

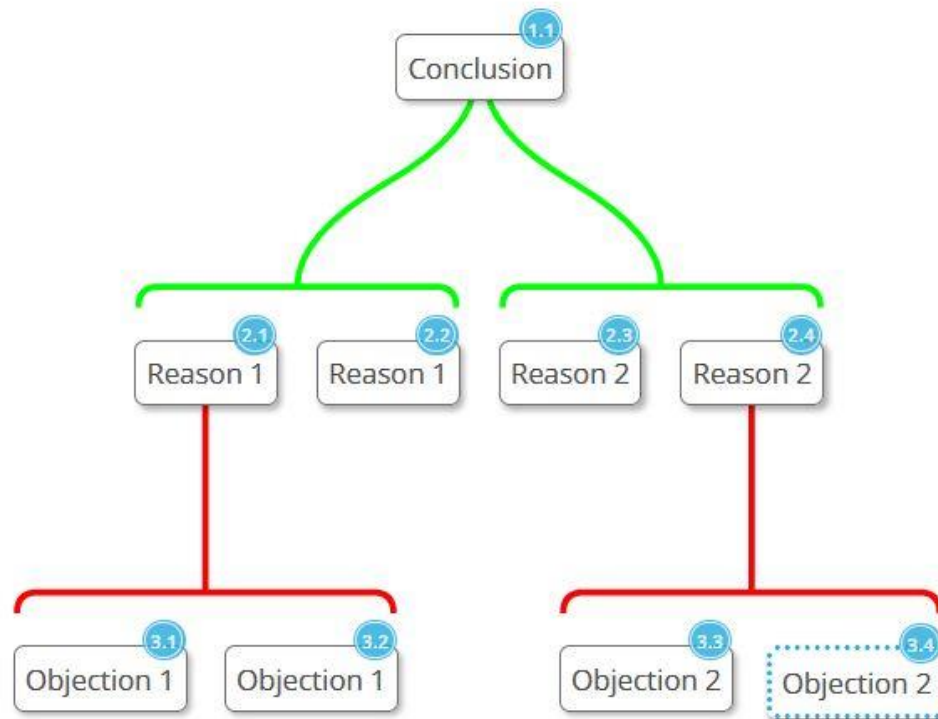


Argument mapping with MindMup

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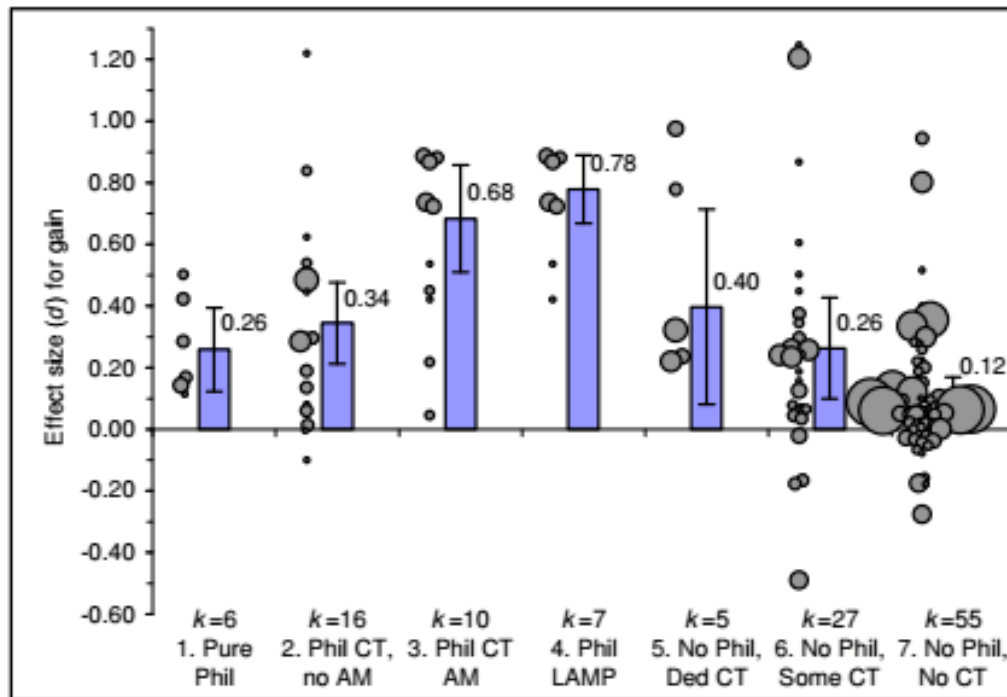
1. What is an argument map?

Graphical display of evidential relationships in an argumentation - that is, of how some claims are evidence for or against others.



