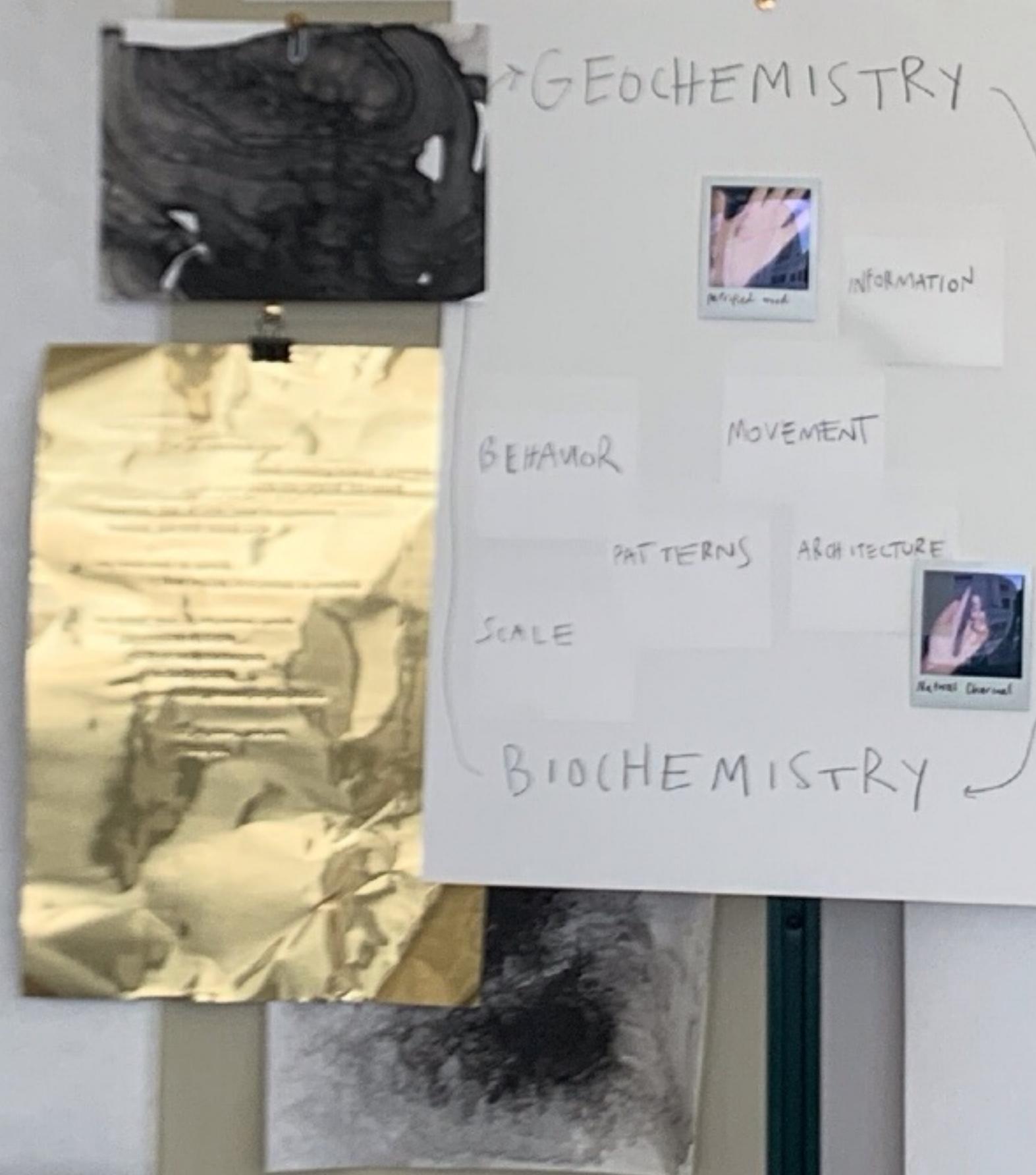


# COMPLEX TRAJECTORY OF INFORMATION

crack, by far, is water. By 3.2 billion years ago, life was extracting electrons from almost everything else. Life, as biochemist Albert Szent-Györgyi observed, is nothing but an electron looking for a place to rest. Quite when the final step to extracting electrons from water took place is contentious. Some claim it was an early event in evolution, but the weight of evidence now suggests that 'oxygenic' photosynthesis arose between 2.9 and 2.4 billion years ago, not so long before a cataclysmic period of global unrest,

things we  
intrinsically  
things are  
intrinsically  
mysterious



THE  
MOVEMENT  
OF LIFE  
IS ALWAYS  
COMPLEX

LIFE IS  
AN OPEN  
INFORMATION  
PROCESS

TRAJECTORY  
TEMPORAL Y  
NO SPATIAL

OPEN  
SYSTEM

DIFFERENT  
TRAJECTORY

DATA /  
INFORMATION

INFORMATION  
AS A  
MATERIAL  
PROPERTY

ENGINES ARE  
MATERIALS  
OF MATTER.  
INFORMATION SECRETS

TRAJECTORIES  
LOOK LIKE  
BODIES

ENVIRONMENT

FORM  
MATERIAL  
ARCHITECTURE

CONDITIONS

A MATTER OF  
SCALES /  
Perspectives

MATTER /  
BODY



TRAJECTORY  
/  
INTERACTIONS  
INFORMATION  
PROCESS  
PATTERNS  
BEHAVIOR  
FORCES  
DIVERSITY  
CO-HABITATION  
LANGUAGE  
DISCOURSE

