# PHILOSOPHY 101

**FALL 2016** 

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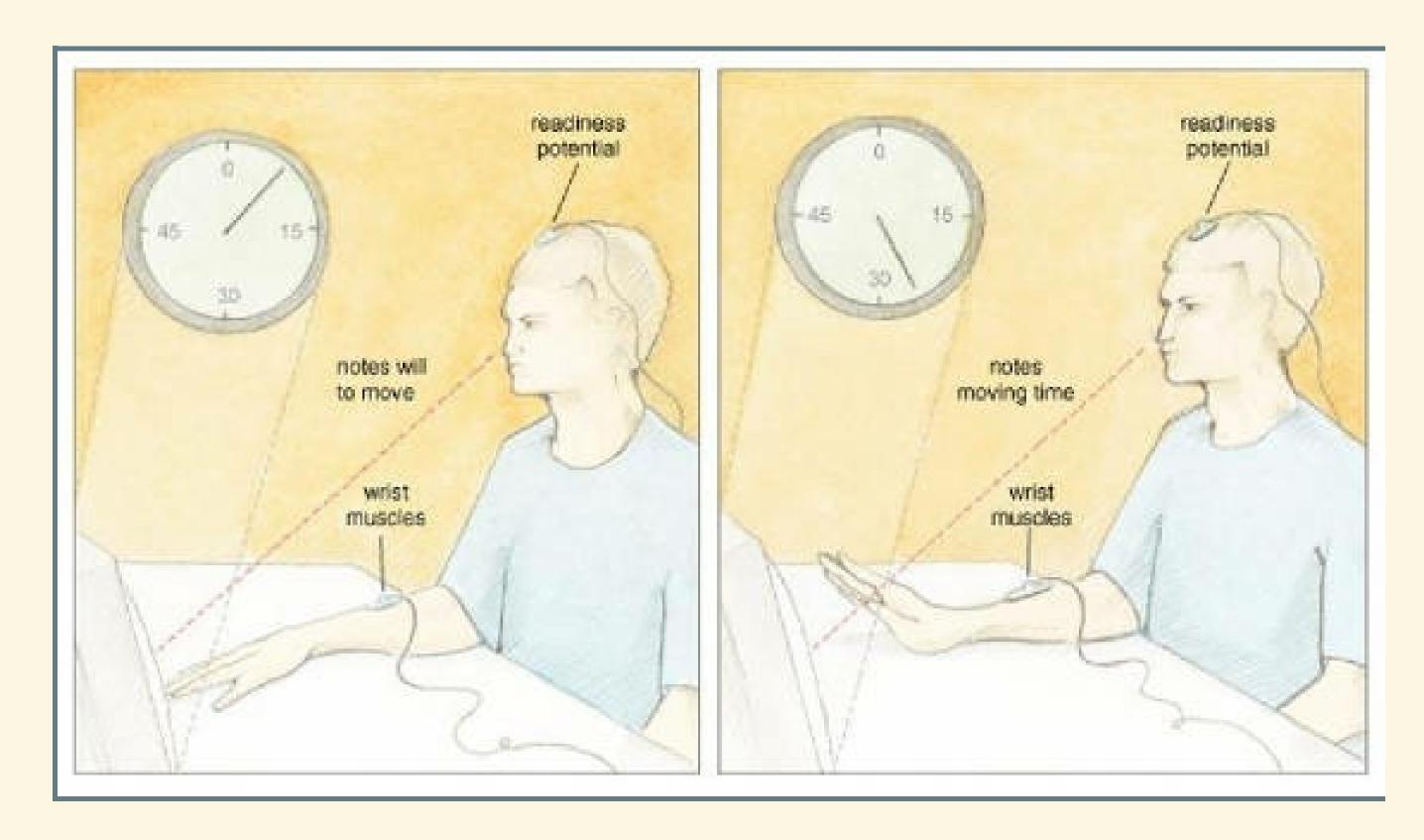
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## THE LIBET EXPERIMENTS

