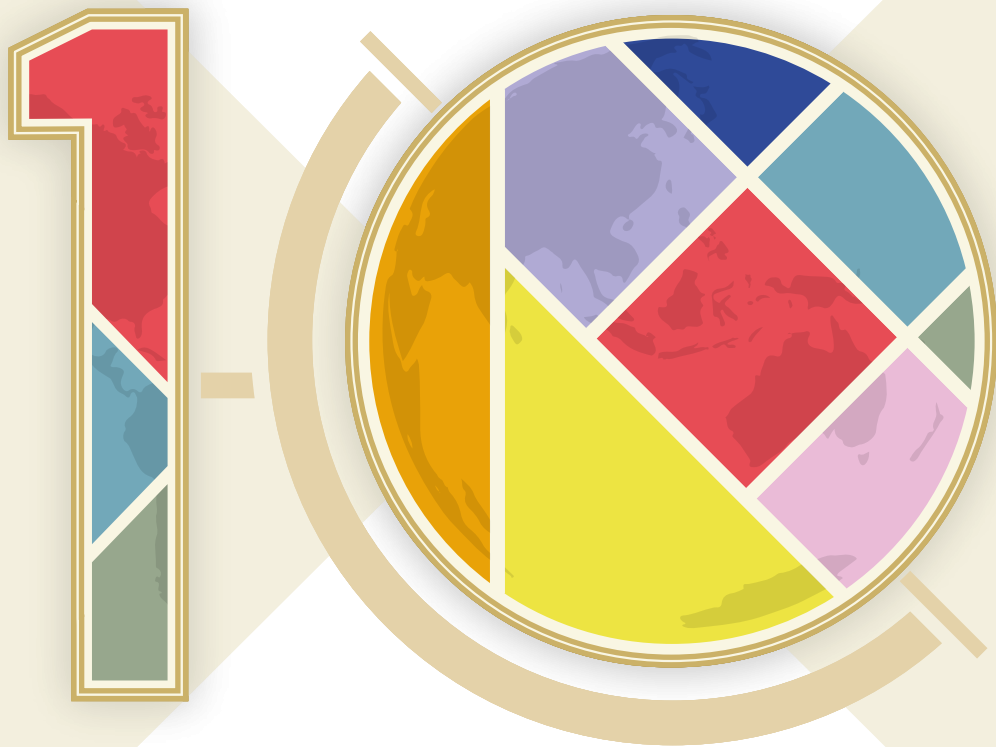


10TH NUS GEOGRAPHY GRADUATE WORKSHOP

BY 2022 GEOGRAPHY GRS CLASS



PROGRAMME BOOKLET

HYBRID SEMINAR | 9AM-6PM, 22.04.2022

Welcome to the NUS Geography Graduate Research Workshop 2022!



The Geography Graduate Research Workshop marks the culmination of the Department of Geography's Graduate Research Seminar (GRS) module each year. All graduate research students in the Department of Geography are required to complete the GRS during the first year of their candidature. The class includes both Masters and PhD students, some of whom only commenced their studies in January. This year's class comprises 10 graduate research students from a variety of academic and national backgrounds -- from China, Germany and Nepal, as well as from Singapore. Equally varied is the range of research topics members of the class are engaging with, as can be seen from the abstracts included in this programme.

The Workshop showcases students' individual research projects. Within their fifteen minute-long presentation slot, each student will cover some or all of the 'what?', 'why?' and 'how?' of their research, describing their respective projects, placing each in its academic context, outlining the significance of their planned work, and detailing how they aim to tackle the underpinning puzzles and problems. Some of the students may even be in a position to present preliminary research findings. Most, however, will focus on research that they propose to carry out during the remainder of their time in the Department. It is not easy to expose ideas to scrutiny when, often, much is unsure and unclear. Overall, the intention of the workshop is that students can learn from presenting their own research ideas, receive constructively critical feedback in Q and A sessions, and make their interests known to Department's research community.

