The Limits of Logic in Politics

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Reasoning as skilled activity

Reasoning is activity.

It is a skilled activity.

It can be better or worse... just as speaking Spanish, playing piano, or pulling a 720.

Validity:
- the conclusion **must** be true if the premises are
  - it is **impossible** for the premises to be true and the conclusion false.

Invalidity:
- the conclusion need not be true if the premises are.
  - it is possible for the conclusion to be false even if the premises are true.

Two related ways to go wrong:
1) Evidence fails to exclude alternative conclusions
2) Evidence is irrelevant to the exclusion of alternatives.
Add some facts: 1) Bob is in the western U.S.; and 2) Bob can see the ocean.

Valid Inference: Bob is in Seattle.
Add one fact: Bob is in the western U.S.

Invalid inference: Bob is in Seattle.

Validity:
- the conclusion must be true if the premises are true.
- it is impossible for the premises to be true and the conclusion false.

Invalidity:
- the conclusion need not be true if the premises are true.
- it is possible for the conclusion to be false even if the premises are true.
Fragility points in core human reasoning

- Ground floor cognitive processing
- Emotive overrides
- Base-line human learning system
- Communicative bandwidth limits
**Conditionals**

- A conditional is a statement composed of at least two component statements in which the truth of one is conditioned on the other.
- That is, these are “If...then...” sentences.
- The conditional reflects our basic understanding for how things hang together.
- In its disguised form in the universal, it reflects our categorical knowledge.
  - “All A’s are B’s” is equivalent to “If x is A, then x is B”
- It is what makes our knowledge actionable, knowing “B if A” allows us to bring about B by way of A or block A by blocking B.

**Disjunctions**

- A disjunction is a statement composed of at least two component statements in which at least one component must be true for the whole statement to be true.
- That is, these are “...or...” sentences.
- The disjunction reflects the basic capacity to consider alternatives.
- Without the possibility to formulate, consider, and evaluate alternatives, there is simply no problem-solving capacities.
<table>
<thead>
<tr>
<th>Correct and Incorrect Conditional and Disjunctive Processing</th>
</tr>
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<tbody>
<tr>
<td><strong>Valid</strong></td>
</tr>
<tr>
<td>If P, then Q. P. So, Q</td>
</tr>
<tr>
<td>If Mary is alive, then there is oxygen. Mary is alive. So, there is oxygen.</td>
</tr>
<tr>
<td>If P, then Q. Not-Q. So, not-P.</td>
</tr>
<tr>
<td>Bob is here if Joe is. Bob isn’t here. So, Joe isn’t.</td>
</tr>
<tr>
<td>If P, then Q. So, if not-Q, then not-P.</td>
</tr>
<tr>
<td>If the roses are blooming, then the aphids are out. So, if the aphids aren’t out, then the roses aren’t blooming.</td>
</tr>
<tr>
<td>Only P or Q. Not-P. So, Q.</td>
</tr>
<tr>
<td>Bob can only have the queen or the jack. He doesn’t have the jack. So, Bob can have the queen.</td>
</tr>
<tr>
<td>P or Q. P. Not (P and Q) So, not-Q</td>
</tr>
<tr>
<td>Bob has either the queen or the jack but not both. Bob has the queen. So, he doesn’t have the jack.</td>
</tr>
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Which of the below arguments are valid?

a) If nothing is left, the chimps will become aggressive. Only should the chimps become aggressive will they need to be caged. Provided that they will need to be caged, Mary should be present to supervise. So, Mary should be present to supervise if nothing is left.

b) That dog is barking again if they are not at home. Only if the lights are on are they at home. The lights aren’t on. So, that dog is barking again.

c) The rats will not eat the poisoned peanut butter provided that peanut butter is a novel substance in their environment. Only if they are satiated will the rats not eat the poisoned peanut butter. The rats are satiated. So, the peanut butter is a novel substance in their environment.

d) None of the above are valid.


**Emotive Overrides**

- Degradation in rational processing
- Altered valuation
- Rational suppression or block
Consider how hard it is, in normal conversation, to give voice to moral judgments without having recourse to the idiom of disgust or reference to the concept of the disgusting. About persons and actions, we say ... things like these: *He gives me the creeps. He makes my skin crawl! Yuck! That makes me what to puke. You’re revolting (repulsive, disgusting)!* In a higher register we speak of vile, odious, abhorrent, and loathsome characters and deeds... We perceive what disgusts and tend to imbue it with defective moral status. *The Anatomy ofDisgust* (1997, 180)

**Disgust**

Being so much in the gut, the idiom of disgust has certain virtues for voicing moral assertions. It signals seriousness, commitment, indisputability, presentness, and reality. It drags the moral down from the skies toward which it often tends to float, wrests it from the philosophers and theologians, and brings it back to us with a vengeance. The day-to-day nitty-gritty moral decision, moral policing, moral education, and morality talk are more likely to involve the disgusting than the Good or the Right... that’s at least partly because disgust ... has the look of veracity about it. It is low and without pretense. We thus feel it trustworthy.... *The Anatomy ofDisgust* (1997, 180-1)
Some moral emotions

Disgust
Fear
Horror and Dread
Contempt
Indignation (righteous anger)
Empathy

The targets of emotive response are not usually baked in.

