



# Bridging open science and science communication

**PCST - 2023 - Rotterdam (Netherlands)**

**VOICES Project**

The value of openness, inclusion, communication and engagement for science in a post-pandemic world

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SCIENTIFIC PRODUCTION

# Scientific papers on COVID-19 alter the balance of knowledge generation

More than 500,000 articles on the pandemic have been published in journals and preprint servers

## Misinformation on COVID-19: what did we learn?

A JRC report analyses the most spread narratives, their consequences, factors predicting how likely people are to believe or share them, and the most efficient ways to counter them. This prepares policymakers for future crises.

SALONI DATTANI

IDEAS OCT 25, 2022 7:00 AM

# The Pandemic Uncovered Ways to Speed Up Science

There doesn't have to be a trade-off between good research and fast research.

## Pandemic brings preprints into the spotlight

19 May 2022



 issue: **Spring 2022**

 topic tags: **PREPRINTS, pandemic, Covid19**

From rapid disease information to a way to promote and share regional knowledge in multiple languages, preprints have come into their own in recent years. **Siân Harris** finds out more

# OPEN SCIENCE



## **Budapeste Declaration - 2002**

First to use the term "open access" and to articulate its public dimension

"The **public good** they make possible is the world-wide electronic distribution of the peer-reviewed journal literature and completely free and unrestricted access to it by all scientists, scholars, teachers, students, and other curious minds"

## **Bethesda Declaration - 2003**

"We encourage our faculty/grant recipients to publish their work according to the principles of the open access model, **to maximize the access** and benefit to scientists, scholars and the **public** throughout the world"

## **Berlin Declaration - 2003**

"Our mission of disseminating knowledge is only half complete if the information is not made widely and readily **available to society**"

"Our organizations are interested in the further promotion of the new open access paradigm to gain **the most benefit for science and society**"

# 1

**Does OA alone contribute to universal access to information? What else do we need?**

# 2

**How can we improve open access to scientific knowledge through science communication?**

# 3

**How has the Covid-19 pandemic and the increase of OA influenced science communication within academia and journalism?**

# 4

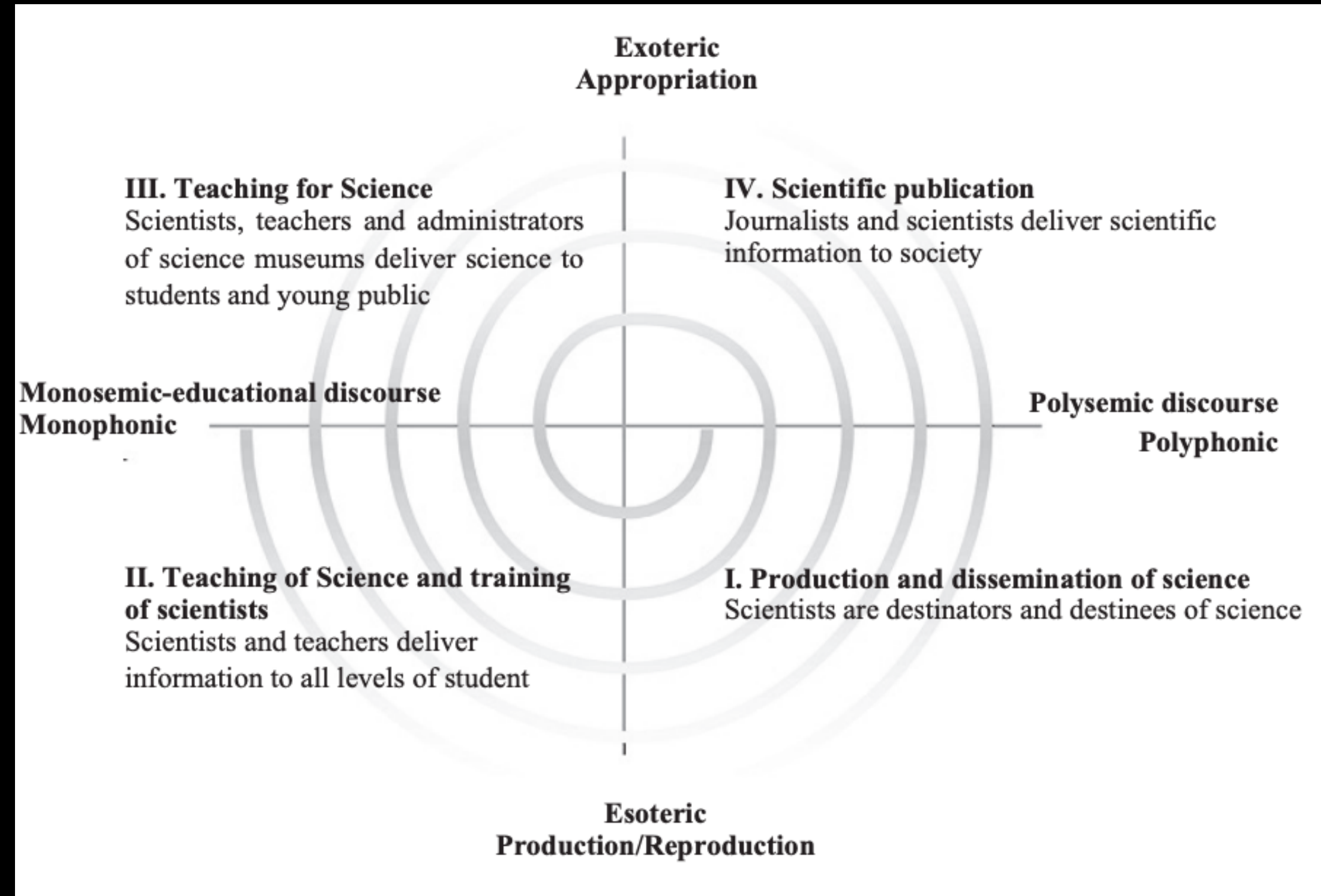
**How might the field of science communication benefit from an increased awareness of the infrastructures and pressures that support or constrain researchers in making their work publicly available?**



