in the first and second rounds

(31 Mar. 2021)

1. TZQ004G

Aragon Falomir, Jaime (V)

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Tourist mobility in the Caribbean coasts of Mexico: Why didn't the government close the border under COVID-19? (Thematic 4)

While most governments (with state capacity to do so) imposed coercive measures demanding social confinement and suspension of economic activities, the socio-historical construction, the social structure and the non-existence of unemployment insurance, among others, made the Mexican government not demand confinement of its population, but the respect of a "healthy distance". In many cases, 25% of those privileged who could work remotely did so, but the majority continued to work in situ (Monroy-Franco, 2020). Of the most affected sectors, recent works have shown that the age gap between 15 and 29 years old will be mainly affected but that, the labor branches where it will impact the most will be, on the one hand, in construction (-17.4%) and on the other hand, in food and beverage preparation services (-15.2%) (Samaniego, 2020:311). The restaurants, despite the fact that they exist throughout the country, there are tourist places where they are the central axis of the economy. The present contribution seeks to analyze what happened in the Caribbean coasts of Mexico, mainly in Cancun during this pandemic year. This context forces us to ask ourselves to what extent not closing the border (or requiring quarantines) was a pillar for, either the survival of an entire economic sector that depends on tourist hordes (while the country kept increasing the number of cases contaminated by COVID-19) or it was the main risk that the Mexican government took during this pandemic moment. This is in line with what most researchers have proposed: save the economy or the population. But, such an axiom can be applicable to all places, and mainly those that depend on tourism such as many Caribbean countries and coastal cities. By observing the mobility that was allowed in the region, we will see what the main consequences were and whether the increases in the number of cases in the Mexican Caribbean were parallel to the national figures, higher or lower.

2. TZO001C

Arrach, Riad (V)

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Le système de transport comme processus de développement territorial ou risque de la ségrégation sociale (Thématique 4)

L'agglomération de Rabat-Témara connait depuis la dernière décennie une croissance démographique et économique rapide entrainant l'étalement de son urbanisation dans les zones périphériques avoisinantes. Sauf que l'évolution urbaine des zones périphériques n'a pas été toujours accompagnée d'un système de transport permettant la connexion avec l'agglomération Rabat-Témara générant ainsi une forme de ségrégation socio-spatiale. L'objectif de cet article est de comprendre la relation existante entre le système de transport urbain et le phénomène de ségrégation sociale. Ce phénomène peut se définir comme la traduction de différences sociales dans l'espace qui se manifeste à travers l'ensemble des interactions socio-économiques propres à chaque ville. A cet effet il importe d'interroger le système de transport en tant que variable permettant la structuration de l'espace en zones à forte homogénéité sociale interne et en zones à fortes disparités sociales. La relation entre transport urbain et espace s'accompagne d'une structuration sociale de l'espace urbain qui contribue à la création ou même renforce la ségrégation sociale au sein de ces espaces. De ce fait, les transports collectifs sont un facteur d'intégration ou de ségrégation des populations selon qu'ils permettent ou non une mobilité suffisante et répondre à des besoins de déplacements susceptibles d'éviter une marginalisation. Les transports collectifs ont un rôle intégrateur pour les différents groupes sociaux.

3. TZQ002N

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Health crises in Cities: Learning from the past and planning for the future (Thematic 1)

This has generated urban health crises among city dwellers notably the urban poor. A systematic search of published literature in English was conducted between 1960 and 2015. Published peer review journals, abstracts, Gray literature (technical reports, government documents, reports, etc.), inaugural lectures, and internet articles were reviewed. Manual search of reference lists of selected articles were checked for further relevant studies. The review showed that the pace of urbanization is unprecedented with cities such as Lagos having annual urban growth rate of 5.8%. Urbanization in Nigeria is mainly demographically driven without commensurate socioeconomic dividends and benefits to the urban environment. This has created urban health crises of inadequate water safe supply, squalor and shanty settlements, sanitation, solid waste management, double burden of diseases and inefficient, congested, and risky transport system. In

conclusion, when managed carefully, urbanization could reduce hardship and human suffering; on the other hand, it could also increase poverty and squalor. Some laws need to be amended to change the status of poor urban settlements. Urban health development requires intersectoral approach with political will and urban renewal program to make our urban societies sustainable that promote healthy living. A careful analysis of past health crises with sufficient data should be done with a view to correcting and addressing health issues in our major cities. Also, adequate planning strategies should be put in place to curtail future occurrences of health crises in cities.

4. TZQ004J

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Les répercussions de l'annulation des croisières touristiques en raison du COVID-19 dans une destination émergente. Le cas de Costa Maya (Mahahual, Mexique)(Thematique 1)

Le terminal de croisière Costa Maya situé près de la ville de Mahahual, dans le sud de l'état de Quintana Roo, est la deuxième destination de croisière au Mexique pour ses flux de passagers. Depuis sa création en 2001, il a surmonté d'importantes difficultés telles que la destruction de ses installations par l'ouragan Dean en 2007, l'urgence sanitaire liée au virus AH1N1 et la crise économique en 2009, entre autres. Cependant, grâce à d'importantes adaptations dans la gestion du terminal et à la mise en œuvre de stratégies de vente innovantes, en 2017, il a dépassé le seuil d'un million de visiteurs et à se positionner comme l'une des destinations majeures sur le marché de la croisière de la Caraïbe occidentale. Pour 2020, Costa Maya avait prévu de recevoir 518 paquebots de croisières (7,6% de plus qu'en 2019), mais n'en atteignit que 141 le 14 mars ; les Centers for Disease Control and Prevention (CDC) ont suspendu les opérations de croisière avec des passagers en provenance des États-Unis en raison de la pandémie de COVID-19. Compte tenu des reports récurrents sur le redémarrage des voyages en croisières touristiques de la CDC à ce jour, le tableau est incertain pour l'avenir. Actuellement, Costa Maya n'apparaît que dans les plans des compagnies maritimes pour la saison 2022-2023, sans indices sur une reprise anticipée. L'objectif de ce travail est de mettre en évidence les répercussions sociales et économiques qui résultent de cette l'annulation prolongée des arrivées de croisières touristiques, dans le contexte de la pandémie de COVID-19, à Mahahual, au regard de la croissance régulière enregistrée au cours de la dernière décennie.

In Spanish

Repercusiones de la cancelación de cruceros turísticos por COVID-19 en un destino emergente. El caso de Costa Maya (Mahahual, México)

La terminal de cruceros Costa Maya, localizada en las cercanías de la localidad de Mahahual al sur del estado de Quintana Roo, constituye el segundo destino de cruceros de México por su movimiento de pasajeros. Desde su inicio de operaciones en 2001, ha superado importantes adversidades como la destrucción de sus instalaciones por el huracán Dean en 2007, la contingencia sanitaria por el virus AH1N1 y la crisis económica en 2009, entre otros. No obstante, a partir de importantes cambios en la gestión de la terminal, y la implementación de innovadoras estrategias de ventas, en 2017 logró superar la barrera del millón de visitantes y posicionarse como uno de los destinos de cruceros más importantes de la competitiva ruta del Caribe Occidental. Para 2020, Costa Maya tenía programado recibir 518 cruceros turísticos (7.6% más que en 2019) pero sólo alcanzaron a llegar 141 porque el 14 de marzo, los Centros para el Control y Prevención de Enfermedades (CDC), suspendieron las operaciones de cruceros con pasajeros de Estados Unidos por la pandemia de COVID-19. Ante las recurrentes postergaciones del reinicio de los viajes en cruceros turísticos por parte de los CDC hasta la fecha, el panorama resulta incierto para el futuro. Actualmente, Costa Maya solamente aparece en los planes de las navieras para la temporada 2022-2023, sin que haya visos para una reanudación anterior. El objetivo del trabajo consiste en revelar las repercusiones sociales y económicas que ha provocado en Mahahual la cancelación prolongada de arribos de cruceros turísticos a partir de la pandemia por COVID-19 en comparación con el crecimiento constante que había tenido a lo largo de la década anterior.

