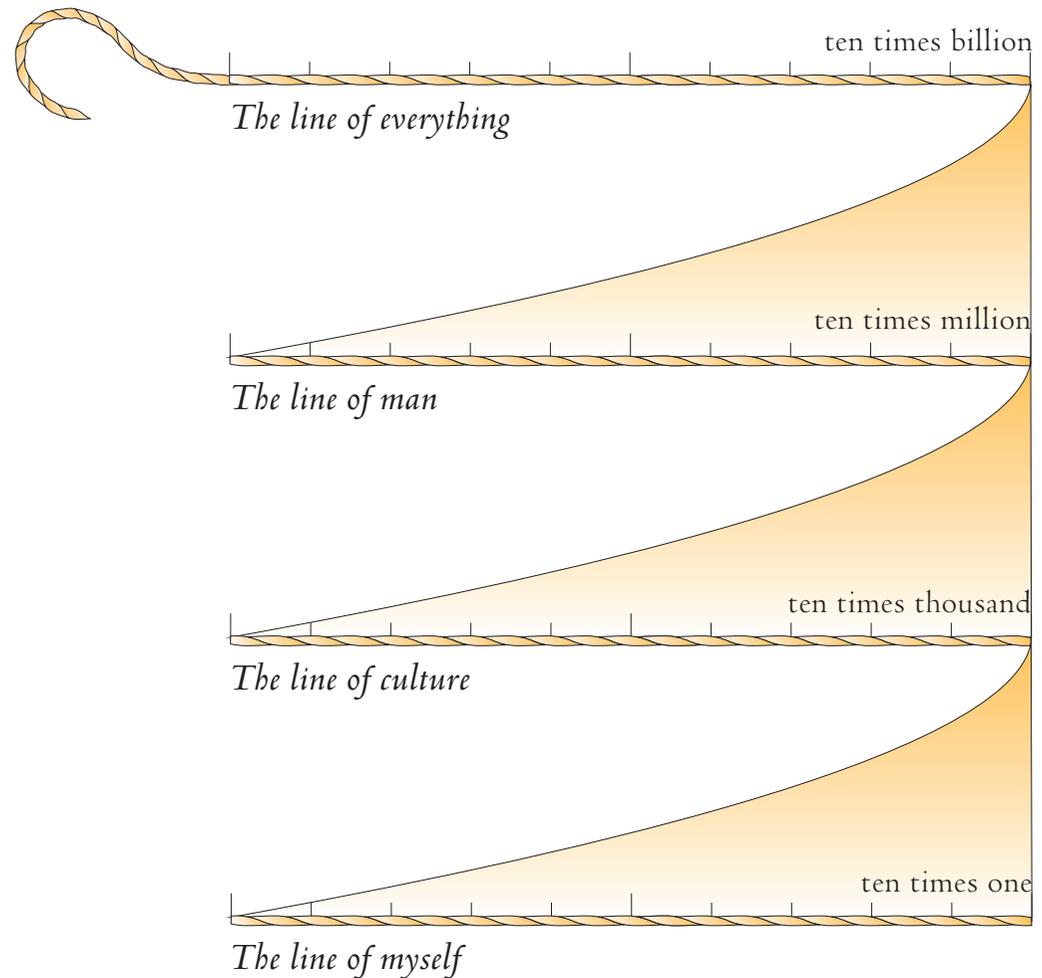




University of Amsterdam
June 13 - June 15 2013

Big History in Primary Education

Anne-Marie Poorthuis
Jos Werkhoven



More information - this presentation:

www.BigHistoryPrimairOnderwijs.nl

(in progress)

www.BigHistoryPrimaryEducation.org

(introduction, soon more)

Big History in Primary Education???



Big History started in the nineties last century

Maria Montessori



To educate the human potential, 1947
Dutch version 1998

Cosmic Education

Kees Boeke



Wij in het heelal, het heelal in ons, 1959
Powers of ten, 1985 (Eams Office)

Cosmic View on education

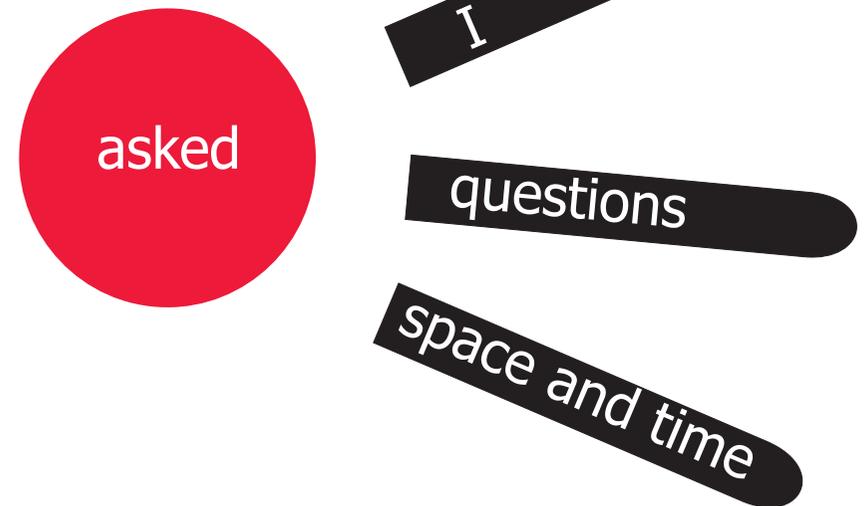
Big History in Primary Education!!!

My Cosmic Education story as a Montessori teacher: **"? ? ?"**

A sense of wonder when I do not know!

