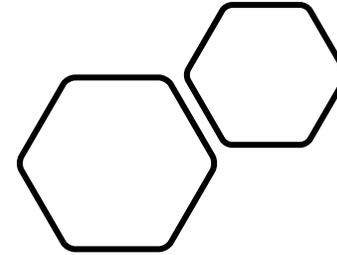


**Publishing in STS: agendas,  
themes and practices among  
centers and peripheries**

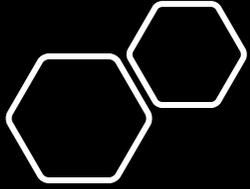


**Pablo Kreimer**  
Conicet, Argentina

**Noela Invernizzi**  
UFPR, Brasil

**Leandro Rodríguez Medina**  
UDLAP, México

**Amílcar Davyt**  
UDELAR, Uruguay



# Research questions

- What is the scope of Latin American STS participation in mainstream journals?
- Are there different profiles in the set of mainstream journals regarding their transnationalization?
- What are the effects of publishing in mainstream journals for Latin American research agendas?

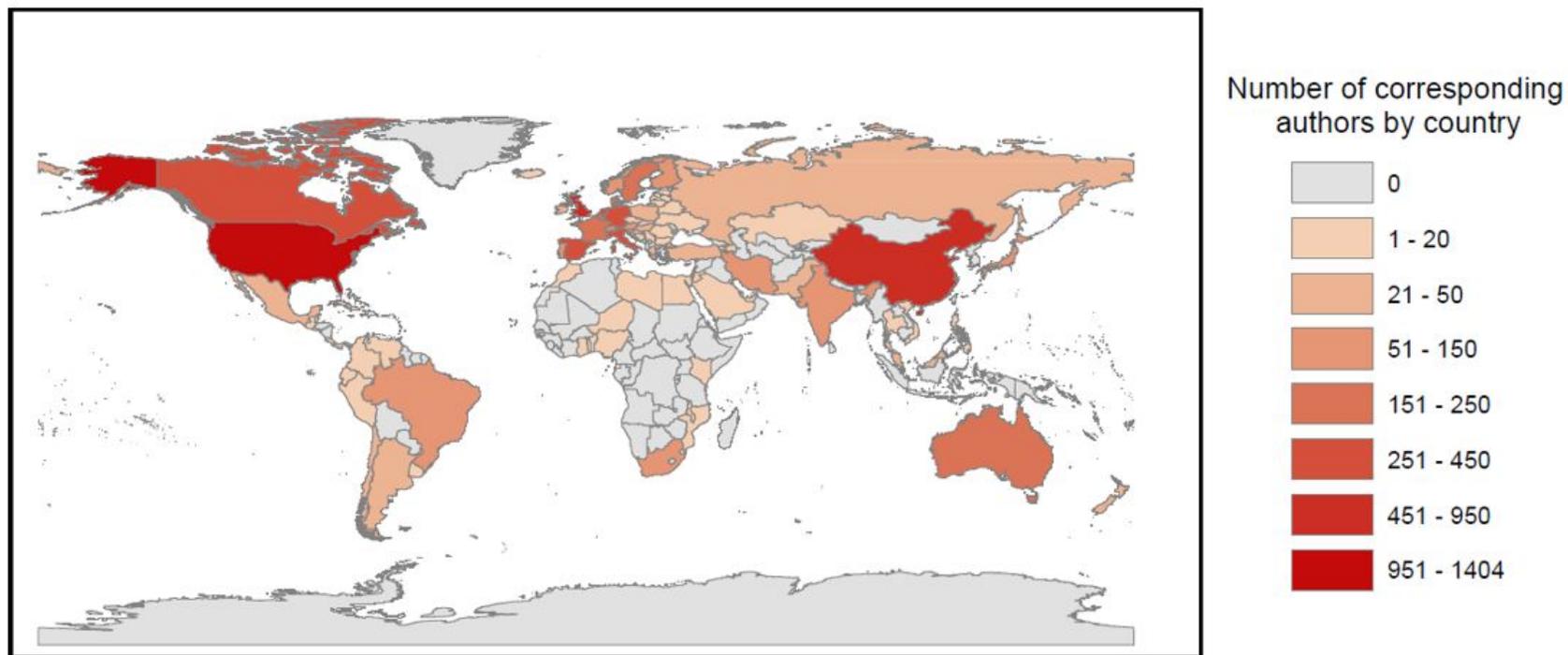
# Methodology

- Articles published in 12 STS journals between 2010-2019 (WOS)
- Analysis:
  - ✓ Contributions by country (C.A.)
  - ✓ Profile of journals: social and anthropological studies of S&T Science policy and innovation and Scientometric studies