2. Why map arguments?

- To improve your general critical reasoning skills
- To better understand and evaluate the arguments of others
- To improve your own arguments

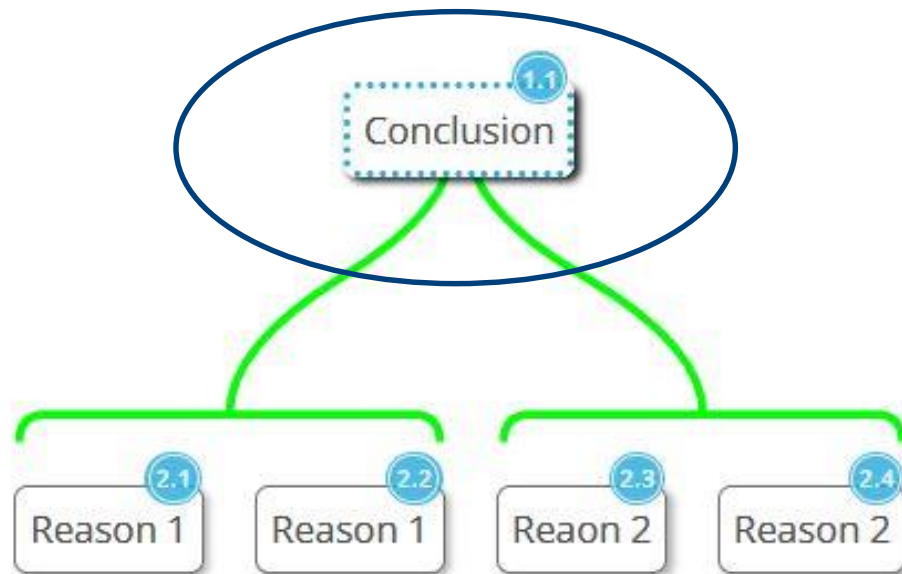


Alvarez, 2007

3. Components of an argument

1. Conclusion

Rule: There is always only one conclusion

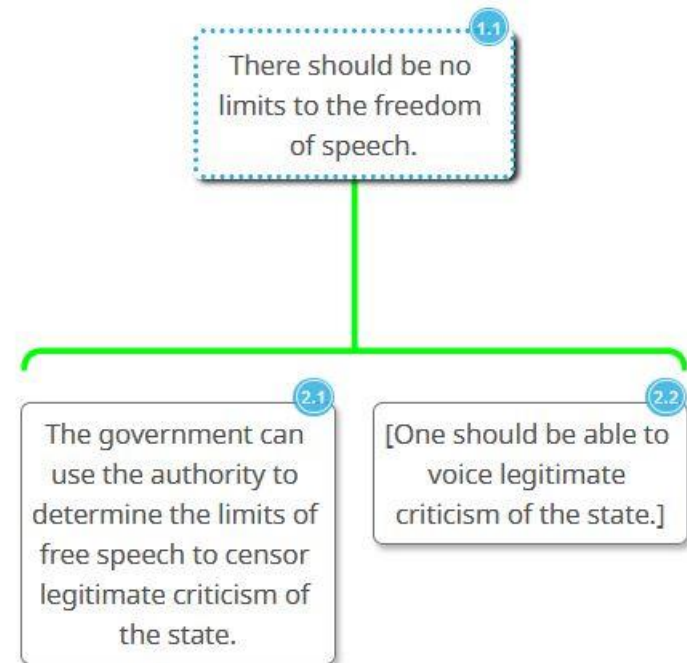


3. Components of an argument

1. Conclusion

Tip: The conclusion is not always what author believes. He/she can just be presenting an argument.

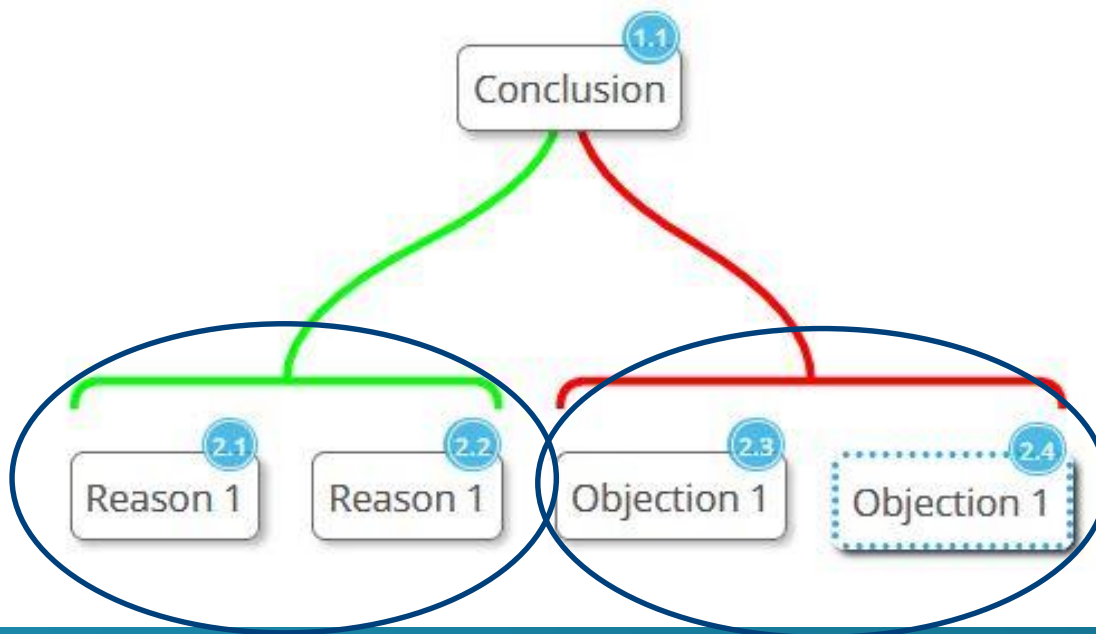
“Some people believe that there should be no limits to the freedom of speech. After all, they say, once we give the government the authority to determine what can be said, they can use that authority to censor legitimate criticism of the state.”