I asked questions → I started a quest in the eighties:
Questioning space and time

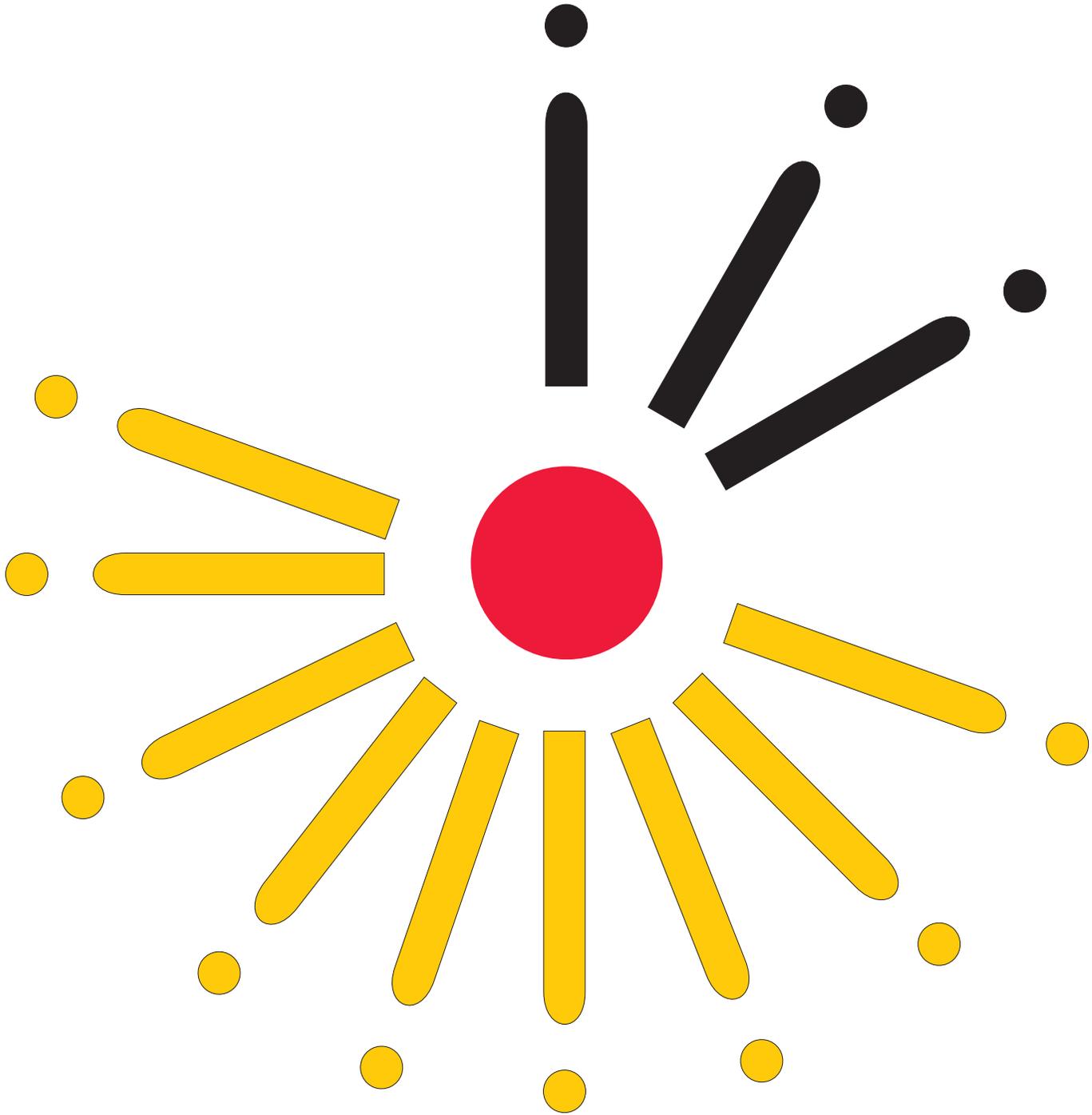
1 2 3



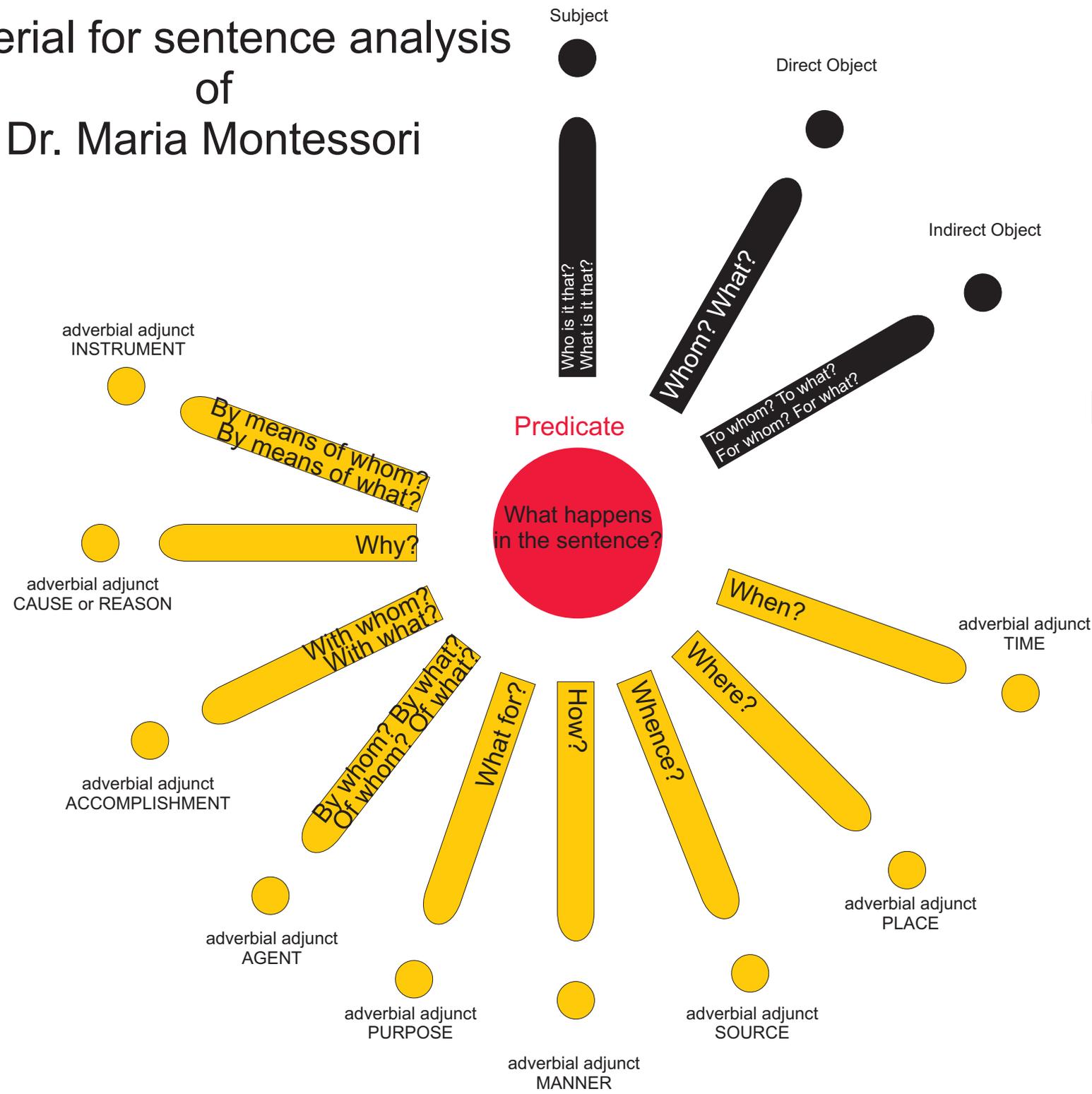
→ The teacher and the child as a researcher

