



What can qualitative-empirical research mean? Consider the chicken*

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* »Consider the Lobster« by David Foster Wallace

My Hypotheses

- (a) Science as such is publicly perceived as an unbiased approach to «reality» or «fact», which often ranks higher than other perceptions of the world.
- (b) If (a) holds true, then agricultural sciences are not science, but just engineering, because they are completely biased by economics, culture and worldviews and they follow function rather than insight into biological or natural law.
- (c) Agricultural sciences create or modify realities, which they subsequently analyse as if they are „world“. Thus animal sciences sciences are to a high degree self referential and analyse their own creatures.
- (d) Reflection on the points (a)-(c) would potential increase the scientific value of Agriculture, but this is hardly anywhere happening.
- (e) A scientific view on e.g. farm animals, which should perceive the animal truly as a biological, sentient, ensouled and integer being should actively ignore the economic entanglements and functions and focus on natural and anthropogenic evolution (domestication) of the animal being.

Influence of agricultural livestock keeping on behaviour patterns of animals



Prevention of natural social behaviour (reproduction, rearing of offspring, herd behaviour, flight)



Prevention from feed selection, deprivation of food variety (taste experience)



Prevention of natural movement behaviour and the corresponding experiences



Influence of agricultural livestock keeping on human perception of animals



If we deprive chickens of key aspects of their behavioral and experiential spectrum, we **deprive ourselves from the possibility to perceive the nature of the chicken.**

By accepting and even aspiring the deprived chicken, we create not only new genotypes in artificial environments, but **we create a new animal,** with a new spiritual conception which is extremely reduced to very few economic functions.

This new conception of the chicken became **the objective of poultry research.**

This depleted conception of chicken is largely accepted as our “truth” – also in animal welfare research.

Why? Because thinking the farm animal outside of economics is impossible by paradigm in Agriculture science.



Influence of agricultural livestock keeping on our ethical values



If we deprive animals of key aspects of their behavioral and experiential spectrum, **we deprive them of their dignity.**

Even if animals themselves have no concept of dignity or no conception of themselves, **we thereby change our concept of dignity** and our conception of these animals, and thus also our behavior toward them.

This is **directly relevant to animal welfare** because we are downgrading the definition of animal welfare.

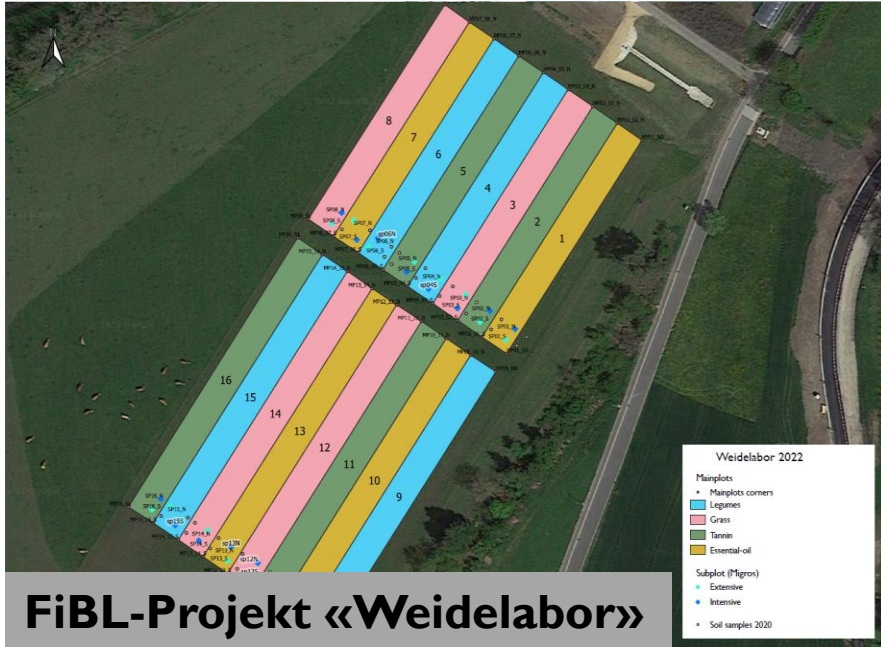
It is **culturally relevant** because we are dismantling our own moral capacity.



How to proceed to overcome the bias?

