The Problems

A. Intentionality (Identity Theory/Functionalism)
   1. Mental states are about things, whether actual or not. They have two properties: (a) They can be about things that don't exist, and (b) They are perspectival.
   2. How can physicalism accommodate this?

B. Rationality (IT/F)
   1. Mental states are used to rationalize beliefs and actions; that is, they are used to make it clear that the actions are appropriate and were (or were not) as they should have been.
      a. This goes beyond merely describing regularities--it involves specifying norms.
      b. It is modeled as involving calculations based on logical relations between propositions that have associated utilities and probabilities.
   2. Does the physicalist project make room for normative practices such as action explanation?

C. Mental Content (IT/F)
   1. Mental states have meanings that are intentional; that is, they have content, much in the way that sentences have semantic content.
   2. Internalists argue that this should be specified without reference to anything outside the agent to whom the mental state is attributed; externalists argue that some mental states make essential reference to the outside world.
   3. Internalism seems compatible with physicalism, but externalism seems required to explain our actions--these often involve indexical reference to things in the world.

D. Circularity (F)
   1. Can you make out a mental state without assuming it?
   2. This is especially a worry for behaviorism, which amounts to a naive form of
functionalism; however, functionalists must also grapple with this, especially those who are inclined toward reductionism.

E. Chinese Room (F)

1. You can set up a functional state that for all the world looks like understanding but is just a weasel-sucked egg.

2. Functionalism can't get understanding, an important mental state. Thus, it is incomplete and inadequate.

F. Qualia (IT/F)

1. Physicalism leaves out what it's like to have mental states (i.e., qualia). Qualia is essentially subjective, so an objective account like physicalism is essentially incapable of accommodating it.

2. Since qualia is what really distinguishes these states as mental, physicalism cannot be correct.

II. Physicalist "Solutions"

A. Models of the Mind -- Addresses (A), (B), (D), and (E)

1. Computational models of the mind
   a. Mental states are associated with physical states that supply their content.
   b. Mental state content is supplied by a "language of thought".

2. Connectionist models of the mind
   a. Mental states are associated with the entire state of the central nervous system.
   b. There is no need for an intermediate medium like the language of thought.

B. Theories of Content -- Addresses (C)

1. Dual-Component Theories
   a. Mental states have narrow content and wide content, where the former is internalist and the latter externalist.
   b. Is wide content explanatorily relevant?

2. Naturalistic Externalism
   a. There is no duality--wide content figures into specification of thoughts
because it explains why an agent can have those thoughts.

b. Does this make it possible to explain actions? Does it capture indexicality?