It is a well-established tradition that members of the GRS class organize as well as present at the annual Workshop. What makes this year's iteration of the event special and momentous is that it is the 10th time the workshop has been held. Partly for that reason, the organizing committee has themed the workshop in terms of disciplinary shifts, both conceptual and methodological. In addition, three members of the cohort of Geography graduate students from the inaugural year of the Graduate Workshop (2013) have been invited to lead reflections on changes (and continuities) over the past decade. My thanks to Drs Menusha De Silva, Yang Yingwei and Piseth Keo for agreeing to join the panel discussion and engage in some comparative retrospection.

Class members have decided to adopt a "hybrid" format for the 10th anniversary workshop. The hope is that this will allow some members of the Department to spend the day together - which was always how the Workshop was run in pre-COVID-19 times - while also enabling others to tune in remotely. I very much welcome the possibility of physical co-presence, even though that remains on a strictly "mask-to-mask" basis.

Whether you are joining us in-person or from a distance via Zoom, I invite you to participate actively in the discussion and development of an exciting variety of geographical research projects. I hope you enjoy the anniversary panel as well as the 10 student presentations that comprise this year's workshop.

Stay safe and well, everyone!

A handwritten signature in black ink, appearing to read 'Bunnell'.

Professor Tim Bunnell
Convenor of GRS module 2022

WORKSHOP THEME

As we hit the 10-year anniversary of the Graduate Research Workshop (GRW), we look at the diversity of research methodologies and subfields and appreciate how they have changed over the years. How have methods evolved? Which are the traditional methods that we still turn to? How have geographical concepts advanced in the ways they are situated in the subfields of Geography?

The workshop involves first year PhD and Master students sharing their proposed research projects and a panel discussion with guests from the first GRW in 2013. The presentations are categorised into three sub-themes. The first subtheme of 'Creating Inclusive Spaces' explores social-cultural geography issues such as placemaking; how the campus act as transformative and inclusive spaces for empowering the LGBTQ community; and exploring image-based sexual abuse relating to social networking spaces.

The second subtheme 'Geographical Information Systems (GIS)' consists of topics relating to geospatial analyses using GIS tools. Here, we explore the relationship of large urban parks and surface temperatures; the socio-economic vulnerability of the COVID-19 pandemic in Singapore; digital humanities and biodiversity in Southeast Asia; as well as the social mobility in Singapore during the COVID-19 pandemic.

The third subtheme 'Geopolitics and Smart Urbanism' relates to political and economic geographies. This involves insights on the representation of geopolitical narratives in video games; the ways and extent in which de facto public governance affect industrial upgrading policies in Nepal; and how smart urbanism and urban informality influence and reshape Southeast Asian cities like Hanoi.

The workshop culminates with a discussion embodying the theme, 'Reflections on continuity and change from the past ten years of GRW', where panellists will reflect on how present-day research methods and constraints differ from the GRW ten years ago. At the heart of it all, we embrace both the "old" and the "new" geographies in the 21st century.

Programme

* Important note: Each session has been given additional 30-40 minute buffer time in case of unexpected delays. The sessions can finish earlier than as stated on the programme table depending on actual presentation time.

08:45 - 09:15 Registration

09:15 - 09:30 Welcome address - Professor Tim Bunnell, Convenor of Graduate Research Seminar

Creating Inclusive Spaces

Session 1	09:30 - 09:50	Reimagining Singapore - old places, new meanings	Huang Junliang Christian
	09:50 - 10:10	Examining the spatiality of the camp(us): LGBTQ+ students' experiences in universities in Singapore	Lan Heng
	10:10 - 10:30	Entangled agencies: rethinking the role of cyberspaces in image-based sexual abuse	Angie Lem An Qi

11:00 - 12:00 Lunch break

Geographical Information Systems (GIS)

Session 2	12:00 - 12:20	Diurnal and seasonal variation of urban park surface temperatures across cities located in different climatic zones	So Hoi Kay
	12:20 - 12:40	Modelling COVID-19 vulnerability in Singapore's subzones	Fang Dingzhong
	12:40 - 12:55	Mid-session break	
	12:55 - 13:15	Digital humanities and biodiversity history in Singapore and Southeast Asia	Rachel Lam Xin Yi
	13:15 - 13:35	Residents' mobility and travel pattern change during the COVID-19 pandemic in Singapore	Tian Haoyu