- Proceed by looking back
 - Who was this animal by its own evolution, in its natural environment?
 - How do the wild relatives of our farm animals **behave**?
 - Which elements of this wild behaviour have been conserved in farm animals?
- Exclude our commercial interest, but involve our interest for the animal
- How can let the animal show us their needs, their preferences, their essential being?
 - We have to provide them **opportunity** – and this field of opportunity will serve as our «laboratory»

Interview with a cow: The „Pasture-Lab“



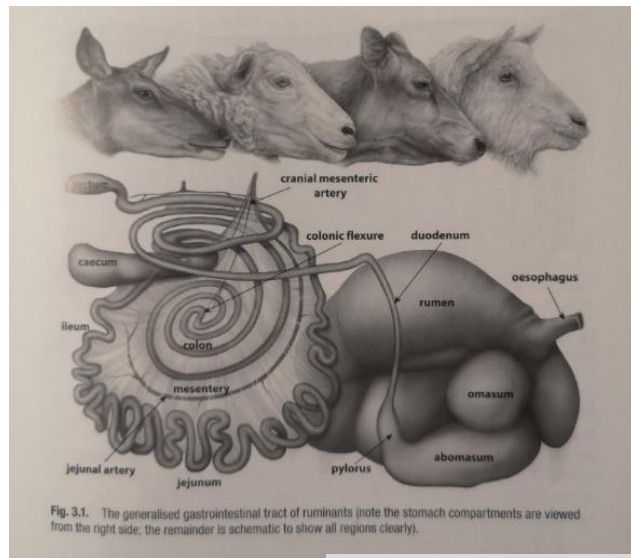


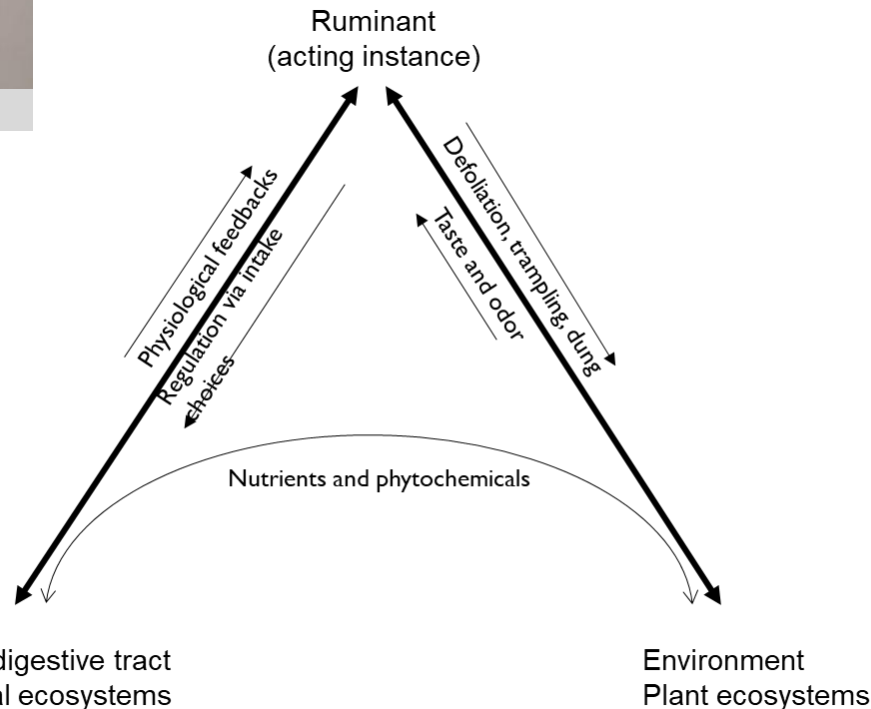
Fig. 3.1. The generalised gastrointestinal tract of ruminants (note the stomach compartments are viewed from the right side, the remainder is schematic to show all regions clearly).