5. TZQ0025

Badr eddine, Ait Laasri (V)

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Le grand Casablanca (Maroc) : Impacts et Inégalités Socio-spatiales de l'urbanisation sur La Sante de La Population (Thématique 1)

Le grand Casablanca se caractérise par une très forte urbanisation, qui a engendré de nombreux facteurs et déterminants directs et indirects. Ces facteurs et déterminants expliquent les mutations de nature à exposer les habitants et leur bien-être aux risques relevant de la santé publique tels que la morbidité, le handicap, la mortalité ... Dans cette mégapole, se développent des inégalités socio-spatiales relevant de la santé publique, qui entravent souvent le développement humain. Bien que Casablanca, se distingue par des capacités touristiques, industrielles et agricoles, capables d'accroître et d'améliorer les indicateurs de développement humain, tel que celui de la santé. Dans ce contexte, cette contribution a pour objectif de mettre l'accent sur l'importance de l'approche pluridisciplinaire de la géographie sociale, et de ses outils et méthodes (approches statistiques et cartographiques), dans l'analyse des impacts de l'urbanisation sur l'état de santé des populations et sur leur accès aux soins médicaux.

6. TZO000J

Bański, Jerzy (P) Professor & Director Institute of Geography and Spatial Organisation Polish Academy of Sciences Warsaw, Poland

Small towns ageing - in search of links between population processes (Thematic 1)

The purpose of the paper is to identify the changes in relations between the natural increase and the migration balance in the small towns of Poland at the beginning of the 21st century and to assess their influence on the contemporary and future processes of population ageing. Eight categories of towns were identified, differing as to the magnitudes and directions of the birth rate and migrations. For these categories the changes are specified concerning the respective processes at the turn of the first and second decade of the 21st century. The study demonstrated that the natural and migration processes in small towns had predominantly negative directions, leading to the weakened population potential, and the direct effect was depopulation. The rate of population ageing is represented with the demographic old age indicator, based on the percentage point differences between the shares of the young and old population. The results from the study confirmed the observation that the population ageing process has been intensive in almost all of the small towns in Poland. The primary factor, shaping the population potential, was constituted by the migration outflow. The bigger the net migration outflows, the higher the population ageing rates. Those processes will have in the future a negative influence on the state of economy and the social structures in small towns. Ageing of a society means also an intensive erosion of the quality of labour force and social capital in this society.

7. TZO0011

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Le Canada et les marchés émergents : Analyse du rôle de trois villes globales - portes d'entrée vers le continent africain (Johannesburg, Le Caire, Casablanca) (Thématique 4)

La ville globale est définie comme un centre de commandement et de coordination des échanges économiques, permettant l'interconnexion des marchés locaux, nationaux, régionaux et mondiaux. espace urbain représente un écosystème entrepreneurial facilitant l'internationalisation principalement des multinationales, mais aussi, de grandes entreprises, voire d'un segment non négligeable de petites et moyennes entreprises exportatrices. En Afrique, les échanges commerciaux et financiers se polarisent dans les espaces urbains. 40% des vingt premières destinations urbaines africaines sont nord-africaines, y compris, Alger, Casablanca, Le Caire, Marrakech, Oran, Rabat, Tanger, et Tunis. Selon le classement du Globalization and World Cities Research Network, Casablanca se range en 3ème place après Johannesburg et Le Caire, comme les trois premières villes globales à l'échelle du continent africain. Ainsi, cette communication tente de répondre à la question de savoir si et comment ces trois villes globales africaines sont des portes d'entrée pour les exportateurs et les investisseurs canadiens vers l'Afrique. Sur le plan théorique, elle passe en revue les théories des villes globales et les théories de l'internationalisation. Sous un angle empirique, elle examine les fonctions des trois premières villes globales africaines, d'une part, et, d'autre part, les échanges économiques Afrique-Canada.

8. TZQ0046

Bouhdiba, Sofiane (P) Professor University of Tunis Tunis, Tunisie

L'enterrement des décédés du Covid-19 dans les villes de Tunisie : un drame humain (Thématique 1)

En temps normal, le décès d'un malade ouvre une succession de gestes orchestrés, immuables depuis des temps immémoriaux. Selon les religions, le corps est lavé, purifié, habillé ou au contraire dénudé, veillé, inhumé, incinéré, voire sciemment abandonné aux bêtes sauvages. Avec toujours un fil conducteur : le respect des coutumes et du corps du défunt, tant dans le monde icibas que dans l'au-delà. Mais, nous rappelle l'historien français Jean Delumeau « En période de peste, comme à la guerre, la fin des hommes se déroulait au contraire dans des conditions insoutenables d'horreur, d'anarchie et d'abandon des coutumes les plus profondément enracinées dans l'inconscient collectif. C'était d'abord l'abolition de la mort personnalisée ? Au plus fort des épidémies, c'est par centaines, voire par milliers que les pestiférés succombaient chaque jour à Naples, Londres ou à Marseille. Les hôpitaux et les baraquements de fortune aménagés étaient remplis d'agonisants ». En effet, lorsque le cadavre est suspecté de transmettre une maladie, on s'en méfie naturellement, et on tente de l'éloigner et de l'enterrer le plus rapidement possible, voire de le brûler si les préceptes religieux – ou la famille – ne s'y opposent point. Une autre solution pratique est d'enterrer les morts dans des fosses communes, et de les recouvrir de chaux vive. L'enterrement de masse ne répond donc pas exclusivement à une explosion du nombre de cadavres, c'est aussi un moyen d'exorciser la peur que ces derniers suscitent. Je m'intéresserai ici au bouleversement des traditions funéraires induites par la pandémie de Covid-19, en prenant pour cadre la société musulmane tunisienne.

9. TZQ0010

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Urban challenges to political authority in Uganda: Lessons from the 2021 elections (Thematic 5)

This paper looks at the Ugandan government's responses to rising urban opposition to President Museveni in the 2021 Presidential election campaign, in particular the surveillance and repression undertaken though government shutdowns of the internet and social media and monitoring of cell phones. Uganda's 2021 election saw Museveni's toughest competition since coming to power in 1986. Pop star turned politician Robert Kyagulanyi, popularly known by his stage name Bobi Wine, emerged as the leading opponent, with strong urban youth support. During the campaign period Kyagulanyi was arrested and assaulted numerous times and protesters who supported him were shot. Control over technology played an enormous role in this campaign. Uganda's social media monitoring centre was established in 2013 to "to weed out those who use it to damage the government and people's reputations". The Regulation and Interception of Communication Act allows the government to monitor phones without users' knowledge or consent. Online activists have been charged under the Computer Misuse Act, and the anti-Terrorism Act has been used to limit freedom of expression. This paper will also explore how the success of Kyagulanyi's own use of social media, as a celebrity and politician, grew his support and countered the government's attempts at surveillance and cooptation.

10. TZQ000W

Cain, Allan (P) Director Development Workshop Luanda, Angola

Housing for Whom? Building African cities on Chinese credit but who gets left behind (Thematic 6)

Since the end of the civil war in 2002, the government of Angola has used Chinese credit facilities backed by petroleum-based guarantees to build prestige urban projects on a scale that in sub-Saharan Africa is second only to post-apartheid South Africa. Decades of rural-urban migration have turned Angola into one of Africa's most urbanized countries, with 62% of its population living in cities. State-delivered subsidized housing has satisfied an important segment

of the middle-class and better-paid civil servants, but few of the urban poor benefited. Angola's major budget allocations for housing failed to deliver on commitments made to build sustainable and equitable cities. With the collapse of oil prices after 2014, the Angolan state budget has been drastically reduced, and it is unlikely that the government will be able to provide investment and subsidies to continue building new large-scale housing projects. While the private sector, both international and local, has to date, been a major beneficiary of construction contracts from the state. The private sector has been reluctant to provide its own financing and to invest in real estate itself, due to weak land tenure and the lack of legislative reforms to make a functional land market. Solving the problems around land may be a way to stimulate the engagement of private-sector participation in providing direct financing for the housing sector.

