The concept of a reflex in Freud’s time

Mental events were the *result* of these reflexive neural pathways and could never themselves be the direct cause of behavior.

**Meynert’s schema**

According to Meynert, the sense that we are physical and mental *selves* occurs because our perceptions and associations are directed by something he called the “Will-impulse” guiding us in the search for pleasurable outcomes and the avoidance of painful experiences.
Meynert made use of the term *primal ego* (which Freud later adapted in constructing his own psychological theories) to refer to the collection of pleasurable *physical sensations* that we quickly learn and seek to preserve as infants.

* A secondary ego determined by higher-level associations later develops which can fall into conflict with the instinctive urges of the primal ego.
William James rejected Meynert’s account:

‘We thus get whatever psychological truth the Meynert scheme possesses without entangling ourselves in a dubious anatomy and physiology’
Freud:

*I shall entirely disregard the fact that the mental apparatus with which we are here concerned is also known to us in the form of anatomical preparation, and I shall carefully avoid the temptation to determine psychical locality in any anatomical fashion. I shall remain upon psychological ground.*
FREUD AS A STUDENT IN PARIS UNDER CHARCOT
In 1891, the germ theory of disease was still in its infancy.

In 1894, Charcot wrote to Freud: I am astonished to see the extent to which the theory of the syphilitic nature of tabes dorsalis....wreaks havoc right now amongst the best minds. Really the figure 90% (assuming it to be accurate?) can it have so much influence on a stable mind! -- what do you do then with the other 10%?
In the 19th century, the dominant view was expressed in the diagrams of language produced by Wernicke and other European neurologists. According to this view, ideas were based on associations between sensory and motor events in the brain. The meaning of a word was established by linking the sound of the word to a particular pattern of sensory-motor representations.

The Wernicke-Lichtheim diagram has the form of a house.
Fig. 1.2 Charcot’s bell diagram (1888) (IC ideation center, CAC common auditory center, CVC common visual center, CAM auditory center for words, CVM visual center for words, CLA center for spoken language, CLE written language center, Cloche: Bell)
Assume component CAC is severely damaged but that all other components of the model are intact. Which of the following would occur, according to the model?

a) The patient would be impaired in his or her ability to read words.
b) The patient would be impaired in his or her ability to identify auditory words.
c) The patient would be impaired in his or her ability to identify the sound of a bell.
d) Both b and c.
The idea <bell>

```
Shape  Color  Sound  Touch  Motion
```

“Bell”
The metaphor that Wernicke was explicitly relying on, viewed the brain as a gigantic series of switches akin to a telegraph system. Language connected with ideas almost in a reflexive fashion. To hear a word was to immediately and automatically connect the sound with stored sensory and motor representations (Wernicke used the term “images” to mean something like “stored impressions”) which themselves were based on experience. 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*).
The idea <bell>

"Bell"

Shape  Color  Sound  Touch  Motion

The Wernicke-Lichtheim diagram has the form of a house

Fig. 1.2. Charcot's bell diagram (1888) /C/ speech center, CAC common auditory center, CVC common visual center, CAM auditory center for words, CVN visual center for words, CLE center for spoken language, CLE written language center, Cloche: Bell)
To be conscious of an idea and to produce the word associated with it, we simply to activate the impressions we have stored in sensory-motor regions of the brain. These impressions, acting together as a functional unit, then communicate their collective activation to the speech centers.
But how can ideas make you physically ill?

What purpose does language serve and how is it that words or ideas have the power to exert such potent effects on the body?
The patients were left in a kind of *auto-induced hypnotic state*. 

**Normal**

- Trauma → Panicky thought → Reassuring thoughts → Normal Actions

**Abnormal**

- Trauma → Panicky thought → Unconscious (dissociated) idea → Abnormal actions
In the first place we acted, and continue to act every day on their minds as much as possible, affirming in a positive manner a fact of which we are ourselves perfectly convinced -- that their paralysis, in spite of its long duration, is not incurable, and that, on the contrary, it will certainly be cured by means of appropriate treatment... if they will be so good as to aid us.
Breuer and Freud

Verbal Suggestion (Charcot) versus Self Analysis (Breuer and Freud)
The two began collaborating on a new approach to hysteria that replaced the idea of counter-suggestion (defended by Charcot) with a division of mental life into *expectations* and *intentions*.