3. Components of an argument

2. Reasons and objections

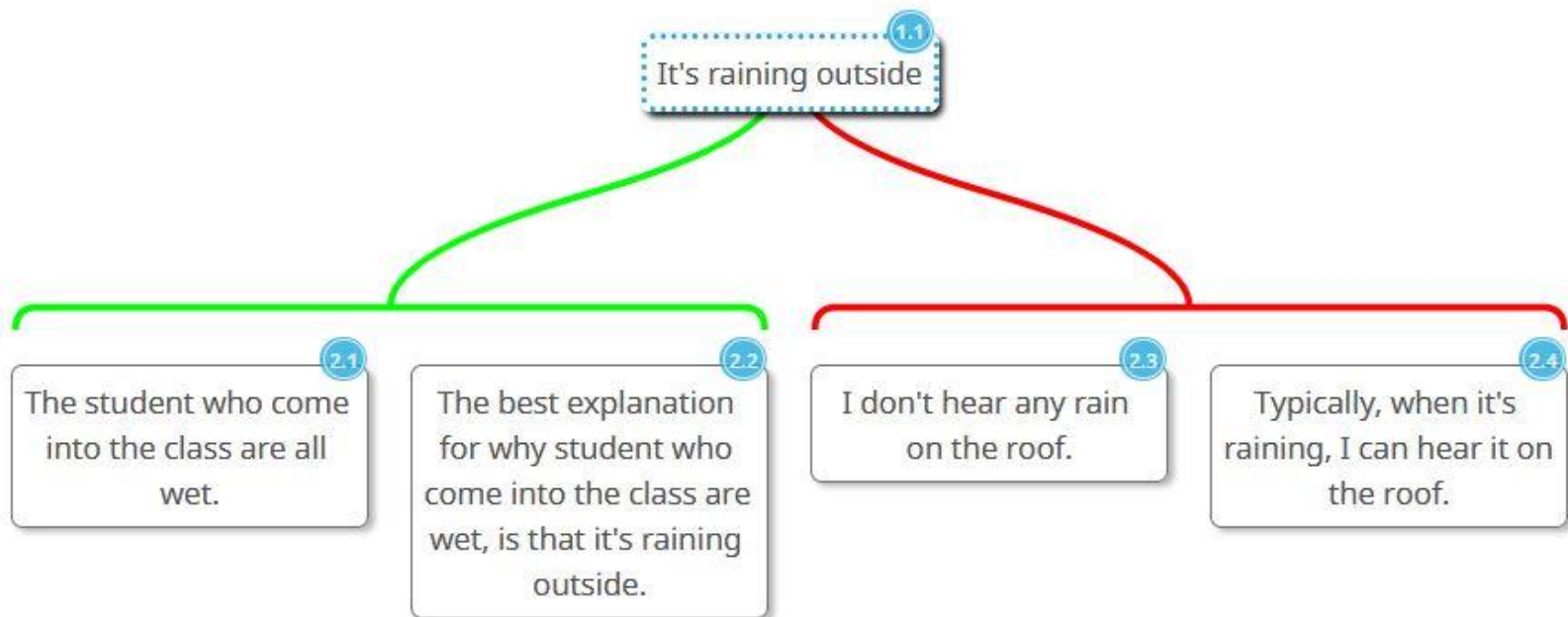
- A reason (green) provides evidence that a contention is true.
- An objection (red) provides evidence that a contention is false.