→ The course Big History in Primary Education

?



Material for sentence analysis of Dr. Maria Montessori



1.

Number 1. helped me questioning.

The network as ordering principle

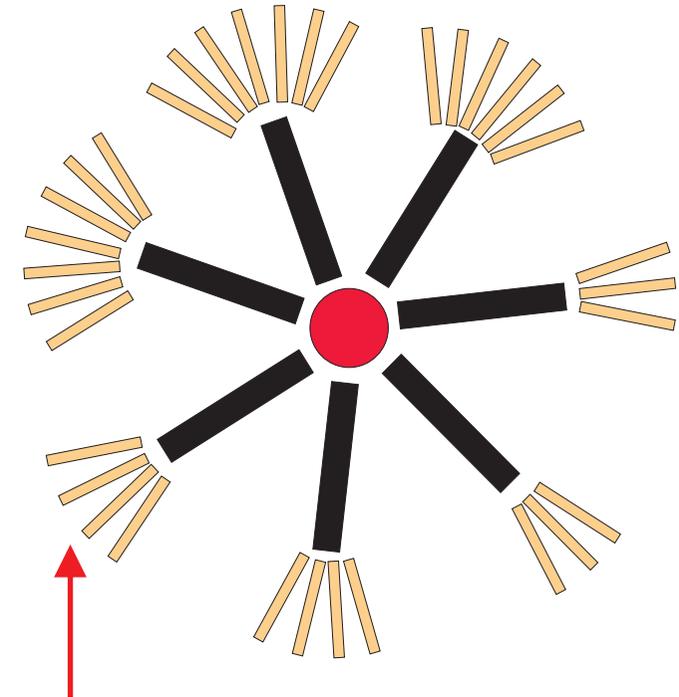
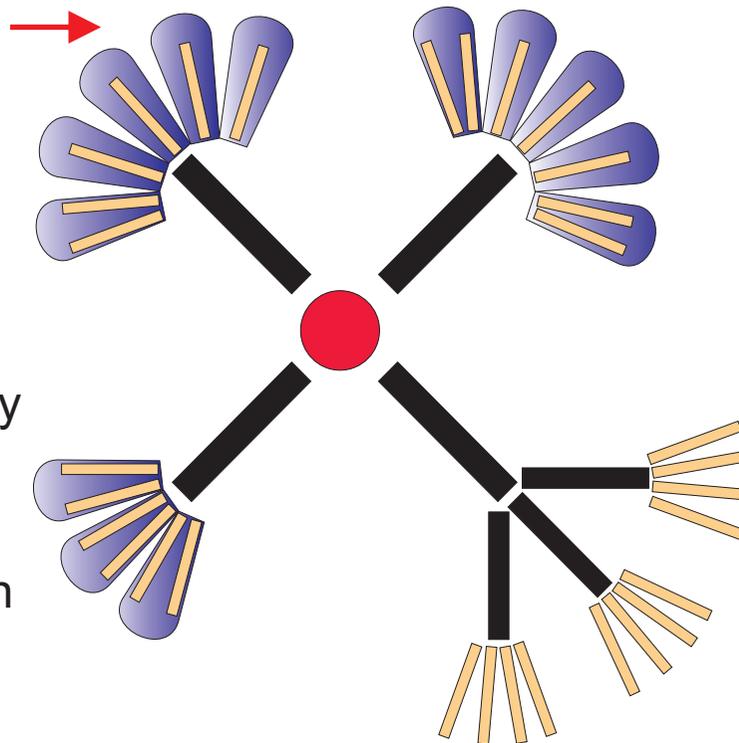
There was a lot of good experience with the patterns of other material, so the children were accustomed to work with these patterns.

The network structure of the questions of Prins-Werker (History in periods for Montessori schools).

Prins-Werker was a Dutch Montessori teacher, trained by Maria Montessori.

Together with a famous Dutch historian, Romein-Verschoor, she developed the structure of the questions to study historical periods or nations.