# Spiral of scientific culture

## C. Vogt

### Democratization of knowledge Copyright Transparency



# Spiral of scientific culture C. Vogt

## Democratization of knowledge Copyright Transparency

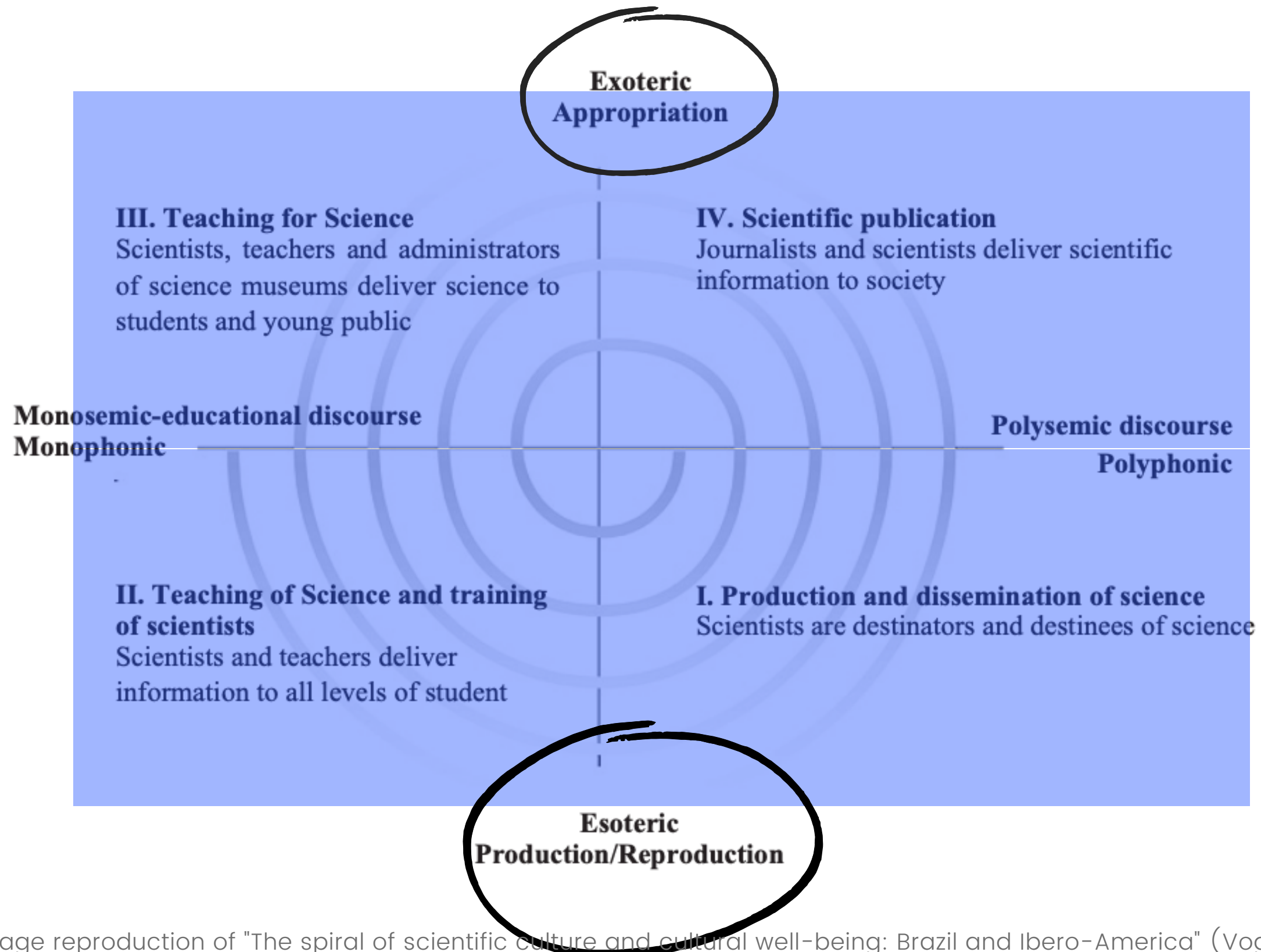
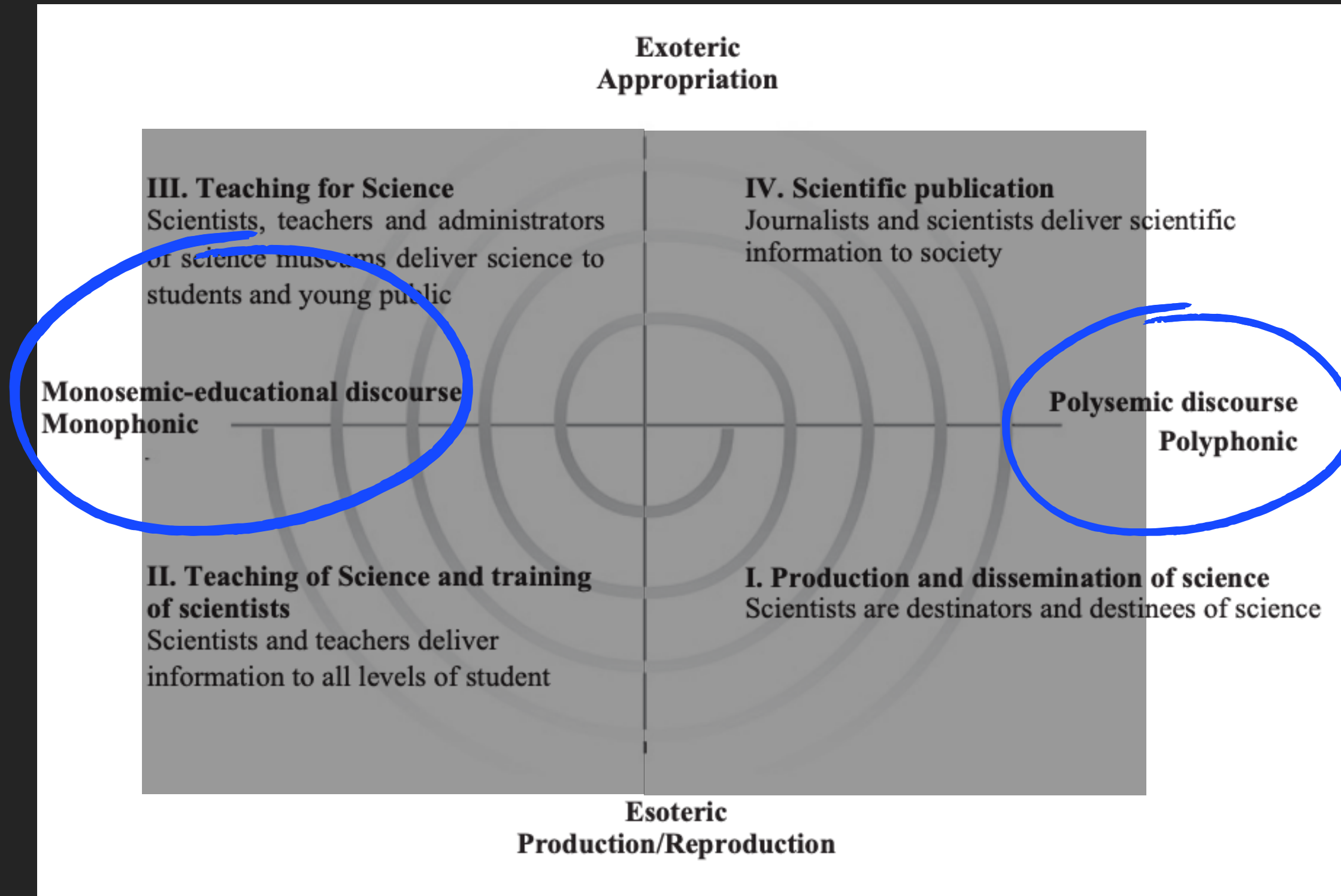