  - ✓ Latin American STS presence
  - ✓ Agendas and themes: main LA topics vis-à-vis world topics (key-words)

- *Technology and Culture*
- *Minerva*
- *Research Policy*
- *Social Studies of Science*
- *Science and Public Policy*
- *Science, Technology and Human Values*
- *Scientometrics*
- *Science as Culture*
- *Science and Technology Studies*
- *Research Evaluation*
- *Public Understanding of Science*
- *Engaging Science, Technology and Society*



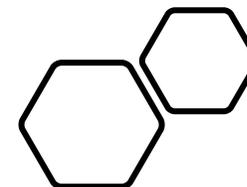
# Results and discussion



Source: Web of Science.

## Transnationalization of STS mainstream journals (2010-2019)

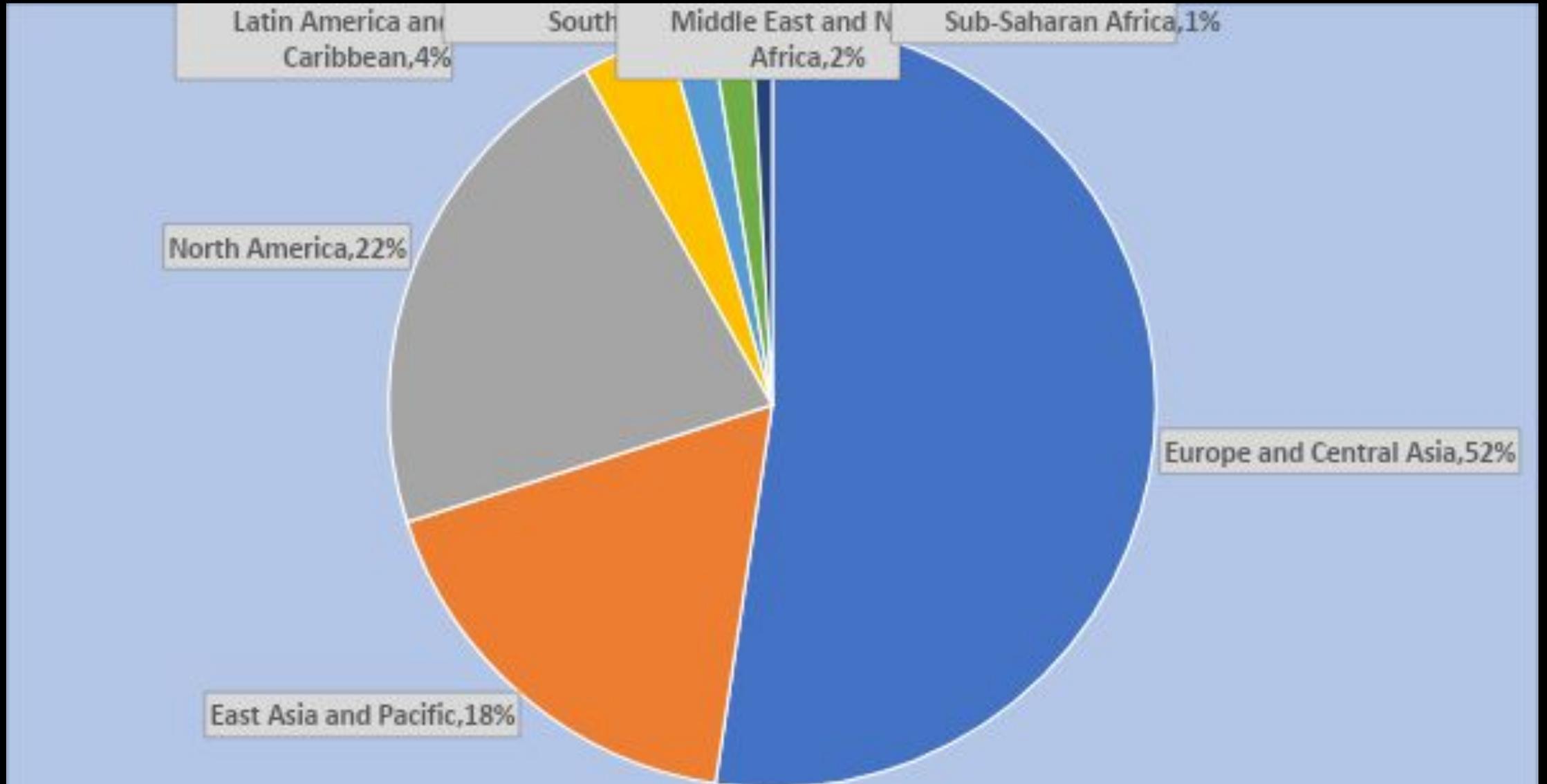
- 7621 articles with CA from 87 countries.
- Outside the Euro-North American axis, only Eastern Asia and Pacific has relevant presence.
- LA contributes with 4% of the articles, mostly in two journals: SCIE and SPP