Normally, we link an expectation to an intention. If I *intend* to nurse my child, for example, I naturally expect the motor intention to succeed.

But suppose I give rise to an unconscious neurotic thought ‘*I will fail at nursing my child*’ which becomes dissociated from the conscious intention to nurture my child.

This thought under certain circumstances may act as a hidden counterforce to my conscious intentions, preventing me from carrying them out.

*Bringing the thought back into the spotlight of conscious awareness returns it to the normal network of associations, whereupon it loses its harmful influence on behavior.*
Charcot’s presupposition that hysteria and other forms of psychopathology were the results of hereditary defects.

Freud argued that *psychological conflict* alone, coupled with the inadvertent suppression of disturbing thoughts was sufficient to generate the symptoms of hysteria.

Breuer also claimed that the recollection of dissociated ideas could bring some relief to the patient.

‘*Hysterics*,’ they both argued, ‘*suffered mainly from ([....unconscious...]) reminiscences*.‘
Charcot’s explanation for the paralysis affecting these two men was as follows: The shock of the initial trauma induced the panicky thought in each man ‘I can’t move my arm’. Principles of association would normally yield other reassuring thoughts that counteracted this initial thought, including the intention to move the limb to check that it is not impaired. But the traumatic experience of the injury in these patients left them with the idea — ‘I am unable to move my limb’ — that acted like a self-induced hypnotic command. Their traumatized minds literally allowed an idea to peel off from the matrix of conscious associations that normally guide our behavior. Once ‘dissociated’ from this stable matrix, the thought exerted an influence on the body that was no longer under conscious control. The patients were left in a kind of auto-induced hypnotic state that was the cause of their paralysis.

If an idea could induce a paralysis, then might it be possible to improve the condition of the patient by communicating other ideas as an antidote? Charcot commented: In the first place we acted, and continue to act every day on their minds as much as possible, affirming in a positive manner a fact of which we are ourselves perfectly convinced — that their paralysis, in spite of its long duration, is not incurable, and that, on the contrary, it will certainly be cured by means of appropriate treatment... if they will be so good as to aid us.

The remedy against the pernicious (i.e. harmful) effects of unconscious ideas responsible for hysterical paralysis (and other psychosomatic disorders) was the expression of conscious ideas as a counteracting influence. Could this form of cognitive (or ‘talking’) therapy provide a complete cure for Pin and Porez, or other such patients?

According to Charcot, the answer was no. Traumatic neurosis, he believed, affected individuals because their nervous systems were genetically prone to the kind of fractured thought processes that was responsible for the disorder. By ‘fractured’, I mean the harmful splitting away of an idea from conscious awareness, resulting in unconscious mental processes which potentially exerts an adverse effect on behavior.

The tendency to develop neuroses ran in families, Charcot strongly believed, and he used the term ‘neuropathic family’ to refer to his idea that certain illnesses were linked to together in families because of a common underlying genetic cause. He mapped out family trees whose members were afflicted by such diverse conditions as hysteria, alcoholism, suicide.

Charcot’s diagram of a neuropathic family
Hughlings Jackson

The unit of language is a *proposition*

A declarative statement that can be seen as either true or false

Even a single word uttered by someone (e.g. *chocolate*) inherently has propositional content.
In addition to propositional language, the human brain is capable of emotional language.

Rigidly organized unconscious reflexes that are determined by biological needs.

Conscious rational thought giving rise to voluntary behavior.

