Announcements and Such

- Two Songs *Blues Traveler* (self-titled 1st album)
 - "But Anyway" and "Dropping Some NYC"
- No Lecture On Tuesday (2/20)
- First Essays Due Next Tuesday (2/20)
 - **Policy on late papers**: Each late day counts down a third of a letter grade (A+ → A, A → A-, *etc.*)
 - Turn-in your papers to your GSI's mailbox in 301 Moses by 4pm Tuesday
- Today: Reason (III of III)
 - Strengths and weaknesses of the classical view
 - Summary of concepts/distinctions on "Reason"

Some Difficulties and Strengths of the Classical View II Meaning Change and Falsification I

- Another potential problem for the classicist is that of *meaning change*. The terms we use can gradually change in meaning.
- Over time, the usage of "vixen" may change in such a way that it becomes difficult to say whether it expresses our concept vixen
- This sort of thing happens in science a lot. Consider the term "mass". Its meaning has changed several times in scientific history
- This makes it difficult to say which propositions are expressed (at various times in history) by sentences containing "mass"
- The classicist will insist on distinguishing cases of meaning change *vs* falsification.

Some Difficulties and Strengths of the Classical View I Vagueness

- Many *sentences* such as (*e.g.*) "the painting contains a red & orange patch" are *vague* because some of their *terms* are vague
- What this means is that it is *difficult to tell* which proposition the sentence expresses
- We may thus be unsure whether a given patch *falls under the term* "red" or "orange"
- But, this does not imply that the *concepts* or the *propositions* in question are vague
- Classicist: the sentence either expresses a necessary truth or not. This isn't a reason to deny there are synthetic *a priori truths*.
- The classicist just needs *one example* here: try "no geometric object is a round square"

Some Difficulties and Strengths of the Classical View II Meaning Change and Falsification II

- 1. Scientists discover (despite appearances) that vixens have such significant male characteristics, they are *not really female*.
- 2. Scientists discover startling things about vixens, and they come to use "vixen" in a new sense. While they deny that "vixens" in this new sense are always female, what they are thereby saying provides no reason to doubt that what we now mean by "All vixens are female" is true.
- For a classicist, (1) amounts to a *falsification* of an *a priori* truth, which is impossible.
- But, (2) is a *mere* case of *meaning change*, and it does *not* threaten classicism.

Some Difficulties and Strengths of the Classical View II Meaning Change and Falsification III

- Classicists take (2) to be possible, and they will claim that all cases that *appear* to be cases like (1) are *actually* cases like (2).
- Other philosophers (*e.g.*, Quine) think that the difference is *not* clear, and that future discoveries *can* weigh against what the classical view calls *analytic* propositions.
- It seems clear that there are *some* truths of reason (*e.g.*, logical & other analytic claims)
- The real controversy is whether there are any *synthetic a priori* truths; and, if there are any, whether they are *necessary* truths.
- It seems we *can* know the *truth* if not the *status* of such claims *intuitively*.

Some Difficulties and Strengths of the Classical View III The Possibility of Empirical Necessary Truths II

- Is it even *conceivable* that there could be a piece of gold that is *not* malleable? This seems more difficult to imagine than ~(1).
- It seems *even harder* to see *any* sense in which there could be water that is *not* H2O.
- Even if the laws of nature were different, it's hard to see how that would undermine the truth of *identity* claims such as (3).
- Of course, the classicist can maintain that these are *not analytic*. But, the challenge here is to the claim: necessary ⇒ a priori.
- There are other examples that seem *even more* threatening to this tenuous thesis.

Some Difficulties and Strengths of the Classical View III The Possibility of Empirical Necessary Truths I

- Classicists are committed to: *all* necessary truths are *a priori*. This is worrisome.
- There seem to be cases of necessary truths that are *empirical*, and thus *a posteriori*.
- Audi discusses several examples, including:
 - (1) Water is soluble.
 - (2) Gold is malleable.
 - (3) Water is H2O.
- Each seems *necessary* in *some* sense. But, all are clearly *empirical* & *a posteriori*.
- One could argue that (1) is necessary in a *merely nomic* sense. (2) & (3) are trickier.

Some Difficulties and Strengths of the Classical View III Essential *vs* Necessary Truths I

- *Origin essentialism* is the view that (*e.g.*) a given (actual) person *could not* have had different parents than they actually have.
- So, consider the following specific claim:
 - Branden's parents are Michael and Gloria.
- According to origin essentialism (a very widely held view), this claim is *absolutely necessary* not even *conceivably* false.
- But, of course, this claim is *empirical*, and, as a result, it cannot be known *a priori*.
- This claim is different than other necessary truths we've seen. It's *singular* & *existential*.
- Distinction: *necessary vs essential* truths.