11. TZQ002C

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Urban and Territorial Planning (Thematic 7)

Urban and territorial planning is a powerful decision-making mechanism to improve access to clean energy, reducing the consumption of fossil fuel and promoting appropriate energy mixes, as well as energy efficiency in buildings, industries, and their connection with cities promoting better connectivity at all territorial levels. The event will focus on how can the International Guidelines on Urban and Territorial planning and related resources support planners and decision-makers to achieve sustainable industrial development to achieve the SDGs providing sustained and inclusive economic growth and new economic opportunities. Moreover, the event will be an opportunity to present case studies on redeveloped industrial zones and their contribution towards sustainable urbanization.

12. TZQ001J

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Petrella, Laura

Chief of the Planning Finance and Economy Section

Andersson, Cecilia

Leader of the Global Public Space Programme UN-Habitat

Healthy Cities and Territories, How to - Tools and methodologies (Thematic 1)

The impact of the urban environment on health and, in particular, inequity in health, has been widely documented. Today more while we live through the COVID-19 pandemic we had realized that the health of our people is the most important asset of our cities. However, a complicating factor is that, health and planners as independent fields, had developed their own methods and find it difficult to work together. The main goal of the session is to highlights and discuss on tools and trainings on "how-to" both sectors can work together, "bridging the gap from both sides" and the benefits from it. Success will depend on our ability to invoke the full potential of combining health with UTP, the event will focused on the importance on tools and trainings that facilitates Its combination that can act as a thread, connecting and strengthening the delivery of many SDGs, a combination that merges benefits for people – in terms of health and well-being – with action on the most pressing environmental and human health problems faced in every country due to climate change and habitat loss. Given that urban and territorial planning is involved with decisions about physical infrastructure with implications for several generations, training and tools to integrating health in UTP. The event will be an opportunity to share experiences on trainings and methodologies from different keynote presentations. Moreover, the event will be an opportunity to share the upcoming training modules development.

13. TZQ004P

Charles, Carlo Handy (ND)

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Haitian Diasporas and in/mobility amid the Covid-19 Pandemic (Thematic 2)

The Covid-19 pandemic has impacted people's mobility in unprecedented ways in an era of globalization and intense travels. While international travelers have been limited by governmental measures of social distancing and travel restrictions, Haitian Diasporas living in the United States and Canada have been able to come to Haiti except for an initial period of lockdown from March to July 2020 in which Haiti's borders were closed. Such light travel restrictions have allowed Haitian Diasporas to visit their families and friends or to pursue other activities in the country while temporarily escaping from the pandemic in their host countries. Drawing on observations conducted for my doctoral fieldwork in Haiti from November 2020 to April 2021, this paper will first examine how Haitian Diasporas coming to Haiti have contributed to local tourism while financially helping families and friends in need in the country. Second, this paper will analyze how Haitians' material conditions of existence shape their understanding

of the pandemic and how they respond to it, challenging a global understanding of what protective measures should be taken to curb the spread of the virus in low-income countries.

14. TZQ0036

Champagne, Eric (V)

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Driving implementation in decentralization and local development reforms (Thematic Others)

Too often public sector reforms are designed to solve complex problems but once under implementation, fail to have the expected impact on those problems. Ambitious decentralization reforms in developing countries are no exception. They often are either compromises or slowed down by implementation and governance issues. In this paper, we address the "implementation gap" in decentralization reforms and local development in developing countries. The implementation gap is defined as the disparity between the desired outcomes set by public sector organizations and their actual performance on the ground. Approaches and tools to tackle the implementation challenges in complex public sector reforms rely on a new generation of principles that often imply the need for action-based, iterative and adaptive public management models. Drawing from the most recent body of knowledge in the field of implementation and the science of delivery, we will present a range of implementation approaches that can support more effective decentralization reforms and local economic development strategies.

15. TZQ000Q

Chardon, Anne-Catherine (V)

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De la vulnérabilité à la résilience urbaine, une approche transversale d'un habitat complexe exposé aux risques (Thématique 3)

Si la crise mondiale multiforme engendrée par la COVID 19 a obligé les villes à réagir promptement face à cet aléa sanitaire, afin de mettre en place les politiques et mesures nécessaires au développement de leur résilience, elle a aussi davantage exacerbé leurs faiblesses et vulnérabilités, plus qu'elle ne les a révélées. Elle a également mis en avant leurs atouts forts, nécessaires face aux enjeux déterminants de cette résilience. Notre analyse débutera par une approche conceptuelle autour de l'évolution des concepts de vulnérabilité, risque et résilience depuis longtemps utilisés dans le domaine de la gestion des risques, puis elle s'attachera à

considérer dans quelle mesure la crise sanitaire actuelle renforce la prise de conscience de la non existence d'un risque zéro, incitant à diversifier l'orientation des politiques publiques urbaines de gestion du risque, tant vers des décisions et actions pérennes que vers des mesures d'ajustements constants. On s'intéressera alors au caractère complexe des contextes de vulnérabilité et de risques urbains, aux origines multifactorielles, qui oblige alors à aborder la résilience de manière transversale et dans tous les domaines (urbanistique, sociologique, culturel, économique, foncier, etc.), en intervenant sur l'ensemble des fonctions et acteurs de la ville, afin de construire dans son acception la plus large, un habitat urbain sûr, sain, soucieux du bien-être durable des usagers. Des exemples concrets illustreront notre réflexion.

16. TZQ003T

Cishahayo, Jean-Marie (P) Research Affiliate Centre on Governance University of Ottawa Ottawa, Canada

Facing New Drivers for Green Economy Transformation: The Case of Shanghai and Yangtze Delta Cities (Thematic 5)

Over the past decade, the green economy has emerged as an important policy framework for sustainable development in both developed and developing countries. It presents an attractive framework to deliver more resource efficient, lower carbon, less environmentally damaging, more socially inclusive societies (Lucien G. and Mark A. M., University College of London, 2017). Located between the mouth of Yangtze River and the East China sea, Shanghai is one of the world megacities with around 27,796.000 population (2021) and a size of 6,340.5 km2 lying in a rich biodiversity and ecosystem integration. During the last three decades of restructuring, and efficient policies reforms, Shanghai has shifted from an old heavy industries manufacturing city to a green competitive economy and became one of the top smart cities in the world. According to HKTD Research (2020), several policies and measures for supporting high-quality development in the Yangtze River Delta Integrated Ecological and Green Development Demonstration Zone jointly formulated by Shanghai, Jiangsu and Zhejiang governments took effect in 2020. Today Shanghai and Yangtze delta cities form China's top regional green economic development powerhouse. However, climate change, environment degradation, air pollution and Covid -19 health crisis are some challenges ahead to reach green, resilient, inclusive and sustainable development. This paper is to aimed use the concepts of RACE (Results, Adaptability, Capacity, Engagement) and Green growth best practices to analyze the key performance indicators, lessons learned in order to formulate new recommendations to nature-based new cities planning and building in developing countries.

17. TZQ000Z

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Using open-access data to explore the relationship between urban morphology and diarrheal diseases in Côte d'Ivoire (Thematic 1)

Little is known about the impacts of morphological indicators that can be derived from the physical environment on the risk of diarrheal diseases. Given Africa's recent explosive urbanization rates and rapid changes in landscape, coupled with a high burden inflicted by diarrheal diseases, urban planners and public health officials in that region can benefit from a deeper understanding of the relation between urban morphology and diarrheal diseases. This work presents a large-scale ecological analysis based on open-access data to readily identify risk factors related to diarrheal diseases originating from the physical environment. Designed as a proof-of-concept study, this work is a cross-sectional analysis that focuses on Ivorian urban centers. Differently from previous spatial epidemiology studies on diarrhea, we advance a set of morphological indicators based on landscape metrics and infrastructures as key variables of exposure, exploring their relationship with prevalence and mortality rates attributed to diarrhea. This ecological analysis aims simultaneously to (i) build an analytical framework based strictly on free, open-access data and open-source software to investigate diarrhea risk factors originating from the physical environment; and (ii) understand whether different urban patterns, defined by land-use and distribution of basic infrastructures, are related to different prevalence and mortality rates of diarrheal diseases.

