

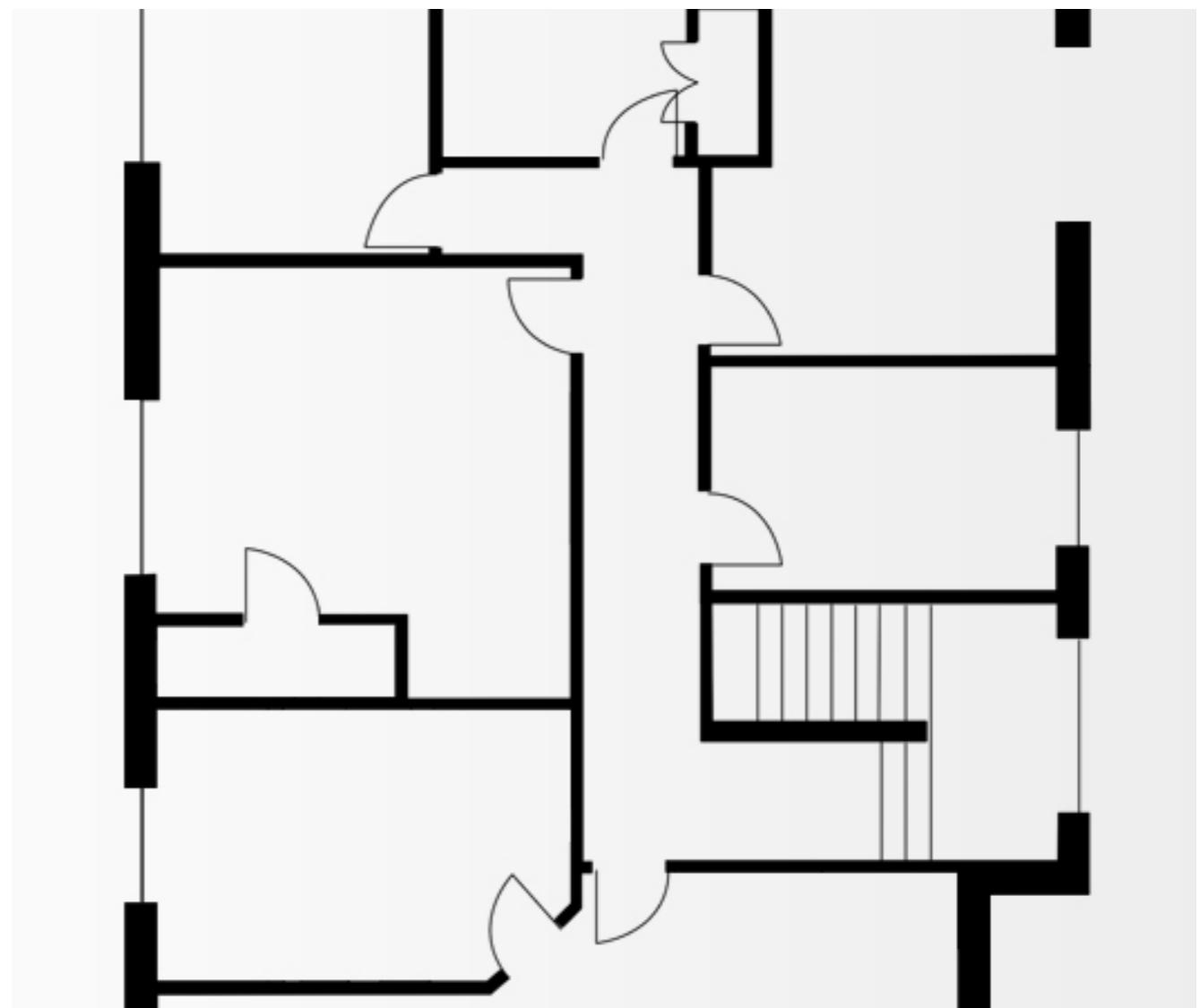


Necessity, Analyticity & A priority

**Dr Maarten Steenhagen
Michaelmas 2018
Lecture 2**

Outline of these lectures

1. The concept and varieties of necessity
2. Analyticity as explanation for necessity, and knowledge of necessary truths
3. The possibility of synthetic necessary truths and ‘rigid designation’
4. The possibility of contingent a priori truths and the significance of the analytic/synthetic distinction



Previous lecture

- Varieties of necessity
 - de re / de dicto
 - nomological, metaphysical, logical
- Quine's argument against de re necessity
- A definition of necessity in terms of possibility
- Modelling necessary truth using possible worlds



Necessary, possible, and contingent truths



Maarten Steenhagen

@msteenhangen



Definition poll!