3. Components of an argument

2. Reasons and objections

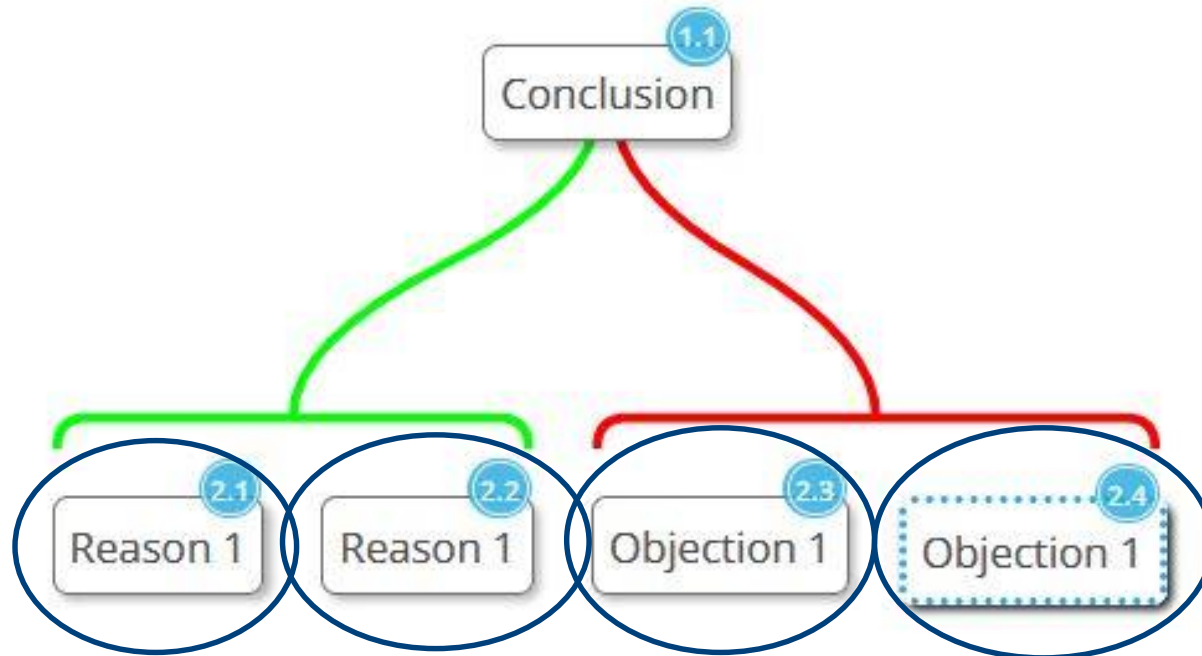
Example:



3. Components of an argument

3. Premises and co-premisses

- A premiss is a claim that is part of a reason or objection.
- Two premisses within a single reason or objection are co-premisses



3. Components of an argument

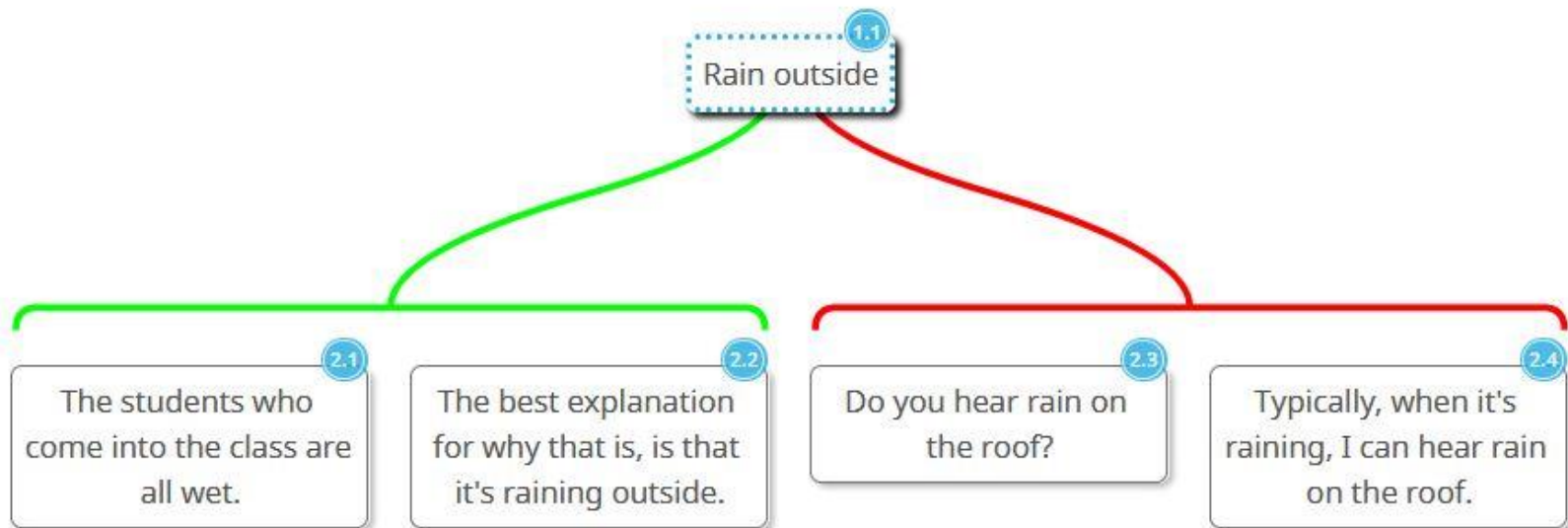
- Rule 1: Reasons and objections consist of claims (premisses) expressed using full sentences.
- Rule 2: Use similar language in premisses of same reason.
- Rule 3: No reasoning within boxes or between premisses of the same reason/objection.
- Rule 4: Each reason/objection can stand on its own

