

International doctoral knowledge and the future of cross-border academic mobility: perspectives from digital scholarship

CGHE Webinar Series – the Future of Cross Border Academic Mobility

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The mobility 'turn' and internationalisation

- Adherence to the concept of mobility as physical student mobility has contributed to a narrowness of vision for internationalisation (Whitsed, Burgess & Ledger, 2021)
- ...and also contributed to a continuing over-emphasis on elite Anglo-European perspectives (Montgomery and Trahar, 2023)
- Broader conceptualisations of mobility are necessary, including thinking about internal education mobilities within large economies such as China and forced migration (e.g. rural to urban) (Xu and Montgomery, 2019)
- The role of knowledge generation in mobility is a crucial part of the mobility picture (McGloin, 2021)

Knowledge and patterns of travel

- Student mobility tends to be from global South to North and academic mobility is the same although academics will travel from North to South to give keynotes or collect data but the dominance remains in the North
- Directions of travel and patterns of knowledge dominance are reinforced by the neoliberal governance of universities (Connell, 2017).
- Houtondji's (1996) notion of 'extraversion' points to the ways in which researchers tend to turn to Europe and the USA as 'the site of key ideas, accepted methods, and the most advanced knowledge' (Collyer et al. 2019, 81). 'Extraversion' is reinforced by patterns of travel
- 'Contemporary universities are powerful institutions, interlinked on a global scale; but they embed a narrow knowledge system that reflects and reproduces social inequalities on a global scale' (Connell, 2017).

International doctoral student mobility as knowledge generation

- Internationally mobile doctoral students play a crucial role in enabling globalised universities to generate new knowledge and innovations (Chellaraj et al. 2008)
- Flows of doctoral students, as highly skilled migrants, constitute ways to create knowledge across and within certain boundaries (Bilecen and Faist, 2015)
- But doctoral knowledge is rarely surfaced as a coherent body of knowledge from which the international HE community can learn (Montgomery, 2019)
- Exponential development of Artificial Intelligence has presented endless opportunities to mine the digital repositories and augment transnational knowledge mobility by synthesising the research and generating summaries and outcomes

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Professor Catherine Montgomery

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Constructing Doctoral theses as powerful knowledge

Article

Surfacing “Southern” Perspectives on Student Engagement With Internationalization: Doctoral Theses as Alternative Forms of Knowledge

Catherine Montgomery¹

Abstract

This article explores how knowledge represented in doctoral theses exploring internationalization may be constructed as a source of “Southern” knowledge on internationalization. The article aims to surface some of the ways in which the theses could illustrate new perspectives on internationalization. The article aims to surface some of the ways in which the theses could illustrate new perspectives on internationalization. The article aims to surface some of the ways in which the theses could illustrate new perspectives on internationalization.

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Dominance of Western theory?

Large scale analysis: 300 theses, narrowed to 98 then 78 and analysis was done on titles and abstracts only

- predominance of Western theory used by the international students as a lens on their non-western educational contexts
- many theses relied on concepts commonly associated with Western theory such as social capital, global citizenship or communities of practice

‘knowledge workers in the periphery are oriented to, and become dependent on, the institutions, concepts and techniques of the metropole’ (Collyer et al. 2019, 10).

Existing re-users of EThOS



Forgotten synthetic PhD theses set to be given new lease of life

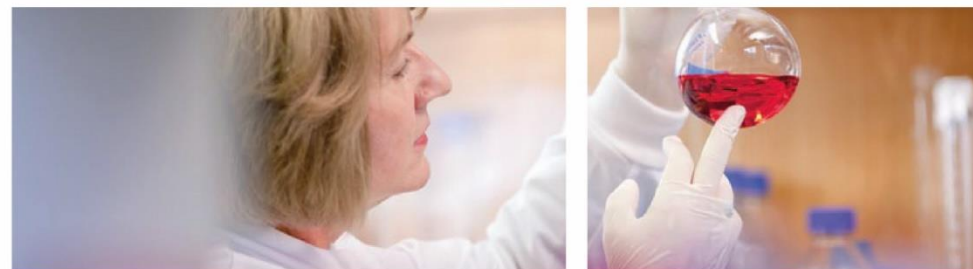
Chemical structures will be harvested from graduate work and analysed for promising drug and materials leads

The feeling that the vast majority of information contained within your painstakingly prepared thesis is destined to be forgotten will be familiar to many a PhD student. But this may be about to change for synthetic chemists, thanks to a team of researchers who have amassed a digital collection of more than 75,000 compounds from PhD theses that might otherwise have mouldered in obscurity.

