

THE SOCIOLOGICAL THINKING MAP

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Note: The Sociological Thinking Map should not be regarded as a series of steps. It is a holistic, not a linear, thinking model. In other words, look for relationships between parts of "The Map."

A Checklist for the Map

1. Have I remembered to ask myself my purpose (or reason) for reading this article or book, listening to this speaker, watching this program, etc.? Remember from "The Map" that because it was assigned is not an acceptable purpose (or reason).
2. Have I remembered to read, view, or listen dialogically (constantly asking questions based on the map)? In other words, am I in a continual internal dialogue with the speaker or writer based on "The Map"?
3. Have I remembered to ask who is the intended audience for the article, book, film, lecture, etc. (mass or popular, educated laypersons or academic)?
4. Have I discovered the thesis (what the article, book, film, lecture, etc., is about)? How is the thesis? Does the writer/speaker stay close to the thesis or does s/he get off the subject?
5. Have I discovered what the basic point of view is of the writer, speaker, etc.? How does that point of view affect the article, talk, film, etc.?
6. Have I discovered the theory/theories which is/are utilized in the article, book, film, lecture, etc.? The theory refers to the way in which the information presented is explained by the writer or speaker. Have I asked whether the theory fits the article, book, talk, etc.?
7. Have I asked what assumptions make up the theory? In other words, what is the writer or speaker assuming to be true? We explain things based on our assumptions (that which lies between the lines).
8. Have I noted the time context during which the observations (referred to in the article, book, film, lecture, etc.) were made?
9. Have I noted the time context in which the book or article was written, film was produced, lecture was given, etc.? (Numbers 8 and 9 are not necessarily the same.)
10. Have I noted the research design (how the evidence was collected)?
11. Have I considered the quality of sociological imagination in the article, book, film, etc.? How could more of it have been used? (Using the sociological imagination means to view all social problems, issues, etc., in their social context — not merely as isolated individual events.)
12. Have I distinguished between the two types of empirical statements (factual and evaluative)? *Both types must be based on evidence.*
13. Have I noted the factual statements (those statements which, any reasonable person would agree, have only one empirically adequate answer -- e.g., all the planets in our solar system revolve around the sun)?

14. Have I noted the evaluative statements (those statements which reasonable people might disagree upon -- e.g., based on the evidence I have presented, it makes sense to allow (or prohibit) abortion on demand)?
15. Have I asked whether the empirical statements support the theory (induction)?
16. Are the empirical statements empirically adequate? (In other words, is a sufficient amount of empirical evidence provided?)
17. Have I considered the quality of the empirical evidence? For example, was the source Jerry Springer or *The American Journal of Sociology* (to use an extreme case)?
18. Was the empirical evidence primary (collected by the speaker or writer) or secondary (collected by someone else and reported by the speaker or writer)?
19. If an empirical statement suggesting causality is made by the speaker or writer, is sufficient empirical evidence (correlation, time order, non-spurious correlation) presented? Do only one or two out of these three criteria (correlation, time order, non-spurious correlation) exist? Have I checked for terms that may indicate causality? (Such as, because, influenced, if, when, why, how, as a result, then, led to, as a consequence, since, explained by, due to, so, in order that, etc.)
20. Are there any necessary conditions for causality given by the speaker or writer? (For example, plugging the lamp into the socket is a necessary condition for the light to go on, but it is not the only necessary condition. The bulb must also be screwed in.)
21. Are there any sufficient conditions for causality given by the speaker or writer? (For example, by itself flying out to Los Angeles is sufficient for arriving in Los Angeles. Nothing else is necessary. However, flying is not a necessary condition. One could also drive, or take a train or bus.)
22. Are there any contributory conditions for causality given by the speaker or writer? (For example, reading a daily newspaper contributes to one becoming informed, but it is neither necessary nor sufficient.)
23. Have I considered the credentials or qualifications of the speaker or writer?
24. Have I checked for propositional statements (predictions)? Have I asked: "Are the propositional statements based on the theory? Is there any evidence (empirical statements) which support the propositional statements? What types of causal relationships are proposed (necessary, sufficient, and contributory conditions)? Is correlation without causality proposed? Time order without causality (proposed)? Full evidence given for causality (correlation, time order, and non-spurious correlation)?"
25. Did I remember to look for logical fallacies using "A Guide to Common Logical Fallacies"?
26. Can evidence be found which refutes the logical fallacies?

