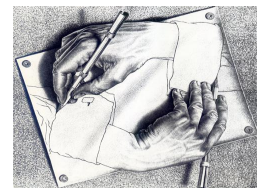
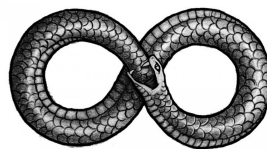


## TOK and Psychology



Subject = *Knower* vs. Object : Ethics, Art, Sciences... via : *Ways of knowing*.

Particular case : Object = *Knower*  
( Reflexive Knowledge )



That is for : *Psychology, anthropology*, and partially for : *Sociology, Economics, History*, TOK !

What are the *ways of knowing* in such a situation ?

These ways could be : Introspection, observation ( completed by theories and/or experiments )

Psychology : study of mind ( Greek :  $\psi\chi\eta$  psyche, soul ) and behavior.

- Medical : Hypocrate ( 400 BC ) mental disorders, Huangdi ( China, Empereur Jaune 400BC )
- Philosophical ... ( Platon, Leibniz, Descartes, G.Berkeley, ... )
- Interpretation of dreams : Promonitory ( African tribes ), social function ( ameridians ),  
*somniaa deo missa* ( bible, éclairer le destin ), négatif, diabolique ( moines privés de leurs rêves! ),  
*« desordre psychique à contenu absurde et sans valeur pratique »* ( Larousse Médical Illustré, 1929 )

## Different approaches in psychology :

Psychoanalytic  $\left\{ \begin{array}{l} S.Freud \\ C.G.Jung \\ A.Adler \end{array} \right.$

Mentalism:  $\left\{ \begin{array}{l} \text{Binet} \\ \text{Piaget : } Epistémologie\ génétique, \text{ constructivism} \\ \text{Chomsky : } Grammaire\ générative \end{array} \right.$

Behaviourism:  $\left\{ \begin{array}{l} J.B\text{ Watson (} little\ Albert\ Experiment) \\ \text{Skinner} \\ R.Epstein (pigeons) \end{array} \right.$

( influenced by Pavlov's work. Link with Ethology )

Other approach : Neurosciences

( neurocognitivism, neurolinguistics,  
neuroethics, neuroeconomics ... )

## Questions relative to TOK

Occam razor ( XIII s)

*Numquam ponenda est pluralitas  
sine necessitate.*

Among completing hypothesis,  
the one with the fewest assumption  
should be selected.

Reductionism, Holism, Emergentism :

*the simple is the source of the complex*

or

*the whole is more than the sum of the parts ?*

or ... ?

## Activities / Questions :

- 1: Compare the 3 psychoanalytic theories above.
- 2: Based on these theories, give an interpretation of some dreams (circular saw, murder of father black panther, ... ).
- 3: According to K.Popper, can we consider psychoanalytic theories as *scientific theories* ?
- 4: What is the *black box* for the behaviourists ?
- 5: Which school of psychology correspond to the stronger application of Occam razor ?
- 6: What Epstein's experiment with pigeons is supposed to show ? Does it reach the goal ?
- 7: Give the specific arguments of J.Piaget and N.Chomsky against *Behaviourism*.

K.Popper's criterion : *Falsifiability*

A statement, hypothesis or  
theory is the inherent  
possibility that it can be proven false.

Scientific theories are *falsifiable*.

Unfalsifiable theories are *pseudosciences*.

"*Tout apprenant est un constructeur*" ( J. Piaget )

Chomsky's repudiation of behaviourism:

<http://www.hbcse.tifr.res.in/jrmcont/notespart1/node114.html>

Video Chomsky Vs. B. F. Skinner :

[https://www.youtube.com/watch?v=FlyU\\_M20hMk](https://www.youtube.com/watch?v=FlyU_M20hMk)