

Arts & Sciences



Yves Klein, *Globe terrestre bleu* 1962

Artists & Scientists



Yves Klein, *Globe terrestre bleu* 1962

Artists & Scientists

Transareality: travelling between
disciplinary and cultural areas

Hélène Fleury & Damien Ehrhardt



Yves Klein, *Globe
terrestre bleu* 1962

D. Ehrhardt & H. Fleury,
“Science and transreality in Humboldt’s cosmos”
<https://hal.archives-ouvertes.fr/hal-02401395/document>



Research groups:



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To Grasp the whole world

INTERNATIONAL CONFERENCE

To Grasp the whole world. On the 250th Anniversary of Alexander von Humboldt

4-6 December 2019 | NOVA Law School

Call for Abstracts: 30 August 2019.

See the event's webpage [here](#).

This event is part of the Project [Cosmopolitanism](#).

EVENTS

Seminar Series in Analytic Philosophy
2021/2022

Workshop on the Phenomenology of Law

Workshop: Concrete inter-subjectivity:
Ontological, ethical, political and linguistic
inquiries regarding interaction

IX Multilateral Kant Colloquium

Seminário HPhil 14 Outubro 2021



[au XX^e siècle, on] peut dire que la science se développe dans une indifférence à peu près totale à l'égard du mouvement artistique. Et la réciproque est valable. Ce n'est pas vrai sur le plan des techniques (...). Le XX^e siècle reste pour l'essentiel, un moment d'indifférence mutuelle.

Jean-Marc Lévy-Leblond, *Art et Science*,
Les Essentiels d'Hermès, Paris, CNRS
Editions, 2012

[In the 20th Century we] can say that science develops in an almost total indifference towards the artistic movement. And the reciprocal is valid. It is not true on the level of the techniques (...). The 20th century remains for the most part, a moment of mutual indifference.

ART ET SCIENCE



Les Essentiels d'HERMÈS
CNRS EDITIONS

Arts & Sciences

- **Arts & Technology and Arts & Science dialogues:
The first works better than the second**



Brown Auditorium Theater, Museum of Fine Arts, Houston | Photo by Werner Du plessis on Unsplash

Arts & Sciences

- **Arts & Technology and Arts & Science dialogues:
The first works better than the second**
- **Two opposing attitudes:**
 - *inclusive vision*, uniting arts and applied sciences;
 - *exclusive vision*, disciplinary withdrawal of the purists of “art for art’s sake” or “science for science’s sake”
- **Common objective beyond art and science: specific or more global, ecological or planetary socio-economic projects.**

Arts & Sciences

EXCLUSIVE VISION

Monodisciplinarity: separate disciplines.

**Art for art's sake,
science for science's sake**

Focus on one discipline, 'purity', canon

Focus on disciplinary identity

INCLUSIVE VISION

**Transdisciplinarity: interactions,
crossings, even mixtures between
disciplines. Art for science's sake,
science for art's sake**