Note: the specific colors are added by Jos Werkhoven

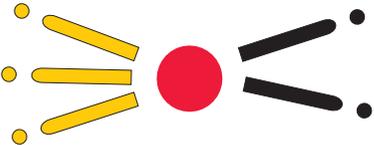


The network structure of the questions of 'de dierenbak' (to study any animal); Montessori material by Nico van Ewijk

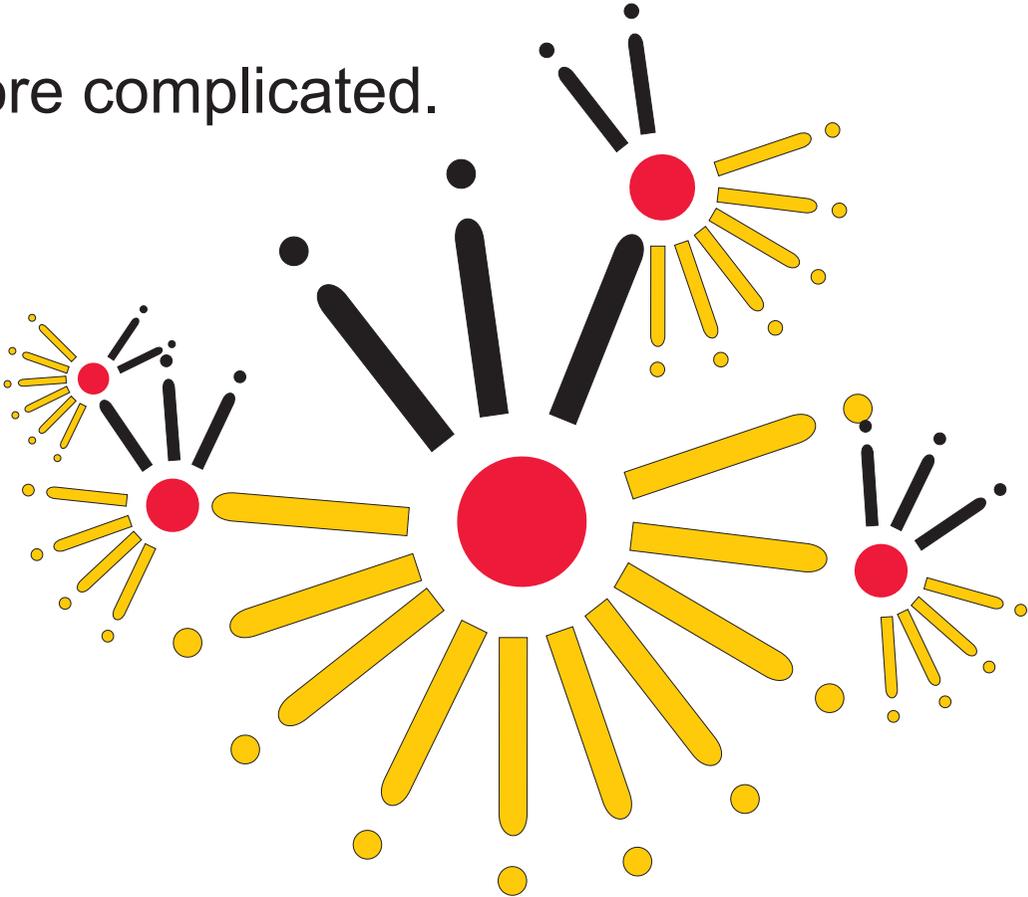
This is the only 'official' Montessori material not made by Maria Montessori that is accepted as Montessori material by the AMI.

