needle exchange programs should be abolished

CLAIM

when you make risky behavior safer, you encourage more people to engage in it.”

because they only cause more people to use drugs

EVIDENCE
The Paragraph

1. When teachers “teach to the test,” students lose the ability to think deeply and critically about subjects.

2. Faced with increasing pressure to help students succeed on the SAT, teachers are modifying lesson plans to only teach the content on the test.

3. Unfortunately, the content of these tests often reflects lower-level thinking, the type of thinking taught by “drill and kill” teaching methods.

4. Teachers focus on making sure the students can recapitulate information rather than making sure they understand it.

5. This type of teaching does not promote critical thinking.
Types of Claims

- **Fact**: have historical backing or focus on empirically verifiable phenomena (the manager saw you, my friends saw you, it’s on security camera)

- **Judgment/Value**: involving opinions, attitudes and subjective evaluations of things (Cheating, like line-cutting, is bad.)

- **Policy**: claims advocating courses of action that should be undertaken (strict gun laws should be in place)
Here’s an unqualified claim:

People who don’t go to college earn less than those who do.
And a qualified version:

*In most cases*, people who don’t go to college earn less than those who do.
Types of Evidence

• **Fact or Statistic:** a point of data that claims some objective (*The Second Amendment ensures Americans have the right to keep and bear arms*)

• **Expert Testimony:** a stated opinion by a person experienced in the field (*Expert X states that nations which have been chronic violators of human rights nearly always continued such acts*)

• **Personal Anecdote:** personal experience gained from time in the related field
Links/Warrants

✓ A "linking" function by establishing a mental connection between the grounds and the claim
✓ Answers the question “Why does this evidence mean your claim is true?”
✓ Unlike evidence and claims, links are frequently unstated
Types of Links

• **Generalization or general principle** - Deductive reasoning

  *That dog is probably friendly. It is a Golden Retriever.*”

  **LINK:** *most or all Golden Retrievers are friendly*

• **Reasoning by example** – Inductive

  *Legalization of soft drugs can decrease hard drug use as example of Netherlands demonstrates where after legalization of soft drugs the use of hard drugs has decreased*

  **LINK:** *the Dutch example is representative and is applicable to other contexts*
Types of Links

• Value premises

*That patient should be seen first, he has a serious injury."

**LINK:** first-come first served doesn’t hold true in life or death situations

• Sign Reasoning - a connection between some phenomena and other conditions that tend to accompany those phenomena

*“Maggy is running a temperature. I’ll bet she has an infection.”*

**LINK:** a fever is a reliable sign of an infection
Final observations

• More dynamic and more flexible (qualifications) than formal logic, works better in real-life situations

• In many arguments, the links are not explicitly expressed and different listeners may perceive them differently

• Only elements related to reasoning. No expressions of feelings or emotions. Only the linguistic elements of reasoning. No nonverbal elements of an argument.

• Focuses on the argument maker, not the target or audience
<table>
<thead>
<tr>
<th><strong>Claim</strong></th>
<th>The federal government should ban smoking.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Qualifier</strong></td>
<td>The ban would be limited to public spaces.</td>
</tr>
<tr>
<td><strong>Warrant /Links</strong></td>
<td>The government is supposed to “promote the general welfare.” Citizens are entitled to protection from harmful actions by others.</td>
</tr>
<tr>
<td><strong>Backning</strong></td>
<td>The United States is based on a political system that is supposed to serve the basic needs of its people, including their health.</td>
</tr>
<tr>
<td>Evidence</td>
<td>Authority</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>• Numbers of deaths attributed to secondhand smoke.</td>
<td>Cite the surgeon general.</td>
</tr>
<tr>
<td>• Lawsuits recently won against large tobacco companies, citing the need for reparation for smoking-related health care costs</td>
<td></td>
</tr>
<tr>
<td>• Examples of bans already imposed in many public places</td>
<td></td>
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