**Practical (socio-economic) or ideal
(philosophy, global issues) applications
beyond disciplines**

**Confronting otherness
in order to reach a meta-level**

Interculturality



Interculturality

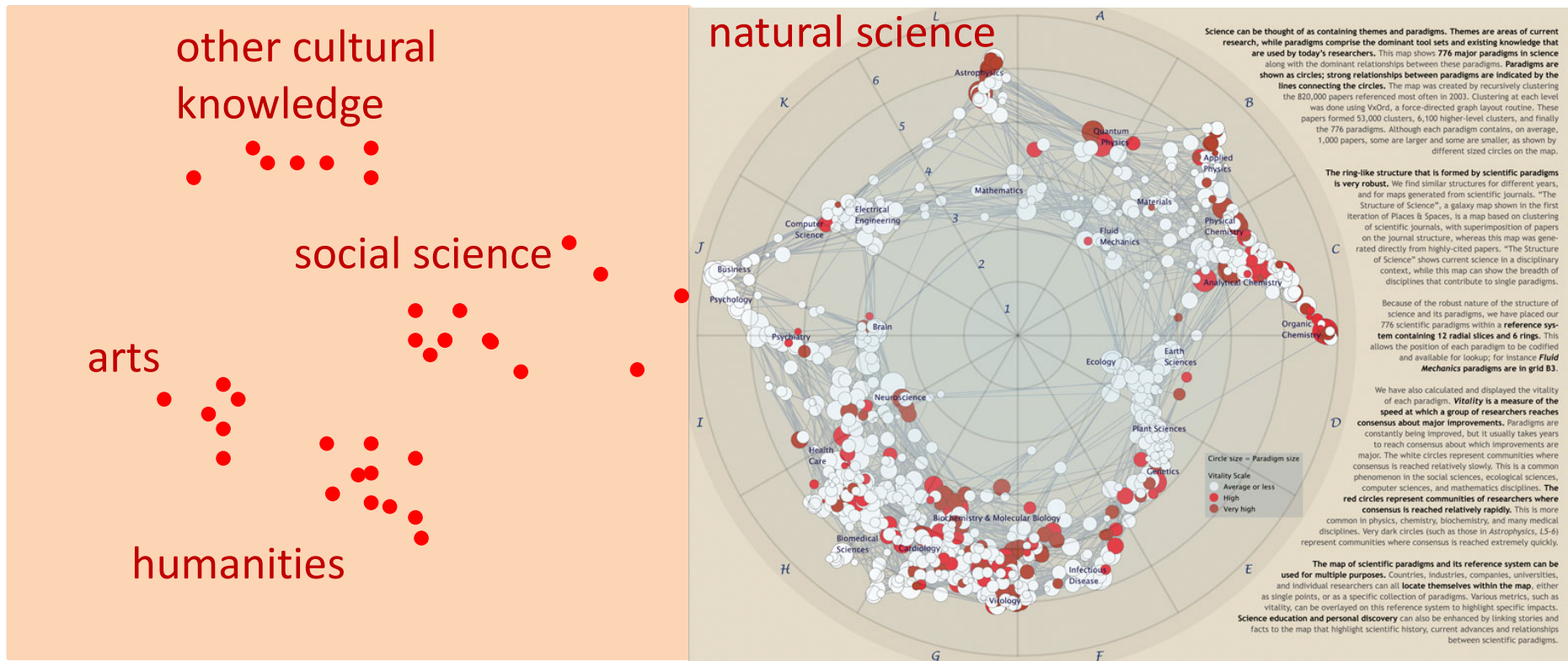


Interculturality



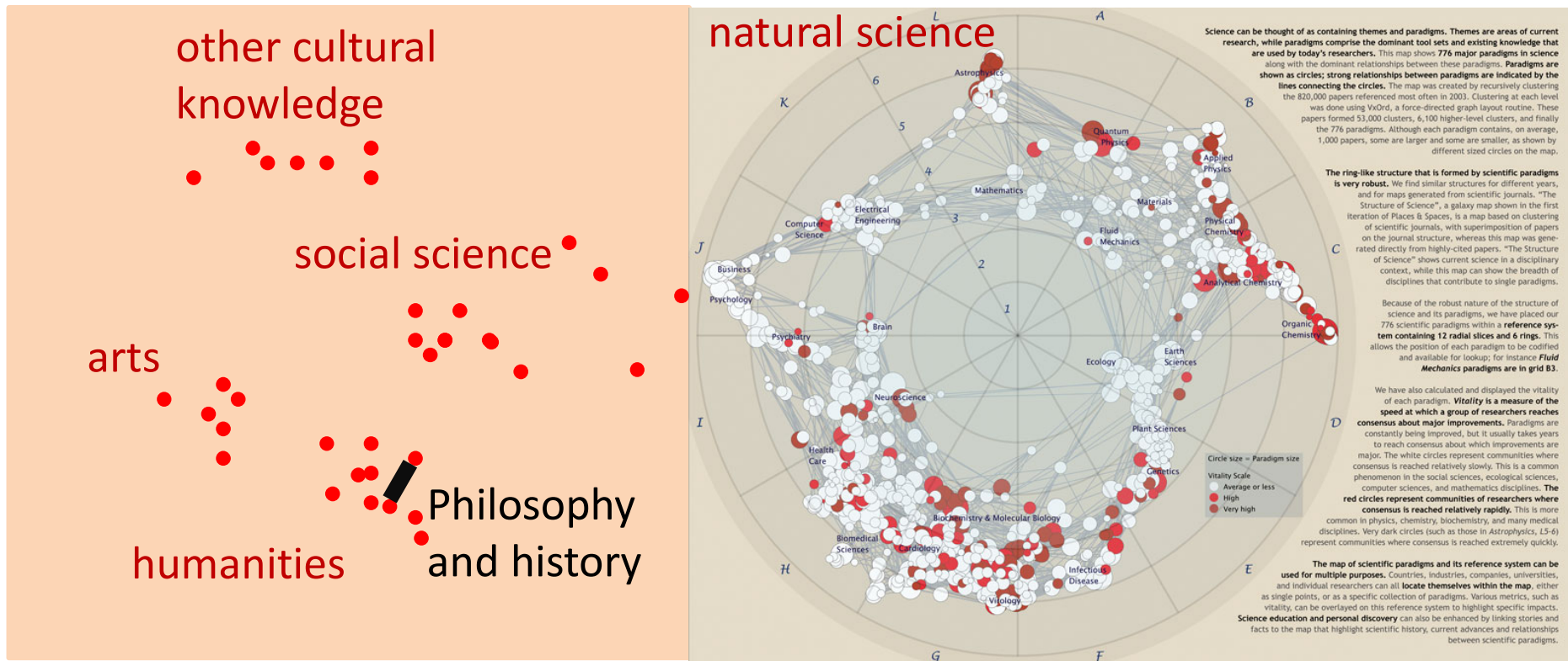
between cultural areas

Interdisciplinarity