(P.I. Hynd, Animal Nutrition, 2019)

Ruminal microbiome

- Fermentative digestion processes
- Saturation of essential FA
- B-carotene degradation
- Bloat
- Acidosis

The animal must be able to control fermentation



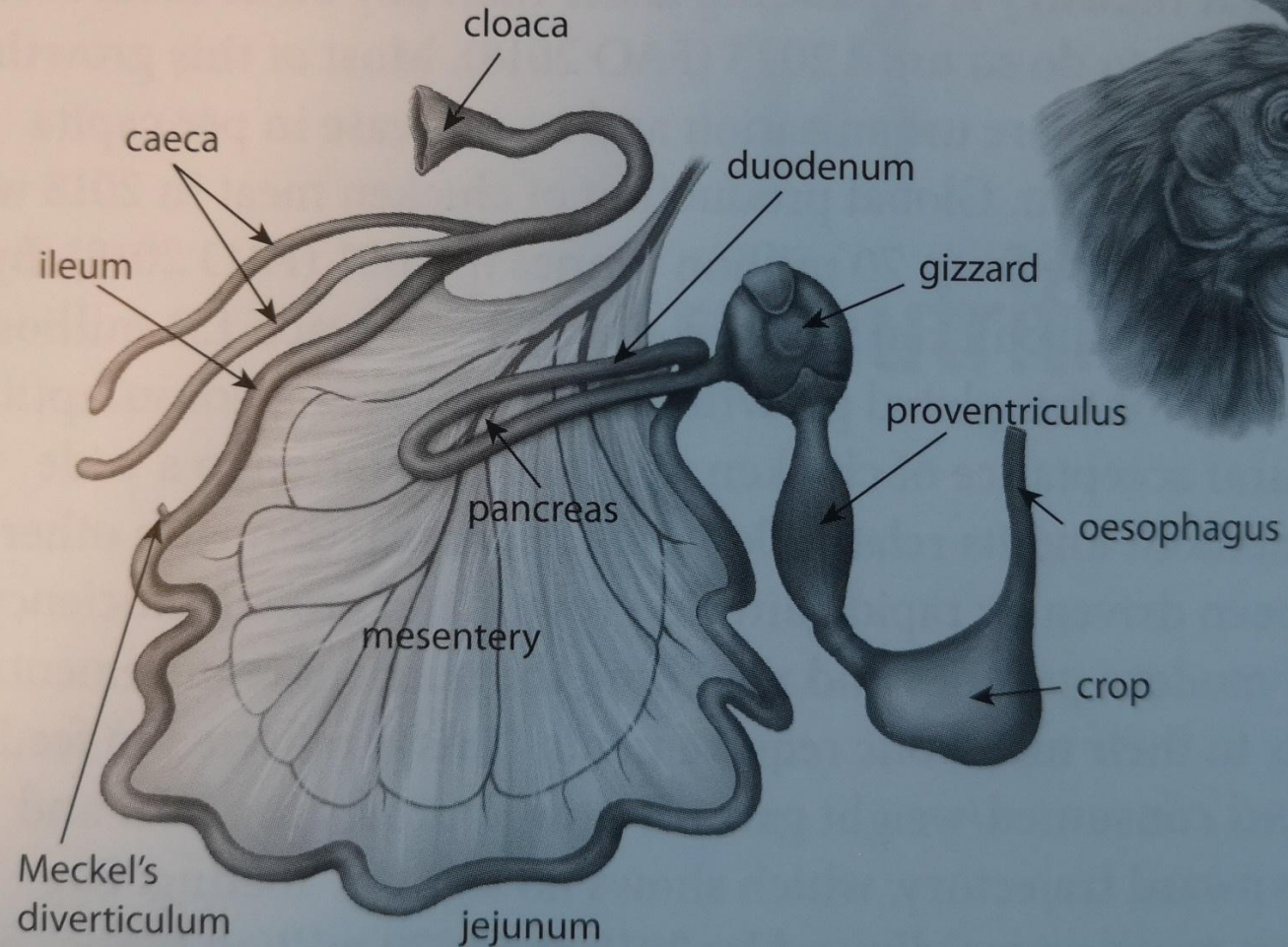
(Leiber, 2022, Let them graze!, in: N. El-Hage, *Managing Healthy Livestock Production*, Elsevier)

Botanical diversity = biochemical diversity

Phytochemicals with antimicrobial effects:

- Tannins
- Essential oils
- Saponins
- Alcaloids
- Glucosinolates

Chicken are omnivores, who can digest also fibre (grass)



**Interview with a chicken:
How much grass do you deliberately eat?**

Project „RauHuhn“ („RoughHen“)