Depending on the age and abilities of the child the study can be

simple

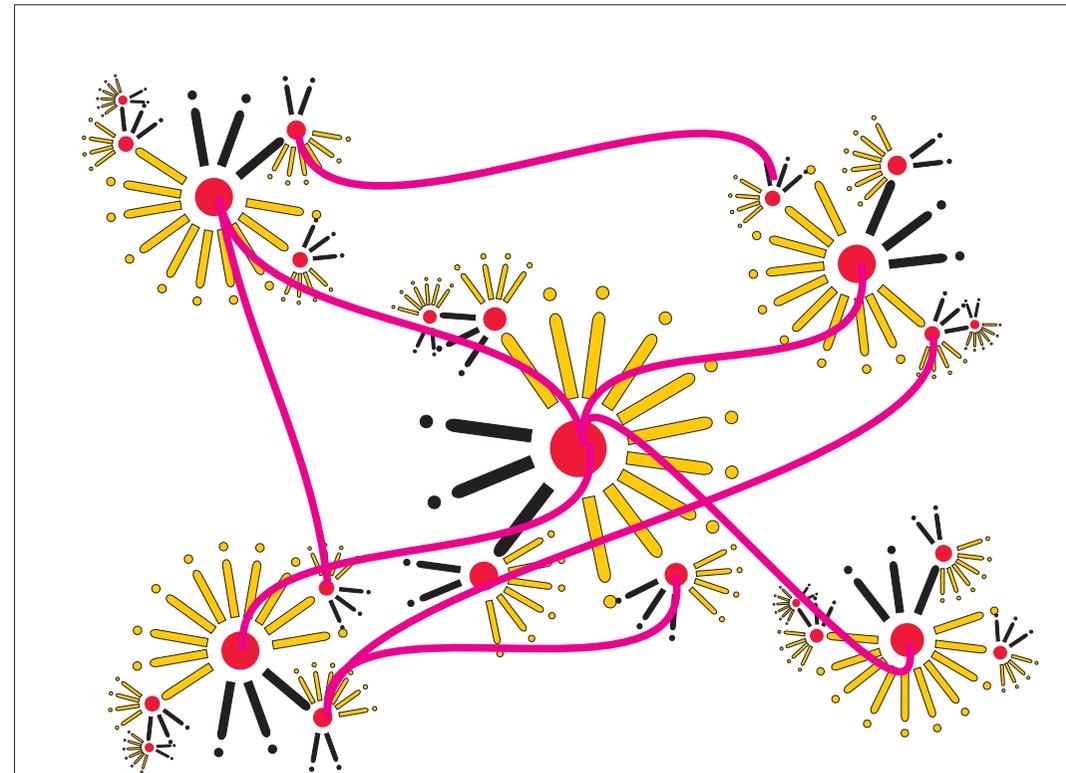
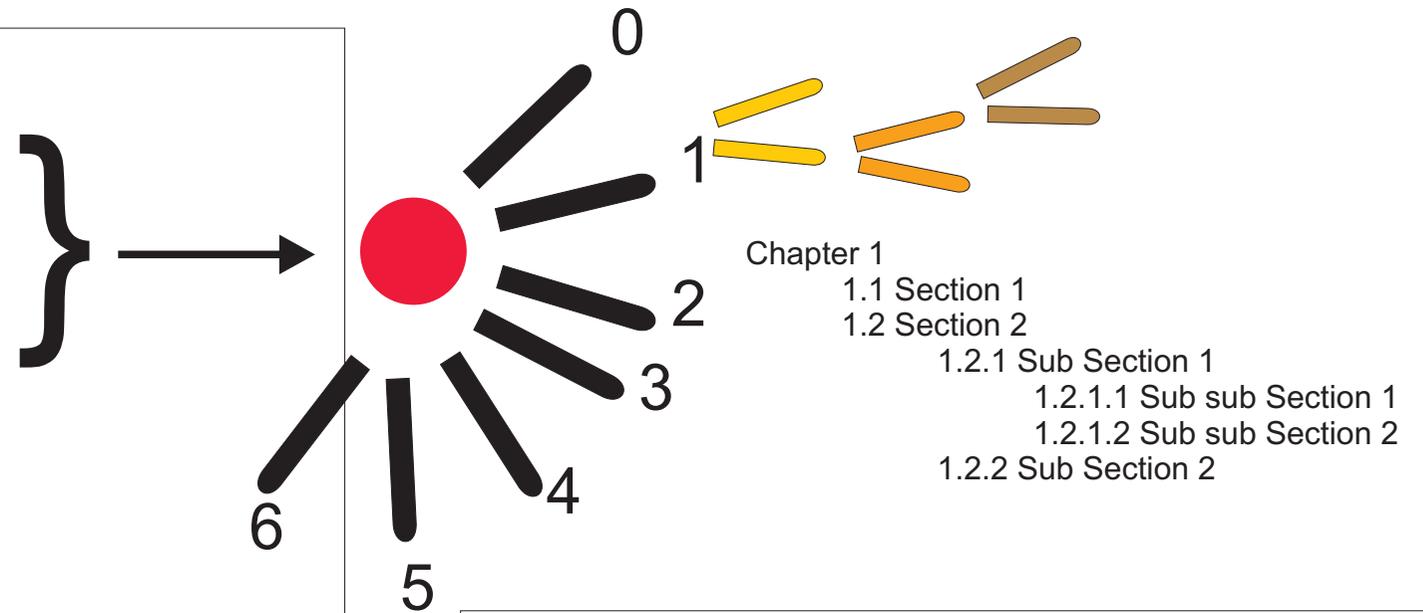


or more complicated.



Building a book, project or dissertation

0.	Introduction
1.	Chapter 1
1.1	Section 1
1.2	Section 2
1.2.1	Sub Section 1
1.2.1.1	Sub sub Section 1
1.2.1.2	Sub sub Section 2
1.2.2	Sub Section 2
2.	Chapter 2
2.1	Section 1
2.1.1	Sub Section 1
2.1.2	Sub Section 2
2.2	Section 2
2.3	Section 3
3.	Chapter 3
3.1	Section 1
3.2	Section 2
3.2.1	Sub Section 1
3.3	Section 3
3.3.1	Sub Section 1
3.3.2	Sub Section 2
3.3.2.1	Sub sub Section 1
3.3.2.2	Sub sub Section 2
4.	Conclusion
5.	Bibliography
6.	Register



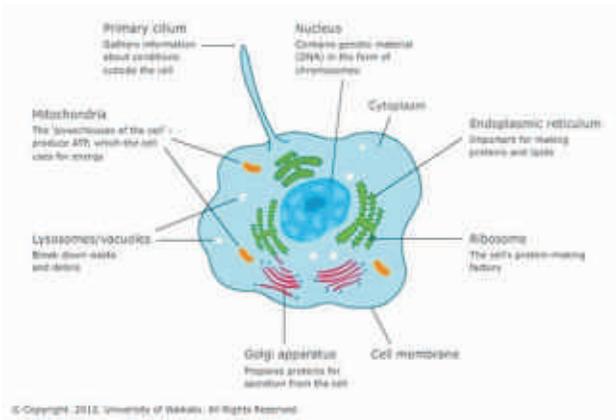
Repeating patterns of cosmos

Quote Maria Montessori:

“In congresses scientists are seeking for working methods with their theory;

Montessori teachers are seeking for theory

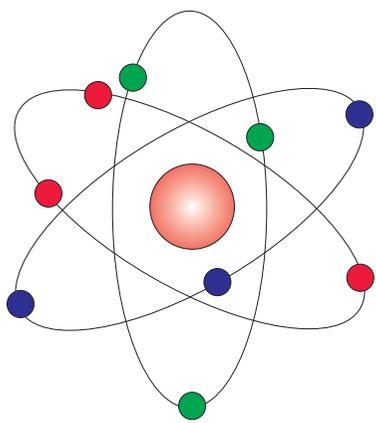
with their working methods.”