![Diagram showing subcortex and cortex with Emotional Language and Propositional Language]

**Emotional Language**

**Propositional Language**
For instance, a man who could say only ‘I want protection’, owed his aphasia to a fight in which he had been knocked unconscious by a blow on the head. Another patient had the curious speech remnant: ‘List complete’: he was a clerk who had a stroke immediately after he had laboriously completed a catalogue.
Paraphasia -- an unintended speech error

At this stage we only want to mention that the paraphasia observed in aphasic patients does not differ from the incorrect use and distortion of words which the healthy person can observe in himself in states of fatigue or divided attention or under the influence of disturbing affects (note: affect in this context means emotion), - the kind of thing that frequently happens to our lecturers and causes the listener painful embarrassment.
Freud was in effect saying that under certain conditions, we unintentionally communicate mental states which we either just dimly perceive or which lie completely beyond conscious awareness.
INTERPRETING DREAMS

Psychical locality is the scene of action in a dream.

locality in the mind

as analogous to the ‘location’ of an image inside a photographic device.
I propose simply to follow the suggestion that we should picture the instrument which carries out our mental functions as resembling a compound microscope or a photographic apparatus, or something of the kind. On that basis, psychical locality will correspond to a point inside the apparatus at which one of the preliminary stages of an image comes into being. In the microscope and telescope, as we know, these occur in part at ideal points, regions in which no tangible component of the apparatus is situated. I see no necessity to apologize for the imperfections of this or of any similar imagery.
The emergence of an idea, whether in dream or a waking state, is like the emergence of an image generated by the physical action of some optical device. Just as there is no tangible part of the device where the image resides, so there is no point in trying to localize a thought to particular neuroanatomical structures.
Dreams -- the royal road to the unconscious

Prior to Freud’s interpretation, dreams were considered to be confused responses of the sleeping brain to *external physical events*.

Freud proposed instead that the mental world of dreams was determined by lawful principles that were quite distinct from those applicable to our conscious perceptions.
In other words, certain memories become separated (dissociated) from the matrix of normal conscious associations, and then these dissociated memories function like autonomous (independent) agents to disrupt our inner mental life.

Bringing these memories back to conscious awareness provides relief, a phenomenon the authors described as catharsis.
His approach treated each dream as a kind of *hysterical fantasy*; the goal of analysis was to reconstruct the missing association between the fragmented contents of a dream so as to reveal the dynamic *internal* forces that produced the experience.

Freud’s interpretation rested on the assumption that the forces unleashed during sleep were *internally generated*. The content of a dream expressed hidden ideas that were *distinct from* the associations governing our normal waking experience, in exactly the same way that unconscious ideas acted on the behavior and reflections of individuals who suffered from hysteria.
Dreams in fact concealed hidden wishes that could not make their presence known directly. The mind, as Freud put it, was like a ‘political writer who has disagreeable truths to tell those in authority’ and so produces them in a disguised form so as to evade a censor.

People remembered the inoffensive manifest content of the dream, which often involved a trivial or seemingly absurd fantasy.

But these fragments, like pieces of a manuscript, contained information about the latent or hidden content behind the dream that was too unpleasant or disturbing to reach the threshold of consciousness in explicit form.
Freud’s physiological model of dreams

- Awake
  - Censor
  - Triggering of unconscious memories
  - Hallucinations
  - Regression

- Inhibition
  - (asleep)
  - Perception and Motor responses
  - Blocked in sleep
  - Release of Energy by CNS

Inhibition

Neural excitation
What, then, is the role of conscious mental life itself? Freud thought of consciousness as a kind of perceptual organ, an inner ‘eye’ that allowed us to sense our own thoughts and feelings.

The unconscious world is much like the external world of sensation; the contents of both inner and outer worlds are fundamentally unknowable.

Reality includes objects that project energy to our sensory organs. We experience light energy as color and shape; yet we do not (and cannot) have direct experience of the objects themselves that generate this information.

The unconscious world has the same ineffable (i.e. *inexpressible or unknown*) quality, presenting its hidden contents to consciousness which then like an inner eye or ear, translates the information into qualitative experience.

As Freud wrote: ‘...*in its innermost nature, *(the unconscious..) is as much unknown to us as the reality of the external world, and it is as incompletely presented by the data of consciousness as is the external world by the communications of our sense organs*.‘