

# Zoonoses and emergence of new infectious diseases: biology meets anthropology

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# Time and Space: History of the Concept of Species Barrier

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# What is the concept of species barrier

- The frequent use of the syntagm is not a proof of its validity
- How to experiment on it, and to explore it, since we chiefly know it through its failures and its incapacity to stop the emergences

# The Species concept, a cornerstone of evolutionary biology

- Species are groups of actually or potentially interbreeding natural populations, which are reproductively isolated from other such groups (Mayr, 1940).



Passage de l'équipe du DDT , Inde

A historical bias, the human factor in the microbial exchange and the emergence of « new plagues » such as syphilis, on the one side, and smallpox on the other side



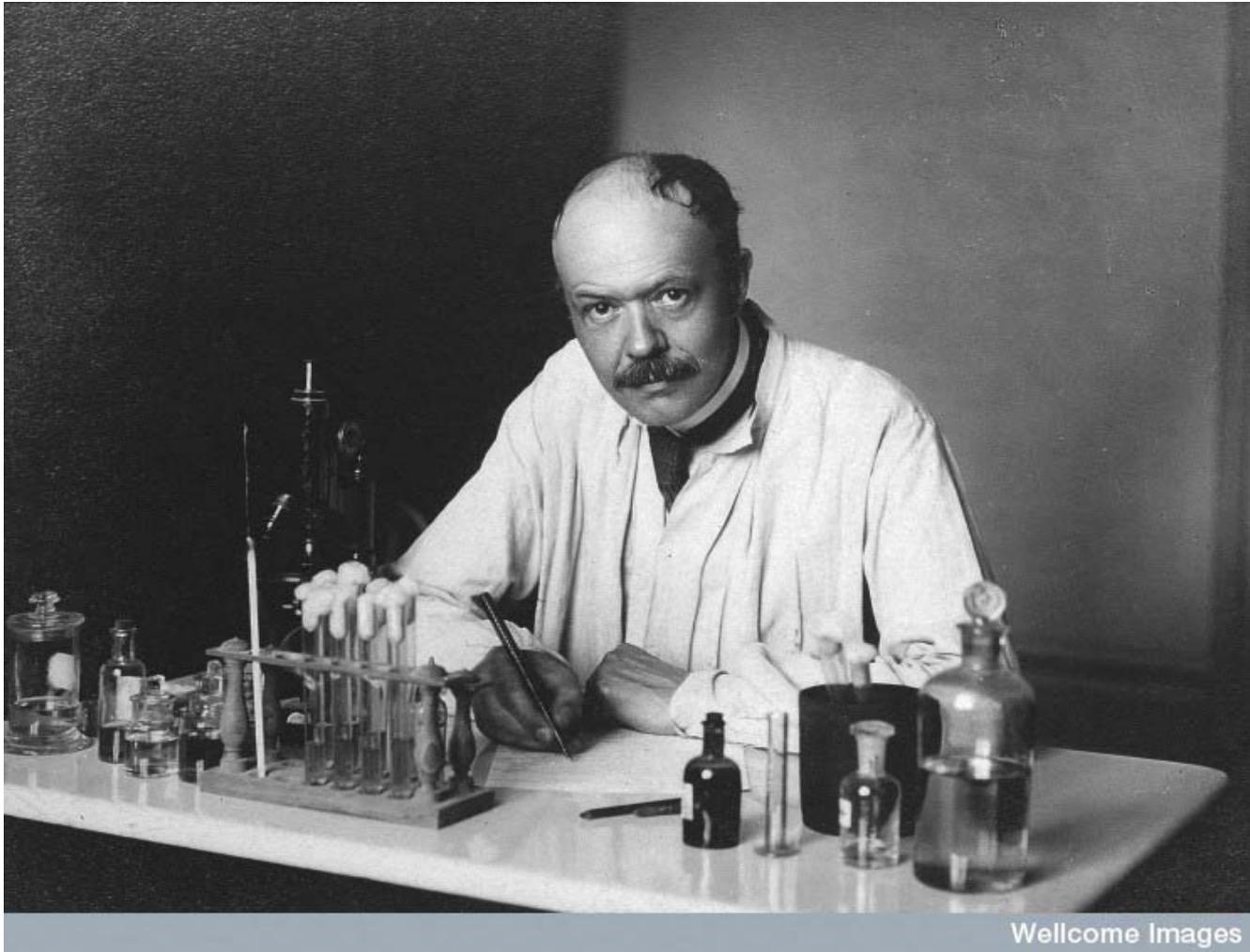
Human factor, the slave trade. But animals were also part of the microbial exchange, malaria carrying mosquitoes were part of the exchange