18. TZQ0024

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Homelessness prevention and determinants of housing among first-time and recurrent emergency shelter users in Canada (Thematic 6)

Primary and secondary prevention initiatives stop people from becoming homeless and help them exit quickly when they do. This study uses administrative data from emergency shelters in Canada from 2010–2016 to compare homelessness pathways and housing outcomes between first-time and recurrent shelter users. It uses a multinomial logit model to identify factors that influence the likelihood of exiting into housing following a shelter stay. The findings demonstrate that first-time users are over two times more likely to exit into newly acquired housing than recurrent users, and that the pathways into and out of homelessness vary significantly between the two groups. The findings suggest that the composition of existing prevention strategies do not sufficiently meet the needs of first-time users experiencing financial and substance use challenges. For recurrent users, federal policies that promote Housing First initiatives increase exits into housing. However, duration of previous homelessness negatively influences housing outcomes, reinforcing the need for early intervention prevention initiatives.

19. TZQ004M

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Le tourisme face à la crise sanitaire de la COVID dans les îles de la Caraïbe : la mise en lumière des limites d'un modèle de développement (Thématique d'autres)

Le tourisme est une activité essentielle dans la Caraïbe. Cette orientation économique s'est progressivement imposée à partir des années 1970, par exemple dans les îles françaises (à l'époque de la guerre froide), puis dans les petites îles qui gagnèrent leur indépendance dans la décennie suivante. Dans les années 1990, l'avènement d'un tourisme de masse centré sur les clientèles occidentales (classes moyennes et supérieures nord-américaines et européennes) encourage la multiplication des investissements dans le secteur du tourisme. D'une manière

générale, l'offre touristique y est peu différenciée. Elle est centrée sur un produit balnéaire : la plage, bordée de cocotiers, les eaux cristallines ouvertes sur l'horizon caraïbe. Les touches culturelles sont secondaires dans cette offre. Les destinations sont en concurrence et se disputent les clientèles sur les marchés nord-américains et européens. Le tourisme était annoncé comme la panacée, la clé du développement pour ces territoires insulaires. Cependant, nombre de travaux soulignaient les limites et les fragilités de ces stratégies de développement qui s'inscrivent dans le prolongement des cycles des économies de plantation. La crise sanitaire des années 2020-2021 a mis brutalement en évidence les limites d'un développement centrée sur le tout-tourisme, une activité internationale construite sur des investissements internationaux et dominés par des acteurs transnationaux. Ces développements extravertis, non maîtrisés, montrent leur limite dans une période d'immobilité où les économies insulaires, privées de leurs recettes en devises, doivent faire face au défi de leur souveraineté alimentaire, où l'immigration se dessine comme unique issue pour la jeunesse.

20. TZQ004N

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Le tourisme de croisière face à la crise sanitaire dans la Caraïbe. Quels enseignements pour quelles perspectives ? (Thématique d'autres)

La crise sanitaire de la COVID a commencé dans la Caraïbe autour de la croisière. Alors que les médias focalisaient sur la situation sanitaire dans le nord de l'Italie et que l'OMS déclarait le début d'une pandémie, la croisière se poursuivait dans la Caraïbe au début de mars 2020. Des manifestations spontanées étaient organisées localement pour réclamer le contrôle des touristes, pour refuser les escales des paquebots. C'est dans ce contexte particulier que les croisiéristes ont fait leurs premières expériences de croisière sans escales. Les tensions autour de la croisière, avec des actions parfois violentes, reflétaient le désarroi des populations face à une activité contrôlée pour quelques grandes compagnies qui laissent peu de place aux territoires d'accueil.

Les retombées économiques sont limitées, les dépenses publiques importantes, les compagnies imposent leurs conditions à des destinations interchangeables mises en concurrence. Des mécontentements et aux tensions se précisent autour d'une industrie de la croisière globalisée et peu soucieuse des préoccupations des petites îles, tant sur le plan économique que sur le plan environnemental. Le contexte de la Caraïbe n'est pas celui de la Méditerranée qui compte des sites majeurs incontournables et des acteurs en capacité de négocier avec les compagnies de croisière.

L'industrie de la croisière, organisée autour de quelques opérateurs majeurs, consolide sa stratégie de contrôle des consommateurs (les clients et leurs dépenses). Il s'agit notamment de faire face aux surcoûts liés aux mesures sanitaires (lorsque la capacité d'un bateau de croisière est divisée par deux...). Ce contrôle des consommations des croisiéristes se renforce au détriment des ports d'escale et des destinations. Les circuits sont reconfigurés et les compagnies investissent dans leurs propres îles privées, notamment dans les Bahamas.

21. TZQ0016

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Urban Renewal and Intelligent Urbanism as Effective Town Planning Tools in Sub-Saharan Africa with Specific Reference to Uganda, Rwanda, and South Africa (Thematic 3)

Sub-Saharan Africa's urban landscape is characterized by the heavy presence of slums in business districts. Public authorities do not always destroy these slums, relocate low-income households in the suburbs in order to upgrade slums into modern housing units in the inner city. Urban renewal refers to land redevelopment in areas of moderate to high density whereby an impoverished urban neighborhood exists. This essay argues that urban renewal and intelligent urbanism are efficient policies that foster access to decent housing and reduce the costs thereof for the urban proletariat. Otherwise stated, by destroying slums and opening up low-cost modern houses in new surroundings, such programmes equip policymakers with effective tools for aiding cities in the vital task of achieving social welfare. To substantiate my claims, the essay critically analyses urban renewal programmes, strategies and projects from randomly selected target countries where pro-urban renewal reforms led to the radical transformation of slums into upscale neighborhoods: South Africa (Alexandra township), Rwanda (Asbestos Removal project/Gasabo district, Mahoro cell/Muhima sector), and Uganda (Kingdom Kampala project, Transforming the Settlements of the Urban Poor). However, while implementing resettlement projects, the paper contends that African countries should meet their intended urban development and socio-economic targets by avoiding creating more poverty than welfare for programme beneficiaries.

22. TZQ003S

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Keys to Cities: Algorithmic augmentation and the resiliency of a cunning intelligence (Thematic 3)

This communication will unpack the following hypothesis: The keys to urban resilience are relative to a code and a cipher. When a city becomes an object of study, it tends to be fit to ideal, theoretical models. Whether they are based on mathematics or natural language, preconceptions are employed about the properties of parts and their relations. The reduction of the city to a model is perceived as necessary to render it manageable and understandable. Ideally, the model would not differ from the city: Every part would be present and the whole city could be part of an information system that could be updated in real time. With the latest generation of algorithms and remote sensors, the model could even learn to update itself and recommend courses of action. Unfortunately, the modelling paradigm described above can never be resilient. Any formalized system can either be consistent or complete, but it can never be both. This communication will present both the theory behind and a data pipeline for an alternative approach in which computational modelling serves to build algorithmic keys to decipher the city's complexity rather than to build representational models. The technics are already well established in the information sciences and the machine-learning algorithms, as well as many large datasets, are widely available online. Resiliency would be fostered through a form of intelligence that remains very 'human' while being partially externalized and augmented through computational technics. The talk will conclude with some challenges for educators, professionals and decision-makers.

23. TZQ003M

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Internationalization and Programmatic Diversity of Higher Education Institutions - A Case Study of University of Toronto with Organizational Theory (Thematic Others)

As the most vivacious agents of internationalization, international students and their expanded enrollment have inevitably impacted the institutional diversity of higher education system and diversification of institutions. The bulk of studies target organizational theory as the efficient explanatory framework for diversity of higher education institutions. This paper chooses two

evolutionary organizational theories – institutional positioning theory and resource dependency theory. Subtle diversity usually occurs at the level of individual higher education institutions and phenomenal diversification takes for a period of time. In order to figure out (a) what effects have been caused by the expansion enrollment of international students to institutional diversity in Canada; (b) what factors contribute to the diversification process, this paper opts for a most-likely case study – the University of Toronto. Following Robert Yin, this paper conducts empirical analyses and discourse analysis on the University of Toronto for the last decade – from 2010 to 2019. From the perspective of government, institution itself, and market, this paper has testified five hypotheses and concludes that (a) international students have significant correlation with programmatic diversification; (b) but, the effect of its expansion enrollment is mainly economical, which is reflected by the significant positive correlation between tuition fees and programs; (c) though governmental funding is not related to programmatic diversification, higher education institutions in Canada follow the administrative directive to innovate and diversify themselves; (e) apart from market, institutional positioning, and government, other factors like academic norms still dominate some faculties more than others.