Image reproduction of "The spiral of scientific culture and cultural well-being: Brazil and Ibero-America" (Vogt, 2012)

# Spiral of scientific culture C. Vogt

**Democratization of knowledge**  
**Copyright**  
**Transparency**



**News Agencies**  
**Journalism**  
**Social media**

**Preprints**  
**Repositories**  
**Open Access**  
**Multilingualism**  
**Altmetrics**

# Spiral of scientific culture

C. Vogt

Democratization of knowledge

Copyright

Transparency

Open Access

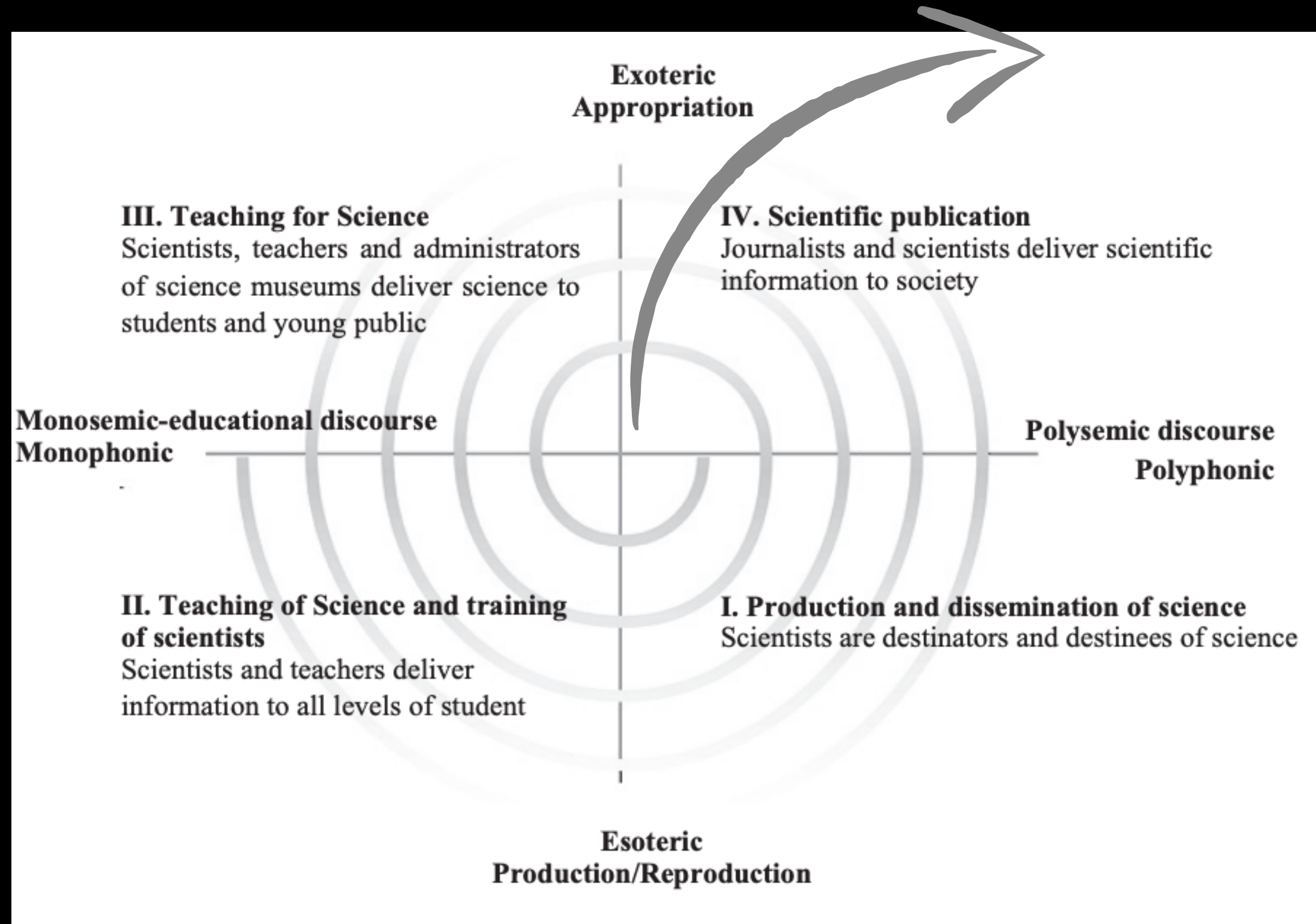


Image reproduction of "The spiral of scientific culture and cultural well-being: Brazil and Ibero-America" (Vogt, 2012)

## Co-production of Science

Strong interaction of non-human and hybrid tools  
(Latour, 2005; Law, 2004)

Culture, society, artifacts, and the scientific community all play a role in shaping scientific knowledge  
(Jasanoff, 2004a, 2004b)

## EDI (Equity, Diversity and Inclusion)

Social movements have called for greater involvement of underrepresented groups in the scientific process and for their specific problems and needs to be taken into consideration

## Ecology of knowledge

New epistemologies, such as epistemologies of the south (Santos, 2019) and civic epistemologies (Jasanoff, 2007), are also competing for space in the scientific method



**How did the pandemic change things?**

## Blurring boundaries

Revealed the blurring boundaries between the once discrete roles that different actors play in science production and communication