14:15 - 14:30 Tea break

Geopolitics and Smart Urbanism

Session 3	14:30 - 14:50	Playing geopolitics - the geopolitical imaginations in digital games, among content creators and consumers	Simon Wellisch
	14:50 - 15:10	The geographical political economy (GPE) of industrial policy interventions in Nepal's pharmaceutical sector	Avinash Gupta
	15:10 - 15:30	Co-creating everyday smart urbanism: micro-businesses on digital platforms in Hanoi and Singapore	Kim Jong Hak

16:00 - 16:15 Tea break

16:15 - 17:30 **Panel discussion: reflections on continuity and change from the past 10 years of GRW**

17:30 - 18:00 Closing remarks - Professor David Taylor

SESSION 1. Creating Inclusive Spaces

Reimagining Singapore - old places, new meanings

Huang Junliang Christian, Master's student

In a city where land is scarce and public spaces are scarcer, how we make use of these spaces becomes paramount. Our social wellbeing, economic vitality, sense of community and connectiveness are all functions of how effectively we shape our cities. The planning and design of good public spaces go hand in hand with the concept of placemaking. Placemaking projects around downtown Singapore in areas such as Marina Bay and Kampong Glam take a more Western-centric focus around the principles of creative and tourism placemaking. My proposed study of the residential landscape remaking of Ang Mo Kio and Hougang in Singapore will uncover if placemaking principles are adopted in the Housing Development Board's (HDB) "Remaking our Heartlands" programme. I will explore in depth, the roles of the state, the private sector, and the residents, and how they have knowingly, or unknowingly contributed to the whole residential placemaking process in these matured neighbourhoods. My work will provide a unique Singaporean aspect to placemaking and how the traditional notions of successful placemaking are not necessarily manifested in its entirety in Singapore.



Huang Junliang Christian, Master's student

Christian is a Masters student under the supervision of A/P TC Chang. He graduated with a BA in Geography from NUS in 2011 and worked as Singapore Airlines cabin crew for 11 years before returning to NUS. Aside from his research work, Christian is also a longstanding member of the Singapore Lawn Bowls national team and has represented the country in many local and international events.

Examining the spatiality of the camp(us): LGBTQ+ students' experiences in universities in Singapore

Lan Heng, Master's student

My research examines LGBTQ+ student's experiences on campus, what type of spaces the university campuses are for LGBTQ+ students, and in turn, how experiences on-campus connect with off-campus spaces. Some universities in Singapore, such as NUS (National University of Singapore), have numerous avenues for LGBTQ+ students to learn and discuss feminist issues, as well as to meet one another. Beyond greater academic freedom which offers modules related to gender, sexuality, and feminism, there are also other student-led organisations (e.g., Inter-University LGBT Network, QueerNUS, tFreedom) and events (e.g., Orientation). Despite being situated in a conservative and heteropatriarchy society where numerous NGOs have reported discrimination and marginalisation experienced by LGBTQ+ youths in numerous spaces (e.g., secondary schools, homes, workplaces), universities appear to be spaces which enables relative freedom when it comes to expression and discussion of gender and sexuality. As such, my research aims to explore in what ways university campuses in Singapore can be spaces of agency and empowerment for LGBTQ+ students (i.e., through enrolling in related modules, or joining student-led organisations), and whether personal empowerment can result in transformative change beyond university campuses and university life (i.e., home spaces and workplaces).



Lan Heng, Master's student

Lan Heng is a full-time Masters student under the supervision of Dr Kamalini Ramdas. She holds a Bachelor of Social Science in Geography with a Minor in Urban Studies from the National University of Singapore.

Entangled agencies: rethinking the role of cyberspaces in image-based sexual abuse

Angie Lem An Qi, Master's student

Contrary to early techno-utopian depictions of the internet as a liberatory site imbued with radical gender imaginaries, many online platforms have devolved into misogynistic cyberspaces that intensify the forceful objectification of women's bodies and its associated socio-spatial constraints. This is exemplified by the increasing prevalence of websites that host image-based sexual abuse (IBSA) - a tech-enabled offence that involves the non-consensual creation, possession and distribution of private sexual images that typically depict women. While researchers have scrutinised perpetrator motives and victim experiences, the dynamism of the cyberspaces where IBSA content gets circulated through has largely been neglected. This leaves the widespread assumption of websites as passive and inert mediums on which nude images are placed unchallenged. Adopting Gries' concept of rhetorical transformation, I seek to address this lacuna by examining how the digital entities situated in the virtual environments of cyberspaces that host IBSA transform nude images, their subjects and agency. Additionally, to highlight the entwinement of online and offline spaces, the material impacts of such transformations will be explored through the use of in-depth interviews and digital ethnography.



