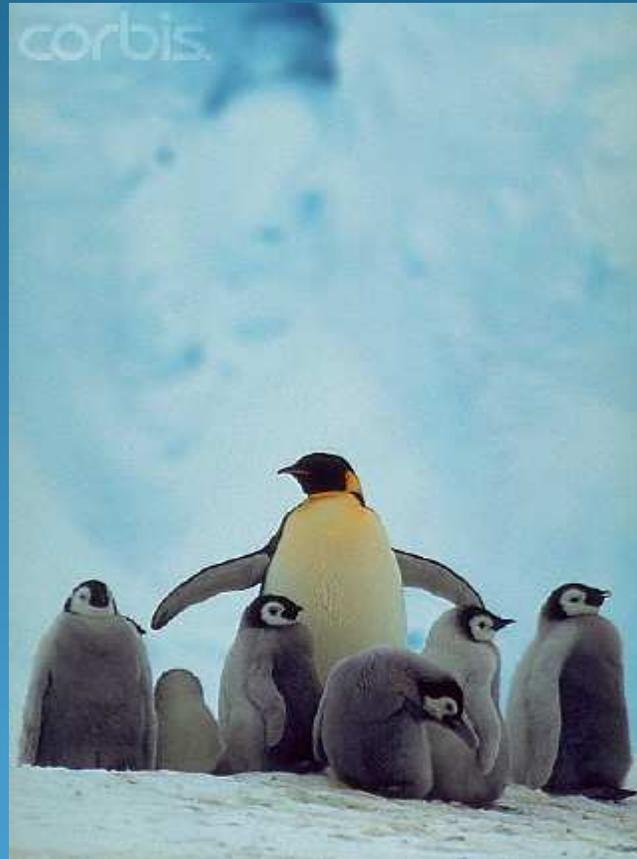


ETHOLOGY (ANIMAL BEHAVIOUR)



OLEH:
SUHARA
JURUSAN PENDIDIKAN BIOLOGI
FPMIPA UPI

Apakah yang dipelajari dalam ethology ?



Untuk apa Chetah mengencingi batang pohon?

Apakah perilaku diturunkan atau dipelajari ?



Perilaku kawin memerlukan proses-proses yang mengawali perkawinan



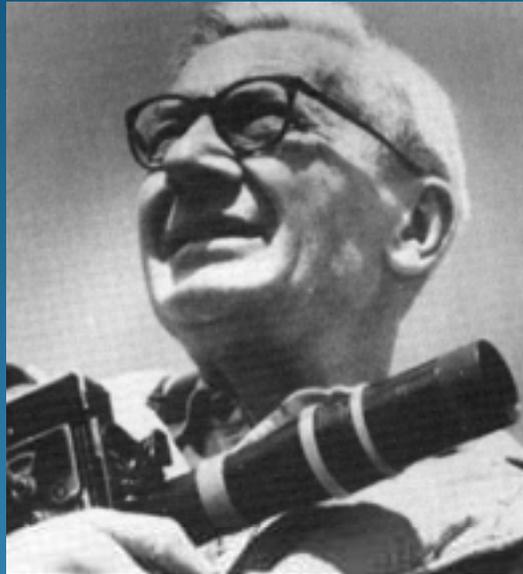
Bagaimana perilaku diturunkan ?



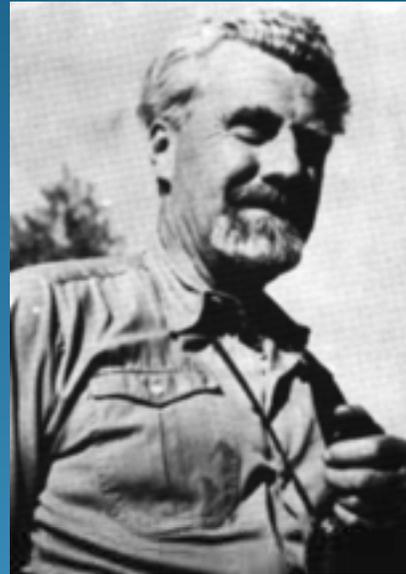


Bagaimana perilaku dipelajari?