24. TZQ004H

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Le tourisme de diaspora en Haïti (Thématique d'autres)

La diaspora constitue un acteur majeur au pays d'origine, surtout quand il s'agit de pays en développement. Avec un niveau d'expérience et d'éducation, généralement élevé, acquis aux pays d'accueil, les membres de la diaspora interviennent dans leur pays d'origine, dans des domaines très variés. En Haïti, leur participation se fait sentir dans le domaine des infrastructures, de la gouvernance locale, de l'économie dont le tourisme (Minto-Coy & Séraphin, 2016). La diaspora haïtienne, maintient une relation affective avec le pays. Ce qui explique que, malgré les difficultés que connait Haïti, elle alimente d'une manière non négligeable ses flux touristiques (Calmont & Mérat, 2015). Si cet attachement se confirme même dans les heures les plus sombres de l'histoire de la destination, comme pendant les grands troubles politiques et les catastrophes naturelles, cela est-il aussi vrai pour la période 2020/2021 avec la pandémie de Covid19 ? Dans cette intervention, nous voulons questionner l'importance du tourisme de diaspora en Haïti pendant la période de Covid19. Nous considérons dans un premier temps l'importance des flux. Et, dans un second temps, les enjeux et les conséquences seront analysés. La région Nord sera considérée comme le cadre d'analyse.

25. TZQ0018

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Bullet train in Bangladesh: Necessity or ambitious? (Thematic 3)

Bangladesh is a developing country which will introduce its first ever bullet train in the Dhaka-Chittagong route. This route can be considered as an alternative solution for the N1 highway, which is the most important highway of Bangladesh with a high accident rate. AC buses, non AC buses, Local Buses and Private vehicles are the most common types of vehicle that ply on this route. Travel by air is also available from Dhaka to Chittagong but the airfare is high. There exists a rail track that connects Dhaka to Chittagong but it is very time consuming with respect to other available moods. However, the bullet train is introduced for this route, which already has so many alternative modes of transport. The estimated cost of a bullet train is around 97000 crores, which is very costly, and commuters who want to use this mode need to pay a good amount of fare. To find the modal shift to the bullet train, a questionnaire survey is conducted. In this study, an MNL model is developed to compare the different available modes. Then a binary logistic regression analysis is performed to observe whether the commuters are willing to pay and use bullet train or not. Some socio-economic factors like gender, age, income, occupation, number of households; travel-related factors like travel cost, time, waiting time, travel frequency, trip purpose, and some other factors related to the condition of road, main obstacles of the trip are considered to develop these models.

26. TZO000P

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Investigating the effects of apartment living from a social and economic perspective on the lives of citizens, Case study: Kianpars neighborhood of Ahvaz (Thematic 6)

Apartment living is a new phenomenon in our social life and in the city of Ahvaz, despite the expansion of housing in apartments and residential complexes, it still seems that the custom and

culture of adaptation to living in a complex has been revived and the mechanisms of this lifestyle. It has not grown as it should. Due to the importance of the subject of this study, this study was conducted to evaluate the effects of high-rise construction and apartment living on the lives of citizens from social and economic dimensions in the Kianpars neighborhood of Ahvaz. The research method in this research is descriptive-analytical and field method using a questionnaire. After collecting the data, Excel and Spss software were used to analyze them. Data analysis was performed using one-sample t-test and regression analysis. Using a questionnaire, several questions in the form of internal and external factors, opportunities and threats are raised and collected among officials, then by setting the component by SWOT method, which is one of the managements and decision-making methods, and after identifying weaknesses And provide appropriate strengths, threats and opportunities, strategies and strategies. The results showed that the planners and implementers of the region could not find the factors that create opportunity or situation; Exploit or make the least use of the factors that cause the threat. Also, the most dissatisfaction of citizens was shown in the environmental dimension.

27. TZQ001N

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Urban Governance Theories in Developing Countries (Thematic 4)

Good governance is essential for the management of societies. Western governance theories have been developed to explain how nations organize themselves. While there are a lot of similarities in governance at the national or local level, differences ought to continue to be explored to understand the intricacies of urban management. Some efforts have been made by urbanists in theorizing at the local level, but mainly from a western perspective. Very little has been written or analyzed on governance in developing countries. Technology, globalization, conflict, and poverty are among the factors that affect local governments in developing nations. This is even more complex when looking at megacities. Can we begin to theorize on governance in developing cities? Are there best practices that cities can adopt today to ensure good governance and therefore come closer to development? This session will present possible urban governance theories for cities in developing countries.

28. TZQ003Z

Gonzalez, Andrew (ND)
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Nature-based solutions for cities: ecological networks for biodiversity and ecosystem services robust to climate and land-use change (Thematic 5)

Designing landscapes for ecological connectivity is a widespread strategy for achieving biodiversity conservation targets in the presence of climate change and land-use change. Natural infrastructure (NI) is an important asset for cities as they adapt to the growing impacts from climate change. NI supplies benefits to people in the form of ecosystem services. The current management challenge lies in designing networks of NI that maintain the benefits to people throughout a city, while minimizing the risks to NI from development. Following a request for research from the Québec government we have developed methods to identify and prioritize networks of NI to maintain biodiversity and ecosystem services in urban areas. I will present results of our approach applied to Montreal. Setting priorities for the management and design of NI networks based on connectivity is an efficient strategy for ensuring the benefits to people and nature in the long term. I will describe recent initiatives applying our methodology. Our approach is general and can be applied to any city in the world where NI is a priority for urban planning. We have extended our approach from the city to the ecoregion of the Saint Lawrence lowlands of Québec. Setting conservation priorities based on habitat quality and connectivity maintained a large proportion of the region's connectivity, despite anticipated habitat loss due to climate and land-use change. Accounting for connectivity strongly modifies conservation priorities. The methods are well suited to the design of ecological networks of NI in regions that include multiple large cities.

29. TZQ003X

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Gentrification in the Global South: New Insights from Chinese Studies (Thematic 6)

Following the introduction of the "gentrification" concept by Ruth Glass in 1964, Anglo-Saxon urban geographers have extensively studied the process and phenomenon of gentrification. In recent years, gentrification studies have moved beyond the Anglo-Saxon academic field. This paper aims to review the current stage of English-Language gentrification studies about China. Using the case of China, the paper argues that gentrification can be generalized to a universally applied paradigm. However, the challenges of studying gentrification in any country are to transfer and adapt the broad paradigm that could capture the complexities of local conditions. Scholars studying gentrification in China have recognized the local and national differences that are specific to China and have worked out to establish their own theories.

30. TZO001Z

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Spatial and temporal analysis and predication of the COVID-19 incidence pattern in the USA (Thematic 2)

Since the outbreak of COVID-19 in 2019, the world has been challenged in many dimensions by the coronavirus disease. The United States of America is one of the countries that have been heavily stricken. Around 23 million cases have been reported, and 3% of these cases has led to death. Although the pandemic has been infecting almost every corner of the USA, the spreading pattern over space and time remains unclear, which has significant meaning for early-warning and predication. This study tracks the county-level COVID-19 cases in the US from Jan 2020 to Jan 2021, and demonstrates the spatio-temporal spreading of the disease over the year. An epidemic time-series generalized linear model for areal disease counts has been implemented to understand and predict diffusion of the COVID-19 in the USA. The proposed models are used to compare against containment measures in each state, and evaluate if strict control measures implemented in some states have efficiently break contagions and limit the spread over time.

