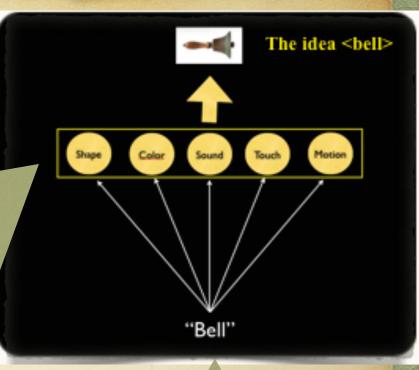
Look at this diagram and compare it with the Wernicke-Lichtheim diagram of language.



Which part of the Wernicke-Lichtheim diagram is represented here?

Is there a representation of the <u>idea</u> <bell> that is independent of activation in the sensory-motor system?

What do we mean by a "functional unit"?

What part of the original diagram is represented here? Hint: Examine the direction of the arrows. What did Wernicke mean by the term "image"?

What was the <u>metaphor of the relationship between mind and</u> <u>brain</u> underlying the Wernicke-Lichtheim diagram?

How did the Wernicke-Lichtheim diagram explain the mechanism by which we understand the meaning of an auditory word? What is the <u>relationship</u> between the following:

(a) The connection between language and ideas.(b) The notion of a reflex.

## Do you understand this sentence:

To understand a word like *bell* was simply to retrieve a bundle of stored associated memories that were registered during repeated experiences with the object (*Close association between various memory images has been established by repeated experience of the essential features of bells*).

## Is the following True or False?

Thinking of one attribute of the object immediately gives rise to the integrated concept; the sound of a bell evokes all the other experiences we have stored with the object, such as its shape, the movements we made when touching it, and so on.

Is the following True or False:

According to Hughlings Jackson, language could be fully explained by considering the operation of physical mechanisms in the brain.

What is meant by the term "proposition"?

Which of the following <u>sentences</u>, according to Hughlings Jackson, have propositional content? Hint: We want to know which <u>sentences</u> are stating facts that are either true or false.

- a) It is raining outside.
- b) I can't move my leg.
- c) Leg.
- d) I don't think I can move my leg.

In doing the previous exercise, did you apply the following definition from the text?

This term is typically used to denote a declarative statement that can be seen as either true or false; for example, the proposition *It is sunny today* can be verified by checking the state of the weather.

Suppose, when I say "I can't move my leg" I am deceived. I can in fact move my leg, though I believe I can't, so you, as the observer can verify that the the sentence is false.

Does the sentence "I can't move my leg" have propositional content? (Hint: check the definition above).

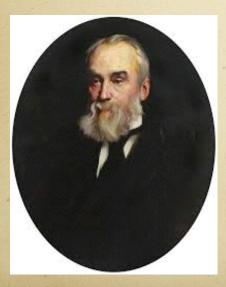
Hughlings Jackson distinguished between <u>two</u> kinds of language, represented differently in the brain. What were these two kinds of language?

In what way did the subcortical brain make contact with the language mechanism?

What did the link between the subcortex and the language cortex express, according to Jackson?

Which part of the system produced propositional language?

How did Jackson's views on language influence the young Sigmund Freud?





What is the <u>fundamental unit of language</u> that is assumed in the Wercnicke-Lichtheim diagram?

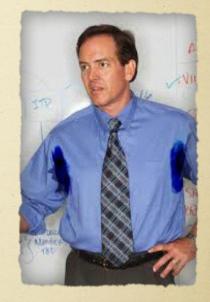
What did Hughlings Jackson argue is the fundamental unit of language?

Freud once remarked, in thinking about how language and other physical expressions communicate both conscious propositional states and unconscious emotional states:

"betrayal oozes from every pore".

Why did he say that?

What did Freud mean by a "paraphasia"?



What is link between a paraphasia and a slip of the tongue or an odd way of expressing an idea?

## What did I mean by this sentence?

All ... (Freud's mentors)... shared the prevailing emphasis that nervous functioning, including the function of the brain, could be reduced to *reflexive internal processes*.