A Guide to Mapping Common Logical Fallacies

Note: Logical fallacies are statements that, while sometimes persuasive, are logically incorrect. Many of these fallacies overlap. Often, when you find one, there are others.

1. ***Appeal to Force***: Argument through threat. "People who believe the way you do should be shot." "I am right because I am bigger than you are."
2. ***Ad Hominem***: Attacking one's opponent, not the issue at hand. "I don't agree with your discussion of motorcycles because you're a communist."
3. ***Shifting the Burden of Proof***: Arguing that something must be true because it hasn't been shown to be false. "I know that rock can read my mind. Who's ever proven that rocks can't read minds?"
4. ***Appeal to Pity***: Supporting one's conclusion through pity. "I think we need to trust that lady. After all, she has suffered a lot." Suffering and being worthy of trust are unrelated.
5. ***Appeal to Popularity***: Attempting to win popular support by appealing to emotions rather than to facts. "I think I will vote for that political candidate. After all, I saw her/him kiss a bunch of babies and then visit a flag factory."
6. ***Appeal to Authority***: Saying that an argument is valid simply because someone else has said so. No additional evidence is presented. "Cracking your knuckles gives you arthritis. After all, John Doe, M.D., said so."
7. ***Hasty Generalization***: Arriving at a conclusion with insufficient, or unrepresentative, evidence. "Drinking makes you violent. All my friends who drink get violent." It is also called "opinion." It lacks empirical evidence. It should be questioned and challenged. It is subjective (not based on objective empirical evidence).
8. ***Sweeping Generalization***: Applying a general rule to an inappropriate situation (the opposite of a hasty generalization). "The crime rate has really gone up in the XYZ metropolitan area. Take Dugenville, for example." (Not realizing that, while the crime rate may have gone up in the XYZ metropolitan area in general, it has actually gone down in Dugenville.)
9. ***Fallacy of False Cause***: Arguing that one thing caused the other simply because one happened before the other. "I'm sure I got sick because I went outside without a coat the day before." Actually, something completely different might have caused this person to get sick.
10. ***Begging the Question***: Using an opinion (a hasty generalization) as evidence to support a conclusion. "No one should eat meat because it is wrong to kill animals." This fallacy is also called circular reasoning.
11. ***Complex Question***: Expecting a simple answer to a complex question. "Do you believe in Aristotle's ideas? Yes or no."