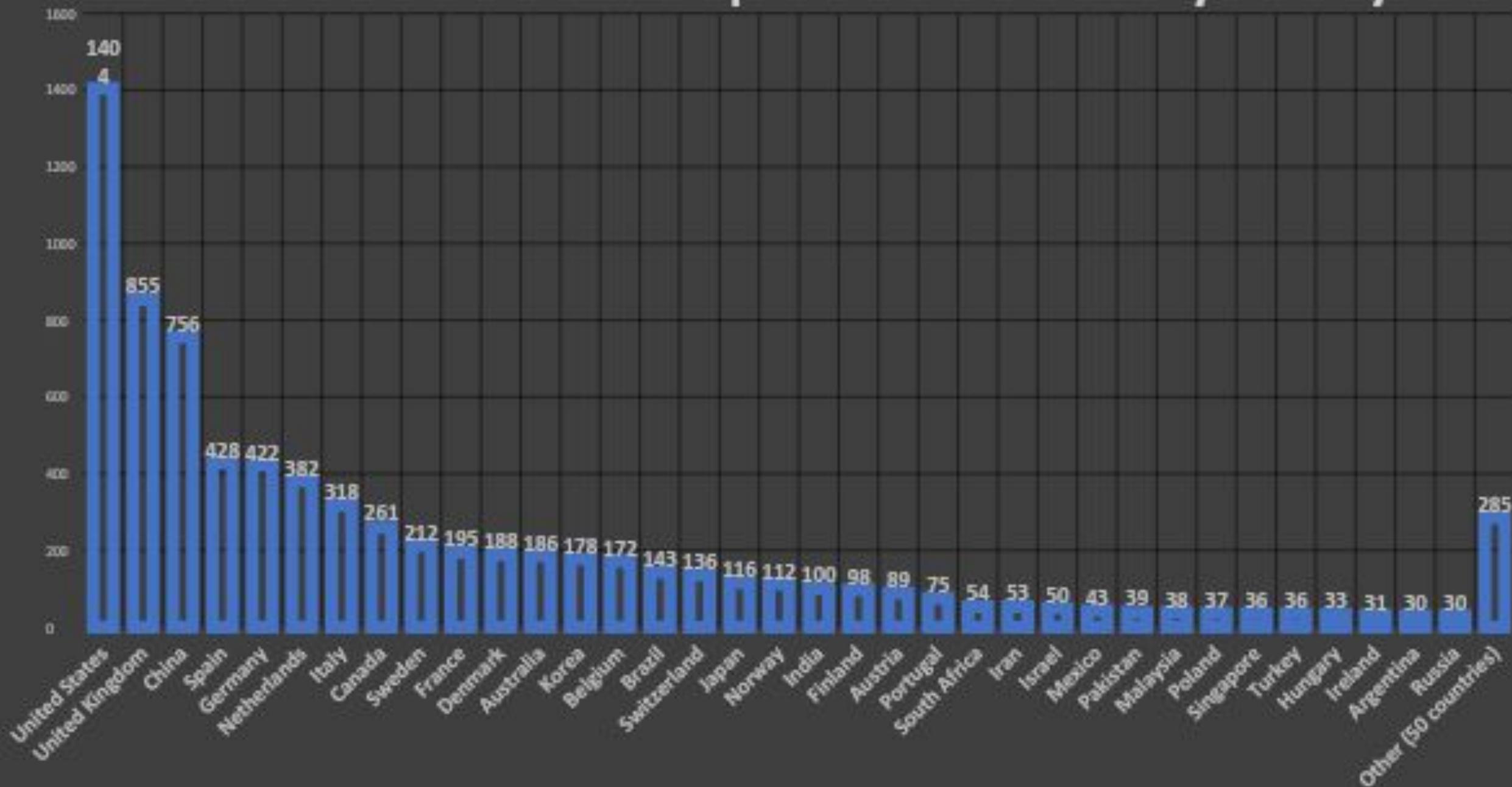
Three countries stand out due to their high production of articles: USA (1404), UK (855) and China (756). The three of them publish 40 % of the articles.