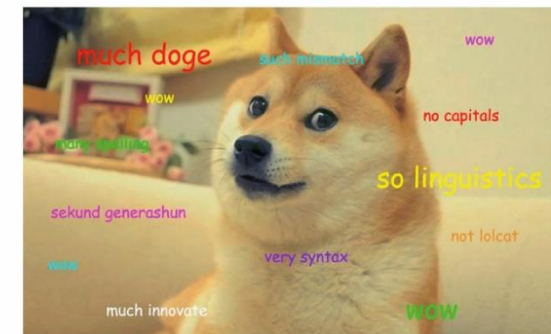


Alzheimer's
Research UK
Defeating Dementia

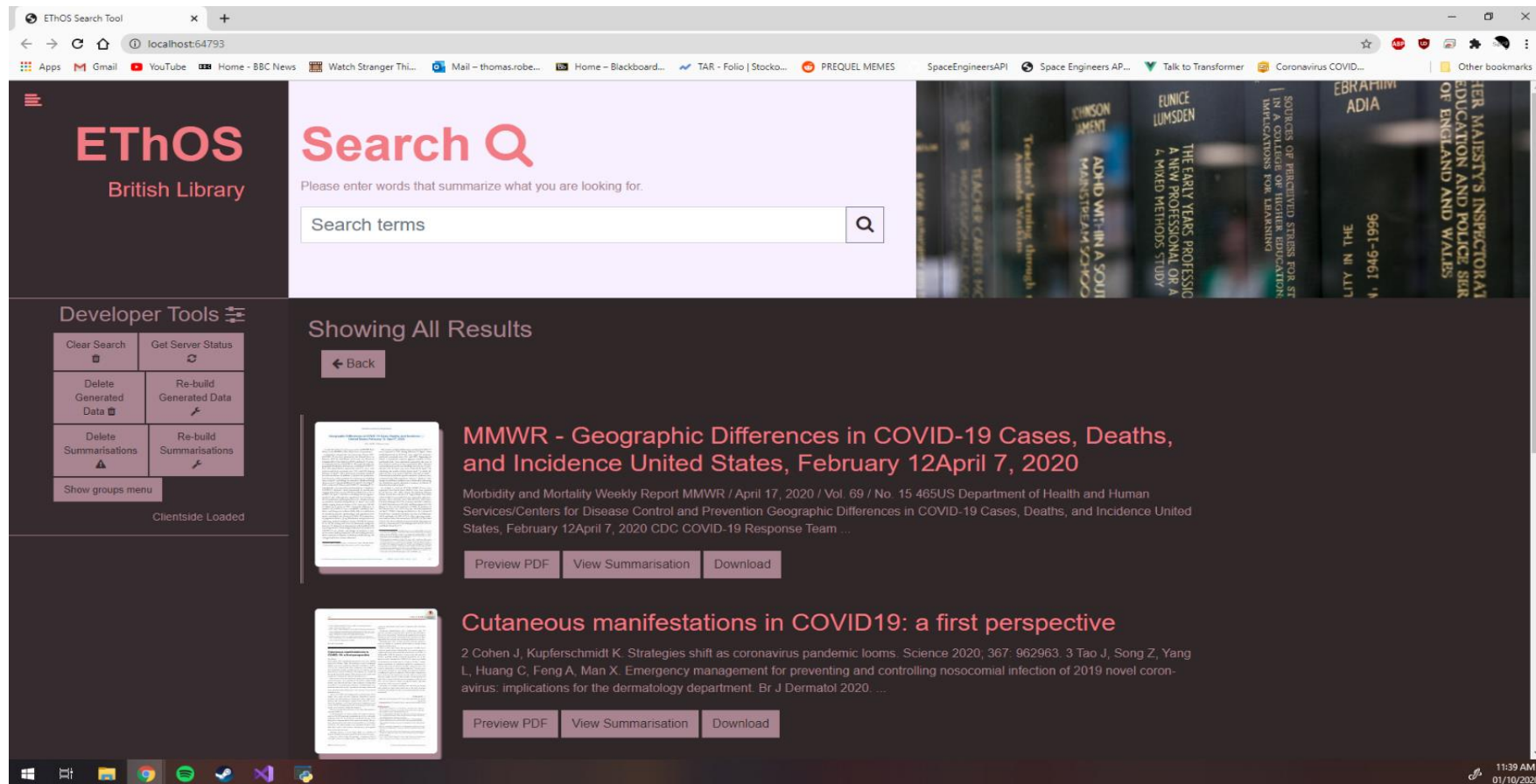
Defeating
Dementia



Wow! The FLAX Language System – So Much Open Data



First prototype of new interface



The screenshot displays the ETHOS Search Tool interface in a web browser. The browser's address bar shows 'localhost:64793'. The page header includes the ETHOS logo and 'British Library'. A search bar is present with the text 'Please enter words that summarize what you are looking for.' and a search button. Below the search bar, the text 'Showing All Results' is displayed. The search results are listed in a grid format, with each result showing a thumbnail of the document cover, the title, and a brief description. The first result is 'MMWR - Geographic Differences in COVID-19 Cases, Deaths, and Incidence United States, February 12April 7, 2020'. The second result is 'Cutaneous manifestations in COVID19: a first perspective'. Each result has buttons for 'Preview PDF', 'View Summarisation', and 'Download'. The interface also includes a 'Developer Tools' sidebar on the left with options like 'Clear Search', 'Get Server Status', 'Delete Generated Data', and 'Re-build Generated Data'. The bottom of the browser window shows the Windows taskbar with the time '11:39 AM' and date '01/10/2020'.

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Search Q

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Search terms

Showing All Results

← Back

MMWR - Geographic Differences in COVID-19 Cases, Deaths, and Incidence United States, February 12April 7, 2020

Morbidity and Mortality Weekly Report MMWR / April 17, 2020 / Vol. 69 / No. 15 465US Department of Health and Human Services/Centers for Disease Control and Prevention Geographic Differences in COVID-19 Cases, Deaths, and Incidence United States, February 12April 7, 2020 CDC COVID-19 Response Team ...

Preview PDF View Summarisation Download

Cutaneous manifestations in COVID19: a first perspective