3. Components of an argument

- Rule 1: Premisses are claims expressed using full sentences.
 - Exclude everything from text that is not part of the argument.
 - Be clear and concise.
 - One should be able to understand each claim without referring to others (avoid demonstratives like ‘that’ and ‘this’).

3. Components of an argument

- Rule 1: Premisses are claims expressed using full sentences.

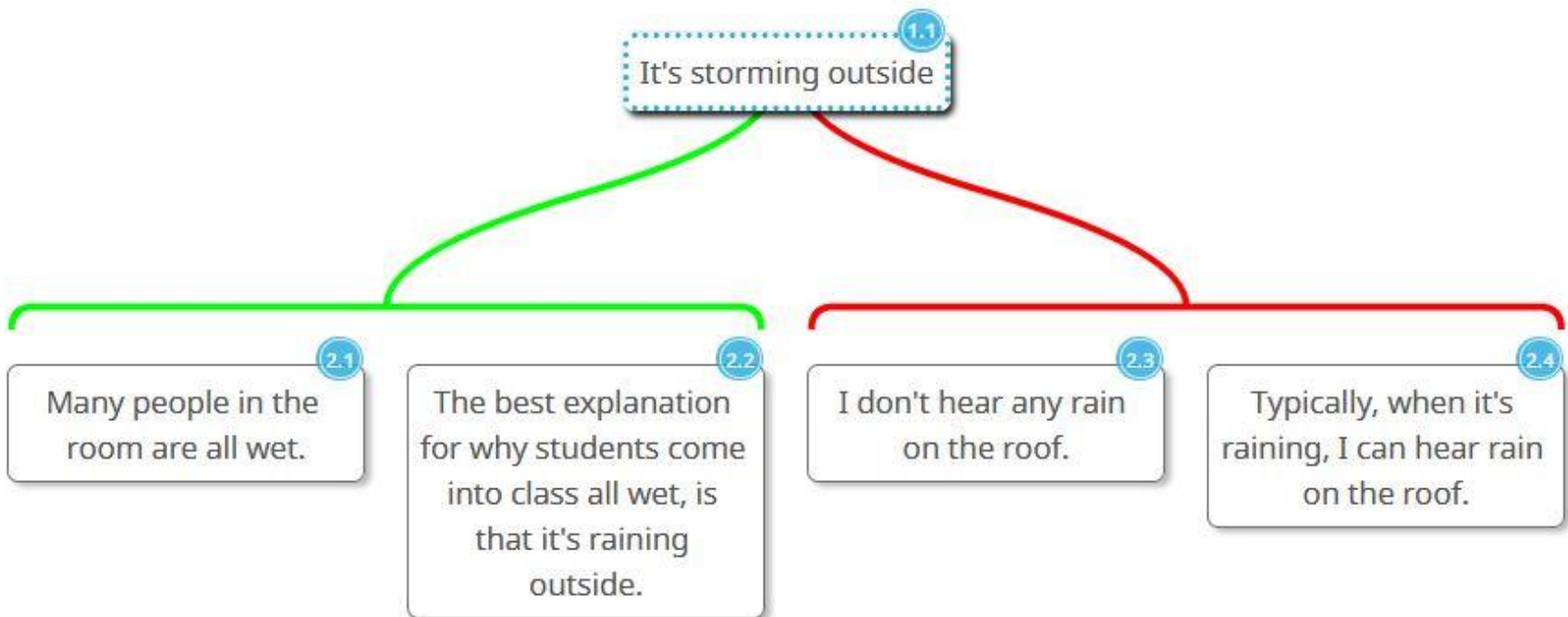


3. Components of an argument

- Rule 2: Use similar language in premisses of same argument.
 - Related: Each concept in a conclusion should also appear in the reason/objection.

3. Components of an argument

- Rule 2: Use similar language in premisses of same argument.



3. Components of an argument

- Rule 3: No reasoning within boxes (premisses) or between premisses of the same reason/objection.
 - Watch out for logical connectors like 'but', 'because', 'hence', etc.