They are to a great degree the response to enculturation.

For example, small children have no disgust response.

Moral training is not a rational process. But, the process direct emotive responses to the cultural approved targets.
“moral reasoning does not cause moral judgment; rather, moral reasoning is usually a post-hoc construction, generated after a judgment has been reached.” “The Moral Emotions” in Handbook of Affective Sciences (2003)

Summarizing Tetlock: “It is not surprising that undergraduates disapprove of the administrator who makes the wrong decision (refusing to pay); what is more interesting is that they also disapprove of the administrator that makes the right decision (paying) but mulls over the dilemma... Tetlock suggests that we disapprove of people who even consider certain morally questionable options; they are tainted by the act of deliberation.” Descartes’ Baby (2004, 128)

“We do have emotional reactions to certain situations, strong moral feelings, what Thomas Jefferson described as self-evident truths. These are not the products of rational deliberation. We must know certain acts are wrong; we do not need reasons – and we are made uncomfortable when people try to find them.” Descartes’ Baby (2004, 129)
The irrationality of the innate human learning system.
Summary of Learning System Errors

- Assuming that an observed pattern increases the probability of its continuation.
- Assuming that underlying uniformities without reason or contrary to evidence to support belief pattern continuation. (The latter is the residual and anti-biological belief in human nature, race nature, sex natures, etc.)
- Pattern bias: assuming without reason that any observed pattern must have a cause cannot be random
- Post Hoc Ergo Propter Hoc: assuming that prior event must be the cause of the posteriori event
- Solution bias: assuming present cases can be solved in the same way as priori cases.
Informational Bandwidth

Faced with limited informational bandwidth, the successful politician will rely on

- emotive overrides
- irrelevance fallacies
- Fallacy of ‘Making Sense’

Constraints on informational bandwidths privilege irrational political discourse over rational political discourse.
Hijacking Fallacies of Relevance

**Ad hominem (Personal Attack)**
to reject an argument by appeal to personal irrelevant qualities of the person advocating the argument.

**Ad misericordiam (Appeal to Pity)**
aims to support some idea/argument by an appeal to pity

**Ad Populum (Appeal to Popularity)**
aims to support some idea/argument by an appeal to the popularity of that idea/argument.

**Ad Vericundiam (Appeal to Authority)**
aims to support some idea/argument by an appeal to an authority figure whose authority or expertise is irrelevant to the subject matter at hand.

**Strawman**
aims to support some idea/argument by rejecting a caricature of an opponent’s position.

**Red Herring**
presents an apparent criticism that is, in fact, irrelevant to the claim/argument made.

**Argument from Tradition**
aims to support a claim by appealing to the fact that the relevant claim has traditionally or previously been accepted.

**Tu Quoque (You too, or an appeal to hypocrisy)**
aims to criticize an opponent’s position by noting that the opponent’s behavior has been inconsistent with that position.

**Post Hoc Ergo Propter Hoc (False Cause)**
to conclude that, say, P is the cause of Q merely because P temporally precedes Q.

**Slippery Slope**
assumes that some event will produce a series of further events without any justification that the initial event suffices for the series.

**Fallacy of Composition/Division**
assumes that a property true of a part is, thereby, true of the whole. Or, assumes that a property true of a whole is, thereby, true of each part

**Ad Ignorantium**
assumes that some claim is true/false because there is not evidence to the contrary. (The mistake is that the absence of evidence is not evidence of absence.)

**Ad baculum (Appeal to Force)**
aims to support some idea/argument by force, coercion, or threat of force.
Fallacy of ‘Making Sense’

Principle: that something might be true or would be true does not imply that it may/is/must be true.

‘Makes sense’:

Relative to some set of assumptions, something is possible or must be true.

1) If Mark were a goat, then he might prefer to sleep in the barn.
2) If Mark were the President, then he would live at the White House.

Both 1 and 2 make sense. Both are reasonably true.

But, we are in no position to think that I may prefer to sleep in the barn this evening or that I do live in the White House without empirical/observational evidence that I am in fact a goat or am the President.

The fallacy: Assuming that something is true on the basis of the nothing more than it makes sense that might or would be true.

Fallacy Observed in the Wild

• Increasing criminal penalties on drug users leads to increased deterrence
• Former drug users have distinctive insight and skills to help others off drugs without need for special training
• Increased availability of weapons increases citizen safety
• Trickle down economics
• Anti-vaccine advocates are simply ignorant and need further education
• Violent video games make children violent
• High self-esteem is key to academic success.
Fragility points in core human reasoning

- Ground floor cognitive processing
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Are we doomed?

Will political discourse be permanently ruled by the irrational features of our psychology?