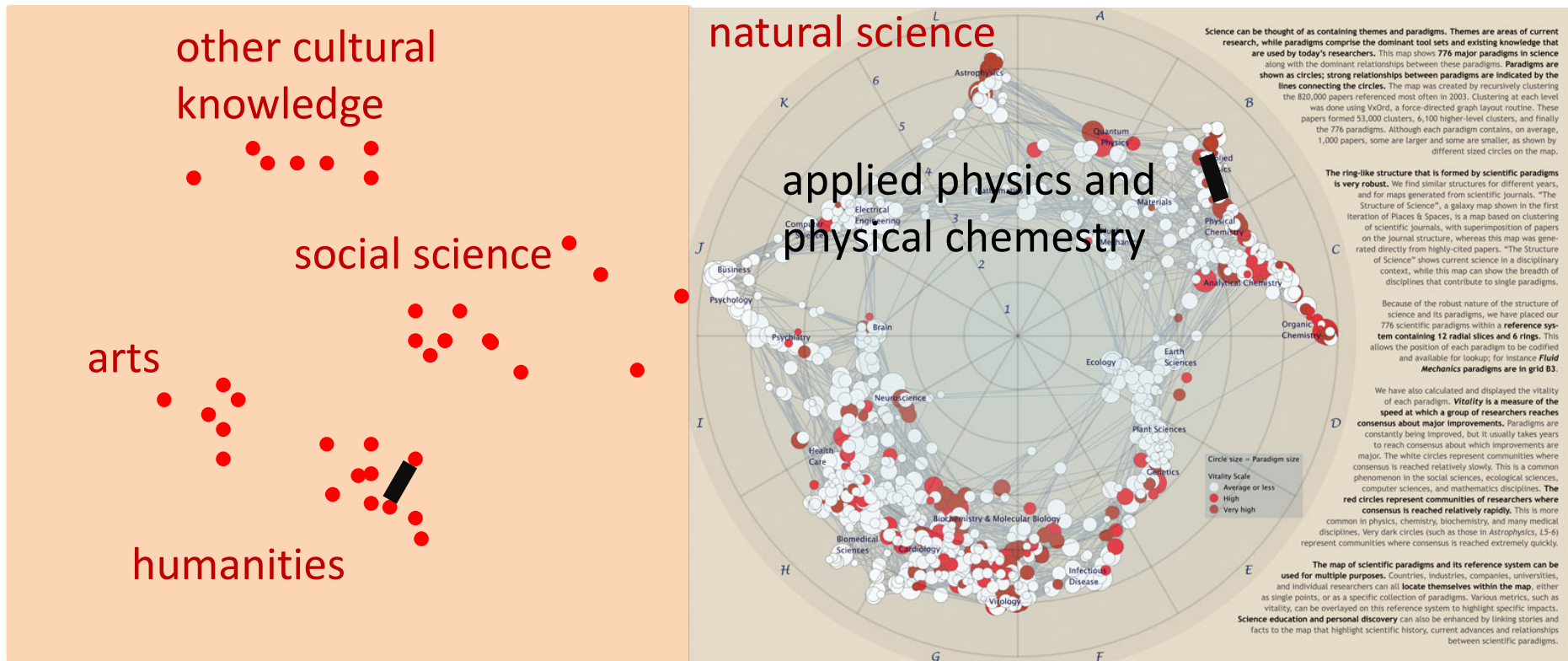
W. J. Rankin, Visualizing Disciplines, Transforming Boundaries,
<https://www.americanscientist.org/article/visualizing-disciplines-transforming-boundaries>

Interdisciplinarity



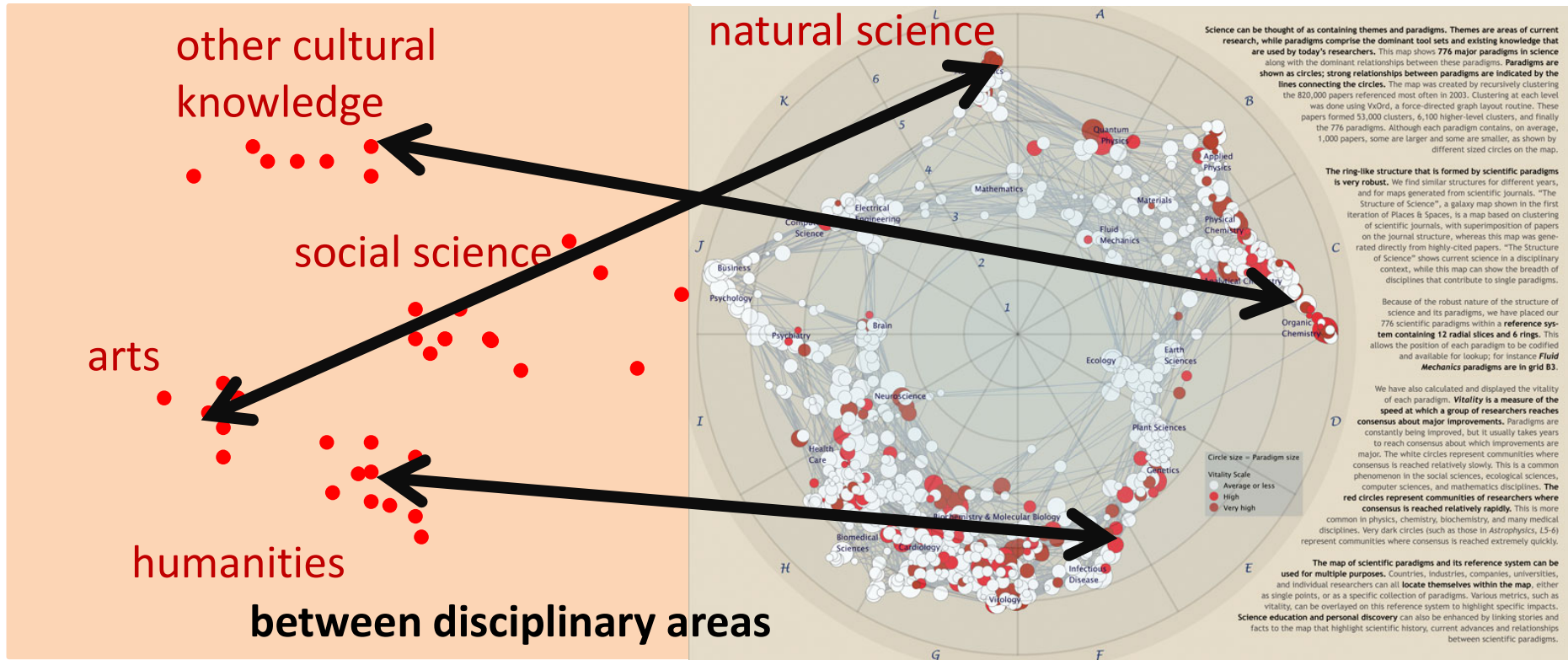
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Interdisciplinarity