3. Components of an argument

- Rule 4: Each reason/objection can stand on its own
 - Ask yourself: if premiss 1 is not true, would premiss 2 still provide a good reason to support the conclusion?



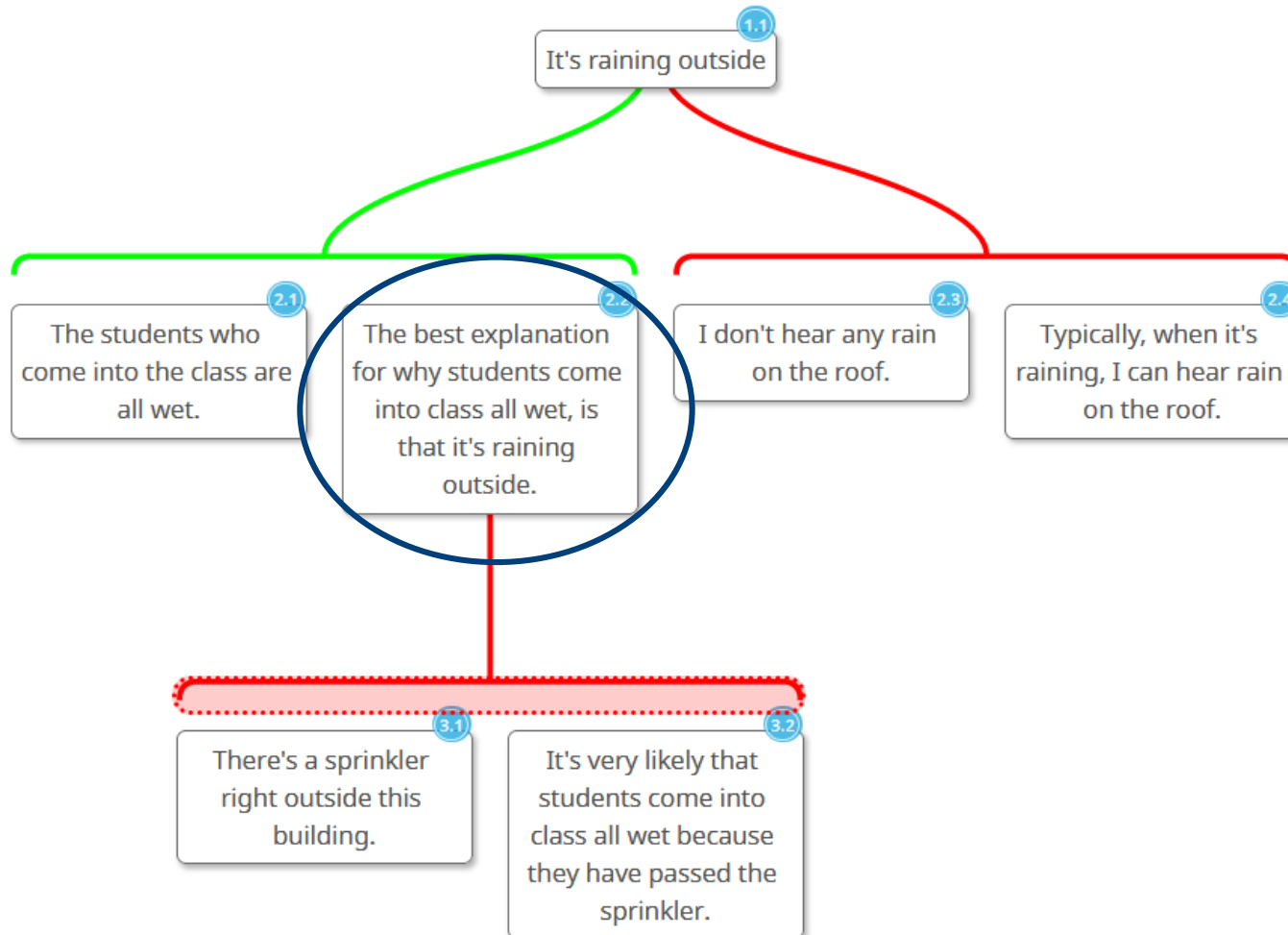
3. Components of an argument

4. Intermediate conclusions

- An intermediate conclusion (= intermediate premiss) is a claim that is simultaneously a premiss of one argument unit and the conclusion of another.