However, their participation in the STS field is very uneven: USA & UK have papers distributed in almost all journals, but China has 85% of its publications in SCI. Other countries:

# Worldwide distribution of STS papers by region



# Papers in STS Journals by country



Journals	Total N. of articles	N. articles from non-hegemonic countries	% articles from non-hegemonic countries
Research Evaluation	309	58	19%
Research Policy	1389	178	13%
Science and Public Policy	639	152	24%
Scientometrics	2978	1548	52%
Engaging ST & Society	88	8	9%
Minerva	211	34	16%
Public Understanding of Science	622	112	18%
ST & Human Values	379	31	3%
Science and Technology Studies	124	7	6%
Science as culture	230	22	10%
Social Studies of Science	366	36	10%
Technology and Culture	286	25	5%

20% of the articles come from China

**Publications from non-hegemonic countries**

# Patterns by type of journal

## Socio-Anthrop S&T

- These journals are the most restricted to publications from the STS intellectual centers with the partial exception of PUS and MIN.

## Science Policy & Innovation

- More internationalized, particularly SPP, with 25% of articles coming from non hegemonic countries

## Scientometrics

- The most decentered, with 52 % of articles from non-hegemonic countries.
- China as a new center with 22% of total articles, the larger contributor among all countries



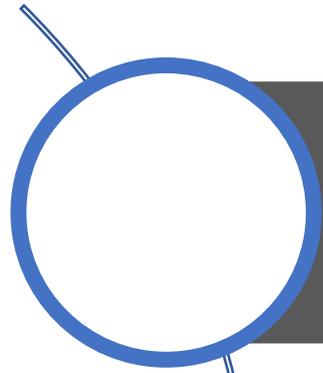
## Number of articles published in all journals, and share of Scientometrics' articles, by region (2010-2019)