A statement S is a contingent truth iff S is...

76% actually T & possibly F

24% possibly T & possibly F

83 votes • 5 hours left

8:31 PM - 14 Oct 2018 from East, England

3 Retweets 2 Likes



Necessary, possible, and contingent truths



Tim Crane @timcrane102 · 13h

Replying to @msteenhagen

Surely a truth has to be actually true?

3

1

10

✉



Guy Longworth @GuyLongworth · 13h

Looks like a reductio of x-phi. :)

1

1

5

✉



Tim Crane @timcrane102 · 13h

couldn't have put it better myself

0

1

2

✉

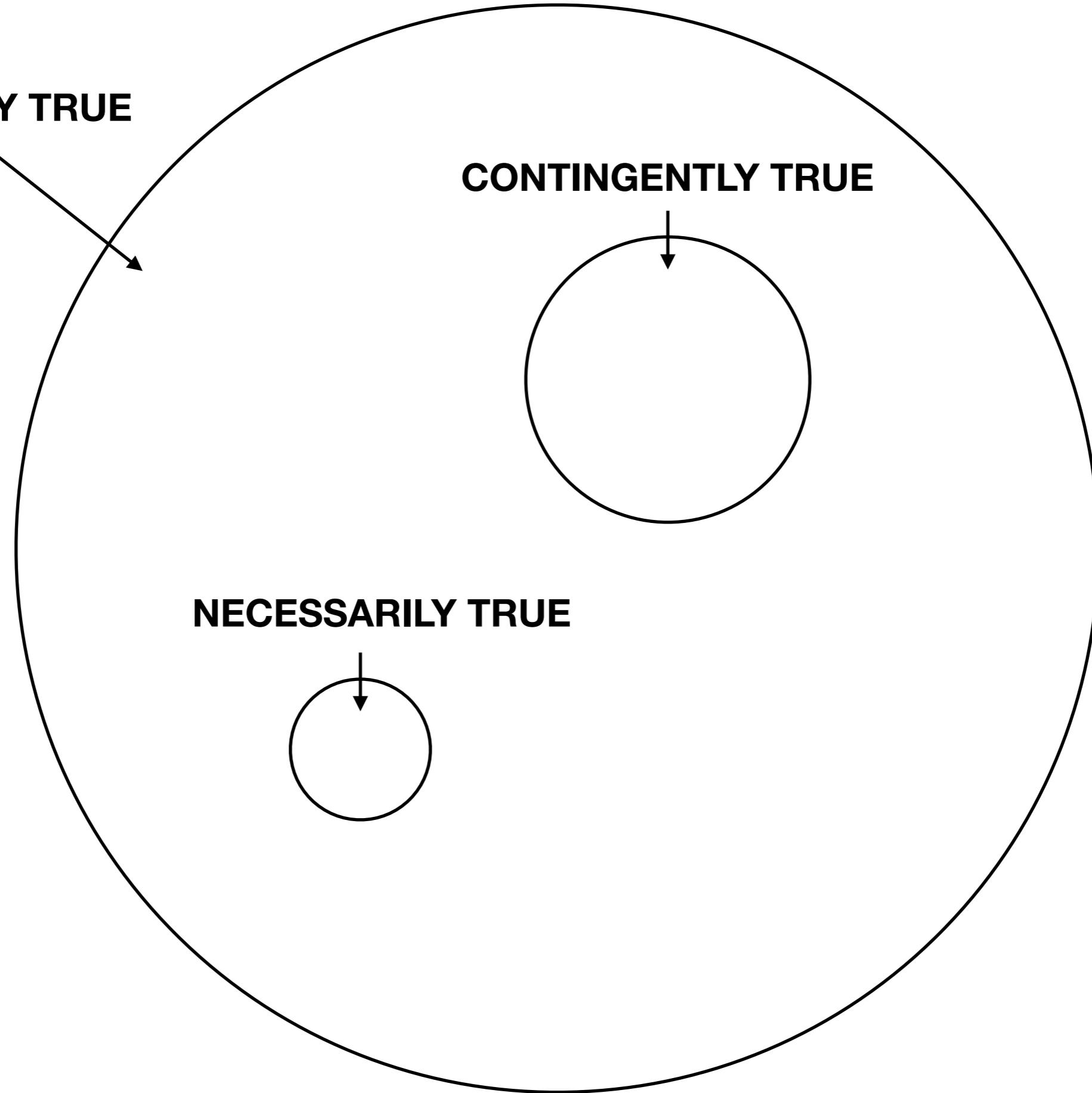
Necessary, possible, and contingent truths

