

#### THE METHOD OF RECONSTRUCTION OF ARGUMENTATIVE PASSAGES:

1. Do a *close analysis* of the passage.
2. List all the explicit premises and the conclusion in *standard form*.
3. *Clarify* the premises and conclusion.
4. *Break up* the premises and conclusion into smaller parts when possible.
5. *Arrange* the parts of the argument into a chain or tree of sub-arguments where required.  
  
It is often useful to number the premises and then, for each conclusion (intermediate and main), list the premises that are used to derive it
6. Check each subargument and argument for validity.
7. If any argument or subargument is invalid (or seems to be) add suppressed premises to make them valid.
8. Evaluate the truth of the premises.

#### To decide if an argument is acceptable:

We seek true, suppressed premises that, if added to the stated premises, yields a sound argument for the conclusion.

#### Two typical problems:

- (1) We find premises strong enough to support the conclusion, but at least one of them is false.
- (2) We weaken the premises to keep them true, but then the conclusion doesn't follow

#### DIGGING DEEPER

When looking for the supporting premises of arguments, we eventually wind up with *fundamental principles*: "principles for which we cannot give any more basic argument" (125)

These fundamental principles may be principles of morality, religion, politics, assumptions about the basic nature of reality, etc.

If people who differ on some point reach a basic disagreement about fundamental principles, their points of view are *incommensurable*.

Is there any way to resolve such clashes?

We should uncover these basic principles, because we can better see why people say certain things, and whether they should be accepted.

We can also test incommensurable views by whether they have (internally) unacceptable consequences.

#### Aristotle: *The earth is stationary and at the centre of the universe*

1. The natural state of massive bodies is to be at rest.
2. To change something from its natural state requires force.
3. Thus, it requires force to keep massive bodies in motion. (1, 2)
4. If the earth is in motion, then it must rotate on its axis at 1680 km/hr,
5. If the earth is in motion, then it must move around the sun at 108,000 km/hr.
6. The earth is enormously massive.
7. So, it would require an enormous force to keep the earth in motion. (3 - 6)
8. A force large enough to keep the earth in motion would be easily detectable by the senses.
9. No force large enough to keep the earth in motion is detected by the senses.
10. Thus the earth is not in motion. (7- 9)
11. Either the earth is stationary or the earth is in motion
12. Hence, the earth is stationary. (10, 11)
13. If the earth is stationary, then the planets and fixed stars rotate around the earth.
14. If the planets and fixed stars rotate around the earth, then the earth is at the centre of the universe.

### Larry Campbell on Wards—Reconstruction attempt

1. "No single community (city neighbourhood) is likely to muster enough votes to reject any councillor during a civic election under Vancouver's at-large voting system.
2. Elected officials are only accountable to a group when that group has the power to reject them during an election. (Suppressed premise)
- ∴ 3. "Not one councillor is accountable to any city neighbourhood under Vancouver's at-large voting system." (from 1, 2)
4. If no elected official is accountable to some region in a voting system, no elected official has to consider the wishes of that region after having made a decision affecting that region. (Suppressed premise)
- ∴ 5. Under the at-large voting system, not one councillor has to consider the wishes of a region after having made a decision affecting that region. (from 3, 4)
6. The only way to put pressure on councillors in at-large systems is through wealthy, city-wide political organizations. (suppressed premise)
7. If the only way to put pressure on politicians in a voting system is through wealthy, political organizations, that system produces bloc voting. (suppressed premise)
- ∴ 8. "[A]t-large [voting] systems produce bloc voting." (from 6, 7)
9. Systems that produce bloc voting, suppress minority voices and favour the candidates of city-wide political blocs are undemocratic.
- ∴ 10. At-large voting systems that don't have to consider the wishes of neighbourhoods and suppress "minority voices and favour the candidates of city-wide political [blocs]" are undemocratic (from 5, 8, 9)

11. There will be "an average [of] 29,000 voters in each of the proposed wards"
12. If there are about 30,000 voters in a neighbourhood, then "local [neighbourhood] candidates could [afford to run for ward councillor]." (suppressed premise)
- ∴ 13. In each of the proposed wards, "local [neighbourhood] candidates could [afford to run for ward councillor]." (from 11, 12)
14. If local neighbourhood candidates can afford to run for ward councillor, then ward councillors are likely to closely consider the wishes of their neighbourhoods. (suppressed premise)
- ∴ 15. Ward councillors are likely to closely reflect the wishes of their neighbourhoods. (from 13, 14) (suppressed premise)
16. Voting systems that closely reflect the wishes of their neighbourhoods often elect people of the predominant ethnic groups in that neighbourhood. (suppressed premise)
17. "At least six of the proposed wards [are made up of] immigrant populations of more than 50 per cent"
- ∴ 18. Under the proposed ward system, at least six wards could likely sometimes vote for immigrant ward councillors. (from 15-17)
19. If the ward system closely reflects the wishes of their neighbourhood, and allows for greater immigrant representation on council, then the ward system will strengthen democracy (over the at-large system) (suppressed premise)
- ∴ 20. The ward system will strengthen democracy (over the at-large system) (from 18, 19)