2 Cohen J, Kupferschmidt K. Strategies shift as coronavirus pandemic looms. Science 2020, 367: 962963. 3 Tao J, Song Z, Yang L, Huang C, Feng A, Man X. Emergency management for preventing and controlling nosocomial infection of 2019 novel coronavirus: implications for the dermatology department. Br J Dermatol 2020. ...

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11:39 AM
01/10/2020

New case uses of EThOS



Kew Science

- Search on Leguminosae (and Fabaceae)
- Looking for new taxa: new names of species or genera that have never been validly published
- Initial list of 231 legume PhD theses
- By hand (not automated search) identified 11 from the list that were relevant
- 9 of the 11 already known to Dr Lewis
- 2 new theses which were detailed studies of a single (mostly agriculturally important) species, or about plant-insect interactions, phytochemical studies, nitrogen fixation studies, various methodologies, or legume crops (generalizing categories)



Dr Gwilym P Lewis

Mobility for diversity in research and knowledge production

- ‘Diversity in research and knowledge production can be defined in numerous ways (e.g. disciplinary knowledge; methodological diversity; ethnicity; gender; race)... and there has been a growing movement towards an understanding that such diversity is integral to ‘good’ science’ (Olenina et al, 2022). (Also Tuhiwai Smith, 2012; de Sousa Santos, 2014).
- Aim to integrate marginalised doctoral knowledge into disciplines and to make this unique form of knowledge mobile across borders, enabled by AI

What are the challenges to this form of knowledge mobility?

- Southern knowledge is not geographic – students may be from the South but they may be part of privileged mobile networks which characterise their knowledge creation as part of a future transnational elite (Bilecen and Faist, 2015).
- Marketised system of international higher education has limited the social composition of international doctoral students and so neoliberal elements of internationalisation are having an effect on diversity in knowledge production (Olenina et al 2022).