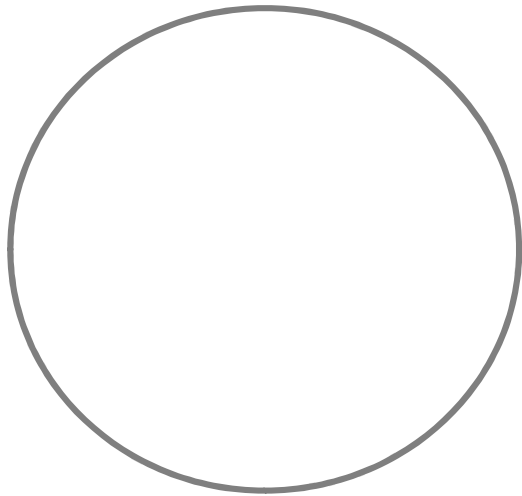
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Interdisciplinarity

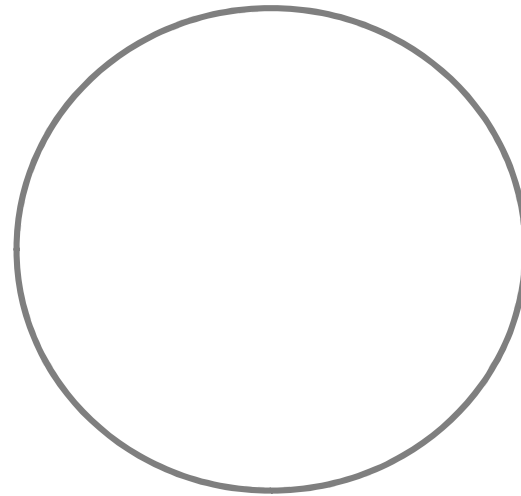


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Transareality



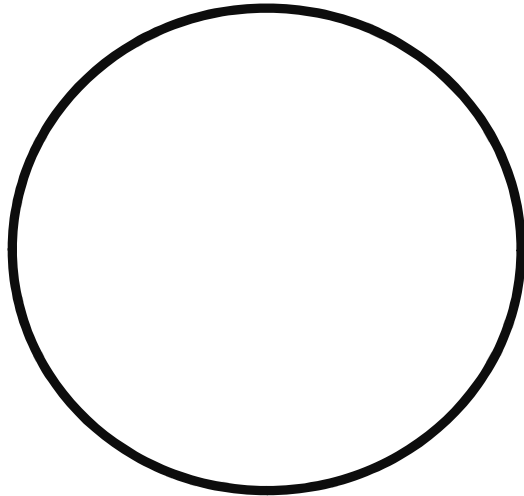
Area A



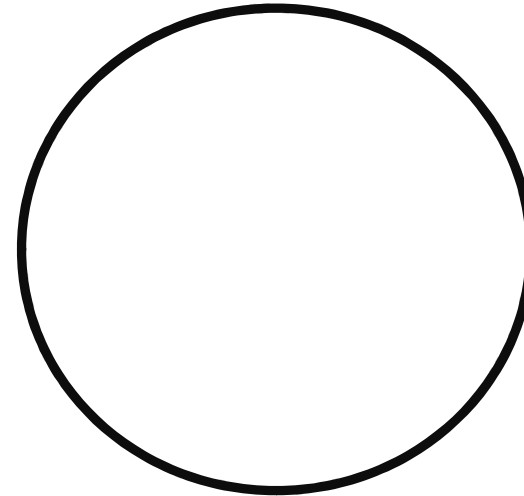
Area B

Transareality

Area thinking tends towards stability...