3. Components of an argument

4. Intermediate conclusions



3. Components of an argument

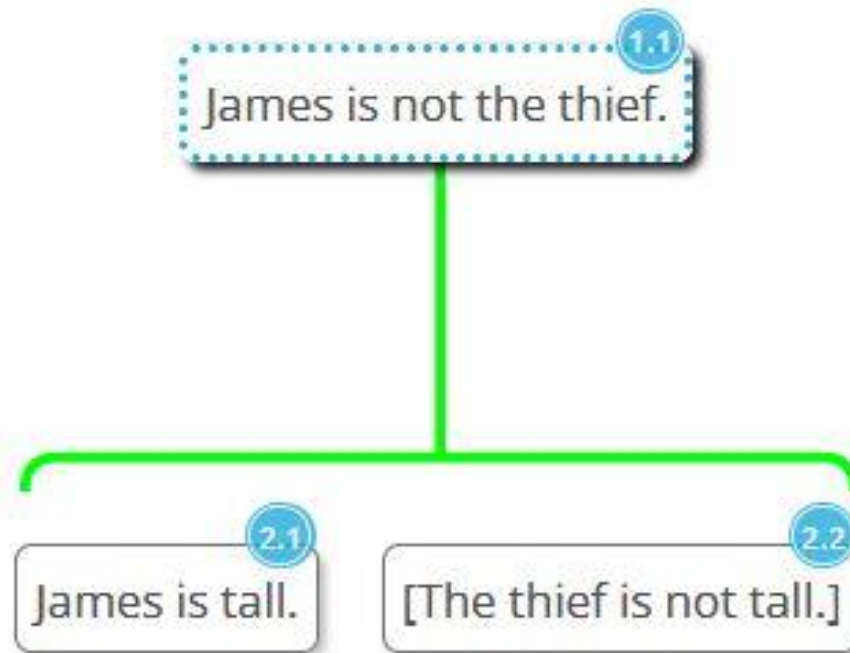
5. Unstated premises

- An unstated premise is a claim that is not explicitly spelled out, but that is nevertheless part of a reason/objection.
- One of the most important goals of argument mapping is to find the unstated premises of an argument.
- Use [square brackets] to represent an unstated premise.

3. Components of an argument

5. Unstated premises

- James is not the thief because James is tall.



3. Components of an argument

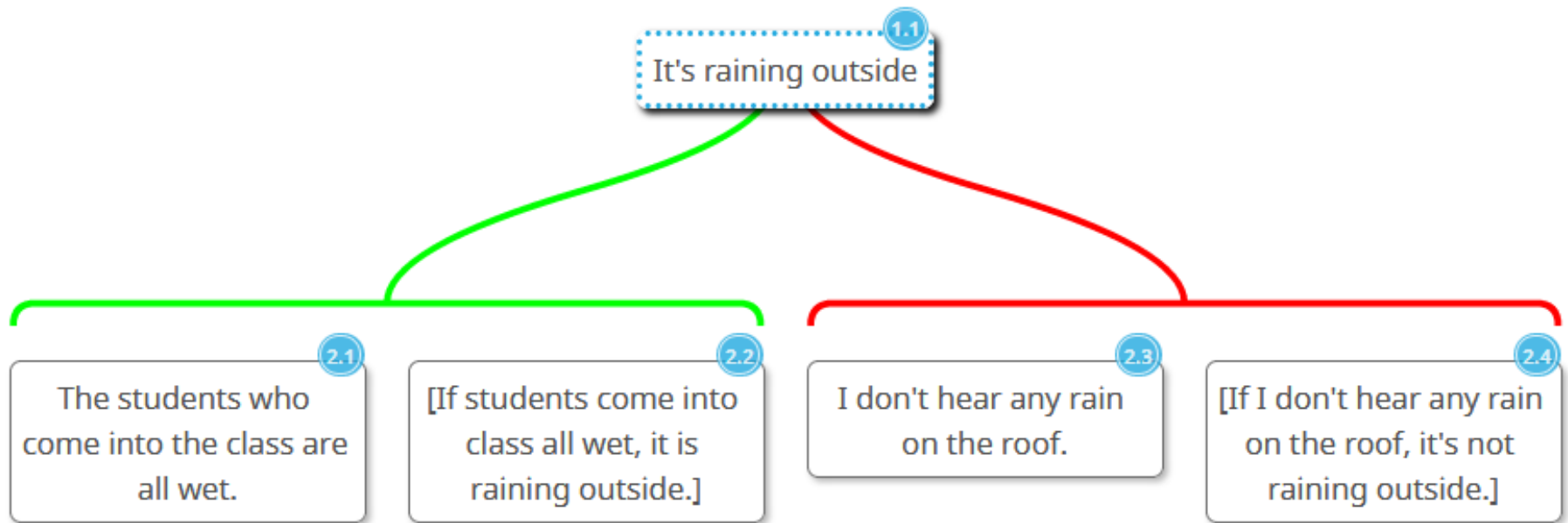
5. Unstated premises

Rule1 : Be charitable

Rule 2: Do not just add if-then claims that make the argument deductively valid. Really think about what is left unstated.