31. TZQ003C

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Social Indicators Research Spatiotemporal Transformation of Urban Social Landscape: A Case study of Wuhan, China (Thematic 3)

For decades, urbanization has been a major topic of discussion among academics and professionals when investigating issues such as social segregation, spatial inequality, and urban sustainability. However, little attention is given to the relationship between social characteristics and the ever-changing development of urban spaces. This paper seeks to investigate progressive changes in the social stratification structure in Wuhan's urban development zone (UDZ) while focusing on their associated spatial transformations, based on census data of Wuhan in 1990, 2000, and 2010. To obtain this objective, the study will answer three key questions: (1) What are the principal urban social dimensions? (2) What are the characteristics of the socio-spatial landscape transformations? and (3) What are the mechanisms of the socio-spatial transitions and their illustration on urban planning and management? We used factor analysis to extract social dimensions along with ArcMap to enhance spatial analysis while visualizing the distribution of social factor scores. The results show that since 1990, the local population (particularly aging population) has reflected a hollowing trend. Industrial relocation and population mobility became the main social dimensions in the 1990s and 2000s respectively. The characteristics of sociospatial transformations are from concentric rings as well as combinations of concentric rings, axial aggregations and multiple clusters. These transformations are formed by the push-pull force of the large area and the centripetal and centrifugal forces inside the city. We have concluded that top-down systems dominate socio-spatial transformations in the early stages, while public participatory management plays a more important role in the later stages, which will become inclusive governance.

32. TZQ004D

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Perspectives for cruise tourism in the western Caribbean: the situation of the island of Cozumel in the face of Covid-19 (Thematic Others)

The purpose of this paper is to determine the current scenario of cruiseship tourism, as well as the prospects for cruise ships in the Caribbean in light of the Covid-19 situation, particularly on the island of Cozumel. In the last decade, the island of Cozumel has experienced an accelerated increase in cruiseship arrivals and cruise passengers. Cozumel registered in 2019 a total of 1,369 arrivals and for the April-December 2020 period a total of 0 arrivals. After almost a year without

being able to sail cruiseships in all tourist destinations, companies such as Royal Caribbean and Carnival have announced their return to business, under the guidelines of the "Framework for Conditional Sailing Order". In the case of Mexico, there are plans to continue with the tourist activity, and in the case of Cozumel, the predominant economic activity is cruiseship tourism. To unveil the situation of Cozumel, an analysis of the cruise routes with stopover in Cozumel registered in the year 2019 was carried out, a comparison of the routes offered by Royal Caribbean and Carnival according to the stopovers and days of navigation was carried out, by means of the geographic information systems.

In Spanish

Perspectivas de los cruceros turísticos en el Caribe-oeste: situación de isla de Cozumel ante la Covid-19

El presente trabajo tiene como objetivo determinar cuál es el escenario actual del turismo de cruceros, así como la prospectiva de los cruceros en el Caribe ante la situación del Covid-19, en particular de la isla de Cozumel. En la última década la isla de Cozumel tuvo un incremento acelerado en arribo de cruceros y cruceristas. Cozumel registró en 2019 un total de 1,369 arribos y para el periodo de abril-diciembre de 2020 un total de 0 arribos. A casi un año sin poder navegar los cruceros en todos los destinos turísticos, empresas como Royal Caribbean y Carnival han anunciado su regreso, bajo los lineamientos del "Marco para la orden de navegación condicional". En el caso de México se tiene contemplado continuar con la actividad turística, y para el caso de Cozumel la actividad económica preponderante es el turismo de cruceros. Para develar la situación de Cozumel se realizó un análisis de las rutas de cruceros con escala en Cozumel registradas en el año 2019, se llevó a cabo una comparativa de las rutas ofertadas por Royal Caribbean y Carnival de acuerdo a las escalas y los días de navegación, mediante los sistemas de información geográfica.

33. TZQ0041

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Manufacturing urbanism: improvising the urban-industrial nexus through Chinese economic zones in Africa (Thematic 7)

Amid growing excitement about Chinese investment stimulating a manufacturing boom across Africa, including through industrial zones, there has been little attention to what this implies for

cities. We examine how Chinese zones in Africa are influencing the relationship between industrialization and urbanization: a neglected theme in the literature on China's role in Africa, despite its centrality in China's own experience. Through research in Ethiopia and Uganda, we argue that Chinese zones are key emerging sites for the making of an urban-industrial nexus. However, these new urban dynamics are not driven by the government officials that dominate the 'policy mobilities' literature, nor by the State-Owned Enterprises usually associated with Chinese activity overseas. Rather, they are emerging through the activities of inexperienced private Chinese actors who do not even operate in the worlds of urban policy. Faced with government histories and capacities that vastly differ from China's, efforts to directly replicate Chinese experience is virtually impossible; yet the tentative relationships between Chinese firms, local territory and government authorities are gradually moulding new improvised urbanisms in to shape. The article draws on research conducted between November 2017 and June 2019 in China, Ethiopia and Uganda. In China we interviewed policymakers and international agencies concerned with investment in African countries. In Ethiopia and Uganda, we interviewed Chinese investors and contractors, national and local government representatives, Chinese government agency representatives and international donors. Overall, this amounts to over 80 semi-structured interviews.

34. TZQ003P

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COVID19 and Tourism: A rapid assessment of Morocco (Thematic 1) (Oral presentation in French)

Tourism is a growing industry and its impact on the economic and social development of a country is considerable. For some countries, tourism is often associated with favourable conditions for infectious diseases, such as COVID19, with development constraints. Indeed, measures in this direction have become a priority for relevant progress in impoverished tourism sectors where the economic contribution of tourism has a high potential. Like the rest of the world, Morocco is facing an unprecedented challenge in managing the current COVID19 health crisis. The strong decisions and anticipatory measures taken by the public authorities are courageous for the health safety of Moroccan citizens. In this respect, all the players/actors in the tourism sector have complied unreservedly with these rules. The rapid assessment approach consists of analysing the situation and needs in the sensitive phase immediately during and after the crisis to determine the type of assistance needed for a rapid rehabilitation strategy. This paper assesses the socio-economic implications of the eradication of COVID19 on Morocco as an

affected tourist destination by focusing on public policies. Nevertheless, it empirically examines whether social distancing policies have directly affected tourism activities.

35. TZQ003N

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Préparation de la Ville de Yaoundé à la gestion des urgences pour une ville plus résiliente (Thématique 4)

Yaoundé fait face à des inondations récurrentes qui détruisent des biens et des logements et polluent les nappes. Plusieurs interventions visant à contenir ce risque à terme ont été réalisées avec le concours des partenaires au développement à travers le bétonnage d'une vingtaine de kilomètres de cours d'eau et la réalisation d'une étude sur la prévention des inondations. En complément de ces actions et en partenariat avec l'Association des Maires Francophones, la Communauté Urbaine de Yaoundé a mis en œuvre un projet de préparation aux situations d'urgence pour une ville plus résiliente. Le Projet a, de septembre 2019 à octobre 2020, réalisé un diagnostic partagé des risques sur le territoire, mis en place une plateforme de coordination entre acteurs en charge de la gestion des urgences, élaboré un plan d'actions chiffré. A la survenance du COVID 19, la plateforme de gestion des urgences a mis en œuvre un plan d'actions spécifique comportant le renforcement de la sensibilisation avec la mobilisation de 300 volontaires, la pose de 20 cubitenaires de 5000l pour le lavage des mains dans les lieux publics, la désinfection des marchés et gares routières. Il se poursuit actuellement par l'élaboration d'un guide à l'intention d'autres villes intéressées par la démarche et la formalisation d'un plan spécifique de gestion des risques et d'intervention d'urgence en cas de catastrophe.

36. TZQ003L

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Hu, Sheng

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Characteristics of Air Pollutants in Main Urban Area of Jinan City (Thematic 4)

The study analyzed the temporal (seasonal, monthly and daily) and spatial (annual and seasonal) changes of six air pollutants (PM2.5, PM10, SO2, NO2, CO and O3) based on the real-time ambient air monitoring data from seven state-controlled monitoring sites in 2019, and measured the correlations. The results show that: (1) The seasonal changes, PM2.5, PM10, CO, SO2 and NO2 showed a positive "U" curve, while O3 showed an inverted "U" curve, and the concentrations of the pollutants tended to be flat in spring and autumn. (2) Monthly changes, PM2.5, PM10, CO, SO2 and NO2 showed upward fluctuating parabolic features, while O3 showed downward fluctuating parabolic features; (3) Daily changes, PM2.5, PM10, NO2, SO2 and CO showed a cyclical fluctuating trend of "double peaks and troughs", while O3 showed a cyclical fluctuating trend of "single peaks and troughs". (4) The spatial distribution, the western and northern part of the main urban area is seriously polluted; (5) The annual average concentrations of PM2.5 and PM10 were highly positively correlated, while PM2.5, PM10 and CO, NO2, SO2 were positively correlated to varying degrees, SO2 was significantly positively correlated with NO2 and CO, While O3 was significantly negatively correlated with NO2 and CO. The contribution of stationary and mobile sources of particulate matter varies over time and the correlation between pollutant concentrations varies by season. The study proposes environmental protection strategies that can provide reference for air pollution control measures and exposure risk avoidance in the main urban areas.