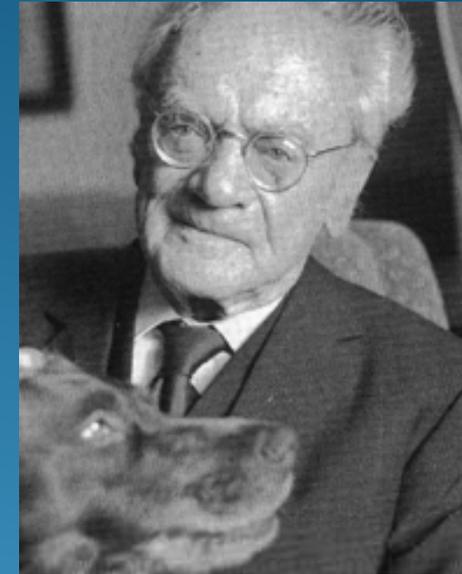
Founders of the field of Animal Behavior



**Niko
Tinbergen**



**Konrad
Lorenz**



**Karl
von Frisch**

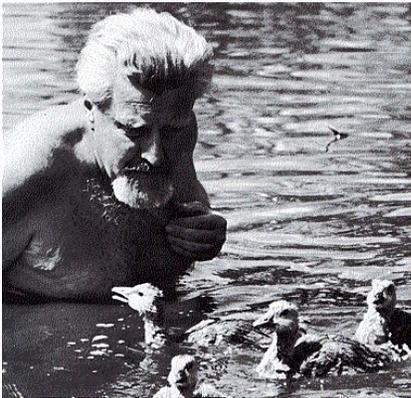


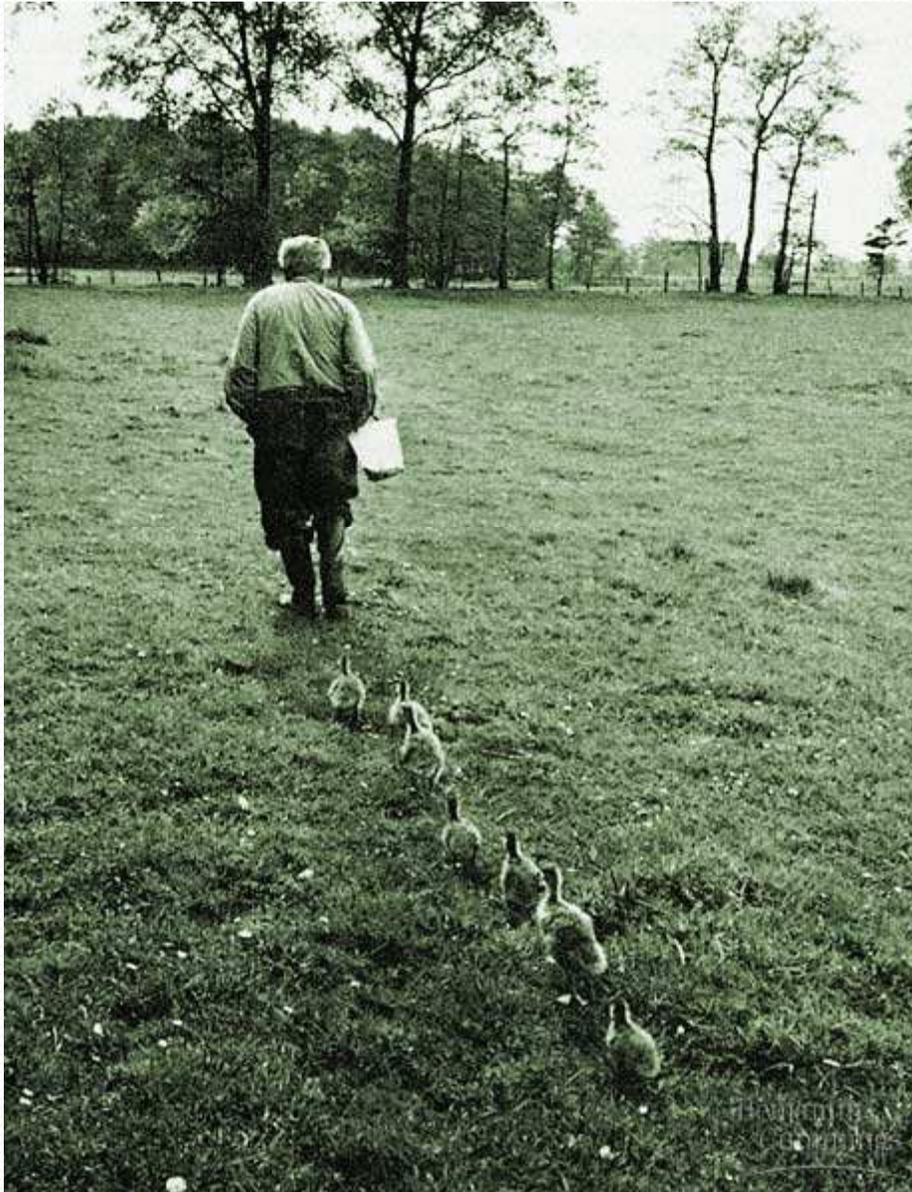
The Nobel Prize in Physiology or Medicine 1973