3. Components of an argument

5. Unstated premises



4. Practice

- Go to: argument.mindmup.com
- Click: create a new map
- Make sure that you are in 'argument visualization' mode
- Map! Argument mapping is a skill that requires lots of practice

4. Practice

- For more tips on argument mapping, go to www.philmaps.com
- For an online textbook on argument mapping, see:
<https://sites.google.com/site/courseimprovingreasoning/home>
- For some live argument mapping with others, go to kialo.com

5. Exercises

Exercise 1:

Keeping a dog as a pet is often good for your health because dogs encourage you to stay active. A dog can also improve your overall mood, and things that improve your overall mood are often also good for your health.

5. Exercises

Exercise 2:

The price of real estate is really low at the moment. However, prices are expected to increase a lot in the near future. Now is therefore a good time to invest in real estate.

5. Exercises

Exercise 3:

It's going to be really hot today. Hence it would be fun to go to the beach today. But of course the beach is really busy on hot days.

5. Exercises

Exercise 4:

The dog didn't bark at the intruder who broke into the warehouse. So the dog must have known the intruder, because he barks at anyone who enters the warehouse that he doesn't know. Hence Olivier can't be the intruder.

5. Exercises

Exercise 5

Descartes, Meditation III

since it possesses the virtue of self-existence, it must also without doubt have the power of actually possessing all the perfections of which it has the idea, that is, all those which I conceive as existing in God. But if it derives its existence from some other cause than itself, we shall again ask, for the same reason, whether this second cause exists by itself or through another, until from one step to another, we finally arrive at an ultimate cause, which will be God.

And it is perfectly manifest that in this there can be no regression into infinity, since what is in question is not so much the cause which formerly created me, as that which conserves me at the present time.

Nor can we suppose that several causes may have concurred in my production, and that from one I have received the idea of one of the perfections which I attribute to God, and from another the idea of some other, so that all these perfections indeed exist somewhere in the universe, but not as complete in one unity which is God. On the contrary, the unity, the simplicity or the inseparability of all things which are in God is one of the principal perfections which I conceive to be in Him. And certainly the idea of this unity of all Divine perfections cannot have been placed in me by any cause from which I have not likewise received the ideas of all the other

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perfections; for this cause could not make me able to comprehend them as joined together in an inseparable unity without having at the same time caused me in some measure to know what they are [and in some way to recognise each one of them].

Finally, so far as my parents [from whom it appears I have sprung] are concerned, although all that I have ever been able to believe of them were true, that does not make it follow that it is they who conserve me, nor are they even the authors of my being in any sense, in so far as I am a thinking being; since what they did was merely to implant certain dispositions in that matter in which the self—i.e. the mind, which alone I at present identify with myself—is by me deemed to exist. And thus there can be no difficulty in their regard, but we must of necessity conclude from the fact alone that I exist, or that the idea of a Being supremely perfect, that is, of God, is in me, that the proof of God's existence is grounded on the highest evidence.

It only remains to me to examine into the manner in which I have acquired this idea from God; for I have not received it through the senses, and it is never presented to me unexpectedly, as is usual with the ideas of sensible things when these things present themselves, or seem to present themselves, to the external organs of my senses; nor is it likewise a fiction of my mind, for it is not in my power to take from or to add anything to it; and consequently the only alternative is that it is innate in me, just as the idea of myself is innate in me.

And one certainly ought not to find it strange that God, in workman impelated on his work; and it is likewise not essential that the mark shall be something different from the work itself. For from the sole fact that God created me it is most probable that in some way he has placed his image and similitude upon me, and that I perceive this similitude (in which the idea of God is contained) by means of the same faculty by which I perceive myself—that is to say, when I reflect on myself I not only know that I am something [imperfect], incomplete and dependent on another, which incessantly aspires after something which is better and greater than myself, but I also know that He on whom I depend possesses in Himself all the great things towards which I aspire [and the ideas of which I find within myself], and that not indefinitely or potentially alone, but really, actually and infinitely; and that thus He is God. And the whole strength of the argument which I have

5. Exercise

Exercise 5

“It only remains to me to examine into the manner in which I have acquired this idea from God; for I have not received it through the senses [since] it is never presented to me unexpectedly, as is usual with the ideas of sensible things when these things present themselves, or seem to present themselves, to the external organs of my senses; nor is it likewise a fiction of my mind, for it is not in my power to take from or add anything to it; and consequently the only alternative is that it is innate in me, just as the idea of myself is innate in me.”

5. Exercise

1. Go to argument.mindmup.com
2. Click 'create new map'
3. When done, select 'file'-'download as'-'either pdf or image'
4. Save the document with mention of your name (e.g. Argument map Olivier Lemeire), and mail it to olivier.lemeire@kuleuven.be
5. Before 7/11

Let's map it!