- A statement S is a *necessary truth* iff it is true in all possible worlds (i.e. there is no possible world where it is false)
- A statement S is a *possible truth* iff it is neither a necessary truth, nor a necessary falsehood (i.e. there is some possible world in which it is true)
- A statement S is a *contingent truth* iff it is not a necessary truth and actually true (i.e. true in the actual world)

POSSIBLY TRUE

CONTINGENTLY TRUE

NECESSARILY TRUE



Why are some truths necessary?

(Why are some truths true in all possible worlds, and others not?)



Analytic vs Synthetic



- Some statements are analytically true (from greek *analuein*, ‘to unloose’). They are true simply because of what they mean:
 - ‘ $1 = 1$ ’
 - ‘Demeter is Demeter’
 - ‘The meeting is cancelled or not’
- These examples are all logical truths: their truth is guaranteed by the *logical form* of the statement itself

Analytic vs Synthetic

- Some truths are not logical truths, but are very similar to logical truths:
 - ‘A vixen is a female fox’
 - ‘All ophthalmologists are doctors’
 - ‘If Demeter killed Hades, then Hades died’
- These examples are often called *conceptual* truths: their truth is determined by the logical form + the meanings or definitions of the terms used.

Analytic vs Synthetic

- Many philosophers have noticed that you can reduce any conceptual truth to a logical truth, simply by replacing terms with their definitions
 - ‘A vixen is a female fox’
 - The term ‘vixen’ means female fox
 - ‘A female fox is a female fox’



Analytic vs Synthetic

- Contrast this with truths that are not logical or conceptual truths:
 - ‘There’s a vixen on the street’
 - ‘Demeter killed Hades’
 - ‘Hades died’
- Statements like this are *synthetic* (from greek *suntithenai*, ‘to place together'): their truth is not fully determined by what the statement means. If a synthetic statement is true, then its truth is determined by both what the statement means and by some other fact

Necessity & Analyticity

- Why are some truths necessary? Because some truths are analytic!
- Analytic statements are either logical truths or conceptual truths and so are true regardless of how the rest of the world is. We might say, they are true in all possible worlds
- Quine: “Among the various possible senses of the vague adverb ‘necessarily’, we can single out one—the sense of analytic necessity—according to the following criterion: the result of applying ‘necessarily’ to a statement is true if, and only if, the original statement is analytic.” (1943:121)