BROWIAN  
MOTION  
IN NON  
LIVING AND  
LIVING

LIFE AS  
A UNIVERSAL  
MATERIAL  
PROCESS

NOISE

Too Much

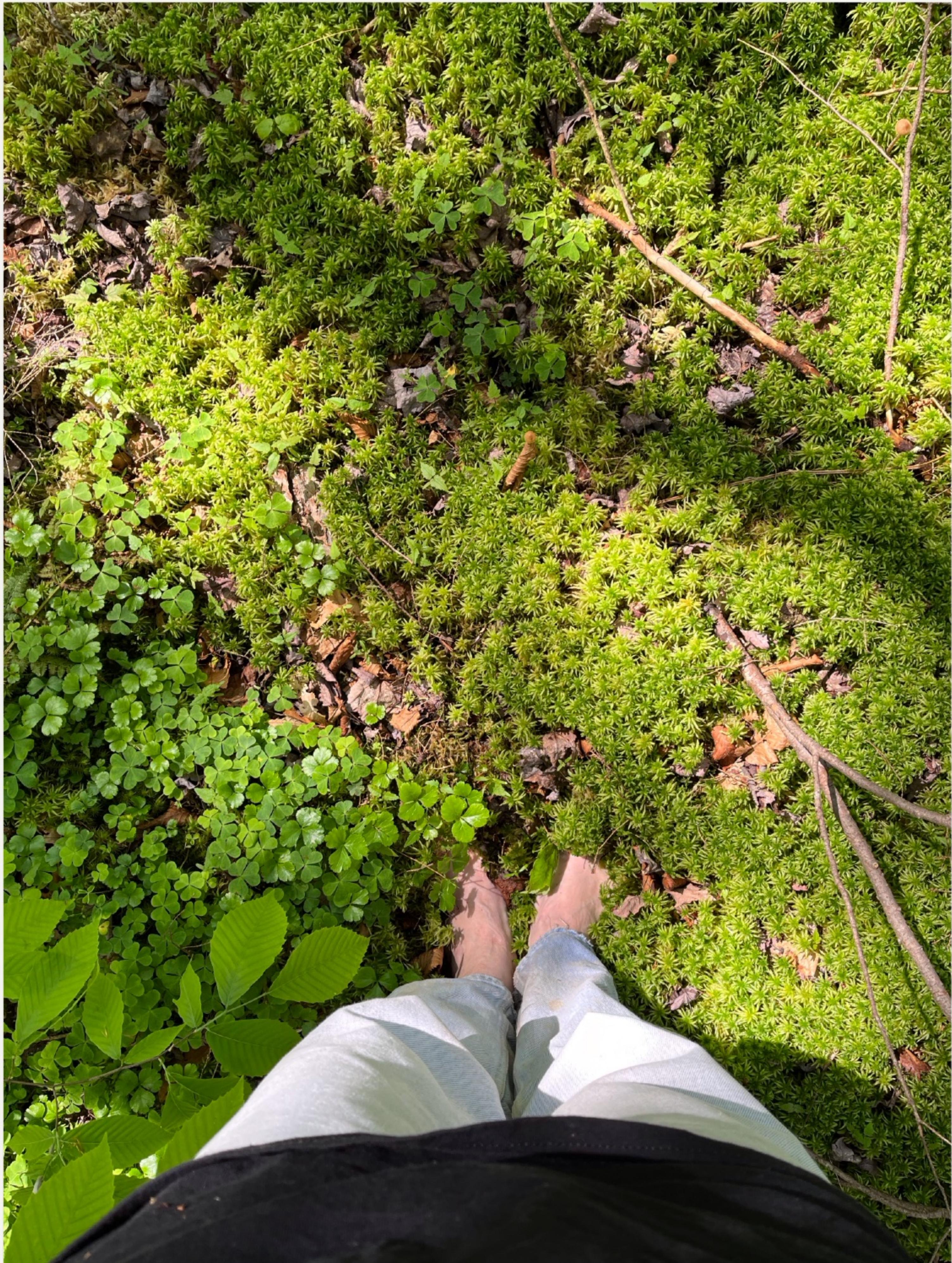
Order is A

Sign of

Danger

WAYS OF  
NATURE  
STUDY





AESTHETICS  
AS A  
TOOL FOR  
NATURE  
STUDIES

IN-DISCIPLINE

YOU CAN NEVER  
ACTUALLY KNOW  
THE WHOLE THINGS

OBSERVERS ARE  
INHERINTLY FINITE ??  
AND CAN'T GATHER  
COMPLETE INFORMATION

R. Adamala

disciplines are necessary because our body cannot grasp the whole universe.

→ advances in technology

but knowledge needs to be collaborative and shared to generate meaning

TAXONOMY  
TAXONOMIZE:  
TO ASSIGN  
UNIVERSALLY  
ACCEPTED  
NAMES (?)  
TO ORGANISMS

ARISTOTLE  
SYSTEM THAT LASTED  
2000 YEARS  
"SCALA NATURAE"  
("great" chain of beings)