#### THE EXPERIMENT

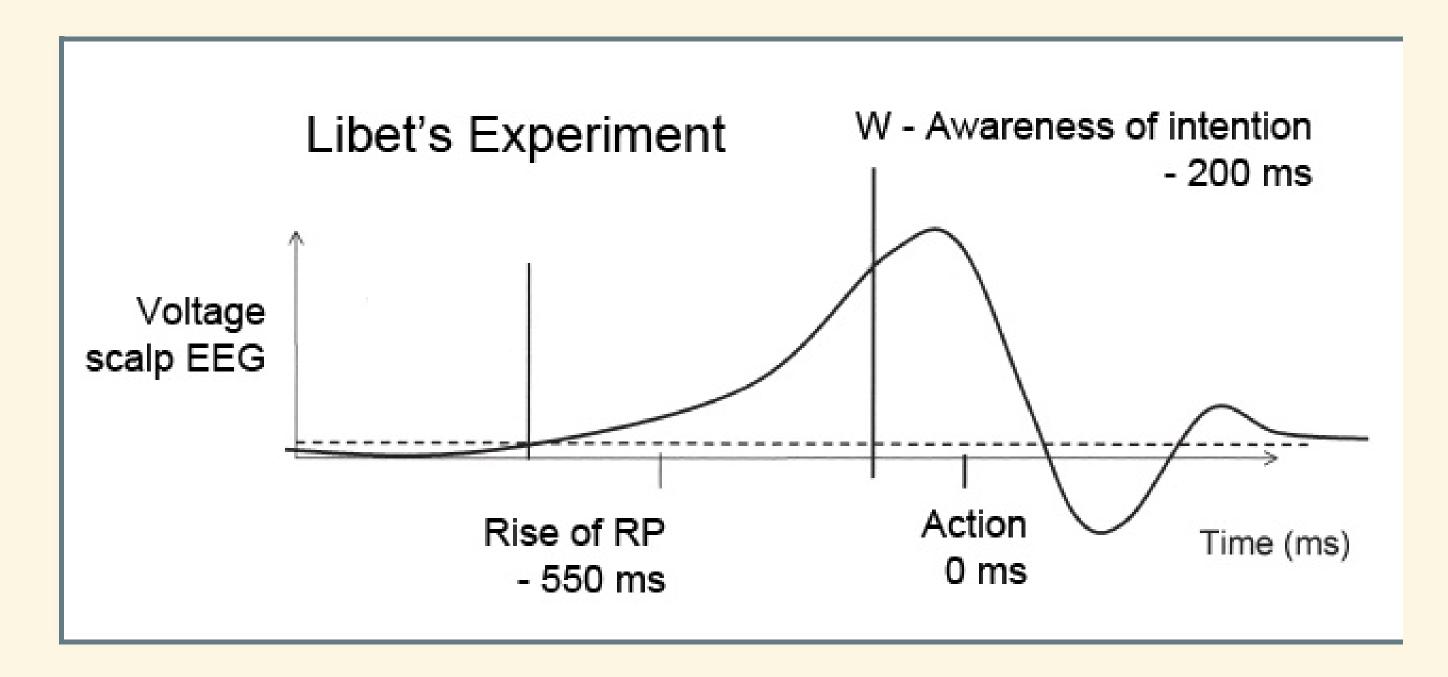
Libet asked his subjects to flex their wrists at any time they wanted and then report the location of a dot moving quickly around a clock face when they first felt the urge or intention to flex their wrists. Throughout this process, he recorded their neural activity (with EEG) as well as their wrist movements (with EMG)...That activity [called a 'Readiness Potential' or RP] ramped up slowly, reaching its pinnacle at the time when bodily movement began, and then fell quickly after movement...(Sinnott-Armstrong, 238)



The Libet experiment

#### A SURPRISING OUTCOME

What was surprising was the order: The readiness potential with unplanned actions (type II RP) began around 550 ms before the hand movement (M) began, and the reported time of conscious will (W) was around 150–200 ms before the hand movement (M) began, so the readiness potential... began around 350–400 ms before the reported time of conscious will (W). This order suggests that conscious will does not initiate the readiness potential...This implication is surprising, because most people think that their conscious choice is what begins the process that makes their body move in such cases. (Sinnott-Armstrong, 238-9)



The readiness potential graph

#### THE EFFICACY OF CONSCIOUS WILLING

- On one interpretation of the experiment, conscious willing is not casually efficacious in the generation of behavior
- Are there other potential functions for conscious willing with respect to action?

#### **VETO POWER**

Potentially available to the conscious function is the possibility of stopping or vetoing the final progress of the volitional process, so that no actual muscle action ensues. Conscious-will could thus affect the outcome of the volitional process even though the latter was initiated by unconscious cerebral processes. Conscious-will might block or veto the process, so that no act occurs. (Libet, 5)

 According to Libet, the role of conscious willing is to control not initiate action The role of conscious free will would be, then, not to initiate a voluntary act, but rather to control whether the act takes place. (Libet, 7)

- Conscious willing may not play a causal role in the initiation of action
- Conscious willing may play a role in the 'veto' of an intention to act
  - No free will, but free "won't"