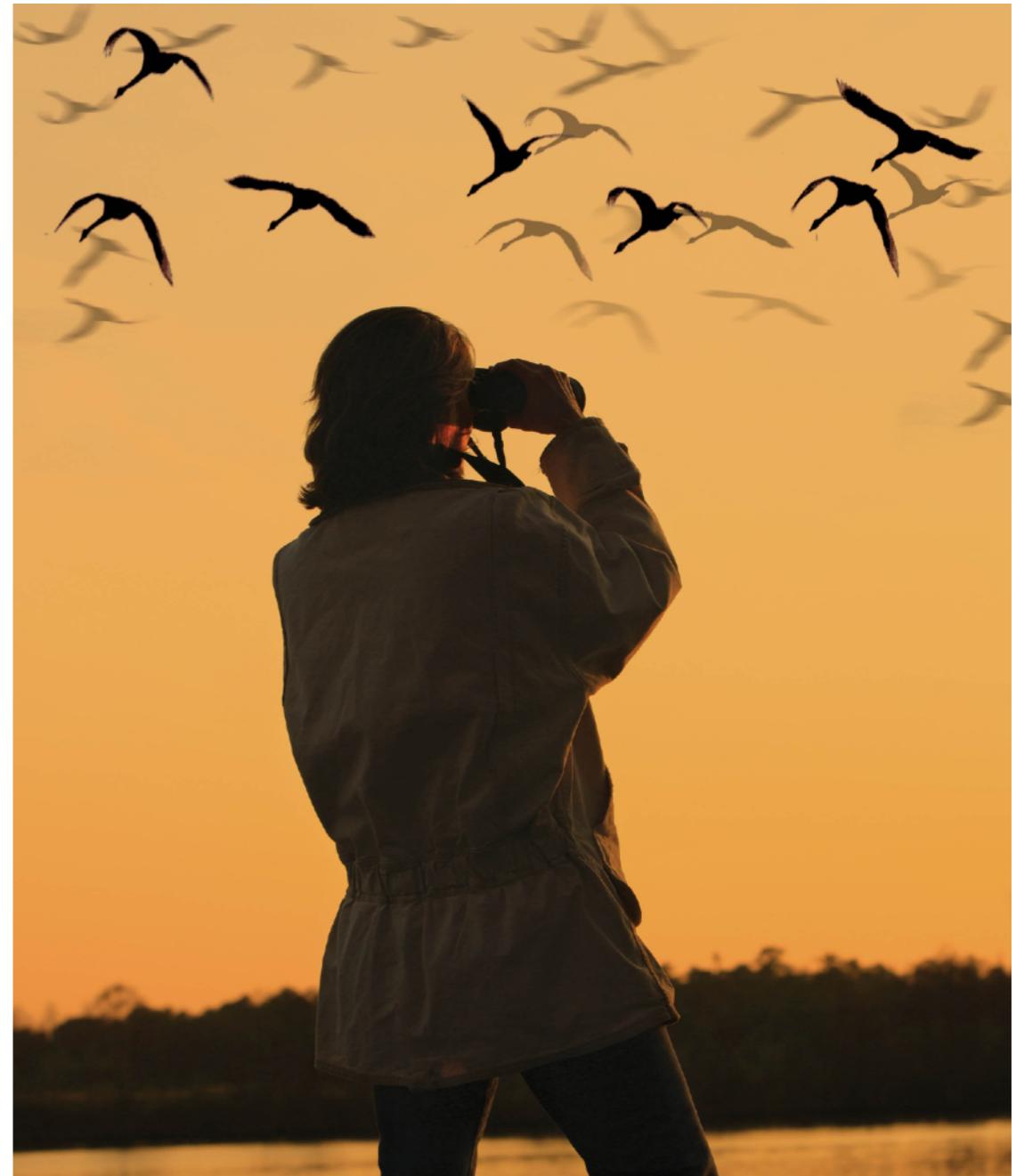
Knowledge of necessary truths

(Why don't we have
travel to all possible
worlds to verify them?)



A posteriori truths

- An important distinction: *a priori* truths vs *a posteriori* truths
S: ‘Demeter killed Hades.’
- How can we know whether S true or false?
- S is a synthetic statement
- We must (a) first and foremost understand what S means, but in addition (b) verify whether Demeter in fact killed Hades



A priori truths

- Can we know certain things without verifying whether what they say is in fact true?

S^* : ‘If Demeter killed Hades, then Demeter killed someone.’

- S^* is an analytic statement
- To know whether S^* is true it is only necessary to understand what S means.