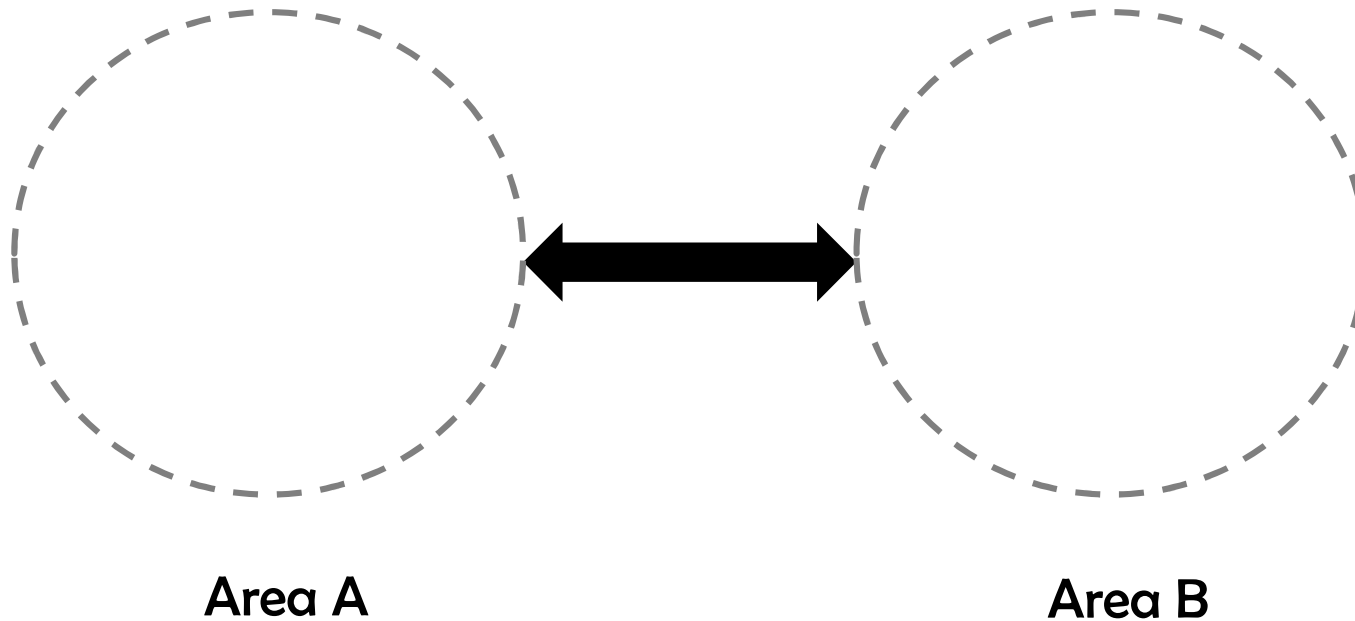
Area A



Area B

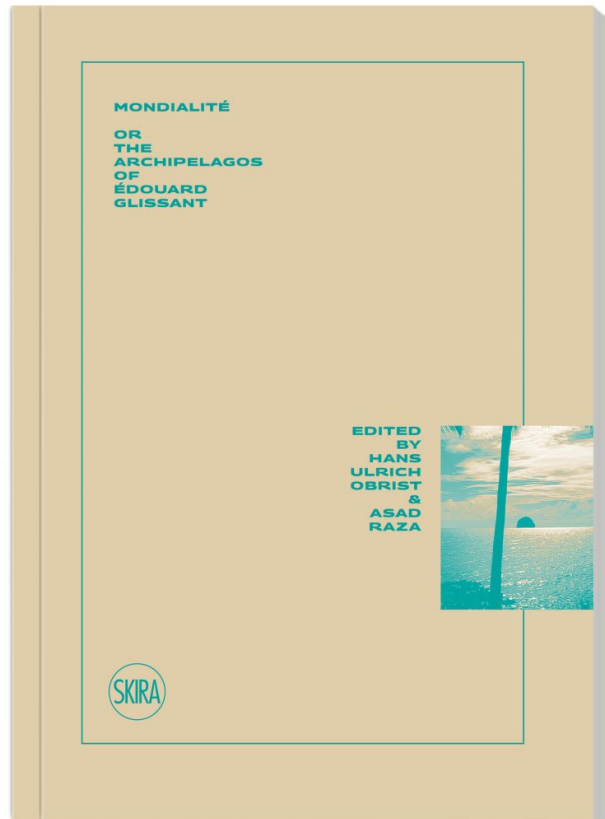
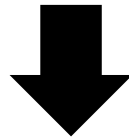
Transareality

... whereas cultural and scientific phenomena should be considered in the dynamics of their relationality