Angie Lem An Qi, Master's student

Angie holds a BSc (Hons) in Geography from the National University of Singapore. She is a Masters student under the guidance and supervision of Dr Kamalini Ramdas. Her research is based on her internship experience at the Association of Women for Action and Research (AWARE) and Sayoni.

SESSION 2. Geographical Information Systems (GIS)

Diurnal and seasonal variation of urban park surface temperatures across cities located in different climatic zones

So Hoi Kay, Master's student

The park cool island (PCI) effect, defined as lower surface and ambient air temperatures of green spaces within cities as compared to developed urban surroundings, has been studied in several cities globally. However, the variation of the PCI across different climatic zones and seasons has not been investigated using a standardised approach and compared within a single study. Therefore, the present study evaluates both day- and night-time land surface temperatures (LSTs) and the corresponding PCI of fourteen urban parks located in ten cities representing eight different climatic zones. The study employs data from MODIS and Landsat satellites to minimise limitations of coarse temporal and spatial resolutions and take advantage of different acquisition times in these different satellite products. LSTs and PCIs are compared to evaluate diurnal and seasonal differences for a better understanding of urban parks as a tool for mitigating high urban temperatures. LSTs of urban park surroundings will also be investigated to determine whether the PCI effect extends beyond park boundaries into the nearby urban environment.



So Hoi Kay, Master's student

Hoi Kay is a Masters student under the supervision of Prof Matthias Roth. She graduated from NUS Geography in 2021 with a Bachelors of Social Sciences (Geography) and a minor in Geographical Information Systems. Her research interests lie primarily within the fields of urban climate and thermal heat comfort.

Modelling COVID-19 vulnerability in Singapore's subzones

Fang Dingzhong, Master's student

COVID-19 has posed unprecedented socioeconomic burden to humans and countries all over the world. In Singapore, over 300,000 people were infected by COVID-19 and more than 850 people died of this disease. Due to inadequate research on geospatial modeling of COVID-19 and the existing related research methods are the simple aggregation of various factors; this study is proposed to develop a COVID-19 vulnerability model considering static factors like land use and demographic factors as well as dynamic factors like human mobility factors. This study aims to find appropriate factors for specific regions and algorithm of vulnerability which can reflect the COVID-19 vulnerability of certain areas better. The CCOVID-19 vulnerability model for subzones will help government and policy makers identify the most serious areas with COVID-19 and allocate resources and funds.



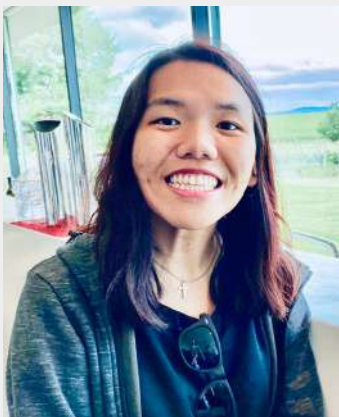
Fang Dingzhong, Master's student

Dingzhong is a Master's student under the supervisor of A/P Wang Yi-Chen. He holds a BSc in Physical Geography from Nanjing Normal University in China. His research interests involve vulnerability modeling.

Digital humanities and biodiversity history in Singapore and Southeast Asia

Rachel Lam, Master's student

Southeast Asia is a haven to a plethora of flora and fauna. However, not all species are native to the respective countries they sought refuge in. Over years, due to various historical vectors such as climate change, land use land cover modifications, and anthropogenic factors, certain invasive species from foreign lands have established populations and become naturalised species in their new homes. This imbalance in biodiversity has been problematic for most countries as invasions often bring unwelcomed consequences such as public health issues, overcrowding threats, negative genetic outcomes if bred with native species. Throughout years, geographic information systems technology has vastly improved, allowing for biodiversity changes across history and relationships between species and vectors to be reflected in geospatial visualisation tools. Hence, more correlation between the factors affecting invasive species population growth may be examined in further detail. The planned research study would focus on development of such visualisation tool through development of a geospatial database which records and displays the biodiversity history of Singapore and Southeast Asia. In particular, the naturalised flora and fauna species, vectors, and their impact to public health, economic security, and food provision in the 19th century would be analysed.