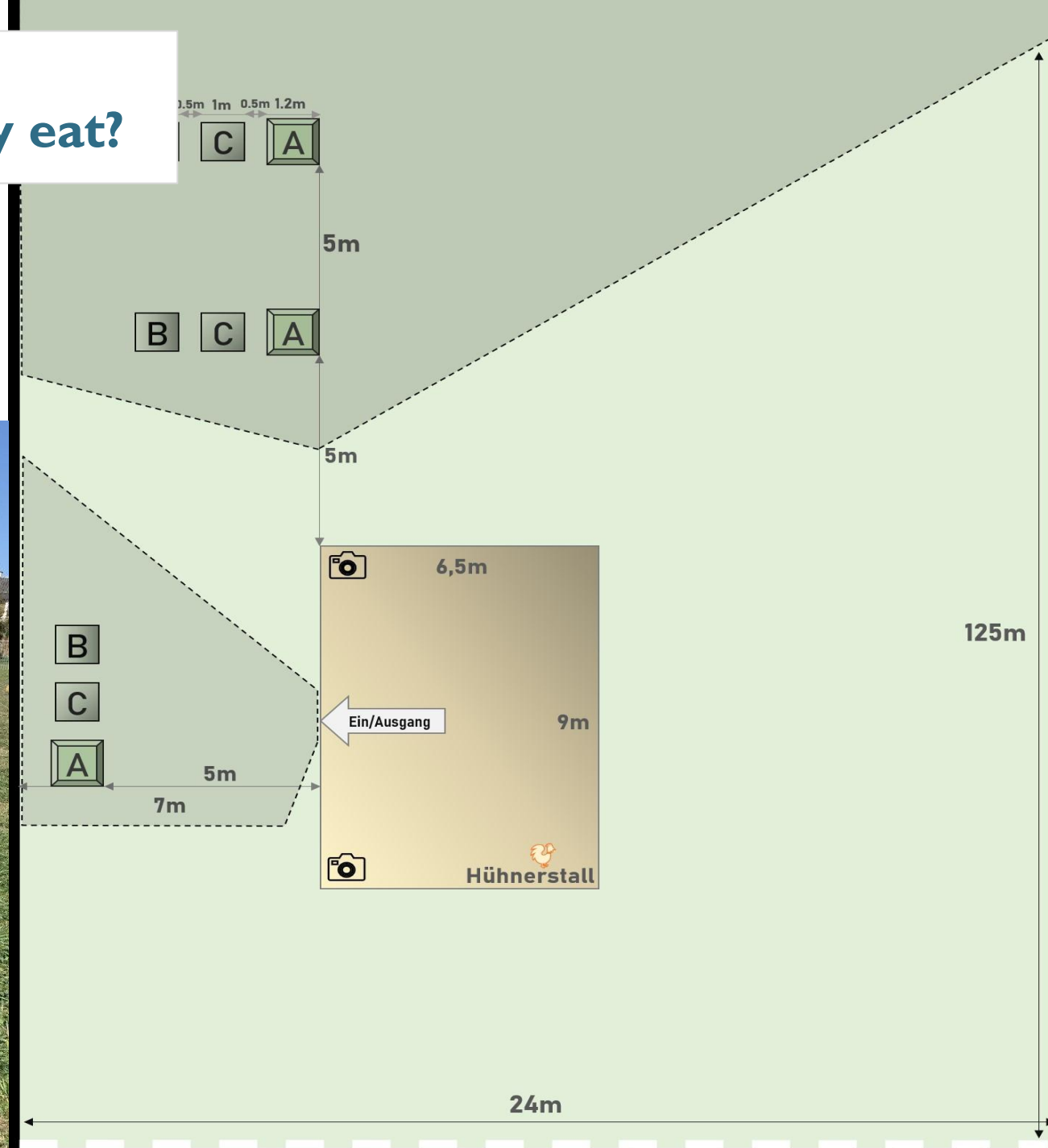
Do the research with them animals

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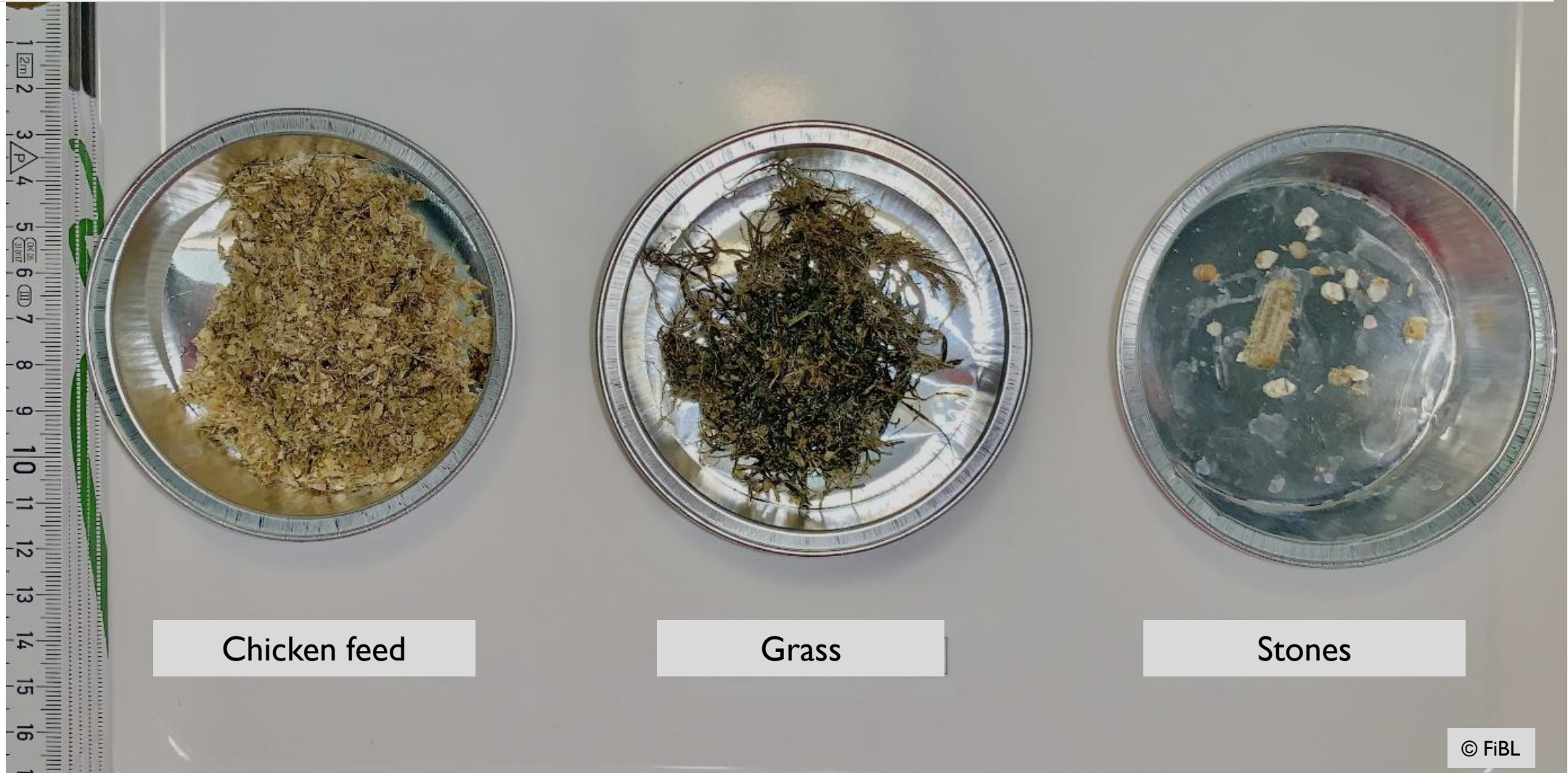


Interview with a chicken: How much grass would you deliberately eat?

Project „RauHuhn“ („RoughHen“)



Chicken are omnivores, eating considerable amounts of grass



Fractions of feed retained from the gizzard of a slaughtered Coffe hen

Pigs are omnivores and explorers



Interview with a pig: where do you want to feed?

Project „Schweinerleben“ („experiencing pigs“)



Conclusion

- A phenomenon-focused research is not, what livestock sciences are usually doing (also not in organic).
- By the economic-function approach, livestock research is actively violating perception of animals.
- More approaches, are needed, which are decoupled from economic function, in order to regain understanding of the essence of our farm animals and value their (also spiritual) dignity.
- The understanding of **changes in the animals'** species (spirit, group soul,...) **during domestication** is by far not enough understood and described.
- This can (to my conviction) only be achieved by phenomenological approaches.
- If biodynamic research will not do it: who else?

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a role model for the future of livestock?**



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www.iaha2025.org

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