The visibility of the human factor, the shock between two parts of a nation



# Naissance, Vie et Mort des maladies infectieuses (1930)



# Historical Typhus and Wars



BAFFET PUNK

Imp. Bernini

1842 LE BOUR 1274

Le typhus à Mayence

D. Fumez fils, éditeur

# Death shaking death with the louse

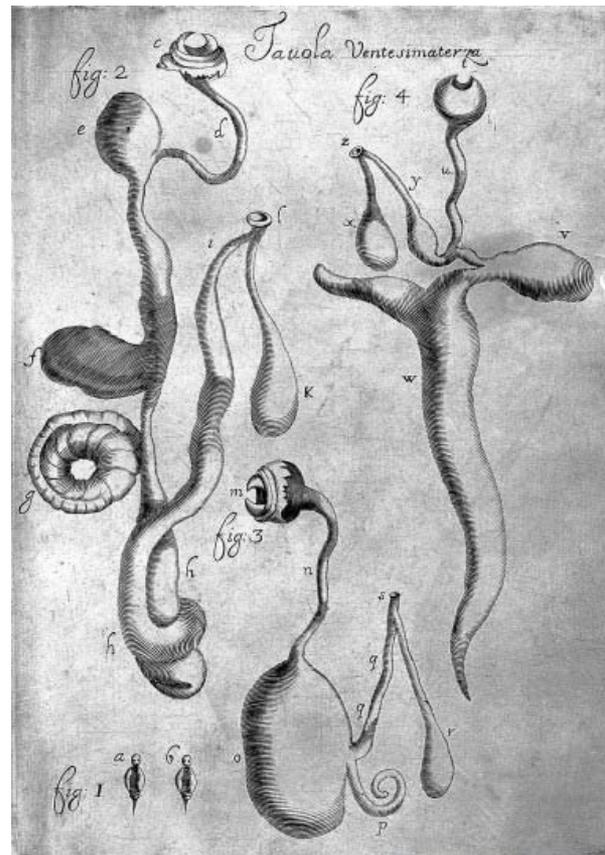


A Russian poster during  
The First World War

# Medieval delousing



# Worms lived inside Man's organs



# Sheltering numerous worms was a frequent occurrence in the Renaissance

- A sickman vomiting a worm in a manuscript



## Humans live with parasites



- Guinea worm being extracted from a skin opening



NATIVE LADY SELLING CHICKENS.