21. "[C]ity-wide problems grow from neighbourhood problems."
22. If problems begin at a lower level, their solutions must be found at that lower level (suppressed premise).
- ∴ 23. "Solutions [to city-wide problems] must be found at the neighbourhood level" (from 21, 22)
24. A ward system is better than an at-large system for solving neighbourhood level-problems. (suppressed premise)
- ∴ 25. A ward system is better than an at-large system for solving city-wide problems. (from 23, 24)
26. Ward voters also are concerned about city-wide issues.
27. If ward voters are concerned about city-wide issues, they will hold their ward councillors accountable if they can't find "the right balance between the city's interest and neighbourhood concerns."
- ∴ 28. Ward voters will hold their ward councillors accountable, if they can't find "the right balance between the city's interest and neighbourhood concerns" (from 26, 27)
29. If the ward system is better than the at-large system for solving city-wide problems and can balance the city's interest and neighbourhood concerns, voters have no need of the at-large system. (suppressed premise)
- ∴ 30. Voters have no need of the at-large system (from 25, 28, 29)

31. "Using Sullivan's own figures, the cost of [changing from an at-large to a ward voting system] will [only] be about \$400,000 a year..."
32. If the cost of [changing from an at-large to a ward voting system] will [only] be about \$400,000 a year..., " then the ward system is a very inexpensive way to strengthen democracy. (suppressed premise).
33. The ward system is a very inexpensive way to strengthen democracy. (from 31, 32)
34. If the at-large system is undemocratic and unnecessary, and the ward system is a very inexpensive way to strengthen democracy, Vancouver voters should vote for the ward voting system. (suppressed premise)
- ∴35. Vancouver voters should vote for the ward voting system. (from 10, 20, 30, 33, 34)

**Diagram?**

#### *Reconstruction of Mystery I: A Mere Matter of Deduction*

Thomas P. Stanwick, the amateur logician, removed a pile of papers from the extra chair and sat down. His friend Inspector Matthew Walker had just returned to his office from the interrogation room, and Stanwick thought he looked unusually weary.

"I'm glad you dropped by, Tom," said Walker. "We have a difficult case on hand. Several thousand dollars' worth of jewelry was stolen from Hoffman's Jewel Palace yesterday morning. From some clues at the scene and a few handy tips, we have it narrowed down to three suspects: Addington, Burke, and Chatham. We know that at least one of them was involved, and possibly more than one."

"Burke has been suspected in several other cases, hasn't he?" asked Stanwick as he filled his pipe.

"Yes, he has," Walker replied, "but we haven't been able to nail him yet. The other two are small potatoes, so what we really want to know is whether Burke was involved in this one."

"What have you learned about the three of them?"

"Not too much. Addington and Burke were definitely here in the city yesterday. Chatham may not have been. Addington never works alone, and carries a snub-nosed revolver. Chatham always uses an accomplice, and he was seen lurking in the area last week. He also refuses to work with Addington, who he says once set him up."

"Quite a ragamuffin crew!" Stanwick laughed. "Based on what you've said, it's not too hard to deduce whether Burke was involved."

Was Burke involved or not?

#### **General Snork example (p. 126):**

1. Someone has a right to rule only if they have been elected by the people. (SP)
2. Someone who comes to power by a military coup has not been elected by the people. (SP)
3. Someone who came to power by a military coup has no right to rule. (1, 2) (SP)
4. General Snork came to power by a military coup.
5. General Snork has no right to rule. (3, 4)

$$\begin{array}{c} (1) + (2) \\ \downarrow \\ (3) + (4) \\ \downarrow \\ (5) \end{array}$$

**EXERCISE X: 3 - 14 P 126-7**

**Please:**

- put each question into standard form, with numbered premises above a numbered conclusion
- identify suppressed premises by (SP)
- be sure to show from which premises your intermediate and final conclusions derive
- be sure your completed argument is valid
- provide a diagram for each argument

**Due October 19:** Express the “Mystery Deduction” case as an argument in standard form, with numbered premises above a numbered conclusion; identify suppressed premises by (SP); and be sure to show from which premises your intermediate and final conclusions derive. Be sure your completed argument is valid. Please provide a diagram for the argument.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There is a vertical margin line on the left side, creating a narrow left margin. The paper appears to be from a notebook or a standard ruled document.