Image source: (bp.blogspot.com)

Geospatial digital inequalities: challenging new frontiers of colonialism and marginalisation in higher education

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South Africa

- Gini index – one of most unequal countries in world (https://pip.worldbank.org/country-profiles/ZAF)

- 1994 – end of apartheid

- 56.5 million – black south africans - 81%, coloured people 9%, whites 8% and Indians 3% (https://southafrica-info.com)

- 11 official languages

- Huge rural/urban disparities

- Digital connectivity - 1.7% of rural households, 17.3% in urban areas and cities have internet *at home*

- Mobile Internet access devices in rural areas (45.0%) still lags behind its use in cities (67.5%) and urban areas (63.7%), (Karula & Jere, 2022, StatsSA)
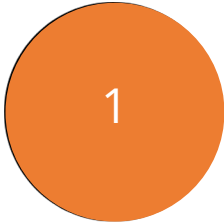

SOUTH AFRICA
political map
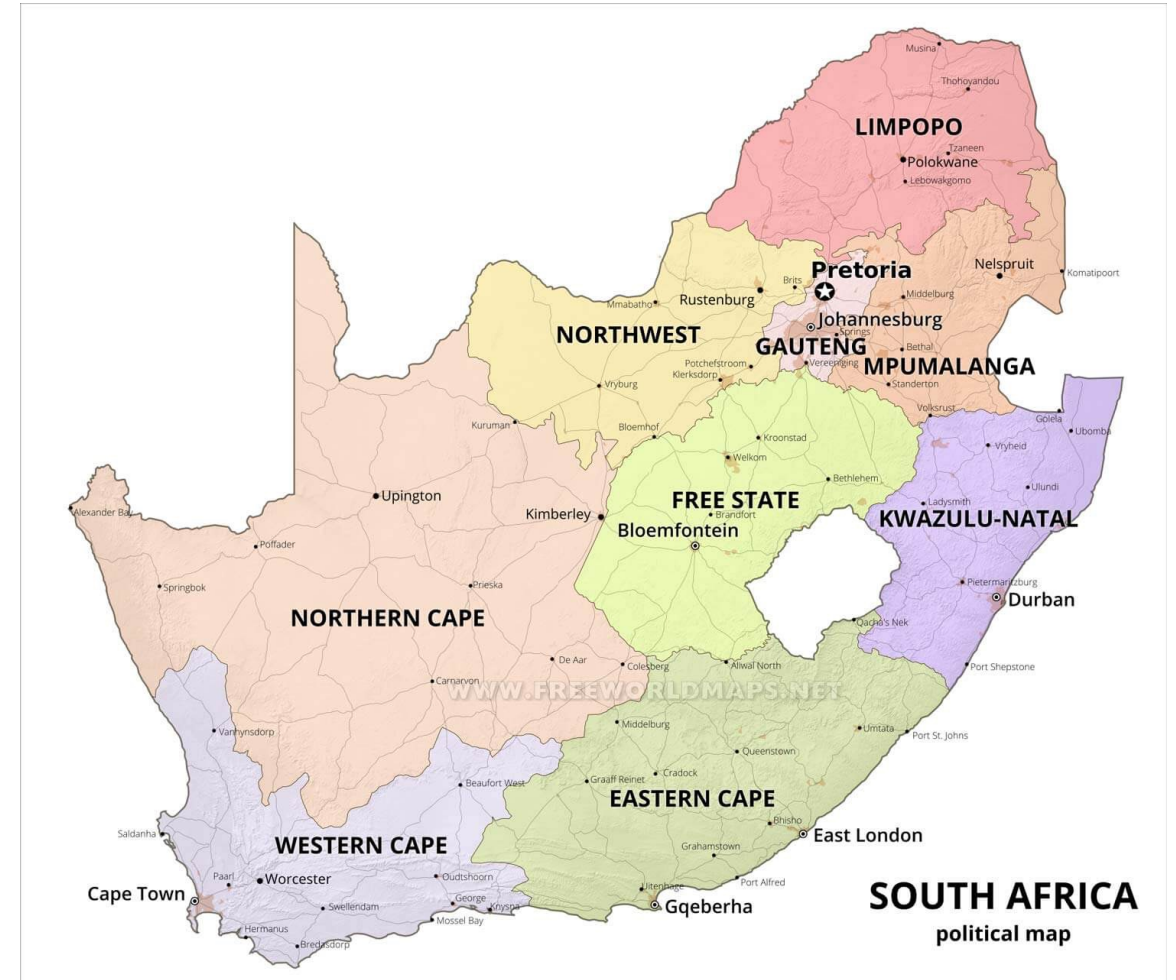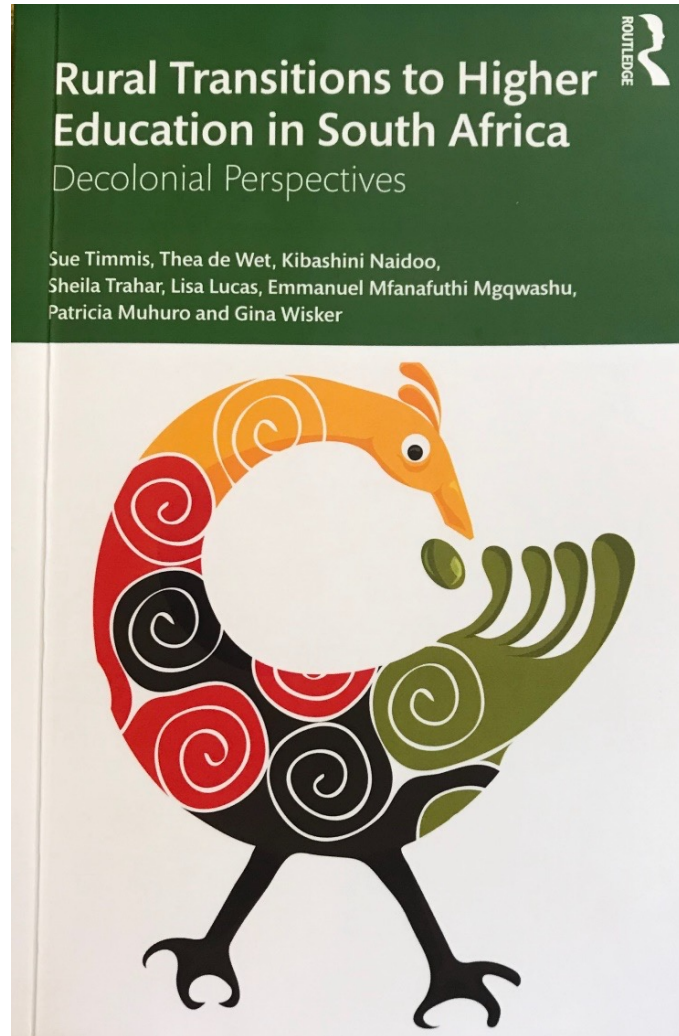
SARiHE