37. TZQ0019

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Nigeria's Sub-National Vulnerability to the COVID-19 Virus (Thematic 1)

Since the first confirmed case of Corona Virus (COVID-19) in Nigeria on 27 February 2020, the spread of the virus across the country has had severe consequences on the country's economic development with businesses closing down, workplace absenteeism, and a general reduction in productivity. The spread of the virus is partly attributed to the country's economic recession on 21 November 2020. However, the spread of the virus and its impact varies from one sub-national entity to the other; Lagos and the Federal Capital Territory (FCT) having the highest total cases till-date with 22,562 and 6,385 respectively, while the total highest case of death till-date is recorded in Lagos and Edo, with 220 and 112 deaths recorded respectively. Thus, utilizing the Africa COVID-19 Community Vulnerability Index (CCVI) for Nigeria Sub-nationals created by Surgo Foundation, this study seeks to identify which of the sub-national entities in Nigeria are most vulnerable to COVID-19 and why. The CCVI has seven themes, namely; Socio-economic vulnerability, Population density, Access to housing and transportation, Epidemiological factors, Health system factors, Fragility, and Age that will serve as predictors of Total COVID-19 Cases,

Deaths, and Recovered cases (27 February 2020 – 27 January 2021). Spatial Regression in R Statistics will be used to determine relationships between variables.

38. TZQ001X

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Rwanda Urban Governance- Case of Kigali as Capital city vs Secondary Cities (Thematic 5)

Increasing physical and soft infrastructure, both in quality and quantity, is a pre-requisite for enhancing economic growth and sustainable urban development. Rwanda has a well-developed urban development strategy with clearly aligned policies and defined urban sector actors at national and provincial level. The country planned to double its current urbanization rate within the next 5 years through its national strategy for Transformation (2017-2024). The new country's Vision 2050 includes even more ambitious targets of a 52.7% urbanisation rate by 2035 and 70% by 2050. Kigali, the capital, continues to grow to be an attractive city in addition to the six other specialized and branded secondary and satellite cities under implementation now. The COVID-19 pandemic is having an adverse impact on Rwanda's economy in general, despite a sizeable policy response in urban areas. Output in 2020 was projected to contract by 2%, compared to an 8% increase expected pre-pandemic. Rwanda urban climate action and green growth is a multilevel, multi-actor, and cross-sectoral governance challenge. To mitigate climate change and build urban resilience, Rwanda should tackle the main sources of GHG emissions attributable to cities include (i) Energy use in buildings, including electricity consumption (ii) Urban form, (iii) Urban transport and (iv) Urban employment. Will the country strategically be able to achieve all these goals? This paper will highlight new strategies and global synergies.

39. TZQ000N

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Impact de la pollution environnementale sur la qualité des eaux et sur la biodiversité phytoplanctonique de quelques étangs de la ville de Bertoua (Est-Cameroun) (Thématique 3)

Une étude réalisée dans cinq étangs (Mokolo, Mopa, Cote d'azur, Ngaikada et Kpokolota) de la ville Bertoua avec deux stations de prélèvement (surface et profondeur) et des données collectées mensuellement de mars 2016 à avril 2017 a permis d'apprécier la dynamique spatiotemporelle du phytoplancton en relation avec l'eutrophisation. Les variables abiotiques montrent des étangs anthropisés avec des températures élevées (> 23°C), une faible transparence (< 70 cm) malgré la

faible profondeur (< 170 cm), une oxygénation moyenne (> 50 %), des teneurs élevées en éléments nutritifs et pigments photosynthétiques. Ces caractéristiques classe les étangs comme hypereutrophes avec l'azote comme facteur limitant de l'eutrophisation. Les variables biologiques montrent que l'étang Cote d'azur a obtenu 159 espèces, Mopa (147 espèces), Ngaikada (143 espèces), Mokolo (138 espèces) et Kpokolota (136 espèces). On note un vieillissement des hydrosystèmes avec des peuplements diversifiés, mais pas en équilibre à cause de la dominance d'un petit groupe d'espèces saprophiles et polluotolérants constitués des taxa : Azpeitia africana, Stauroneis Phoenicenteron, Eresmophaera gigas, Microcystis aeruginosa et Aphanocapsa incerta. La gestion de l'eutrophisation devrait s'appesantir sur le contrôle du flux des composés azotés afin de permettre une restauration des étangs, une reprise des activités aquacoles et une gestion anticipative des blooms phytoplanctoniques responsables de l'eutrophisation.

40. TZQ0023

Kemajou, Armel (ND)

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Stratégies individuelles d'accès au logement dans les périphéries de Lomé et Yaoundé (Thématique 6)

Le périurbain est un angle mort des études sur l'urbain en Afrique subsaharienne. Il est peu considéré par les chercheurs, mais aussi par les professionnels de la ville et les bailleurs de fonds. C'est pourtant là que se fabrique la ville de demain, là où les enjeux de durabilité et de résilience sont les plus vifs au vu des dynamiques démographiques et spatiales en cours. Cette présentation propose d'explorer les dynamiques de production des périphéries urbaines dans deux grandes villes, Yaoundé (Cameroun) et Lomé (Togo), au travers de l'analyse des stratégies individuelles d'accès à la propriété foncière et résidentielle des habitants. L'analyse prend appui sur la construction de six figures du résident en quête de logement, des idéaux-types qui se différentient par la nature de leurs aspirations, le niveau de préparation et les modalités de mise en œuvre de leurs projets d'accès au logement. Une centaine d'entretiens compréhensifs avec des chefs de ménages constitue la base empirique de ce travail. Les facteurs déterminant la variabilité de ces figures sur le territoire, et la manière dont elles produisent l'espace urbain à l'intersection de leurs trajectoires propres seront ensuite discutés. Sur cette base, la présentation postule que l'urbanisation fulgurante dans ces villes est un tissage d'urbanismes individuels à grande vitesse, guidé par une intelligence collective qu'il faut mettre au cœur de toute politique de planification de villes inclusives et résilientes.

41. TZQ003K

Kilina, Elena (V)

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Place and Play in Urbanity of China and Brazil (Thematic 3)

This research builds on the deep conversation about the relationship between place and people. The focus is on the anthropology of place and the introduction of state of play through the concept of urban space and visuals. The work sits within the BRICS framework (China-Brazil), as described through Sao Paulo and Shanghai case studies. A variety of urban practices and complex spatial relationships across Latin American and Asian cities may urge us to rethink these notions with the emergence of alternative functions and the re-imagination of urban space as shaped by global modernity. Within local, regional, national and global contexts, space is not an empty element, but is complicated mixture of social and public relations and meanings. As cases studies demonstrate, public places in Shanghai and Sao Paulo are the reflection of qualitative indicators of cities and social health in terms of interaction between place and users. The intended juxtaposition between the Sao Paulo site - Parque Minhocão - and that in Shanghai - Redtown - was to identify some key factors regarding why one space "works" for play and one does not. Public places are repositories of memory, physical evidence of a city's evolution, and sites of people's pasts, as citizens and private individuals. Public space needs to be readable as public in order to succeed. Through the visual anthropology and affordances approach (Tim Ingold) this work intends to show that ambiguity can lead to a richer experience for the user or uncertainty for the user. How interactions as "urban play" can reflect affordances as a potential of the space?