Some Difficulties and Strengths of the Classical View III Essential *vs* Necessary Truths II

- An *essential* truth is a truth about a particular thing, which articulates a property that is essential to that thing.
- As such, essential truths are not true in *all* possible worlds, but only in worlds in which the particular object in question *exists*.
- Another example (due to Kripke):
 - Hesperus = Phosphorus
- This can be thought of as an *essential* truth about Venus (that it is self-identical).
- One problem with this Classical reply is that it seems "water is H20" is true even in worlds where there is no water.

Some Difficulties and Strengths of the Classical View III Essential vs Necessary Truths IV

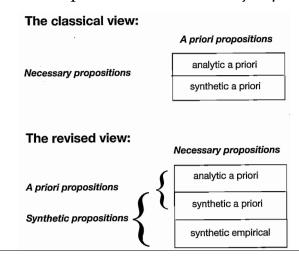
- Consider Goldbach's Conjecture:
 - Every n > 2 is the sum of three primes.
- This is a simple, but "deep" question about the natural numbers. It remains *open*.
- Let's suppose it's true (hence, a theorem).
- It's clearly a (conceptually) necessary truth.
- Is it *a priori*? This seems like a stretch.
- Its proof (let's safely assume) will have required so much "technology" that it's difficult to think of it as *genuinely a priori*
- It may be "ultimately" *a priori*, but knowing it seems to require more than "pure reason"

Some Difficulties and Strengths of the Classical View III Essential *vs* Necessary Truths III

- The Classicist can distinguish necessary truths *about necessary existents* (numbers, *etc.*) *vs contingently existing things* (water)
- The nature of contingently existing things must be discovered by scientific inquiry
- The nature of necessarily existing things can be discovered by reason alone
- In any case, this amounts to a *revision* or *qualification* of the naive Classical view
- There are further reasons to worry about the Classical claim *necessary* ⇒ *a priori*
- "Deep" mathematical theorems seem to be *marginally a priori* (at best), but *necessary*

Some Difficulties and Strengths of the Classical View III Essential vs Necessary Truths V

• So, there are necessary truths knowable only through empirical investigation or arduous proof that isn't *strictly a priori*



Some Difficulties and Strengths of the Classical View IV Reason, Experience, and *A Priori* Justification

- Despite the shortcomings of the Classical View, it remains attractive in many ways.
- It suggests that reason is a powerful and *active* capacity for belief and knowledge.
- In this sense, reason is analogous to introspection (as opposed to perception).
- One can, *virtually at will*, use reason to arrive at many justified beliefs and much knowledge (albeit only *a priori* knowledge)
- This is not to deny the *genetic* dependence of reason on experience. We need experience to *acquire* concepts, *etc*.
- But, once we *have* the concepts, reason can act powerfully, *independently of experience*.

Some Difficulties and Strengths of the Classical View VI Loose & Strict "A Priori Justification/Knowledge" I

- Just as there are non-perceptual beliefs about perceptible objects, there are non-a priori beliefs about a priori propositions
 - I may learn even a self-evident truth *p via testimony.* This is a *testimonial* belief *about* an *a priori p, not* an *a priori* belief
- Also, a belief may be "a priori justified" in a *loose* sense, even if it's not strictly a priori.
 - I believe a mathematical theorem on the basis of a *very subtly*, and *reasonably*, incorrect understanding of it.
- We don't want to call these cases of *a priori knowledge*. But, perhaps there *could be* a "loose" sense of APK, based on "loose" API.

Some Difficulties and Strengths of the Classical View V A Priori Beliefs

- Principle of justification for *a priori* belief. Normally, if one believes a proposition solely on the basis of (adequately) understanding it, this belief is justified.
- **Principle of knowledge for correct** *a priori* **beliefs**. Normally, if one believes a true proposition in the *a priori* way described above, then one knows that it is true.
- **Principle?** Normally, if one believes a proposition solely on the basis of one or more premises that self-evidently entail it and are themselves believed in the *a priori* way just described, this belief is justified.
 - That is: Normally self-evident entailment *transmits* this kind of *a priori* justification.