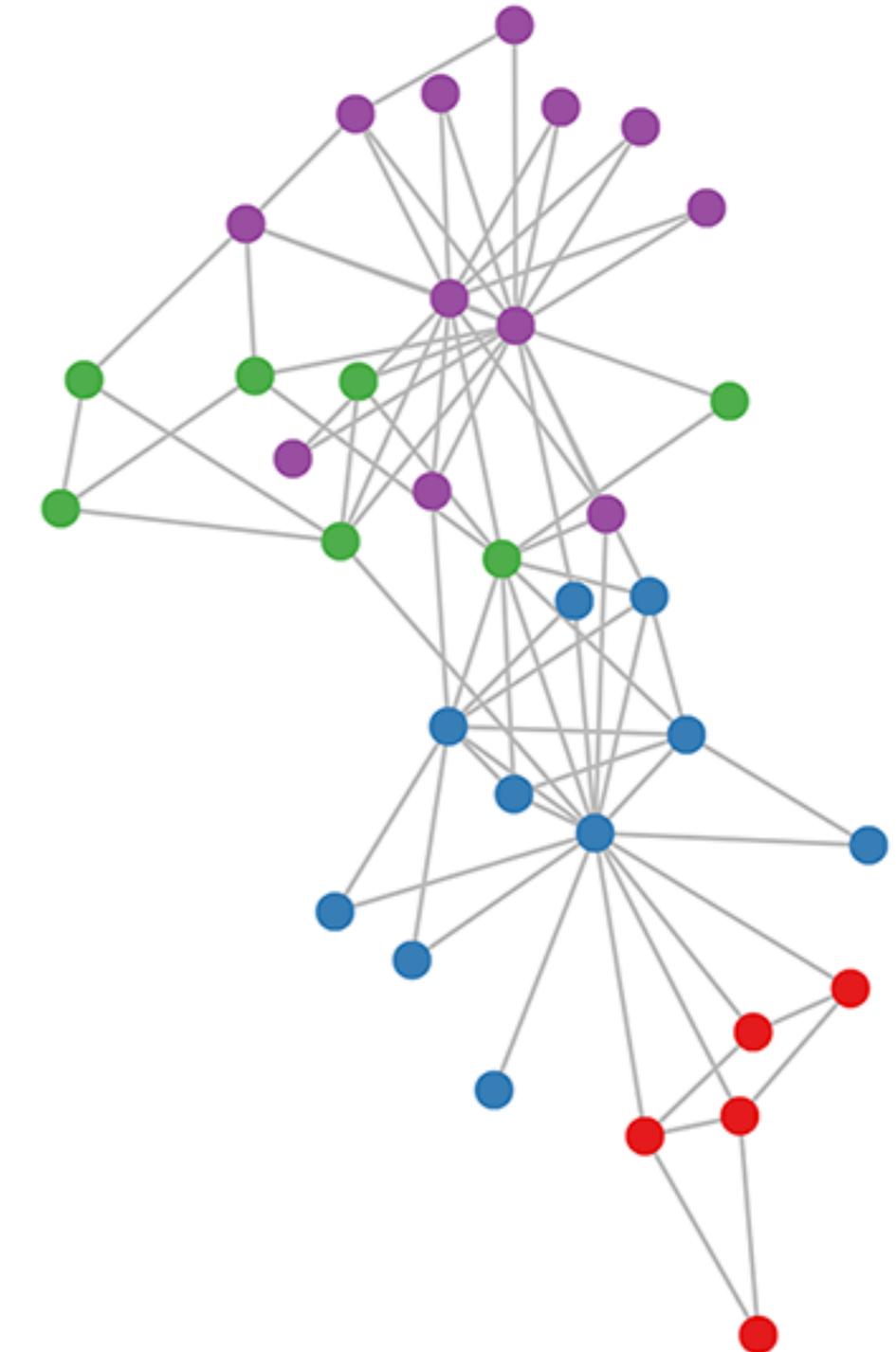


A priori truths vs a posteriori truths

- A statement is *a priori* true if and only if understanding the meaning of the statement is all that is required to know that it is true
- A statement is *a posteriori* true iff it is not *a priori* true

Connecting the dots

- Analytic → Necessary (Obvious)
- Necessary → Analytic (Plausible)
- Analytic → A priori (Obvious)
- A priori → Analytic (Plausible)
- A priori → Necessary (Obvious)
- Necessary → A priori (Plausible)



A package deal?

For any sentence S...

1. S is a necessary truth \leftrightarrow S is an analytic truth
2. S is an analytic truth \leftrightarrow S is an a priori truth
3. S is an a priori truth \leftrightarrow S is a necessary truth



“The views which are put forward in this treatise derive from the doctrines of Bertrand Russell and Wittgenstein, which are themselves the logical outcome of the empiricism of Berkeley and David Hume. Like Hume, I divide all genuine propositions into two classes: those which, in his terminology, concern ‘relations of ideas’, and those which concern ‘matters of fact’. The former class comprises the **a priori** propositions of logic and pure mathematics, and these I allow to be **necessary** and certain only because they are **analytic**...”

–A.J. Ayer, ‘Preface to First Edition’ in *Language, Truth and Logic*

“...That is, I maintain that the reason why these propositions cannot be confuted in experience is that they do not make any assertion about the empirical world, but simply record our determination to use symbols in a certain fashion. Propositions concerning empirical matters of fact, on the other hand, I hold to be hypotheses, which can be probable but never certain.”

—A.J. Ayer, ‘Preface to First Edition’ in *Language, Truth and Logic*



Necessary truth = A Priori truth = Analytic truth

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