# Grahek Ch.6

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Philosophical Implications of Pain Asymbolia

## Two important implications (p.73)

1. Pain is complex

"The sensory-discriminative, emotional-cognitive, and behavioural components typically occur together, but they exist separately."

#### 2. No affect $\Rightarrow$ no motivation $\Rightarrow$ no biological function

"without affective, cognitive, and behavioral components, pain loses all of its representational and motivational force ... [and] no longer serves its primary biological function."

#### Two views about pain

#### The Subjectivist view:

"the sensation of pain with its distinctive phenomenal content or quality—the "what-it-is likeness" of pain—is the essential component of our total pain experience and plays the central or fundamental role in it." (76)

#### The Objectivist View:

"the feeling of pain is just the awareness of objective bodily states of affairs: the perception or sensory representation of bodily or tissue damage." (78)

## Asymbolia and the *subjectivist* view (p.76)

- Sensation of pain is sufficient for somebody to be in pain.
- In pain asymbolia, sensation is present while all other components of pain are absent (the essence of pain).
- This sensation points to nothing, leaves no traces in the memory and does not move the body and mind in any way.
- This sensation is the object of ridicule. "the legendary question of what it is like to be in such pain, would get the following answer: it's kind of funny!"

## Asymbolia and the *objectivist* view (p.80)

- patients are capable of discriminating, differentiating, and localizing damaging stimuli whenever they are applied to any part of their bodies, and they do feel pain therefrom.
- the pain these patients feel does not represent for them any damage to their bodies.
- "the feeling of pain cannot, when taken alone, be understood as the perception or representation of bodily or tissue damage."
- "the representational force of pain is rather to be sought in the emotional-cognitive components of pain."

#### Building a prosthetic pain system

The plan: to duplicate the human nervous system - sensors detect tissue damage and send a warning message via a wiring system to a response device informing the brain of the danger.

Implementation: patients will hear a buzzing sound / see a flashing light whenever bodily damage has been detected.

**Result**: patients would override/disconnect the device and carry on with the activity causing the bodily damage.

### Using pain to prevent pain

The revised plan: patients will experience unpleasant but harmless pain which will motivate them to discontinue whatever activity brought about the tissue damage detected by the sensors.

Implementation: the system will send out a high voltage but low current electric shock whenever bodily damage is detected.

**Result**: Patients viewed the shock as punishment for rule breaking and responded with resentment rather than with a sense of self-preservation.

#### Pain and location

Conjecture: pain was projected in a location different from the one in which damage was occurring. If projected in the correct location patients will respond appropriately.

Will this work? Only if signals are transmitted further to cortical areas responsible for affect, motor valence and behaviour.

#### The fundamental problem

Patients can ignore the message/disconnect the wire. The fact that it's irrational doesn't stop people from doing it.

"The mysterious power of the human brain can force a person to STOP—something I could never accomplish with my substitute system". " (88).

The bottom line: "the sensation of pain does not carry by itself any message or representation of bodily damage, if nociceptive signals are not further or in parallel processed for their affective and motor valence as well as for their behavioral significance." (89).

#### The complexity of the neurophysiology

information related to intensity is transmitted through parallel routes simultaneously activating separate areas responsible for feature-extraction, affective evaluation, attention attraction, and motor processing of the incoming signals. (90)

valence and biological significance of nociceptive signals are processed in parallel and simultaneously with the processing of the location at which the pain sensation is to be projected and its intensity and qualitative character decided. (92)

# Summing up

- To serve its biological function, pain has to phenomenologically appear as homogeneous with "preeminent intensity of feeling and, consequently, of action." (93).
- Anatomical-Neurophysiological evidence indicates that pain is not what it appears, it is not unidirectional and sequential. It is a complex process in which parallel transmissions and assessments of information are involved.
- Asymbolia cases demonstrate the complexity of pain and the fact that it cannot be analyzed purely in terms of sensations or of representation of noxious stimuli.

# Questions

- 1. Is Grahek's view of pain a functionalist one? Is this a plausible view?
- 2. Do a priori conceptual observations about the "nature" of pain have any place in our investigation of what pain is?
- 3. Does pain present a unique case with regard to the goal of negotiating between the scientific and manifest image? (colors, free will, time, etc.)
- 4. Should normative/political/pedagogical considerations factor into our decision of what to call pain?