Some Difficulties and Strengths of the Classical View VI Loose & Strict "A Priori Justification/Knowledge" II

- With "deep" mathematical theorems p, I
 may believe p on the basis of self-evident
 axioms, together with a *justified true belief*of an entailment of p by the axioms.
- While this won't be *a priori* knowledge *in the strict sense* (since "deep" theorems are not *strictly a priori*), it may be "loose" APK.
- Two kinds of (strict) *a priori* justification:
 - Justification based *directly* on the understanding of a self-evident claim *p*
 - Justification based *indirectly* on the understanding of *q*, *via* understanding a self-evident entailment of *q* from a self-evident *p*. [*inferential a priori* justification]

Some Difficulties and Strengths of the Classical View VI Summarizing the Distinctions I

• We've seen a large number of distinctions. First, several kinds of *a priori propositions*:



A priori in the narrow sense: self-evident; roughly, adequate understanding is a sufficient ground for justification; belief based on such understanding constitutes knowledge. (This basic case is direct self-evidence.)

PROPOSITIONS:

A priori in the broad sense: not directly self-evident but either (a) indirectly self-evident, i.e., not self-evident but self-evidently entailed by a self-evident proposition, or (b) ultimately a priori, i.e., not self-evident in either sense but provable by self-evident steps from a self-evident proposition.

• (a) 1 = 1, (b) either 1 = 1 or my car is red, (c) a theorem of sentential logic, provable by (not too many, and simple) *modus ponens* steps

Some Difficulties and Strengths of the Classical View VII Summarizing the Distinctions III (Justification)



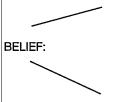
A priori in the strict sense: (a) based on an adequate understanding of a directly self-evident proposition, or (b) indirectly based on such an understanding via a self-evident entailment of the proposition in question by a self-evident proposition.

A priori in the loose sense: not a priori in the strict sense but based on *an* understanding of the proposition in question (the proposition itself need not be a priori or true).

- Strict: (a) belief that 1 = 1, based on *adequate* understanding, (b) belief that 1 = 1 or my car is red, based on AU of SEE (a) \Rightarrow (b).
- Loose: based on *an* understanding (*e.g.*, insult/offended example would suit here)

Some Difficulties and Strengths of the Classical View VII Summarizing the Distinctions II

• Several kinds of *a priori belief*:



A priori in the narrow sense: (a) held in an a priori way; roughly, based on an understanding (possibly an inadequate understanding) of the proposition in question, and (b) of a proposition that is a priori (in the narrow *or* broad sense).

A priori in the broad sense: (a) held in an a priori way but (b) of an empirical proposition.

- Narrow: belief that nothing is a round square, based on *an* understanding of round/square.
- Broad: (*p*) people tend to feel offended when they are insulted. One may believe *p* solely on the basis of *an* understanding of its concepts, *despite* its being *empirical*.

Some Difficulties and Strengths of the Classical View VII Summarizing the Distinctions IV (Knowledge)



A priori in the strict sense: knowledge (a) of an a priori proposition that is directly or indirectly self-evident, and (b) constituted by a belief that is a priori justified in the strict sense.

A priori in the loose sense: knowledge (a) of a proposition that is not directly or indirectly self-evident but is provable by self-evident steps from some self-evident proposition, and (b) constituted by belief based on understanding such a proof.

- Strict: (a) knowledge that 1 = 1 (or an *indirect* SE: "1 = 1 or my car is red"), where this belief is (b) *a priori* justified in the *strict* sense.
- Loose: (a) knowledge of, say, a theorem of sentential logic that is provable in (*few*, *simple*) steps from self-evident axioms, where (b) this is based on *understanding the proof*.

Some Difficulties and Strengths of the Classical View VIII The Power of Reason & Indefeasible Justification I

- Is reason powerful enough to be able to provide what even introspection seems (?) not to: *indefeasible* justification (the "holy grail"!)?
- There may be truths that are so simple and luminously self-evident that they *cannot* be unjustifiably believed (when properly considered)
 - For instance, that (p) 1 = 1.
- It's hard to see how one could comprehendingly consider *p*, and yet unjustifiably believe *p*.
- One might believe *p* (in part) for bad reasons, but that wouldn't undermine the justification reason provides, *when one adequately understands p.*
- *Not all a priori* justification is indefeasible.

Some Difficulties and Strengths of the Classical View VIII The Power of Reason & Indefeasible Justification II

- Plausible skeptical arguments might be able to defeat *a priori* justification (even in the strict sense) — even for certain logical truths.
- Moreover, indefeasible justification may sometimes occur even for *a posteriori* claims.
- Consider the proposition that-"Branden exists". This may be the kind of proposition that *I* (cannot help but) *indefeasibly justifiably* believe.
- But, surely, "Branden exists" doesn't express a *necessary* truth, much less an *a priori* truth!
- Whatever my justification is for believing that Branden exists (what is it?), it doesn't seem defeasible. But, it also doesn't seem *a priori*.
- Defeasibility & skepticism to be discussed later...