## Science in the making

Communication of 'science in the making' rather than finished science

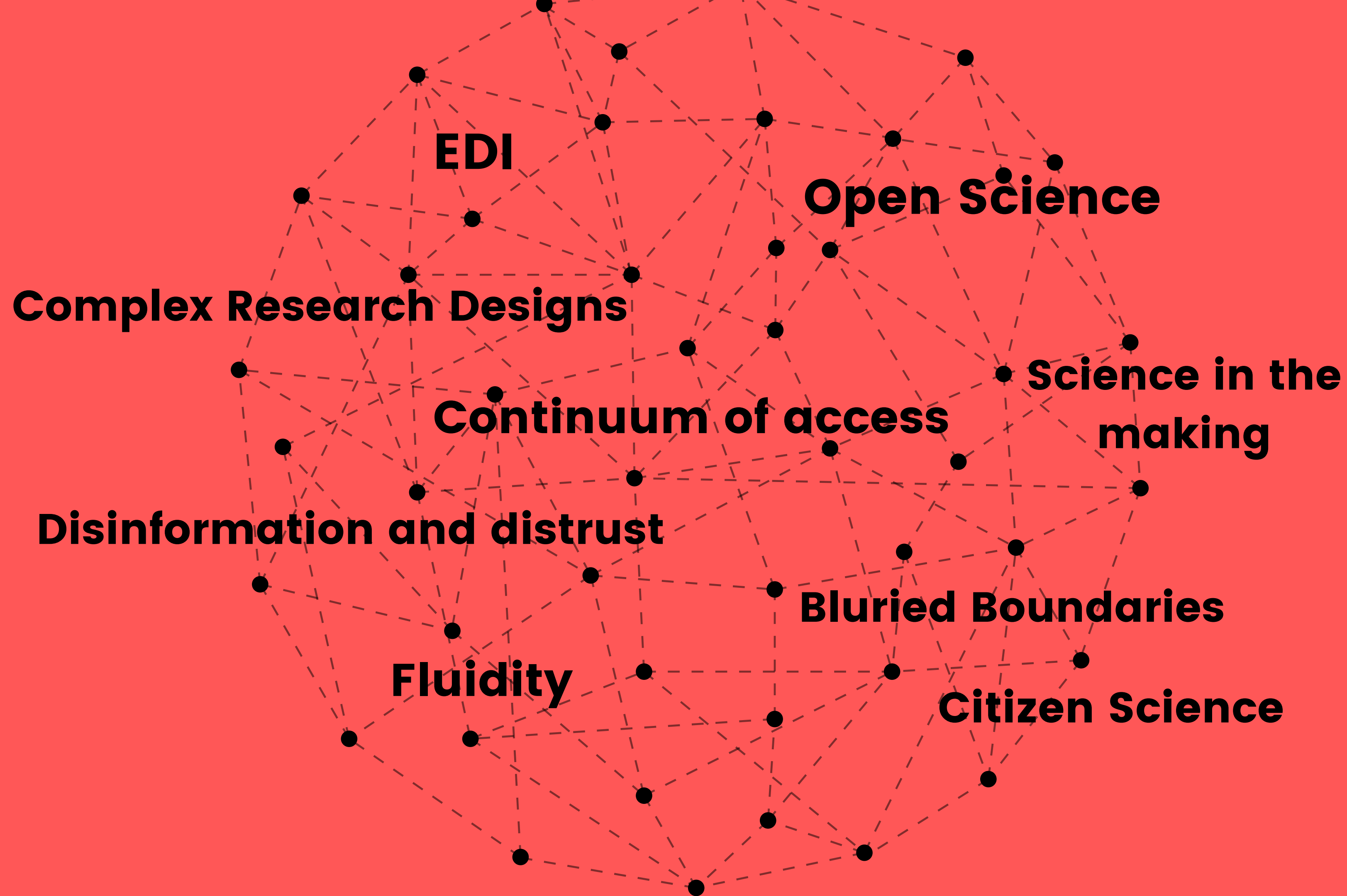
## Open science practices

Wide uptake of Open science practices, even within disciplines and journals that had long been resistant

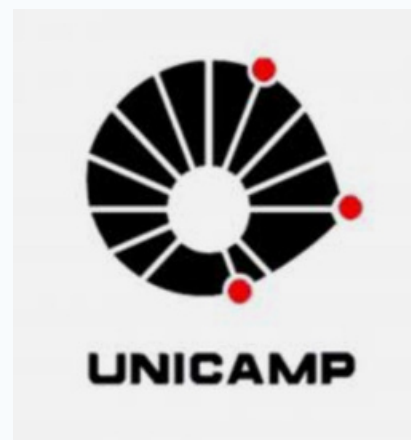


The image features three overlapping spirals on a light blue background. The leftmost spiral is composed of thin, dark grey lines. The middle spiral is also made of thin, dark grey lines but has a more pronounced, tighter coil. The rightmost spiral is the most prominent, drawn with thick, black, brush-stroke-like lines that have a textured, hand-drawn appearance. The text is centered over the middle and right spirals.

**A new model for the spiral  
of scientific culture**



# Obrigada!





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