Regions	N. of articles in all journals (%)	N. of articles in Scientometrics (% of total)	% Scientometrics articles in region's publications
Europe and Central Asia	3991 (52)	1281 (43)	32,1
East Asia and Pacific	1347 (18)	935 (31)	69,4
North America	1665 (22)	340 (11)	20,4
Latin America and the Caribbean	282 (4)	176 (6)	62,4
South Asia	139 (2)	125 (4)	89,9
Middle East and North Africa	131 (2)	86 (3)	65,6
Sub-Saharan Africa	66 (1)	35 (1)	53,0
Total	7621 (100)	2978 (100)	39,1

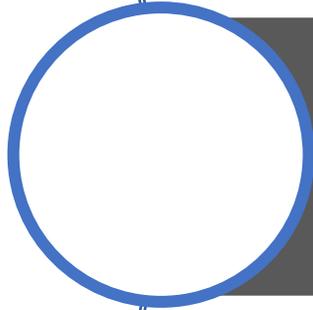
Non-hegemonic regions  
main contribution is to  
Scientometrics

Are themes  
linked to the  
peripheral  
science  
uninteresting to  
mainstream  
journals?

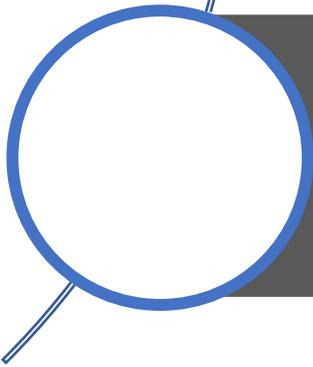
- We found different dynamics among the three categories of journals that may be explained by their different objects of study and methodological resources involved.



Scientometrics - Well-defined, standardized, consensual techniques; same databases, increasingly accessible from institutions in peripheral countries tend to universalize participation.



SP & Innovation - Object of study is the factor that enables a greater international circulation: isomorphic STI policies + different local implementation. Considerable theoretical consensus around evolutionary and institutionalist economy facilitates dialogue.