SCALA NATURAE

PLANTS → MAN

≈

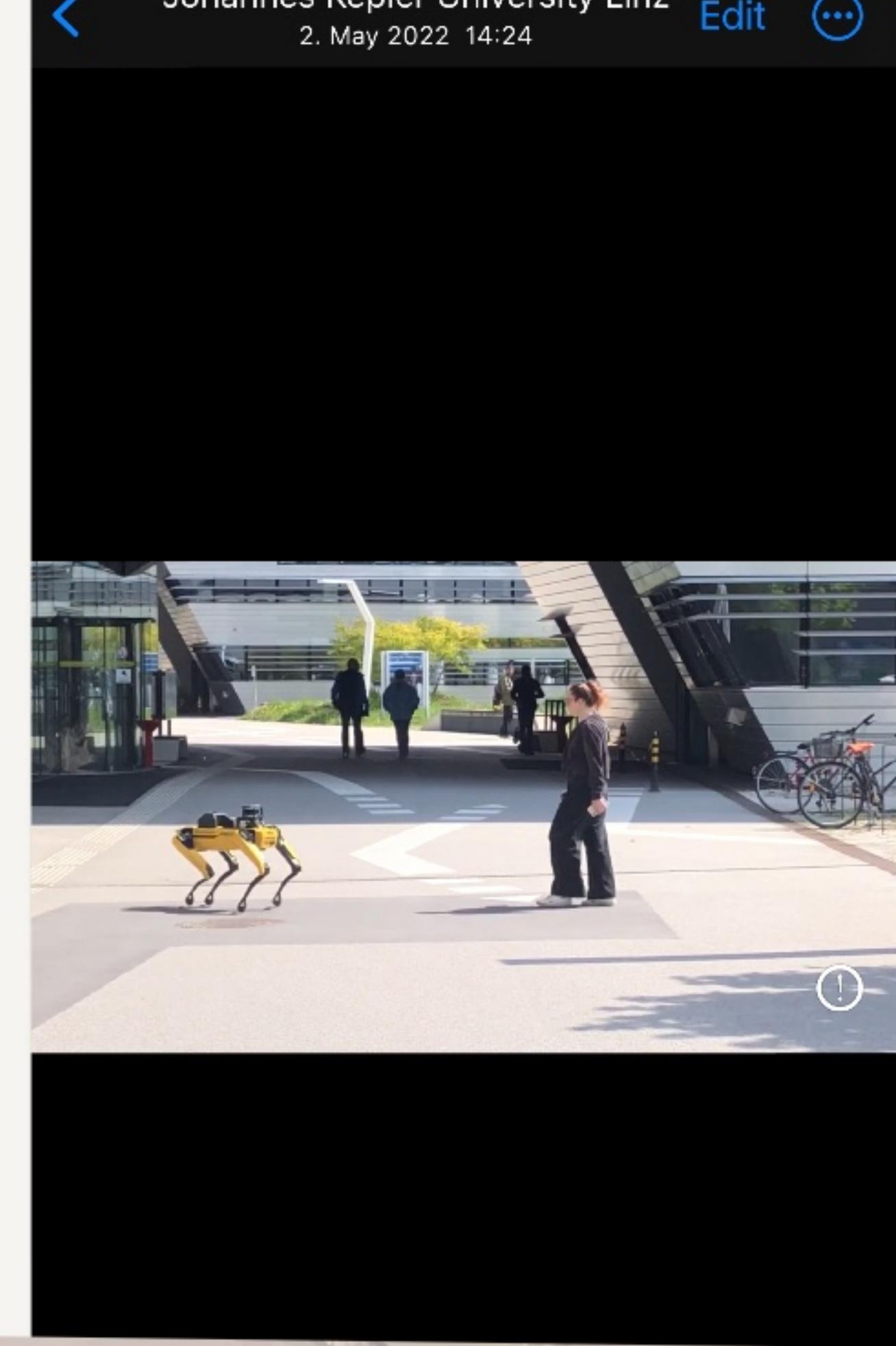
2 KINGDOMS

PLANT

ANIMAL

Carol Linnaeus 18<sup>th</sup> Century  
7 category system

SPOT



DANIELA

ELISIA  
TIMIDA



1. CHOSE LATIN  
18<sup>th</sup> CENTURY  
SCIENCE  
'(WHO WAS DOING  
SCIENCE?)'

2. BINOMIAL  
NOMENCLATURE:

1. GENUS

2. SPECIES

NAMES BASED ON

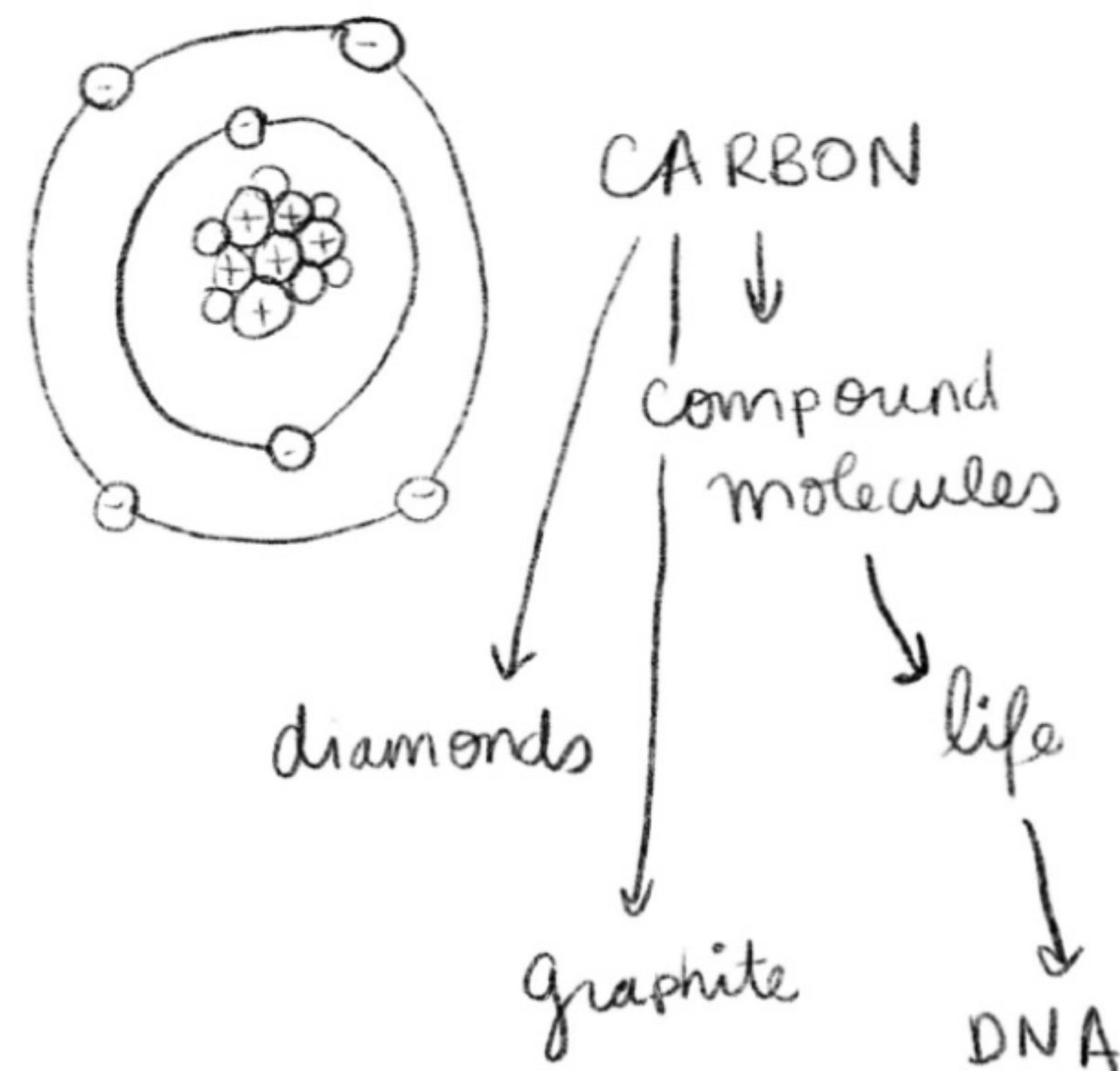
- PHYSICAL CHARACTERISTICS
- BEHAVIOR
- HONORARY (?)
- LOCATION & HABITAT

KINGDOM  
PHYLUM  
CLASS  
ORDER  
FAMILY  
GENUS  
SPECIES

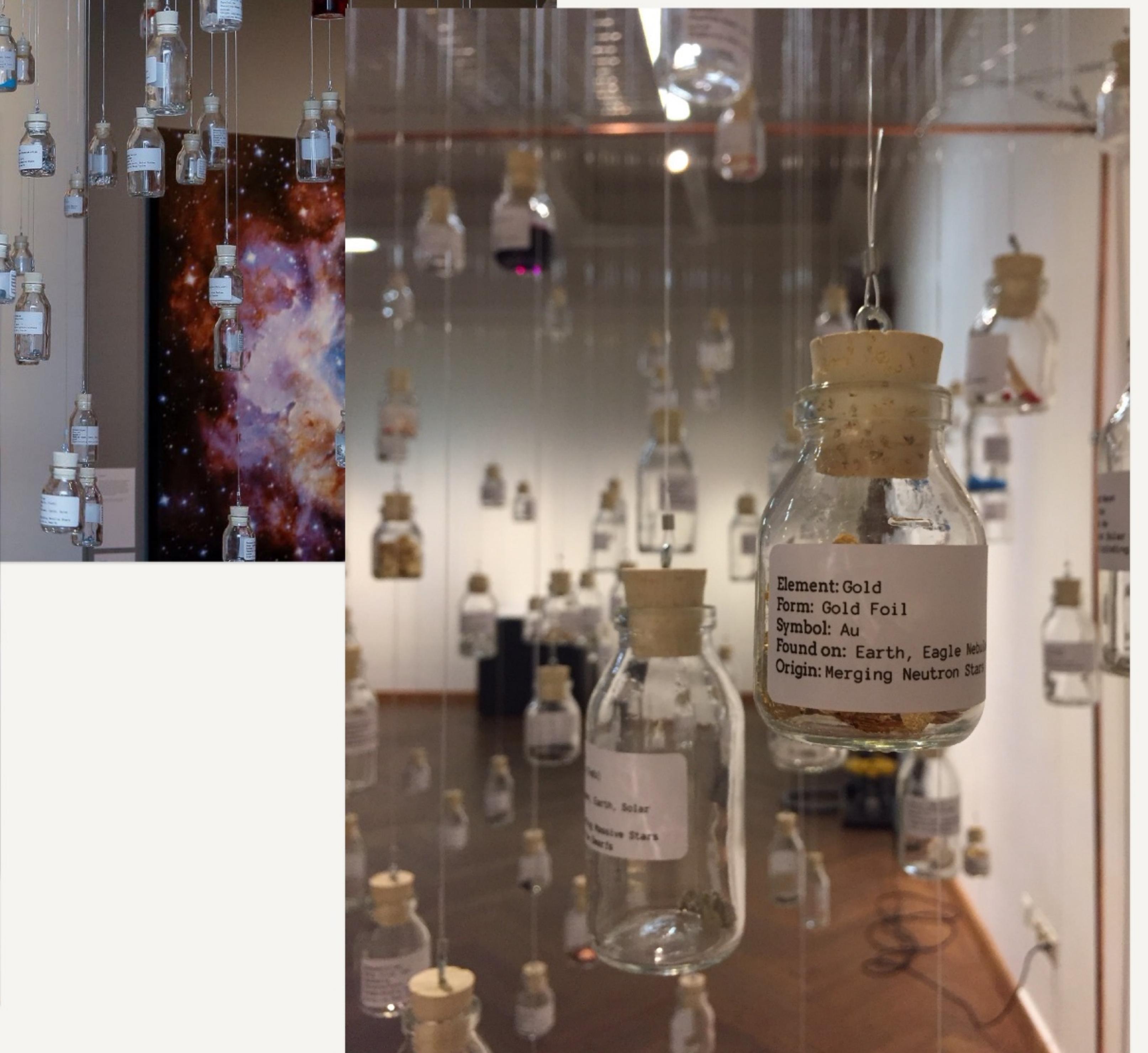
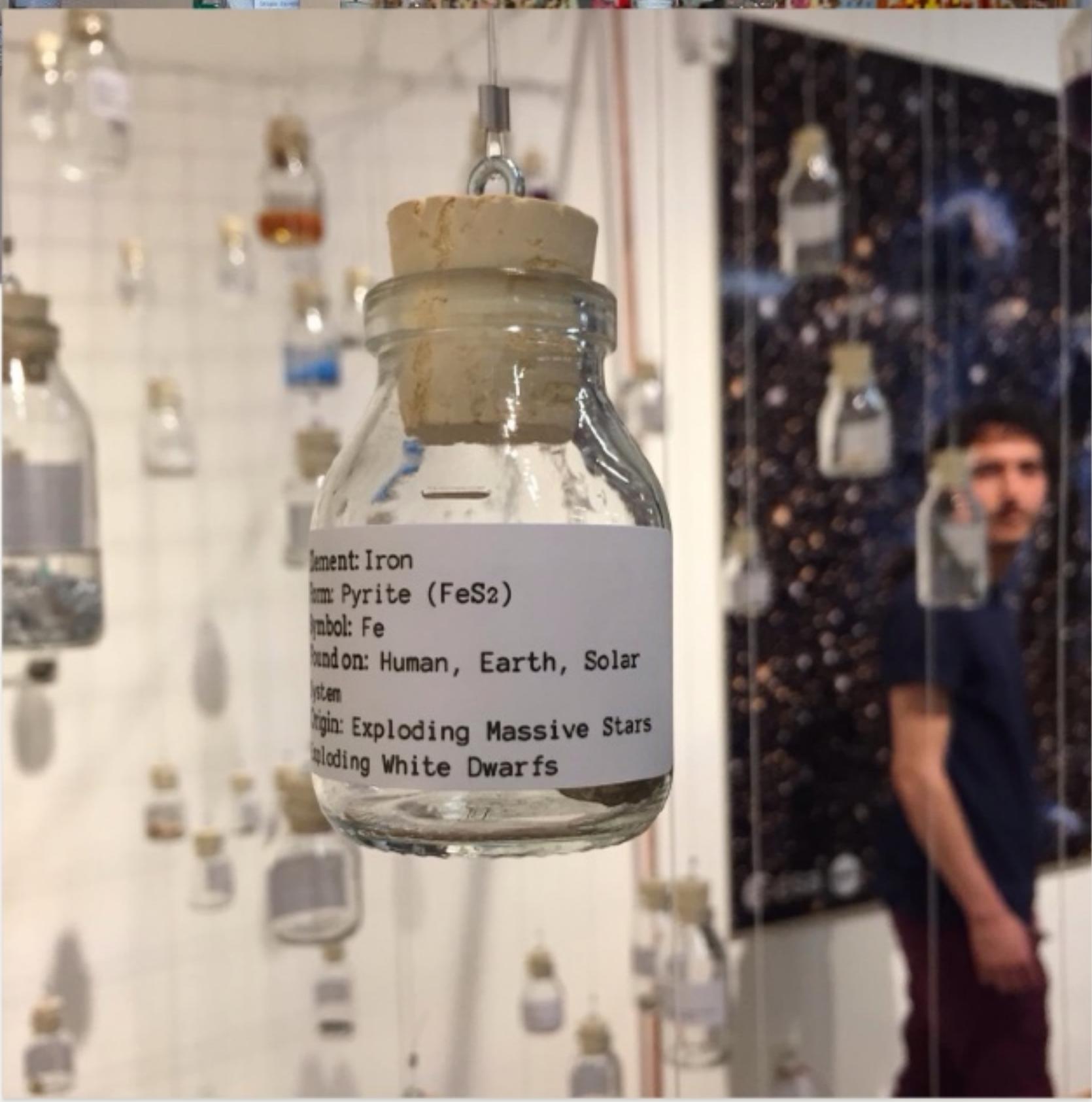
than we should expect. I shall argue that the distinction between a 'living planet' – one that is geologically active – and a living cell is only a matter of definition. There is no hard and fast dividing line. Geochemistry gives rise seamlessly to biochemistry. From this point of view, the fact that we can't distinguish between geology and biology in these old rocks is fitting. Here is a living planet giving rise to life, and the two can't be separated without splitting a continuum.

NICK LANE  
THE VITAL QUESTION

HOW TO  
STUDY LIFE  
WITHOUT DIVIDING  
IT INTO  
TAXONOMIES AND  
DISCIPLINES?