SÉRIE NO. 1181-5

The close proximity between women and poultry still exists today



# Women butchering poultry, a war treasure



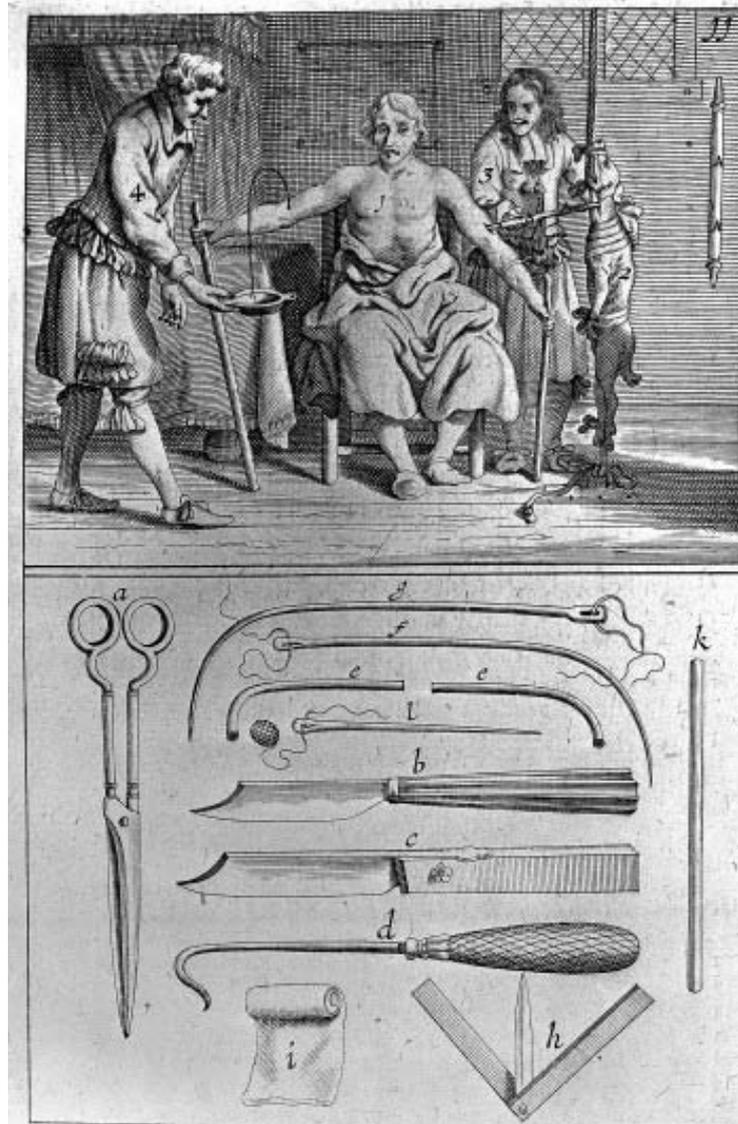
# Children and birds in Cairo fairs



# Blood transfusion from Sheep to Man



# Blood Transfusion from Dog to Man



# Vaccine inoculation



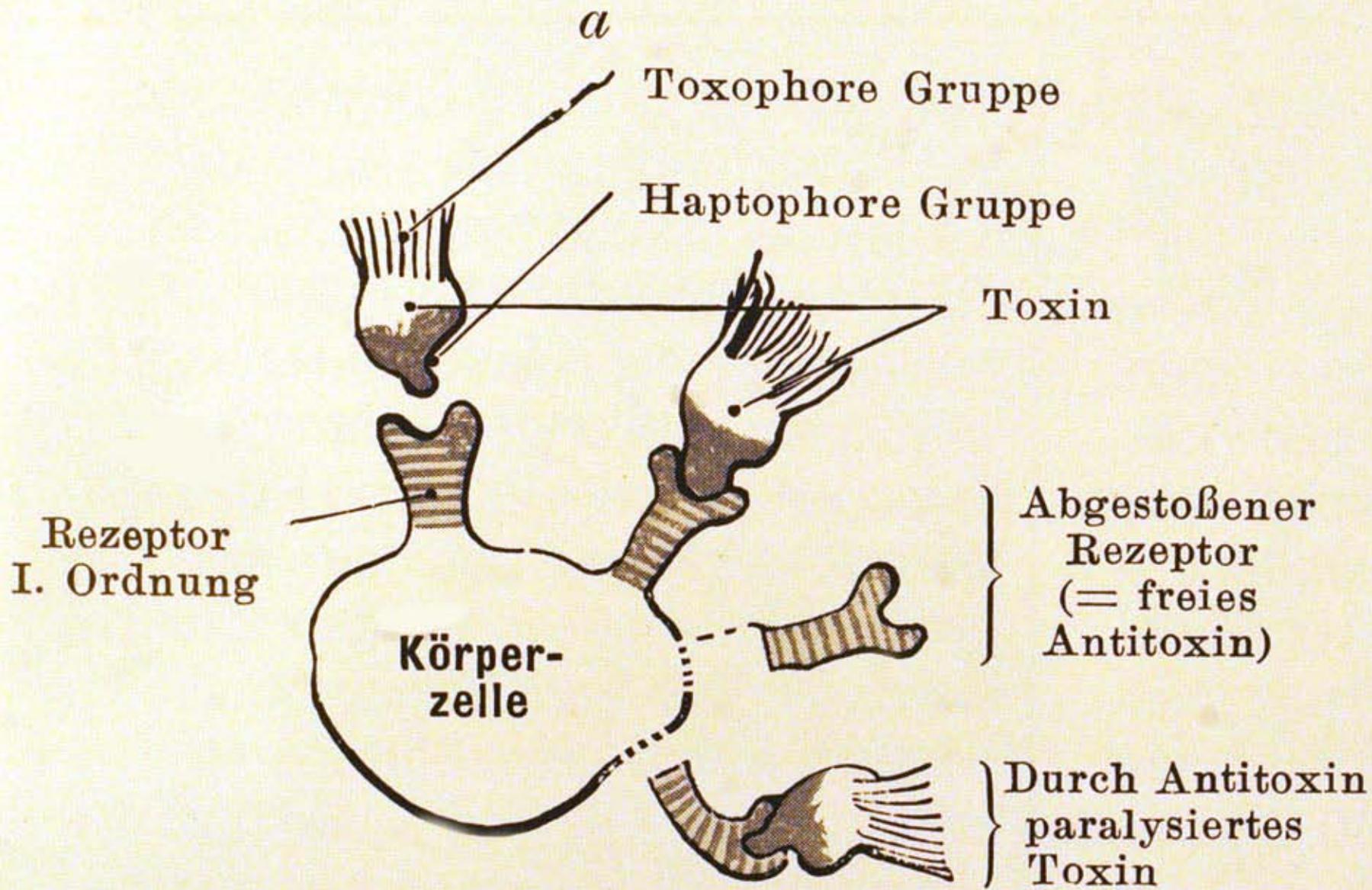
# Pasteur travaille sur le vaccin contre la rage



La vaccination contre la rage du petit Joseph Meister

# Le vaccin contre la rage fait le tour du monde





# Confounding factor, the protective role of the cattle in the Soviet Union against malaria



A malaria epidemics raged in the Soviet Union in the 1930s, attributed, among other factors, to the destruction of the cattle

Idea of a fortress  
opposed to microbes

The Immune system  
According to Sandwith,  
Cairo, ca 1900

# D'une peste à l'autre



Peste



Ebola

# Emergence d'autrefois ?

Le mur inachevé du Duomo de Sienne incarne pour Rino Rippuoli, directeur de Chiron Vaccins, l'émergence de la peste