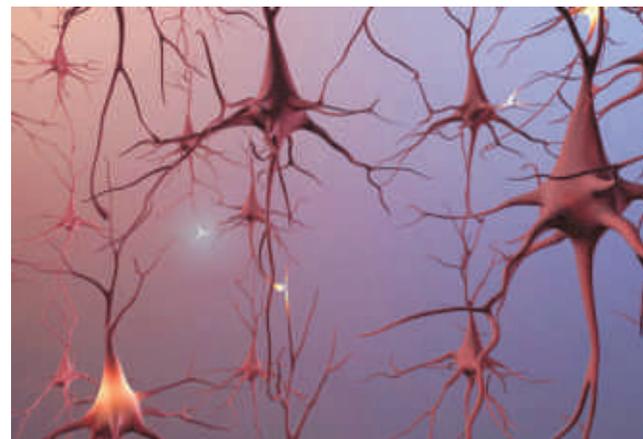
A human cell



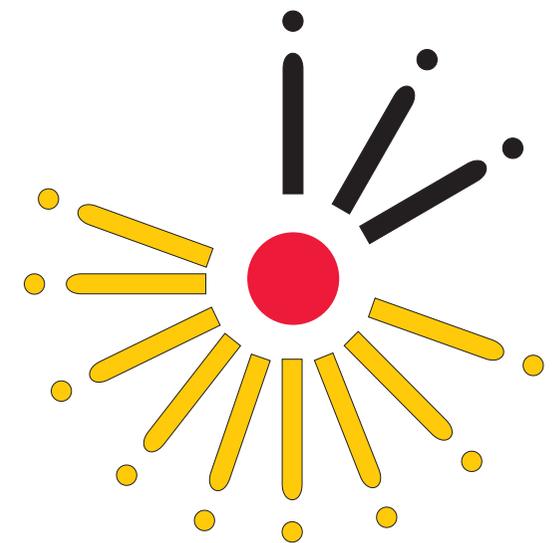
Our solar system



Electrons around the nucleus



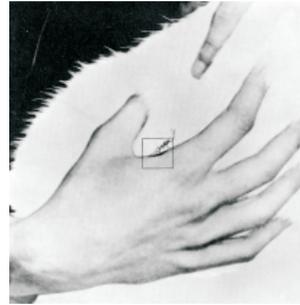
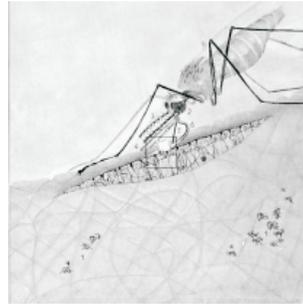
Our stimulated brain



2.

Number 2. helped
me questioning
SPACE

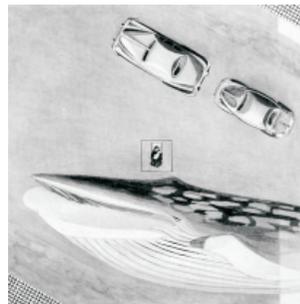
0,01 meter high - 0,0001 m² 0,1 meter high - 0,01m²



1 meter high - 1 m²



10 meter high - 100 m² 100 meter high - 10.000 m²



The illustrations are from
the original publication;

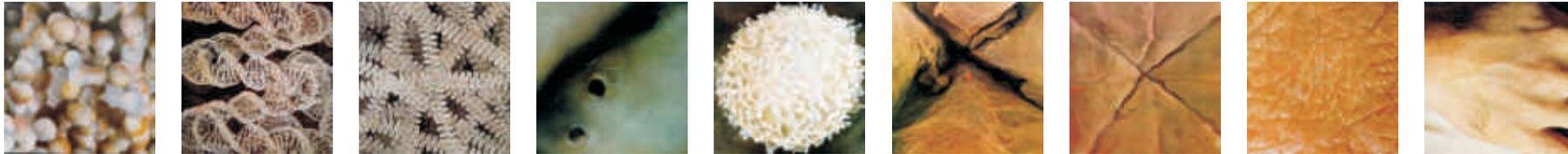
Kees Boeke,
Wij in het heelal, het heelal in ons,

translation:
We in universe, universe in us.

1959,

Uitgeverij Muusses en Meulenhoff.