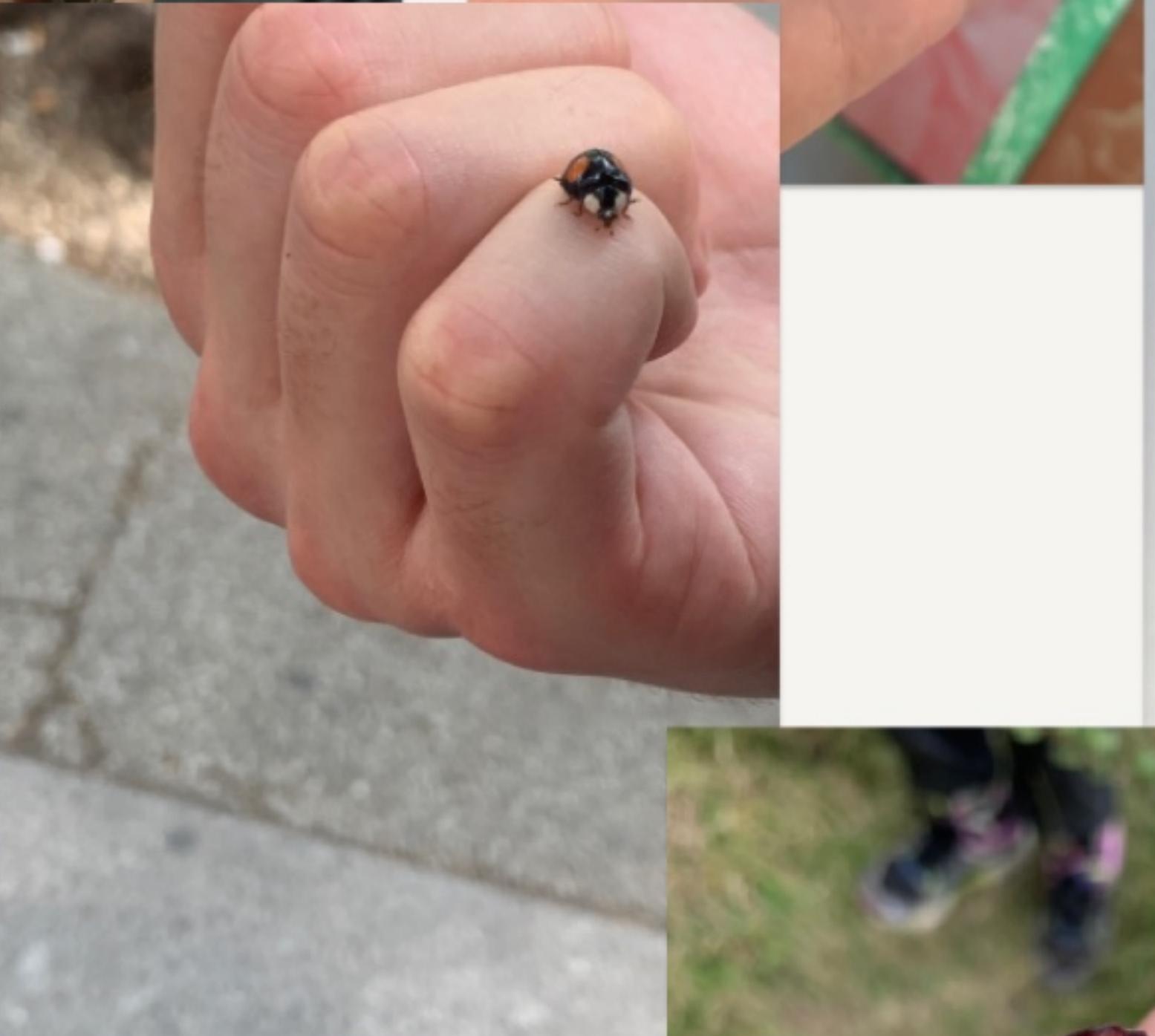
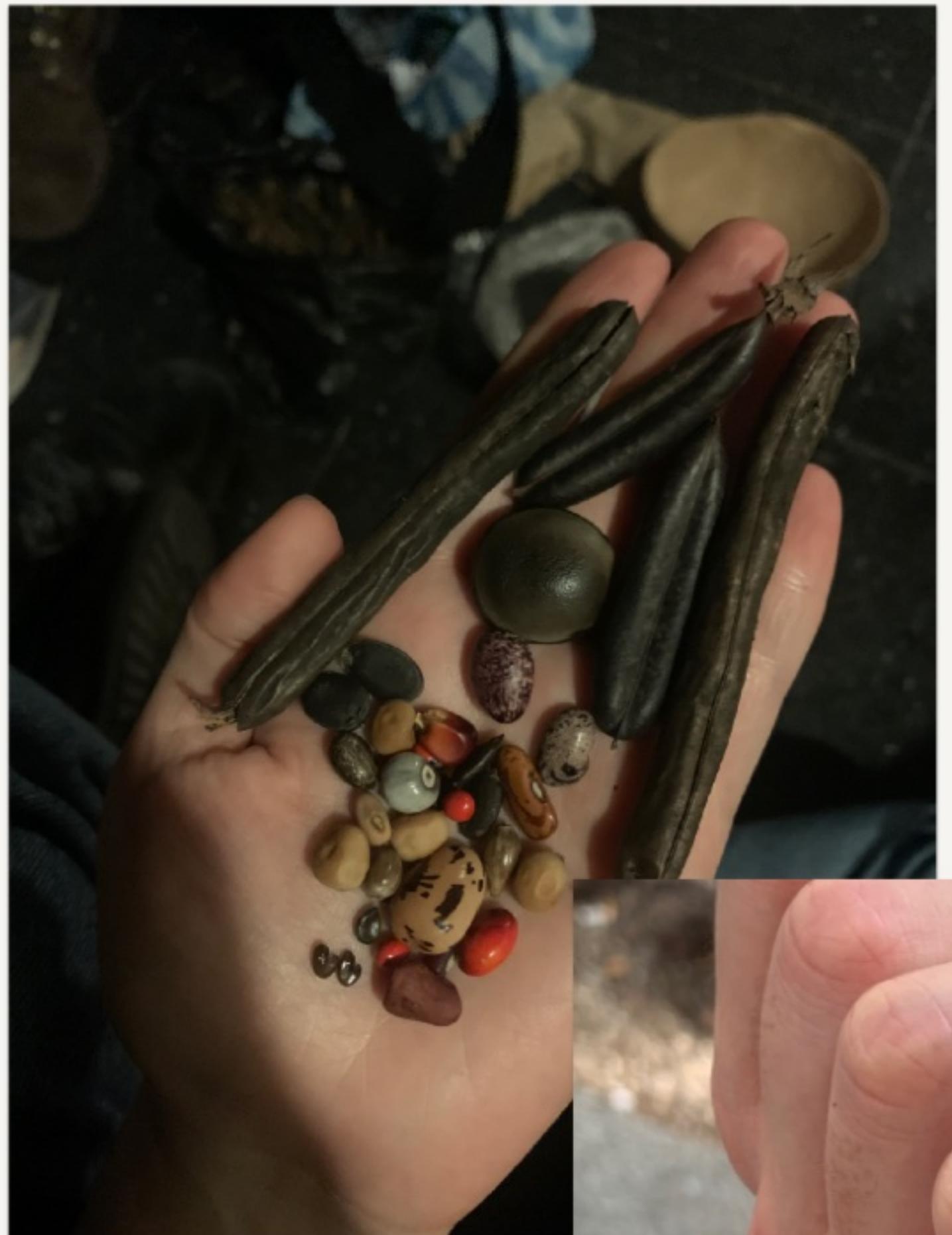
↳ HOW TO STUDY LIFE AESTHETICALLY?