TRANSAREAL

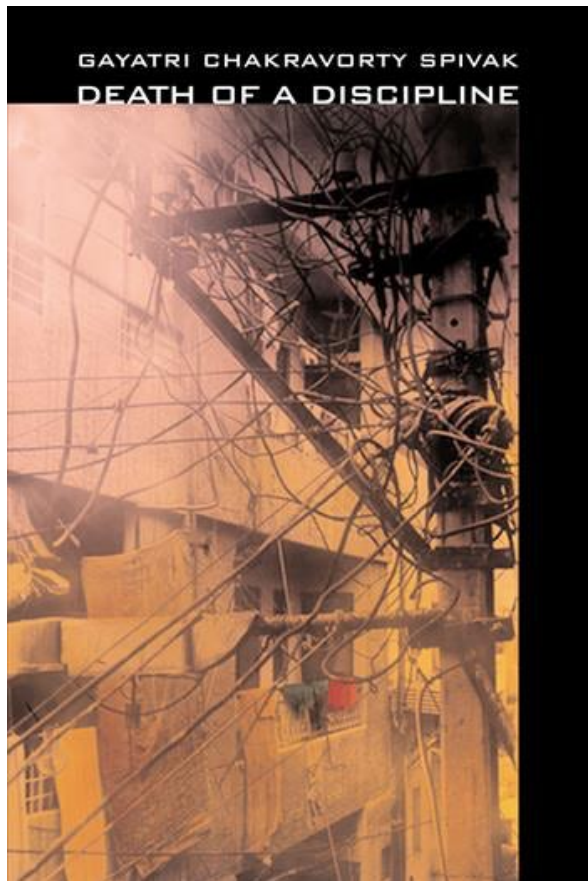
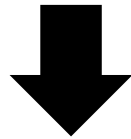
TRANSAREALITY



MONDIALITY

state of presence of cultures lived in the respect of diversity (Glissant)

TRANSAREALITY



MONDIALITY

state of presence of cultures lived in the respect of diversity (Glissant)

PLANETARITY

understands the planet as a unified natural space, a kind of otherness that we inhabit and on which we depend (Spivak)

Artists & Scientists

Alexander von Humboldt
geographer, naturalist,
explorer (1769-1859)



Olivier Messiaen
composer (1908-1992)



Mildred and William Archer
anthropologists, art historians
(resp. 1911-2005 & 1907-1979)



William Archer, India, 1976



Mildred Archer, India, 1976

Alexander von Humboldt (1769-1859)



AUTO PORTRAIT DE HUMBOLDT à 45 ANS
Crayon, portant l'indication, en allemand et en français : « Alex. H. von mir selbst im Spiegel, 1814 ». — Alex H., par moi-même, dans la glace, 1814.
(Collect. Société de Géographie)

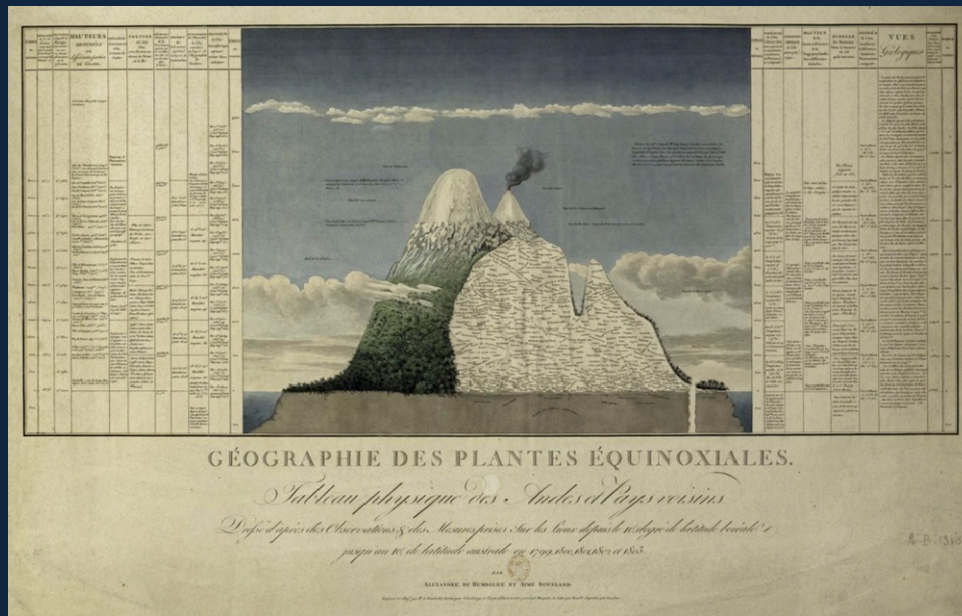
Humboldt: measuring the world for the progress of science



Eduard Ender, *Humboldt und Bonpland am Orinoco*,
Berlin, Akademie der Wissenschaften

- Humboldt measuring the world and constantly taking readings
- he was aware of the role of Enlightenment for the development of science
- he was convinced that all results can be reduced to numerical relations: *J'ai la fureur des chiffres exacts* (letter to Gotthelf Fischer von Waldheim on March 20, 1837)
- he was proud of his instrument-based scientific approach