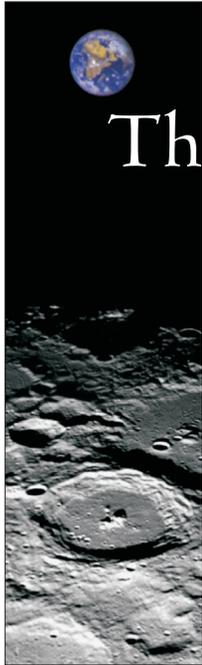
The illustrations are from
Eames Office



The journey of Kees Boeke *Powers of ten*



*Just 42 steps to
explore the whole kosmos*



The lines of life

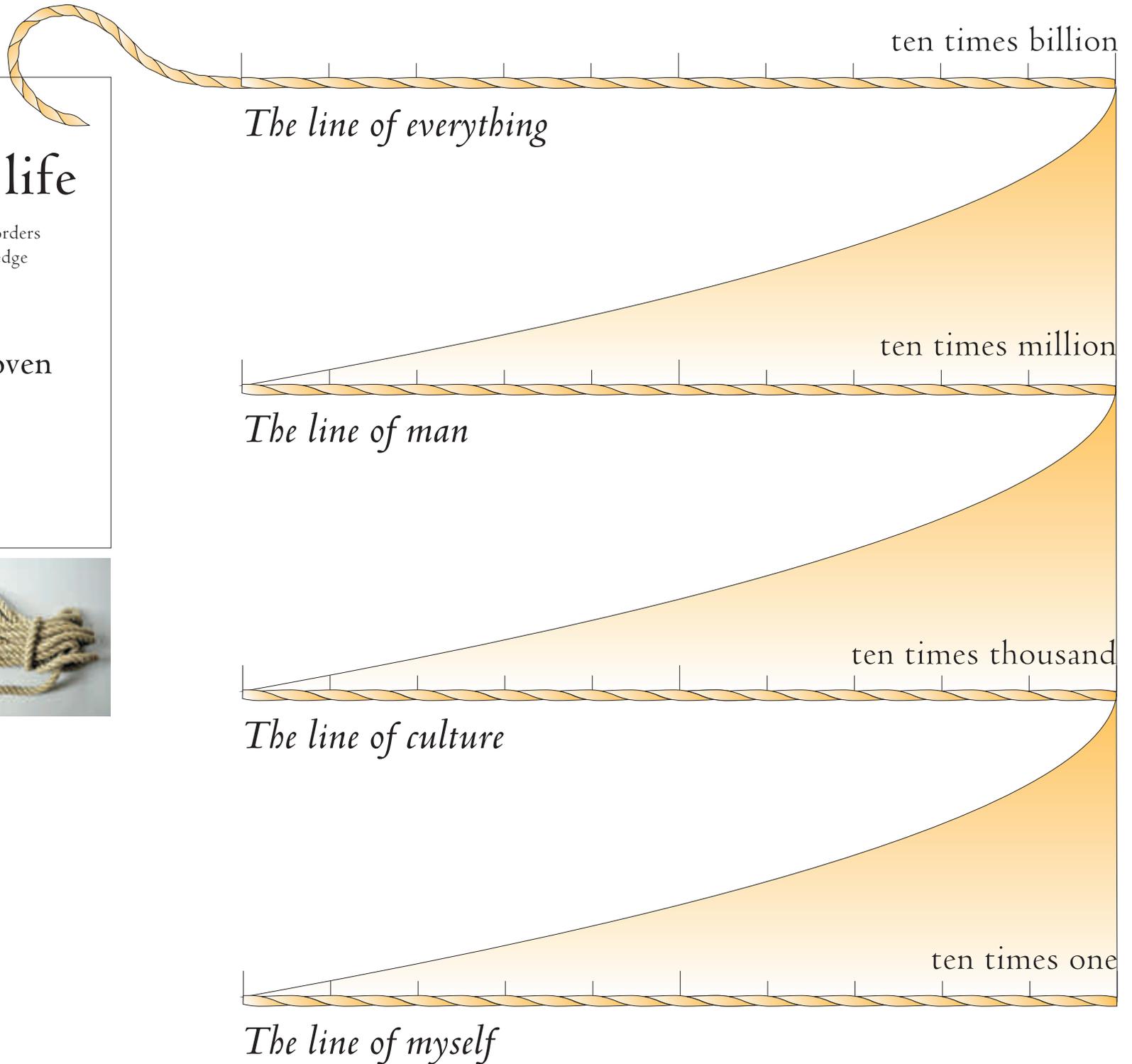
Looking for the borders
of human knowledge

Jos Werkhoven



3.

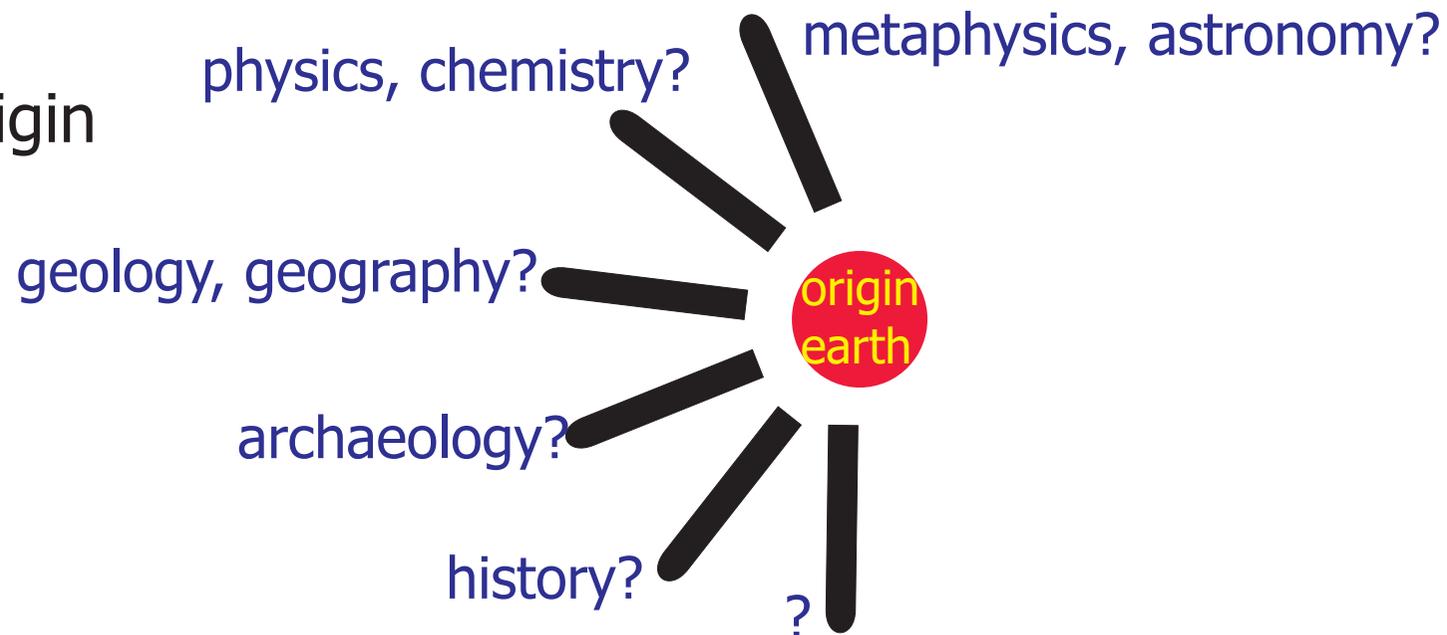
Number 3. helped
me questioning
TIME



WHY Big History in Primary Education?

- The best thing happened to me in my work with children.
- The wonder of the universe we live in.
The universe is a whole - **education must be a whole too!**
I didn't see that in my own mastership and the materials/
books we used. **There's is so much more to know.**
- Breaks through the boundaries of the school subjects.
It's integrated learning.