Is the following statement True or False.

According to Brücke, one of Freud's teachers, thoughts could not influence the body.

Who was responsible for the term "Primal Ego" and how was this <u>mental</u> construct related to <u>physical</u> events?

How, according to Meynert, does the sense arise that we are both physical and mental "selves"?

What is a "secondary ego" and in what way does it differ from a "primary ego"? How was the distinction used to explain the existence of mental conflict? Was Freud originally responsible for this distinction? What did William James have to say about Meynert's view on the relationship between mental events and the brain?

Is the following statement True or False:

In Freud's landmark work on the interpretation of dreams, we see clearly expressed his argument that psychological constructs must be grounded in neuroanatomical structures. What did Freud mean by the term "psychical locality" of a dream and how does the term relate to the Theatre Metaphor we discussed in Chapter 1

What is the relationship between Freud's use of the term "locality in the mind" and the location of a physical image in a microscope or some other analogous optical device?





Is the following statement True or False?

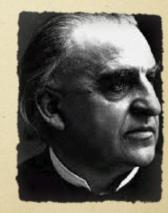
There is a physical location <u>in the telescope</u> where the image exists?

Is the following sentence True or False:

There is a location or set of locations in the brain where a thought resides?

How did Charcot use (i) <u>principles of association</u> and (ii) an a<u>bnormal response to physical or mental stress</u> in explaining hysterical paralyses and other analogous effects of the mind on the body?

What did Charcot mean by a "<u>dissociated</u>" or "fractured" thought"?



What remedy did Charcot propose to counteract the pernicious (i.e. harmful) effects of unconscious ideas responsible for hysterical paralysis (and other psychosomatic disorders)?

Is the following statement True or False:

Charcot believed that a "talking therapy" could provide a complete cure for individuals like Pin and Porez.

What medical result gave rise to doubt about Charcot's claim that heredity weakness was partly responsible for hysterical paralysis and other forms of psychosomatic disorders. How did Charcot's version of the talking cure differ from Breuer's version?

What did Freud and Breuer mean by the difference between expectations and intentions? Think of two examples of a situation that may occur when an unconscious thought in everyday life undermines a conscious intention to carry out some action

(one possible example that you can elaborate: an elite baseball pitcher who "chokes").

What, according to Freud and Breuer, were the <u>two</u> necessary ingredients that generated the symptoms of hysteria?

What did they mean by the following:

Hysterics suffered mainly from (....unconscious...) reminiscences.

## Why did they mean by *catharsis*?





Dreams, according to Freud, were the "royal road to the unconscious".

Freud proposed that the mental world of dreams was determined by lawful principles that were quite distinct from those applicable to our conscious perceptions.

How did this view of dreams differ from Wundt's?

Is the following statement True or False?

Freud argued that dreams were the brain's confused response to external stimuli. We dream about howling wolves, for example, stimulated in sleep by the noise of the wind. How did Freud in fact view the nature of dreams?

- a) They reflected unconscious wishes.
- b) They were a form of hysterical fantasy.
- c) They included both a latent and manifest content.
- d) All the above.

Which part of a dream always hidden "behind the scenes"?

- a) The manifest content.
- b) The latent content.

Use the following terms to reconstruct Freud's physiological model of the relationship between conscious and unconscious processes.

Protective censor

External stimulation (sound, vision, touch, etc)

A feeling of relief or pleasure

Regression

Inhibition of motor processes

> What does this term mean in the context of Freud's theory?

Do you understand this sentence?

Regression during sleep produced hallucinations (dreams) reflecting unconscious wishes that could not be realistically fulfilled, while in waking life an active internal censor prevented these alarming fantasies from emerging into consciousness.

What is the role of conscious mental life (CML) and in what way did Freud view consciousness as a kind of perceptual organ?

Is the following statement True or False:

According to Freud, the external world is ultimately knowable to us directly via input from our senses, while the unconscious world remains inaccessible to direct experience.