"for their discoveries concerning organization and elicitation of individual and social behaviour patterns"

Konrad Lorenz (1903-1989) examined genetically programmed behaviors in young and **imprinting**.

Young geese form an image of “parent” just after hatching. If the hatchlings first encounter a human, they will imprint on him and follow him around as if he were their mother.



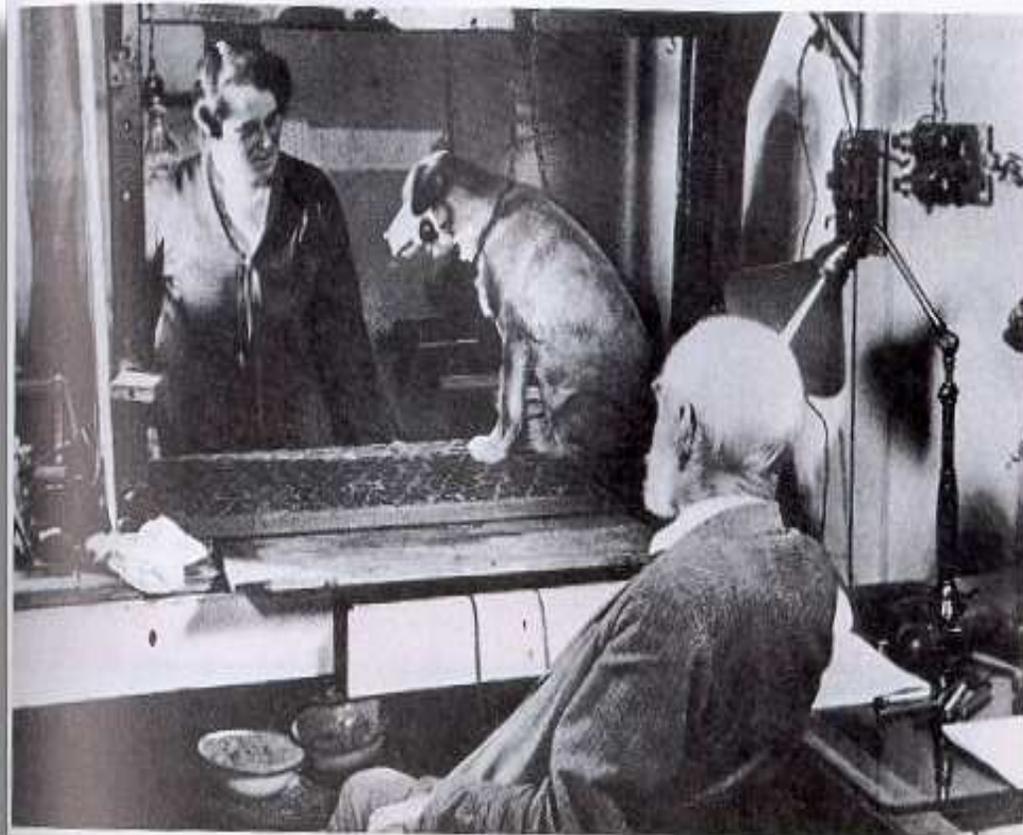


Mengapa bisa seperti ini ?