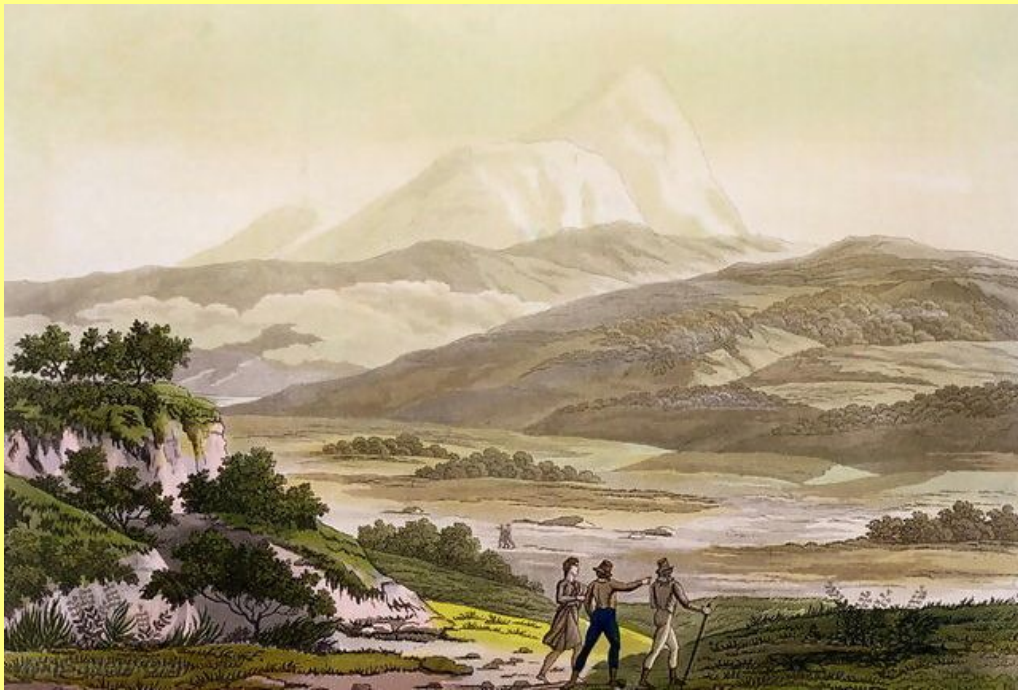
Humboldt's discoveries & inventions



Alexandre de Humboldt & Aimé Bonpland, "Géographie des plantes équinoxiales : tableau physique des Andes et pays voisins dressé d'après des observations et des mesures prises sur les lieux depuis le 10^e degré de latitude boréale..." Paris, BNF, Gallica

- The theory concerning the periodic swarm of meteors and the rain of shooting stars of the Leonid meteor
- The discovery of the fluvial system Amazon/Orinoco
- The law of the decrease in mean temperature with the increase in elevation above the sea-level
- The opening of new research fields as geography of plants, scientific orography (*wissenschaftliche Gebirgskunde*), or early American studies (*Altamerikanistik*)
- The invention of isotherm lines

The Humboldtian cosmos at the origin of ecology



after Humboldt, *Mount Cayambe Ecuador*,
oil on Canvas.

- Humboldt's cosmos: unity in diversity
- Ernst Haeckel borrowed to Humboldt the idea of a coherent whole constituted by complex interactions
- Humboldt discovered the idea of 'keystone species'
- He explained the role of the forest in humidifying the atmosphere, holding the water, and protecting the soil against erosion
- The Humboldtian geography connecting science, cosmopolitics and geo-poetics: social, economic and political problems linked to environmental issues

Geopoetics

A book on nature must contain its objective as well as subjective sides; our inner world is constructed by the impressions that nature provokes in us: nature paintings (*Tableaux de la nature*), music from the rocks...

→ Holistic approach including sensibility, emotion, and rationality



Landscape as focus for both scientific and humanistic study – Left: “Cargueros on the arduous Quindiu Pass between Bogota and Quito”, Humboldt, *Vue des Cordillères...*, 1810, table 5 – Right: “Gas volcanoes of Turbaco in Colombia”, Humboldt, *Vue des Cordillères...*, 1810, table 41.

Transareality by Humboldt



- Humboldt was involved in various branches of knowledge – including geopoetics – and transcended them at the same time
- He was a specialist of cultural areas (America, Russia, Central Asia...) coming from natural sciences and learned to think in different languages. But he was able also to situate these areas into a global panorama:
 - research in the natural sciences, based on a comparative analysis of data from all the world
 - contrastive linguistic studies with his brother
 - transatlantic mediator

Olivier Messiaen (1908-1992)

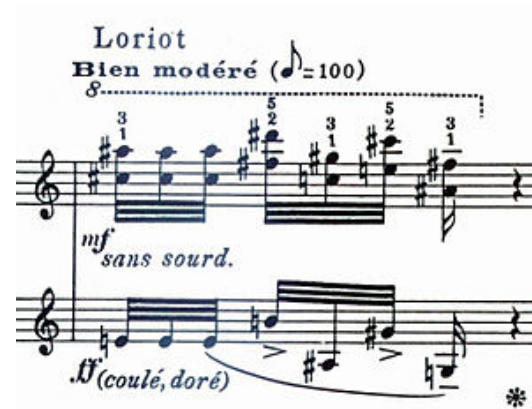


Messiaen's musical aesthetics is based on very different fields of knowledge:

- **Bergson's philosophy of duration,**
- **various scientific theories : expansion of the Universe, microphysics, relativity...**
- **his experience as an ornithologist.**



**Messiaen: notating bird songs worldwide
and incorporated it into his music
e.g. *Oiseaux exotiques*.**

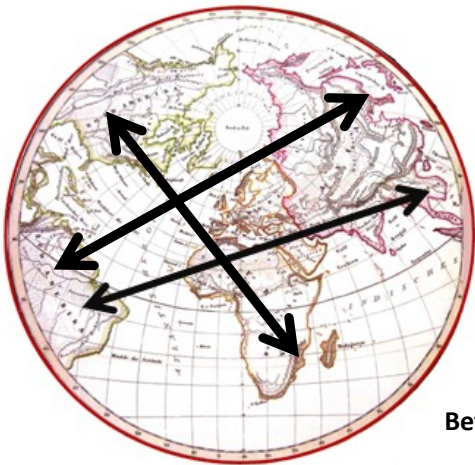


Mildred Archer (1911-2005) & William Archer (1907-1979)

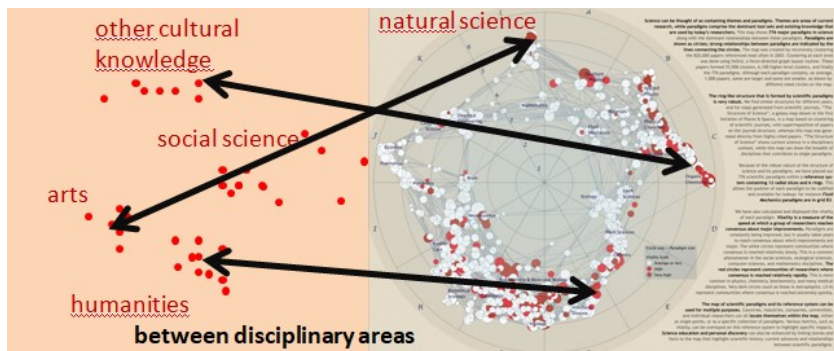


- **situated halfway between anthropology (fieldwork and archival work) and art (collectors and art historians)**
- **they contribute to reconcile the horizon of anthropologists for the preservation of local cultures and that of the artists of the 'primitivist' Western avant-garde, drawing inspiration from "folk and tribal" arts to create**

Transareality in innovation & creativity



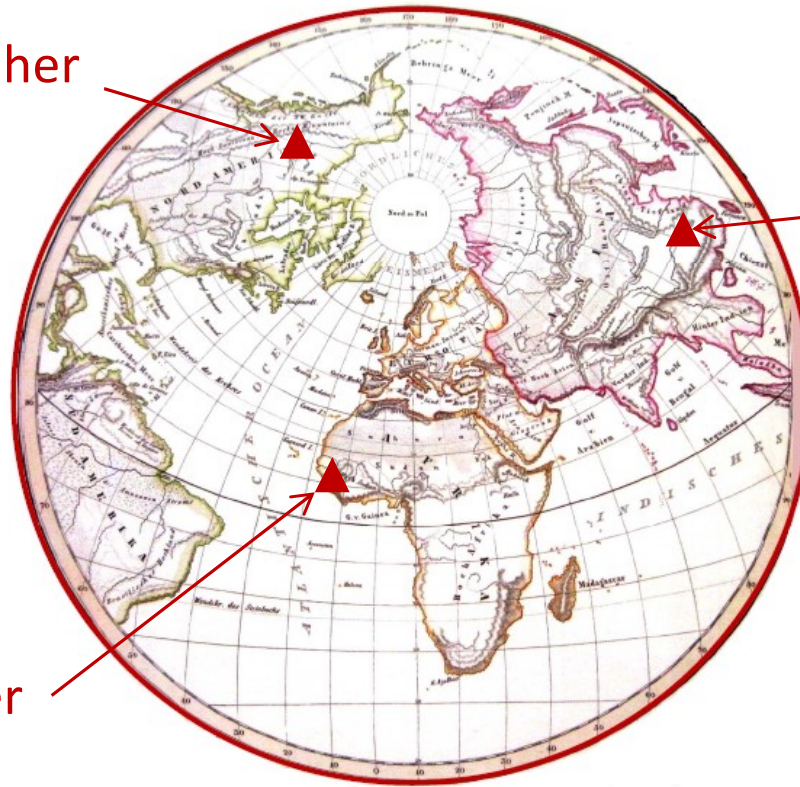
Between cultural areas



- Intensity of innovation correlated to degree of interdisciplinarity & interculturality ?
- Transareality favoring breakthrough innovations and paradigm shifts?

Transareality in innovation & creativity

Canadian philosopher



Chinese physicist

Senegalese writer



Yves Klein, *Globe
terrestre bleu* 1962

**Promotion of
inclusive vision of
arts/sciences relations
& transareality**