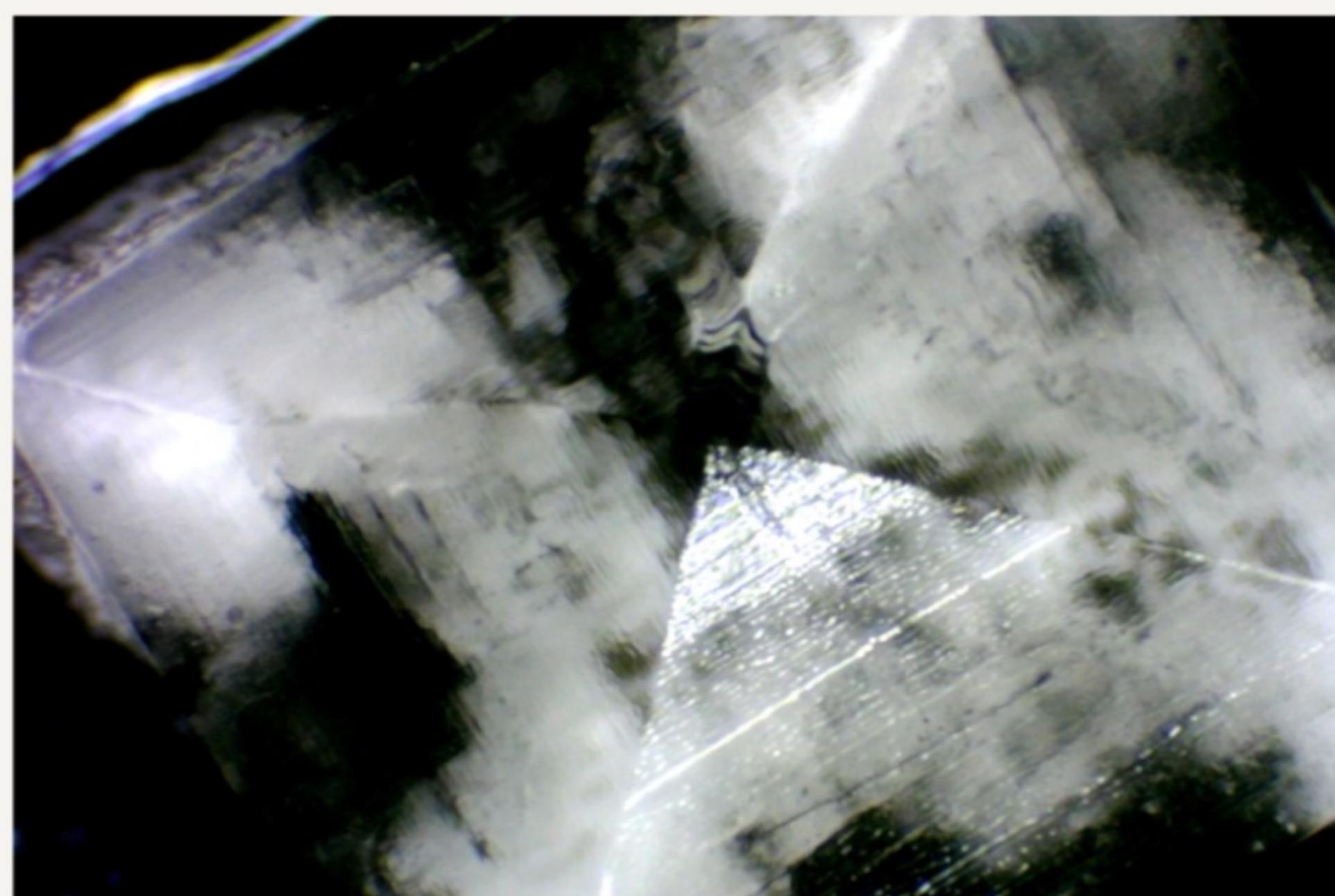
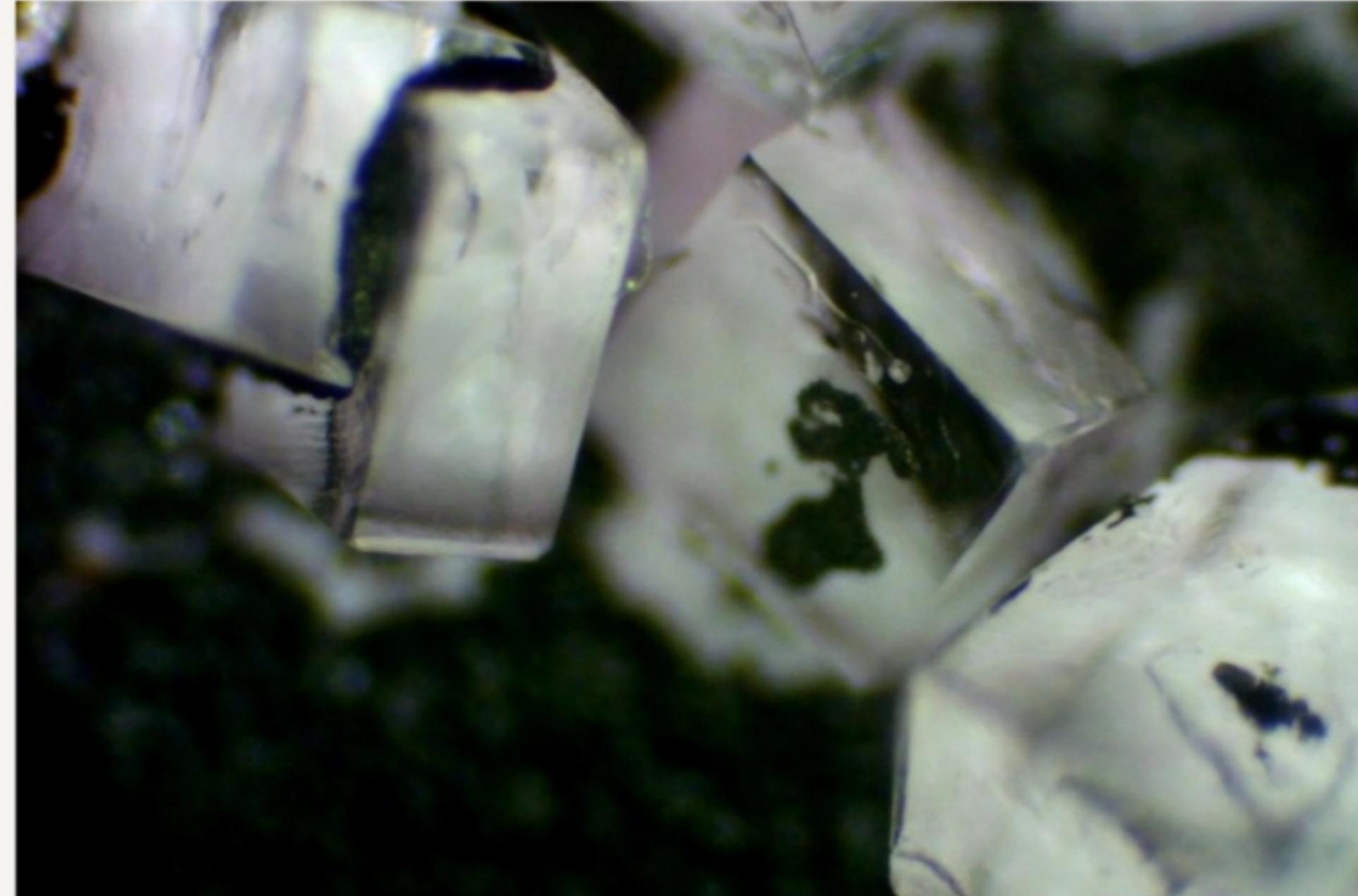