Limits: institutional and supervisory partnerships

Classed and gendered nature of the current HE system in the UK (Olenina et al, 2022)

Principles and power relations in supervisory pedagogies (Singh, 2009): racialised and classed nature of supervisory partnerships: doctoral supervisors are predominantly White middle-class and at least half of doctoral students in the United Kingdom are international.

Student research and engagement are confined to ***what the institution allows*** (Carey, 2018). Research is highly institutionalised and set in the fields of knowledge and the communities of the academy (Tuhiwai Smith, 2012), making it challenging for doctoral students, particularly, international doctoral students, to participate on their own terms.

Challenges to international knowledge mobility mean a pattern of quasi-internationalisation?

‘methodological nationalism’ which Shahjahan and Kezar (2013) argue contributes to narrow national definitions of the social challenges that might have a global origin and impact’ (Olenina et al 2022)

‘Social scientists working in the periphery have a strong orientation to the world centres of their disciplines in the metropole’ (Connell 2007, 217) and the tendency for ‘Northern knowledge’ to dominate is persistent.

Comparative analysis and digital tools?

Potential model for further comparative analysis of bodies of doctoral knowledge, given that a growing number of countries are developing and improving access to their digital doctoral research repositories e.g. NARCIS, the repository in the Netherlands, which holds around 120,000 doctoral theses (also Australia, Canada, China, South Africa and USA to name but a few).

This huge comparative and open access data set could provide a means by which 'Southern' knowledge might be surfaced using AI

References and influential texts

Bilecen, B., & Faist, T. (2015). International doctoral students as knowledge brokers: Reciprocity, trust and solidarity in transnational networks. *Global Networks*, 15(2), 217–235. <https://doi.org/10.1111/glob.12069>

Chellaraj, G., K. Maskus and A. Mattoo (2008) 'The contribution of international graduate students to US innovation', *Review of International Economics*, 16 (3), 444–62, doi: 10.1111/j.1467-9396.2007.00714.x

Connell, R. (2007). *Southern theory: The global dynamics of knowledge in social science*. Sydney, Australia: Allen & Unwin

De Sousa Santos, B. (2014). *Epistemologies of the South: Justice against Epistemicide*. USA: Paradigm Publishers.

Houtondji, P. J. 1996. *African Philosophy: Myth and Reality*. 2nd ed. Bloomington, IN: Indiana University Press

Montgomery, C. (2019). Surfacing 'Southern' perspectives on student engagement with internationalisation: doctoral theses as alternative forms of knowledge. *Journal of Studies in International Education*. 23(1) 123 –138. <https://doi.org/10.1177/1028315318803743>

Montgomery C. (2020). Exploring rurality and ethnicity in globalised higher education: ideologies, intersections and narratives in doctoral research theses. *Compare: A Journal of Comparative and International Education*. 50, 7, 978-994. <https://doi.org/10.1080/03057925.2020.1756744>

References 2

- Montgomery, C. and Trahar, S. (2023) Learning to unlearn: exploring the relationship between internationalisation and decolonial agendas in higher education. *Higher Education Research and Development Journal*. Forthcoming May 2023.
- Olenina, A., Bamberger, A. & O. Mun (2022). Classed and gendered internationalisation of research and knowledge production: a critical analysis of international doctoral students in the UK (1998-2016), *International Studies in Sociology of Education*, DOI: 10.1080/09620214.2021.2008266
- Tuhiwai Smith, L. (2012). *Decolonizing Methodologies*, 2nd Edition. New Zealand: Otago Press.
- Whitsed, C., Burgess, M. & Ledger, S. (2021). Editorial advisory board members on reimagining higher education internationalization and internationalization of the curriculum. *Journal of Studies in Higher Education* doi: 10.1177/1028315320984840
- Xu, C.L. and Montgomery, C. (2019). Educating China on the Move: A Typology of Contemporary Chinese Higher Education Mobilities. *Review of Education*. 7(3), 598-627 <https://rdcu.be/80tW>
- Young, M. (1971) *Knowledge and Control: New Directions in the Sociology of Education*. British Sociological Association.