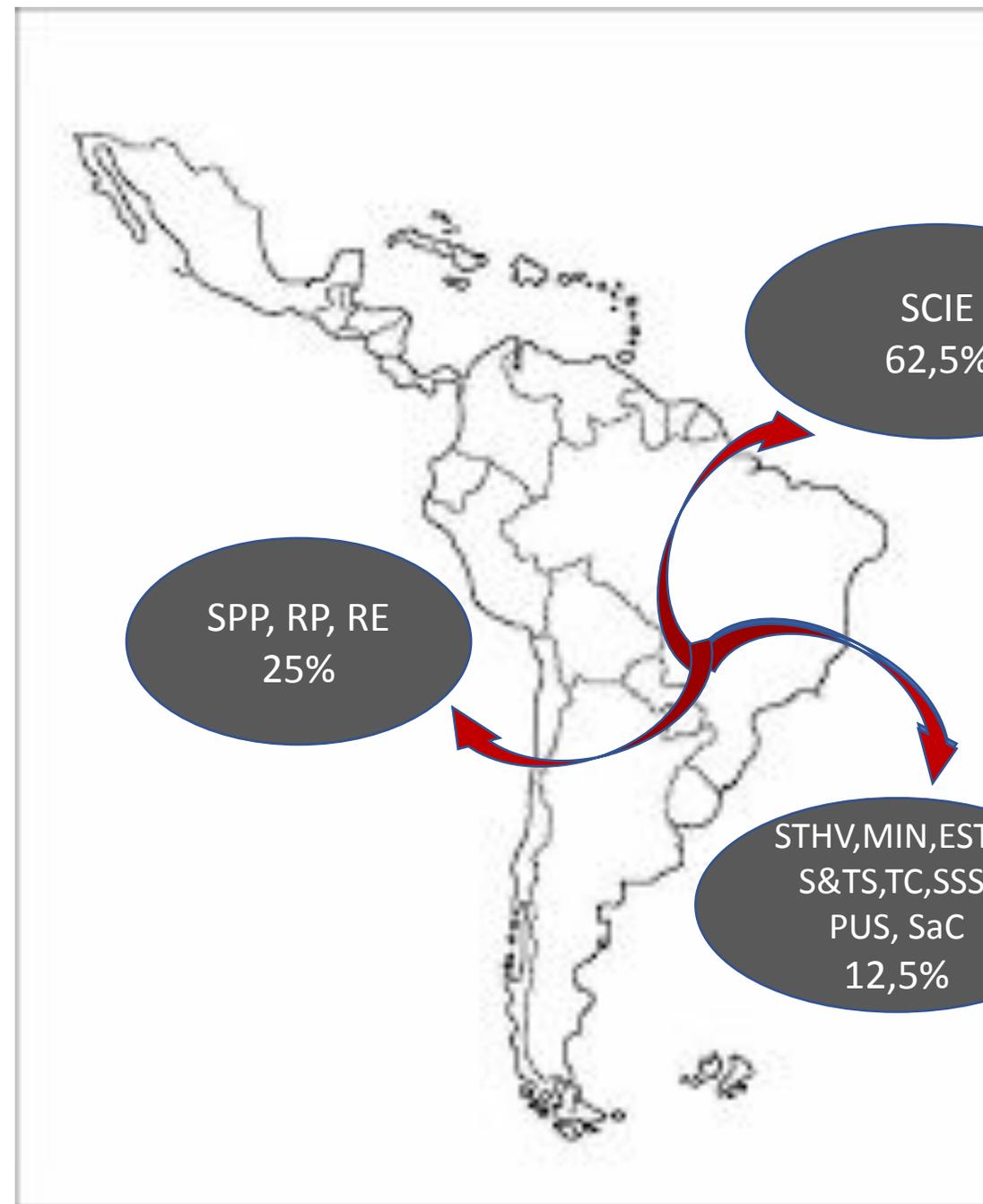


Soc/Ant of S&T - Privileged object of study is hegemonic science and its embeddedness in the social contexts where it is produced using theoretical frameworks generated in such spaces. Peripheral science, studied by peripheral STS communities, rarely reaches mainstream STS literature; it is likely published in journals in Spanish, Portuguese, etc. and in disciplinary journals.

# Latin American publications

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- LA publications in mainstream journals doubled along the period studied (91 to 191), being the region with greater relative growth.
- Brazil contributes with slightly more than a half of the number of articles.
- Together with Mexico, Argentina and Chile, these four countries comprise more than 80% of the regional publications.





# Agendas and themes







# Latin American agendas and themes STP journals

## Alignment with international agenda

- Innovation, S&T policy, patents/intellectual property rights

## Adaptations

- Geographical references (countries, region)
- Relevant role of institutions (universities, public policy)
- Innovation perspective adapted to developing countries (tech transfer, capabilities, learning)
- Social cohesion

## Absences

- Patents
- Innovation policy





# Latin American agendas and themes Socio-anthr. Studies C&T journals

## Alignment with international agenda

- Politics, climate change, science communication, expertise

## Adaptations

- Geographical references (countries)
- High variability of topics and theoretical approaches
- Influence of philosophy of Science (epistemology)

## Absences

- Governance





# Latin American agendas and themes Scientometrics journal

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## Alignment with international agenda

- High concentration of keywords around methodology (scientometrics, bibliometric analysis, citation analysis)
- Citation/bibliometric analysis, collaboration, index

## Adaptations

- Geographical references (countries), but less central than in other types of journals
- Less presence of collaboration

## Absences

- Almetrics

# Conclusions

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- ✓ Latin American STS participation in mainstream journals is increasing in Scientrometrics and Science Policy + Innovation areas, and it is very incipient in the sociological and anthropological studies of S&T
- ✓ The latter trend coincides with the transnational opening of the journals analyzed: high in Scientometrics; medium in SP + Innovation and low in socio-anthr studies of S&T (with partial exception of MIN and PUS)
- ✓ Latin American authors follow mainstream agendas, with some local adaptations. Adaptations are more evident in the area of science policy and innovation studies