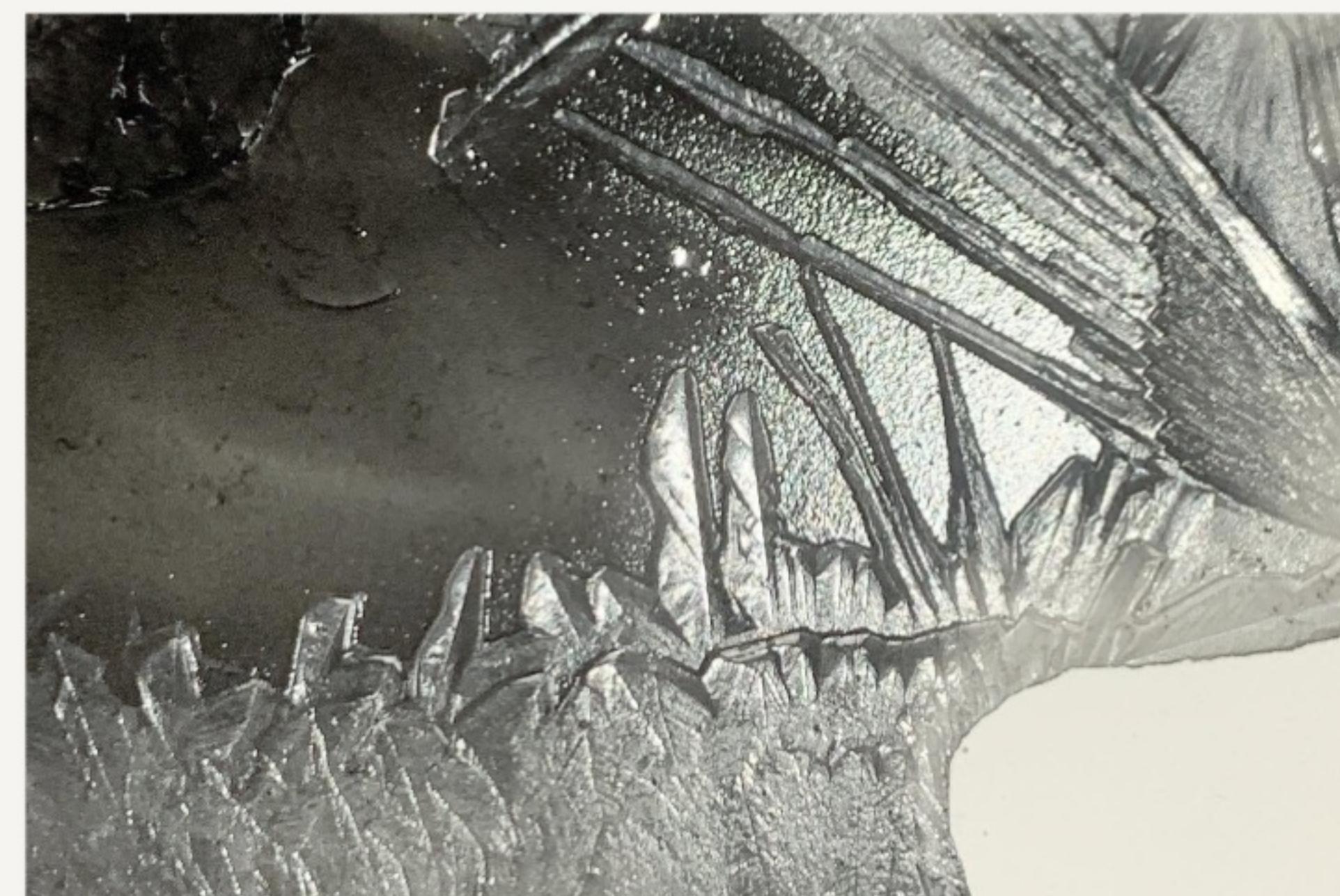
ceramica de La Lindosa, Guaviare

7,250





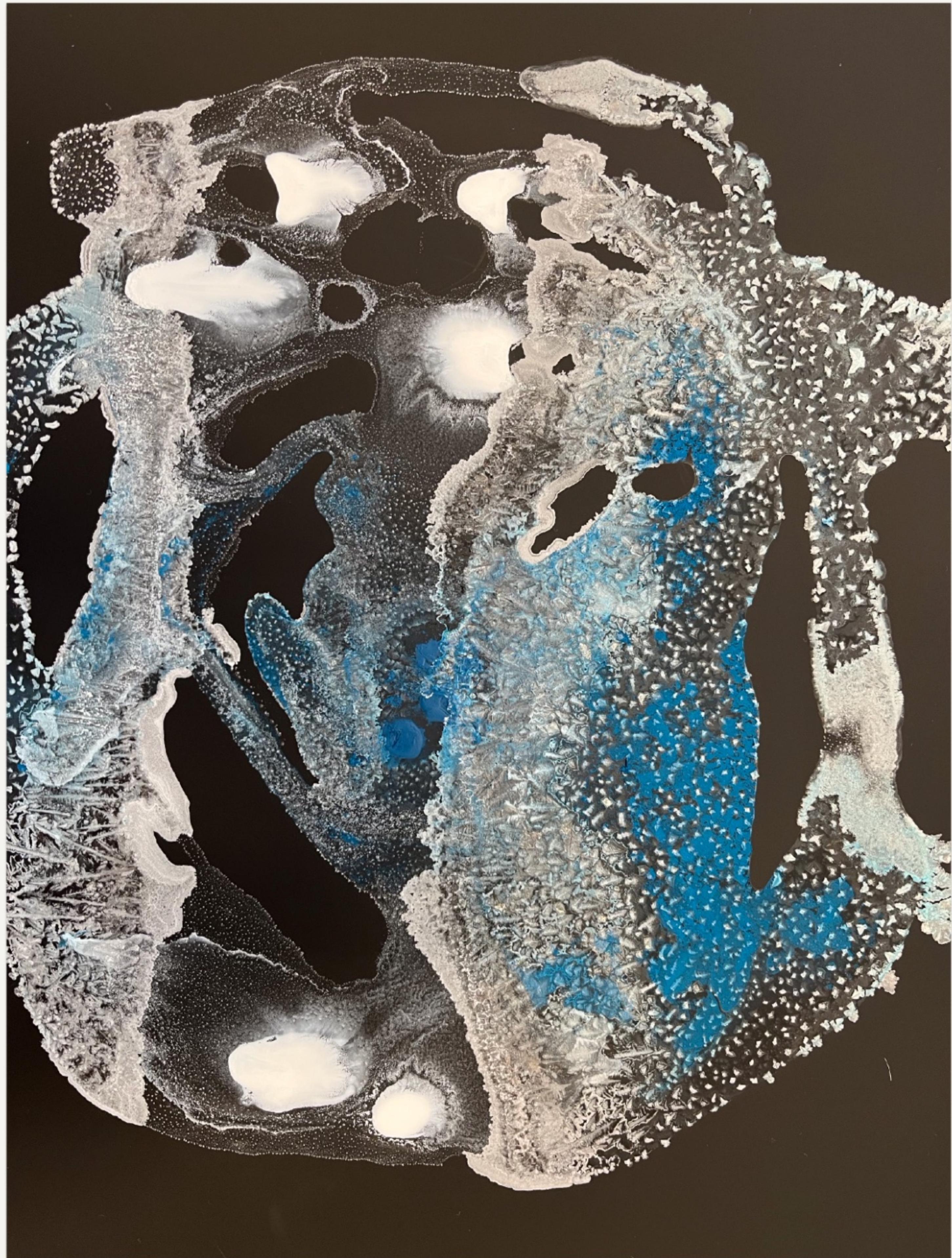
There M no  
body prior to  
the discourse  
through which it  
emerges. J. Butler



