§ Logical Behaviorism [Strong]:
___ Statements containing mental vocabulary can be analyzed into (translated into) statements containing just the vocabulary of physical behavior.
___ Mental events are logical constructions out of actual and possible behavioral events.

§ Logical Behaviorism [Moderate]:
(1) Analytic entailments: there exist entailments between mind-statements and behavior-statements;
    \[ \Rightarrow \text{If x is in pain, then x would exhibit the following set of behavior (or a major part of it): is moaning, is wincing, .......} \]

(2) Partial Translatability: Mind-talk cannot all be translated into behavior-talk. The failure of translation is the result of the ambiguity of mind talk.

*Q: What is the difference between strong logical behaviorism and moderate logical behaviorism? Do you think the moderate version makes logical behaviorism more acceptable?

§ Putnam's Notion of "Pain"
___ the intension of "pain" cannot be some inner quality.
___ "Pain" is a cluster concept: the application of the word 'pain' is controlled by a whole cluster of criteria, all of which can be regarded as synthetic (that is, non-analytic: it is possible to say that the term "pain" applies although the whole cluster is missing).

*Q: What does Putnam mean by this statement: As a consequence, there is no satisfactory way of answering the question 'What does "pain" mean?' except by giving an exact synonym; but there are a million and one different ways of saying what pain is. (p. 26)

*Q: How exactly is Putnam's notion of pain different from that of logical behaviorism?
*Q: What is his point about polio or multiple sclerosis? (p. 27)

- Logical behaviorism: "Pain" is a cluster-concept -- that is to say, it stands for a cluster of phenomena.
- Putnam: What we mean by 'pain' is not the presence of a cluster of responses; rather, it means the presence of an event or condition that normally causes those responses.
Q: Do you agree with Putnam when he says, "One can have a 'pink elephant hallucination,' but one cannot have a 'pain hallucination,' or an 'absence of pain hallucination.'"?

*** Putnam's definition of "pain":
--- Pains are not clusters of responses; they are (normally, in our experience to date) the causes of certain clusters of responses.

§ Putnam's Goals:
--- I come to bury logical behaviorism, not to praise it.

To Show:
(i) There is no analytic entailment connecting pain and pain behavior.
(ii) Statements about pain are not translatable into statements about the behavior of pain, because causes (pains) are not logical construction out of their effects (behavior).

⇒ It is logically possible (no self-contradiction) to have hypothetical worlds in which there are pains but no pain behavior.

§ Putnam's Argument Against Logical Behaviorism:
--- 1. If 'pain' means a cluster of responses such as saying "ouch" or wincing, then it is impossible for anyone to have pain in the absence of this cluster of responses.
--- 2. But there can be possible worlds (it is not self-contradictory to have such worlds) in which pains are not responsible for the usual responses, or even are not responsible for any responses at all.
--- 3. Therefore, this cluster of responses cannot be the meaning of 'pain.'

Two Possible Worlds:
(1) The super-Spartans
(2) The X-worlders

*Q: Do you agree with Putnam that the super-Spartans and the X-worlders do have pains?

§ Putnam's Conclusion:

If this last fantasy is not self-contradictory, then logical behaviorism is simply a mistake.