OPERANT CONDITIONING



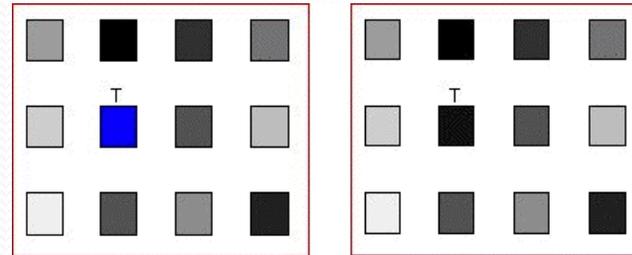
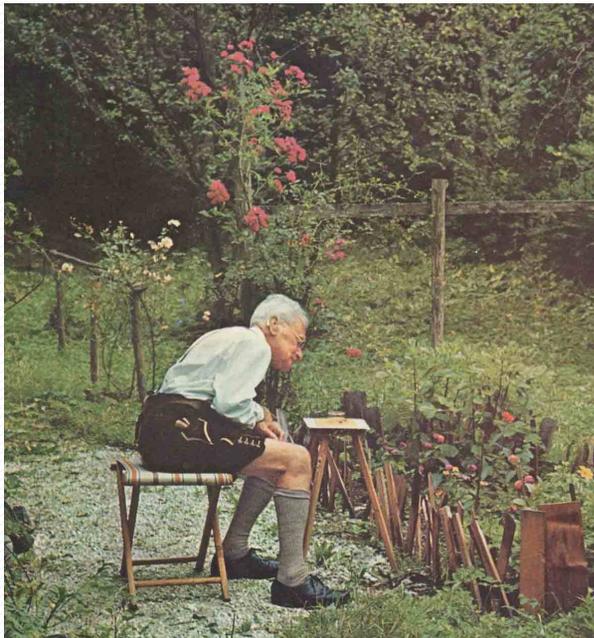
IVAN PAVLOP



Karl von Frisch (1886 - 1982), pioneered studies in bee communication and foraging.

Demonstrated that honey bees have color vision.

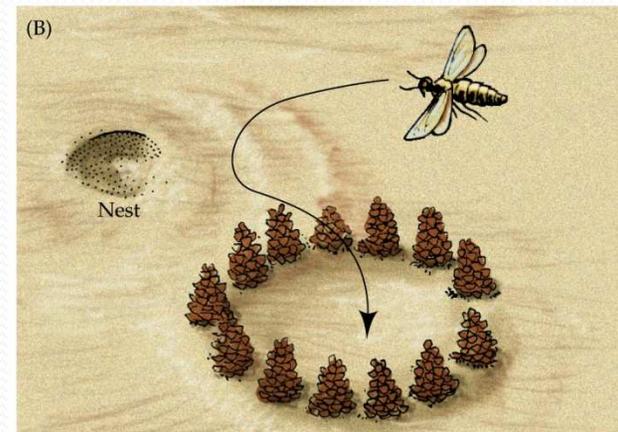
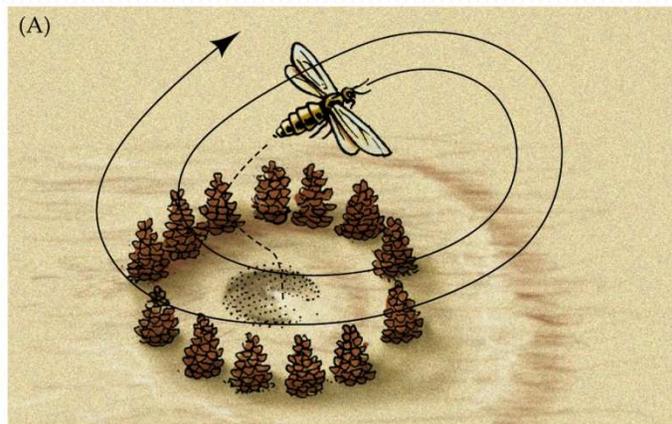
Honey bees use a dance language to communicate the location of resources to other bees.



Niko Tinbergen (1907-1988) formulated a method studying animal behavior (Tinbergen, 1963)

His approach had a strong Darwinian influence: understand the ultimate (evolutionary) reasons for behavior.

Demonstrated that digger wasps used visual landmarks to relocate their nests.





B.F SKINNER



A -- Animal refers to the organisms.

B -- Behavior refers to the observable actions of the organism.

C -- Causation refers to the proximate causes of behavior such as genes, hormones, and nerve impulses that control the expression of behaviors.

D -- Development refers to the ontogeny of behaviors such as imprinting, or in the case of cognition, learning.

E -- Evolution refers to the phylogenetic context in which behaviors are found. For example, the prevalence of parental care in birds, but not reptiles (with some exceptions) is an example of the taxonomic affiliations of some behaviors.

F -- Function refers to the adaptive value or contribution that the behavior makes to fitness.

(from B. Sinervo UCSC)