12. *Fallacy of Ambiguity*: When using a term unclearly or imprecisely leads to illogical conclusions. "My point is that we must have absolute freedom in any democracy." The freedom to murder, to steal, to commit arson, etc.?
13. *Appeal to Tradition*: Appealing to tradition to support one's arguments and conclusions. "Women are the most important parents. After all, mothers have always had primary responsibility for children." Where is the evidence?
14. *Appeal to Newness*: Assuming that something is better merely because it is newer. "This new soft drink is the best. After all, it is the latest thing."
15. *Appeal to Wealth*: Assuming that wealthy people are more likely to be correct than poor people. "The rich folks know what they're talking about."
16. *Appeal to Poverty*: Assuming that poor people are more likely to be correct than wealthy people. "You can trust a poor person, but rich people are corrupt."
17. *Fallacy of Repetition*: Assuming that something is more likely to be correct the more likely it is heard or read. "Elvis is alive! I read it in seven supermarket tabloids just this week."
18. *Black-and-White Fallacy*: Assuming that only two alternatives exist, whereas there may be many more. "Either you are pro-choice or pro-life. Which is it?"
19. *Correlational Fallacy*: Assuming that because two or more events occur simultaneously, that there is a causal relationship. "Pornography became more common at the same time as drug abuse. It is, therefore, clear that pornography causes drug abuse (or drug abuse leads to pornography)." Actually, a third factor might be causing both pornography and drug abuse, or there may be no real connection at all.
20. *Fallacy of Interrogation*: Assuming that something happened (without sufficient evidence). "Why did you rob that person's house?" This question assumes, perhaps wrongly, that the person actually committed the robbery in the first place.
21. *Non-Sequitur*: Drawing an illogical conclusion from the premises. "Therefore, because the prisons are too full, as I have clearly shown in my report, we need to open the doors and let out all the inmates."
22. *Gambler's Fallacy*: Failing to recognize that "chance" does not relate to individual events. "I have been robbed so many times this week that the chances of my being robbed again this week are really low" or "Lightning never strikes twice in the same place" or "You seem to be on a lucky streak."
23. *Teleological Fallacy*: Confusing cause with origin. "Since the rain causes flowers to grow, flowers come from the rain."
24. *Pragmatic Fallacy*: Assuming that something is true because it is practical to believe that it is true. "We must believe that each human being has a unique destiny, because if we don't, there will be nothing to live for."
25. *Reductionism*: Assuming that the whole is no greater than the sum of its parts. "Society is just a collection of individuals." "A car is merely a bunch of auto parts."

26. *Reification*: Forgetting that all social categories (including societies) involve people. "I am not interested in statistics. I want to hear what happens to people."
27. *Naturalist Fallacy*: Assuming that ethical behavior is natural (not learned). "We are all born with an innate sense of right and wrong."
28. *Pathetic Fallacy*: Attributing human characteristics to non-humans. "My dog is as intelligent as my wife (or husband)." "My cat is just another member of the family. He follows our discussions at dinner time."
29. *Straw Man*: Misrepresenting one's opponent's position so that one may more easily attack it. "My opponent in this political race does not believe in the family. Would you want such an immoral person as your representative?"
30. *Fallacy of Limited Alternatives*: Assuming that one has presented all the alternatives without sufficient evidence. "These are our only options for reducing air pollution. . . ."
31. *Red Herring*: Ignoring criticism by changing the subject. "How can you talk about my voting record when you have cheated on your wife three times since you have been in office."
32. *Fallacy of Prejudice*: Arguing from bias. "We all know that members of this ethnic group are slobs. Why help them find a better place to live? They will only mess it up."
33. *Fallacy of Personal Appeal*: Appealing to someone's personal views, emotions or prejudices to convince him/her of something. "You can trust me. We both come from the same neighborhood." "We all want to live in a nice neighborhood, right? Then we all must band together to fight racial integration."
34. *Special Pleading*: Insisting on better treatment than someone else (double standard). "I know, your honor, that Joe and I both murdered Alex, but I had a messed-up childhood, and Joe didn't."
35. *Two Wrongs Make a Right*: Assuming that a wrong can be corrected by another wrong. "John murdered my mother, so I murdered his mother." This sequence of events assumes that if a murder is met with a murder, the problem (the original murder) has been corrected; while, in fact, the actual issue was never dealt with.
36. *Intentional Fallacy*: Interpreting a book, article, film, talk, etc., based on what you *think* the writer or speaker meant rather than what the words actually say. "She said no, but I think she really meant yes." "Although the writer clearly said she believed in the death penalty, I cannot accept that she actually does."
37. *Golden Mean Fallacy*: Assuming that merely because a position is in the middle, or is moderate, it is, therefore, correct. "It used to be that one could drink at eighteen. Now you have to wait until you are twenty-one. Why not make it nineteen and a half? It is always best to take the middle course." What evidence is offered?
38. *Fallacy of Questionable Analogy*: Making an analogy which does not really apply. "A lot of wild animals get into fights and kill each other, your honor, so what I did in killing my wife's boyfriend is no worse."