Rachel Lam, Master's student

Rachel is a Master of Social Science student under guidance of Associate Professor Feng Chen-Chieh. She received her bachelor's degree in environmental engineering with a geosciences minor from National University of Singapore. Prior to joining the master's programme, she was an environmentally sustainable design consultant. Her research interests are in the field of geographical information systems and mapping environmental history.

Residents' mobility and travel pattern change during the COVID-19 pandemic in Singapore

Tian Haoyu, Master's student

Human movement within a city is affected by different issues. In the context of COVID-19, the residents' mobility is influenced by both the government policy and their willingness. During the COVID-19 epidemic, the government proposed a series of social distancing policies, which reduced the frequency and number of gathering activities. Besides public policies, people's attitude towards COVID-19 situation will also affect their mobility and travel pattern. This study will explore the relationship between the residents' movement and COVID-19 status through the case visit data, infection cluster data, public transportation data, community mobility report and social media data. In different stages of the COVID-19 pandemic, residents' awareness of the epidemic changes with vaccination or virus mutation. These issues may also affect their travel willingness and choice. Therefore, this study will also explore if the residents' attitude towards different COVID-19 situations affects their mobility and travel pattern to a certain extent.



Tian Haoyu, Master's student

Tian Haoyu received his Bachelor's degree in Geographic Information Science from Nanjing University, China. He is now a Master's student under the supervision of A/P Feng Chen-Chieh. His research interests include human dynamics, spatial data analysis, urbanism and geographical big data.

SESSION 3. Geopolitics and Smart Urbanism

Playing geopolitics – the geopolitical imaginations in digital games, among content creators and consumers

Simon Wellisch, PhD student

Despite the widespread popularisation of digital games, more commonly known as video or computer games, in societies across the globe, they have only occasionally received attention from geopolitical scholars. Popular geopolitics as critical study of audiences and affects is one of the few strands covering games. While transferring approaches used for films, books, and other popular media is valid, the uniqueness of games requires more layers of analyses. There is a multitude of genres with distinctive mechanics formed by the developers to delineate player agency. Developers also determine participation; they can support or prohibit user-made modifications. Both examples can be still undermined by players and breaking game rules is an everyday occurrence. This invites looking beyond the geopolitical imaginations presented in games themselves towards the players' narratives and interactions with these. Thus, digital games incorporate their own spaces, game worlds, and constitute an assemblage of producers, consumers, and content creators, but also of rulesets, expectations, and participations. Geopolitical contexts are integral on all levels, leading to questions like "How are geopolitics manifested? What is the gaming community's perception of geopolitical issues? What possibilities of content creation do the players have on their own and what content do they create?"



Simon Wellisch, PhD student

Simon specialised in political geography and geopolitics during his Bachelor and Master studies in Germany and the Czech Republic. Other field studies included Lithuania, Kyrgyzstan, Tajikistan and Xinjiang (PRC). Simon is particularly concerned with perceptions and dissemination of geopolitical concepts and their underlying power relations.

The geographical political economy (GPE) of industrial policy interventions in Nepal's pharmaceutical sector

Avinash Gupta, PhD student

GPE problematizes regional development and associated policymaking—including industrial—in terms of distributional conflicts among social formations, often beyond national scale. The scholarship emphasizes how design, but more crucially, implementation of policies are associated with societal distribution of power and social systems referring to structures, norms and resources. Yet, geography has dived far less into in-depth empirical analysis - a scenario even less promising apropos less-industrialized geographies although industrialization agenda looms large in economic policymaking including global. Such omission is problematic and paradoxical since industrial policies are not peripheral issues in many of these countries that not only sit upon pockets of industrial capacity but are linked to GPNs even if via imports. This non-engagement not only hurts the discipline but also leaves societies at the hands of narrow, placeless and abstract fields like mainstream economics that offers no tools to elucidate upon intricate political economies of development policymaking. Unsurprisingly, geographers continue to remain on the margins in elite policymaking networks, manifested as this is in geography's low influence. Against this backdrop, my research aims to investigate how far and in what ways does de facto public-governance affect industrial policy interventions in Nepal, sectoral focus being Nepal's pharmaceutical sector.