- Digital inequalities - social and spatial
  - Barriers to applying to university
  - Transitions to university online systems
  - Individualising digital literacies
- Decoding the digital university
- Misrecognition and assumptions – decontexualised 'learners' (Timmis & Muhuro, 2019)

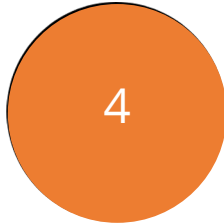# Digital inequalities during Covid: 7 areas of inequality

1 — 'Home' study conditions

2 — Digital Literacies

3 — Institutional support

4 — Assessment

5 — Spatial & digital

6 — Disabilities

7 — Intersecting inequalities

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University of BRISTOL

Digital inequalities across higher education in the global South and global North since the start of COVID-19

A review of the literature

M Carolina Valladares Celis
Sue Timmis

From digital divides… to… geographies to… inaccessibilities

New frontiers - Data/Digital Colonialism

- Data colonialism (Couldry and Mejias 2019)
  - 'combines the predatory extractive practices of historical colonialism with the abstract quantification methods of computing' (p337)
  - 'new social relations (data relations, which generate raw inputs to information processing) become a key means whereby new forms of economic value are created' (p 343/344)
- Tech hegemony –the domination of digital technology multinationals in Global South (Kwet, 2019)

New frontiers - Data/Digital Colonialism

- Examples in higher education:
  - Learning analytics
    - Algorithms may be based on inequalities and normative assumptions
    - 'Algorithmic decision-making automates inequalities and discriminates along racialized and gendered lines.' (Williamson, Bayne & Shay, 2020, p360)
  - Unbundling and rebundling of university services
  - Large government 'transformation programmes - Operation Phakisa (Gov of South Africa, 2015) - 'catch up' on technology in schools – all using global solutions
  - 11 official languages in South Africa – only English supported by ChatGPT – no African languages

Decolonising research on AI and digitalisation

- Reclaiming 'technology with heart' (Nardi, 1999)
- Recentring the human in research - social-spatial – technical relations and intersectional inequalities
- Co-production approaches that acknowledge indigenous and local knowledges, differential power and resources

Some possible questions…

- *How can we ensure communities can participate (equally) in and are represented in AI/machine learning research?*
- *How can we ensure we avoid extractive research practices?*
- *How can we build transparency into digital and AI research?*
- *How are research resources distributed when working across global south/north partnerships?*

Thank you!

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