- Tell about the origin
of the earth:



WHY Big History in Primary Education?

- Children of 6 years old want to know!
They are involved.

- It's a **BIG** story.
A story is an attractive teaching method to inspire further study:
 - not easy to forget;
 - it gives a whole - a whole with several essences;
 - the essences are for further study.

- Global citizenship; to improve democracy.

WHY Big History in Primary Education?

→ Inspires necessary renewal of education.

Our schoolsystem is still based on the time of the 19th and 20th century.

In primary education '**Skills of the 21th century**' are discussed:

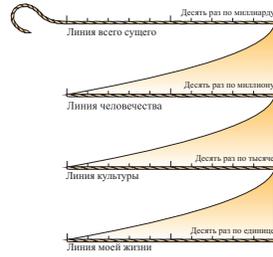
→ **Skills of the 21th century:**

- collaboration - co-operation;
- problem solving;
- ICT literacy;
- creativity;
- critical thinking;
- communication;
- social and cultural skills.



OF COURSE

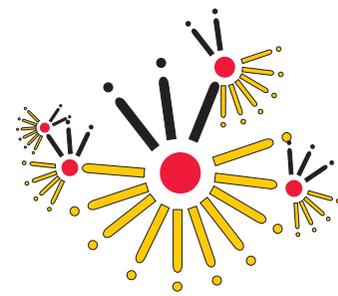
Big History in Primary Education!



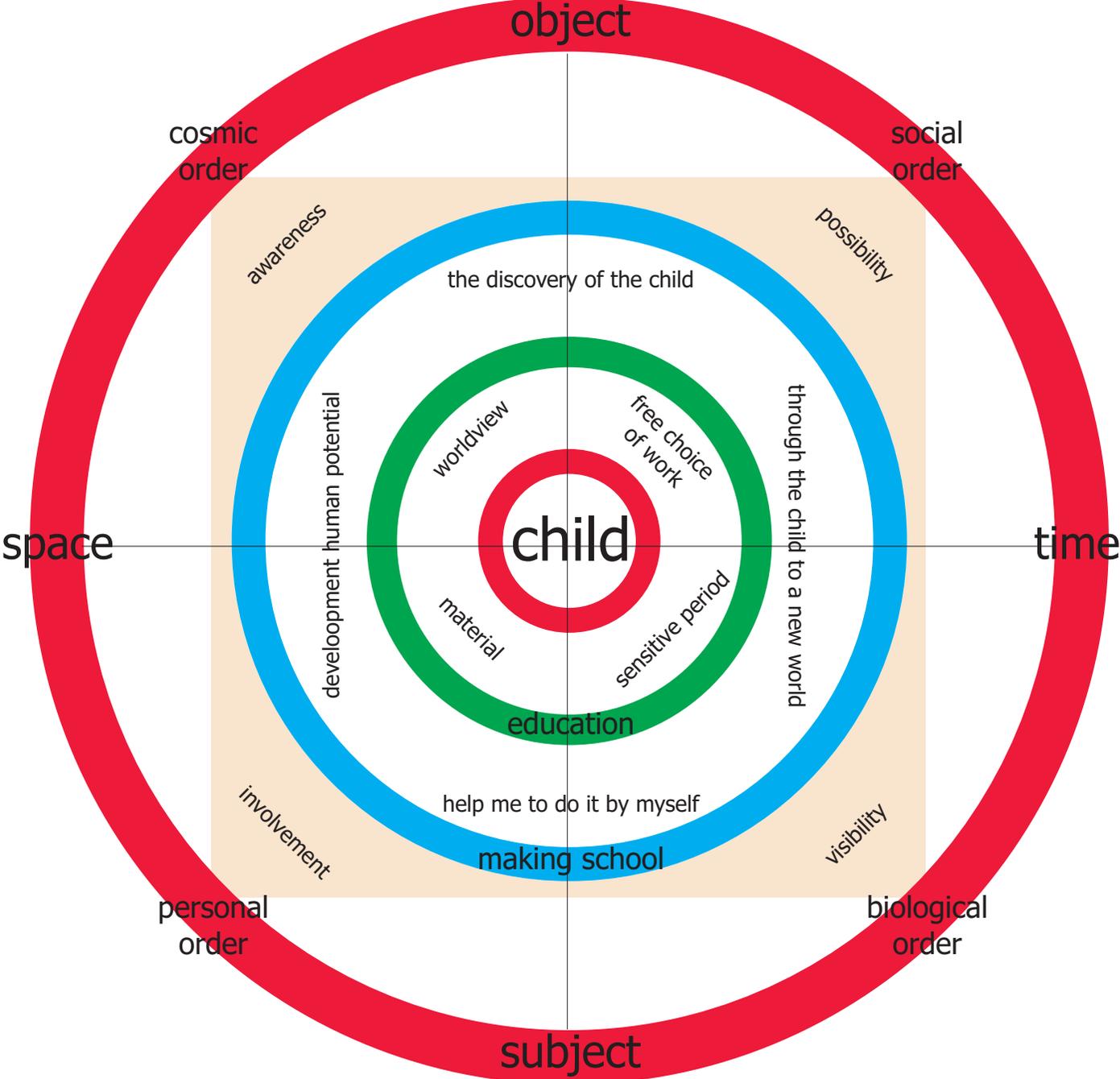
→ www.BigHistoryPrimairOnderwijs.nl
(in progress)

→ www.BigHistoryPrimaryEducation.org
(introduction, soon more)

- Course Big History in Primary education
- based on: the three frameworks (teacher and child)
 - based on: childrens portfolio (child)
 - based on: organising in relation with everything there is (school)
 - based on: **'The enabling environment'**



Enabling environment



Every baby knows the

scientific method!



Big History can help us to improve Primary Education