Avinash Gupta, PhD student

Having obtained an MBA (Anand, India) which led him into banking (Nepal), Avinash veered towards critical social sciences and pursued an MSc at SOAS (London). Since then, Avinash has studied geographical political economy (GPE) of development policymaking, focus being institutional dynamics of governance. His regional focus has been on political and economic geographies of India and Bangladesh.

Co-creating everyday smart urbanism: micro-businesses on digital platforms in Hanoi and Singapore

Kim Jong Hak, PhD student

The current academic approach to smart urbanism in everyday life narrowly focuses on viewing smart urbanism as a modality of the state to exert its power to reshape the public. This research does not aim to refute the approach but rather examine the extent to which this claim applies in contemporary society. My research primarily explores alternative imagery of smart urbanism co-constituted by society and state authorities. I aim to investigate how micro-businesses on digital platforms are shaped by state-society relations with multifaceted rationalities, logic, and mechanisms. How do these micro-businesses operate on platforms? Who wins and loses in state-society encounters regarding platform-based micro-businesses on the ground? How do state authorities and business owners understand and engage with these platform-based micro-businesses? These questions are essential to extend our extant understanding of everyday smart urbanism beyond the state's aspiration for power projection. In so doing, this research provides a comparative study of Hanoi and Singapore. By linking the findings from these two instances through a comparative study, the research proposes that we will gain a deeper understanding of how everyday smart urbanism is manifested.



Kim Jong Hak, PhD student

Jonghak joined the Department of Geography, NUS in July 2021 as a PhD student. He holds a BA in Architecture and an MA in Urban Regeneration from Korea University. His research interest revolves around smart urbanism and platform-based urban practices in Southeast Asia, with a particular interest in Vietnam.

PANEL DISCUSSION. Reflections on continuity and change from the past 10 years of GRW



Dr. YAN YINGWEI

Dr. Yan Yingwei is a lecturer in the Department of Geography, National University of Singapore. He completed his PhD in the Department of Geography, National University of Singapore in 2016, and his postdoc research in the Institute of Geography, Heidelberg University, Germany in 2017. His main research areas include volunteered geographic information (VGI) and its applications in disaster and crisis management as well as pedagogical research pertinent to GIS education.



Dr. MENUSHA DE SILVA

Dr. Menusha de Silva's research examines the intersections of transnational migration and ageing, with a specific focus on Sri Lankan migrants' later-life mobility and negotiations of transnational citizenship, and eldercare relations within transnational families. Her work is based on multi-sited fieldwork that engaged with Sri Lankan immigrant communities in Australia and the United Kingdom, and with return migrants and family members of migrants in Sri Lanka. She has employed qualitative methods to construct transnational family case studies and migration histories. She received the Area journal prize in 2020 for *New Research in Geography* for the co-authored paper titled, "Daughter" as a positionality and the gendered politics of taking parents into the field'. Her current research focuses on geographical education and pedagogy. She recently worked with colleagues from NUS Geography and the Young Sikh Association of Singapore to create a collaborative virtual fieldtrip video, which is used as both a resource for undergraduate teaching and community awareness.



Dr. PISETH KEO

Dr. Piseth Keo is a policy advisor, researcher, and practitioner in the field of development and environmental management. For more than 15 years in his professional career, Dr. Keo has been driven by his inspiration and passion to contribute towards sustainable environmental management, and inclusive development in Cambodia and the ASEAN region. He has authored and co-authored papers and book chapters with a number of International Publishing Houses. He regularly publishes commentary on various topics including climate change, sustainable development and environmental management in the Mekong and ASEAN. He has also been a reviewer for an international publishing house, i.e. *Geoforum*. Dr. Keo received his doctoral degree from the Joint-Doctoral Programme between the National University of Singapore and the Harvard-Yenching Institute (Harvard University) in 2018, and his Master's degree from the Australian National University in 2010.