You add complexity  
by adding or  
changing  
parameters

such as the form of  
the space it is in, its  
dimensions or amount.

↓ video all  
circles  
together  
in between  
walls / bars  
+ race  
outwards



# Big Bang fusion

# cosmic ray fission

# Merging neutron stars

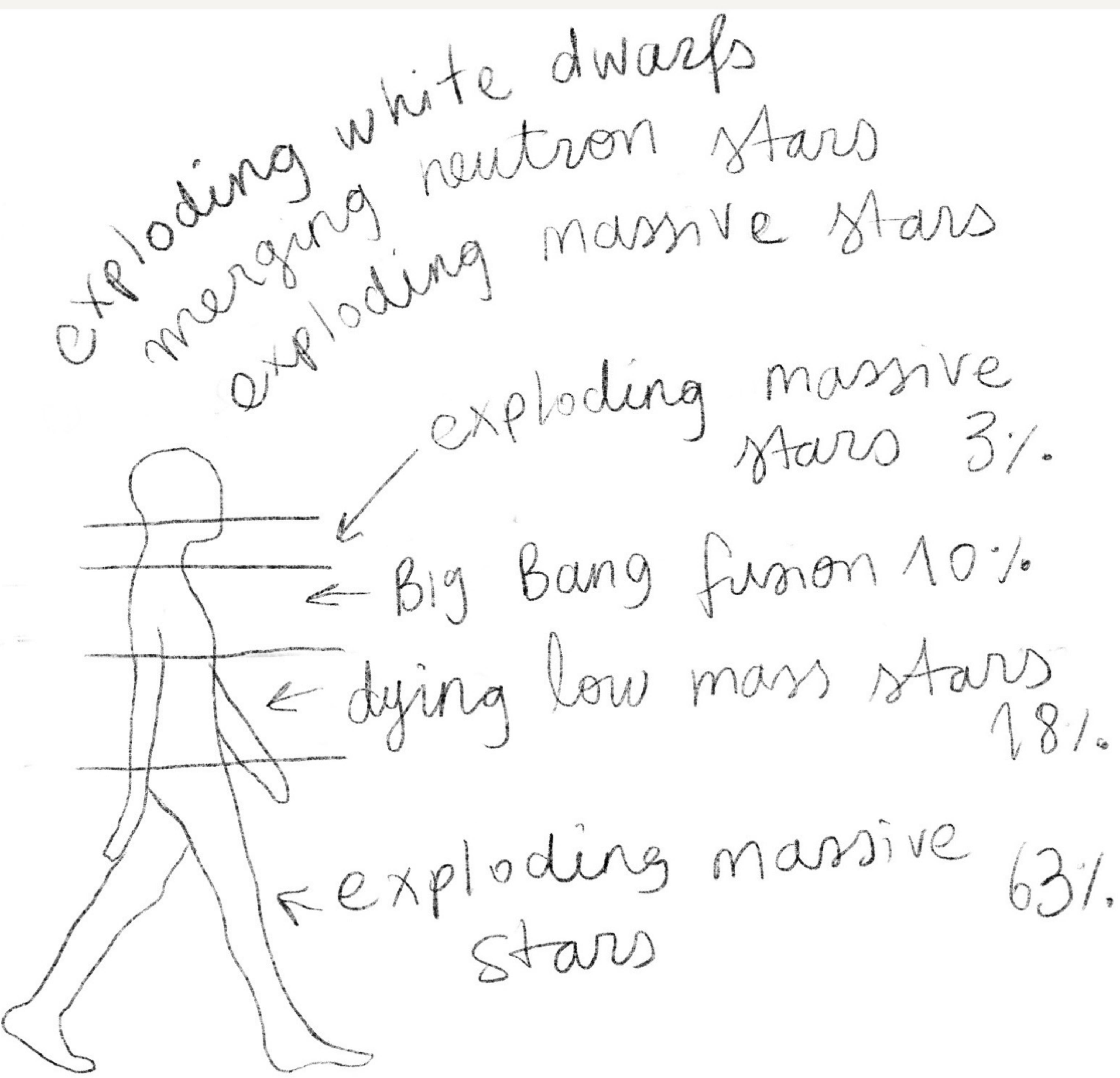
exploding massive stars

dyiing low mass stars

# exploding white dwarfs

1 H		
3 Li	4 Be	
11 Na	12 Mg	
19 K	20 Ca	
37 Rb	38 Sr	
55 Cs	56 Ba	
87 Fr	88 Ra	

5 B	6 C	7 N	8 O	9 F	10 Ne
13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn



This was what Darwin was trying so hard to get his readers to see: that there is never just one way of ranking nature's organisms.

To get stuck on a single hierarchy is to miss the bigger picture, the messy truth of nature, the "whole machinery of life." The work of good science is to try to peer beyond the "convenient" lines we draw over nature. To peer beyond intuition, where something wilder lives.

To know that in every organism at which you gaze, there is complexity you will never comprehend. 162

Lulu Miller - WHY FISH  
DON'T EXIST

# TO THINK SENSORIALLY

"5" Senses ☺

SIGHT

SMELL

TASTE

TOUCH

HEARING

OTHER LESS  
popular senses:

, spatial  
awareness?

• balance?



.5 CONCEPTS  
FROM MY OWN  
RESEARCH

A microscopic image showing various microorganisms, including a large green alga-like cell in the foreground and several smaller, rod-shaped bacteria. A black callout line points from the text on the right towards a cluster of small, yellowish-green spherical organisms.

## AESTHETIC ELEMENTS:

- RHYTHMS
- Repetitions
- movements
- form
- materiality