42. TZQ0029

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UIZ
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Université Ibn Zohr
Agadir, Morocco

Impact of COVID-19 on the Air Quality in Morocco: A Study of Major Cities of the Country (Thematic 4)

The 2019 pandemic of the COVID-19 has negatively impacted the substantial threat to public health and major global economic losses. Morocco, like other countries, has set the lockdown for intense measurements to preserve people's lives and to fight against this dramatic situation. However, the positive impacts of this pandemic are on the environmental side were some indicators (air quality, landcover, water turbidity, ...) have started to gradually come out of lockdown and to improve the environment quality. The aim of this study is to provide an assessment of the air quality changes during the period of lockdown and unlocking across six major cities in Morocco (Tangier, Fez, Rabat, Casablanca, Marrakech, and Agadir). We have evaluated the pollutant during March-July 2020 and compared it with the same period in 2019. As result, a significant reduction in the quantity of NO2 and CO and has been observed. The improvement of the air quality can primarily be justified by the restrictions on construction and demolition activities, the manufacturing activities reduced, and the restrictions on the movement of vehicles. The lockdown initiatives substantially lowered NO2 and CO. In addition, the aerosols did not alter significantly since they are often linked to the natural occurrence of dust.

43. TZQ0027

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L'impact des formes urbaines sur le confort thermique dans les espaces extérieurs : Cas de Marrakech (Thématique 3)

L'urbanisation est une transformation anthropique majeure de l'occupation du sol. Les éléments bâtis du tissu urbain modifient fortement la quantité de rayonnement solaire réfléchi ou absorbé, la distribution de l'écoulement du vent et les bilans hydriques et énergétiques à la surface terrestre. Ceci entraîne la création d'un climat urbain caractérisé principalement par l'ilot de chaleur urbain qui désigne l'augmentation de la température dans le centre de la ville par rapport à son entourage. Ce phénomène affecte le confort et la santé humaine et ses impacts seront amplifiés par le changement climatique. L'ilot de chaleur urbaine est étroitement lié à la géométrie des constructions et leurs espacements, leurs matériaux et couleurs et la présence des espaces verts. Dans cette communication on focalise sur l'impact des formes urbaines sur ce phénomène à travers la simulation et l'analyse du confort thermique dans les espaces extérieurs de quartiers de morphologies différentes dans la ville de Marrakech. Une ville semi-aride au Maroc, caractérisée par son été chaud et sec et ses jardins historiques qui autrefois occupaient les deux tiers de la ville et qui sont aujourd'hui en déclin à cause de l'étalement urbain.

44. TZQ002B

Laïla, Amraoui (P) Professeur Laachir, Asia Université IBN Zohr

Urbanisation et Climat: Quels rôles de l'arbre dans la Modulation du climat urbain (Thématique 3)

Les villes constituent les lieux par excellence, de développements économiques, social et culturel. Toutes les formes de ce développement évoluent selon un rythme inédit depuis la fin du 20ème siècle, en induisant des transformations radicales et irréversibles dans les milieux urbains. Cette expansion galopante de l'urbanisation contribue pleinement au développement des industries et des services, tout en favorisant une amélioration du niveau et de la qualité de vie des populations. Néanmoins, sur le plan environnemental, et notamment climatique, les impacts de l'accélération du phénomène urbain se font ressentir de manière négative. Le milieu urbain de par l'artificialisation qu'il fait subir à l'espace est à l'origine de processus radiatifs, thermiques, dynamiques et hydriques qui modifient les échanges thermodynamiques entre la surface et l'atmosphère. Ainsi, Il résulte de cette artificialisation la création d'un microclimat très typique des milieux urbanisés; le climat urbain. Il sera question dans cette communication d'expliquer les relations complexes qu'entretient la ville avec le climat et vice-versa. Il sera question aussi d'exposer le concept scientifique de l'association ADAR Souss Massa (ADoptez un ARbre), qui est une jeune association environnementale non lucrative, qui vise à l'amélioration du climat urbain par le biais du verdissement des villes.

45. TZO001M

 $Li, Amy\ Huangqing\ (P)$

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Re-promoting Sustainable Underground Urbanization for Developed and Developing Countries in Our Modern History (Thematic 3)

During recent decades of overwhelming exploration of underground resources (groundwater, geothermal energy, minerals) and underground spaces (tunnels, caverns, buildings), there has been a lack of in-deep investigation on international agenda to look at the degree of political awareness of sustainable underground development. International organizations advocating and debating the use of underground space and its innovative contribution to urban futures, have been sustained through intensive interaction through conferences and working groups. These active moves involved public and private actors from developed and developing countries, with a rapidly increasing interest to explore the various and viable usage of this natural resource – subsurface space. From 2014 to present, as an international consensus built up by a long-term advocating efforts addressed through a series of World Urban Forums, United Nations Human Settlements Program (UN-HABITAT) recognized the necessity of promoting best practices of the sustainable use of underground space for resilient urban development in modern era and for implementing the 17 Sustainable Development Goals (SDGs) of UN 2030 Agenda. This article

will present a first retrospect on the modern history of research initiation and international promotional agenda for sustainable underground urbanization.

46. TZQ0022

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Integrated ocean management and coastal urban transformation towards resilience and SDGs (Thematic 3)

Human needs for food, energy, transportation and recreation has increased user conflicts in coastal areas that caused issues like coastal urbanization, pollution and loss of coastal habitats. There is a pressing need for better human activities management in coastal areas to protect healthy ocean environment and promote sustainable development for a better future. Managing coastal cities and urbanization from increasing human activities in coastal areas is a critical issue in balancing global ocean conservation and blue economy. Integrated Ocean management (IOM) was presented as an effective approach to manage expansion of human footprints in coastal areas, coordinating land and sea spatial planning to achieve coastal urban regional resilience and provide guidance for the transformation. Therefore, we presented IOM as a holistic, ecosystem-based and knowledge-based approach to improve management of coastal cities, promoting Sustainable Development Goals (SDGs) in next decade.

47. TZQ001K

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Human Mobility and Urban Crime Displacement in COVID19-Normal: A Case Study in the City of Ottawa (Thematic 5)

COVID-19 and the associated measures have changed our routine activities and the functionality of our built environment and has impacted the mobility of urban residents. The implementation of the COVID-19 related measures can also bring the displacement of the urban crime, for example, residential property crime may reduce with the increase of the natural surveillance due to the shift in working in an office to working-from-home, resulting in more at-home time, meanwhile, Anti-Asian hate crime may increase due to the more "suitable" targets and motivated offenders caused by racism and xenophobia under the circumstance of COVID-19 crisis. To

examine the crime displacement problem, it is also necessary to understand human mobility during the length of the pandemic. The traditional census data cannot show the dynamic mobility of the people. In this situation, geo-tagged social media data can be employed in the quantification of human mobility as a proxy for the crime. This paper examines the spatial-temporal change of the crime patterns during the COVID-19 pandemic in the city of Ottawa by adopting the spatial analysis and geotagged social media data to answer the following questions: Q1: How COVID-19 and the pandemic related measures have been displacing crime in the City of Ottawa? Q2: Can ambient population mobility be used as a measurement for crime pattern change during the COVID-19 pandemic? Q3: Can security cameras still be successful in crime-solving and prevention?

48. TZQ004Q

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Spatio-temporal urban social landscape transformation in pre-new-urbanization era of **Tianjin, China** (Thematic 3)

China's economic reforms of 1978, which led to the country's transition from a centrally planned to a market-oriented economy, ushered in a phase of accelerated urbanization. Influenced by the economic transition and taking advantage of its privileged geographic and historic position, Tianjin has seen dramatic changes in its social landscape during the last three decades. Given this context, this study aims at understanding the different urban socio-spatial patterns of Tianjin and their mechanisms in three distinctive economic contexts by adapting both statistical and spatial approaches. Due to increasing population mobility caused by the economic reforms, the urban social landscape of Tianjin has become increasingly multifaceted, characterized by a "one axis, two nuclei" urban morphology. The rise of the Binhai New Area (TBNA) in the southeast is creating a dual-core urban social structure in Tianjin, with its traditional Urban Core located in the center of the city. In terms of the Urban Core's expansion and population movements southeast toward the TBNA, an asymmetric suburbanization process is evident in Tianjin. Meanwhile, an additional population shift toward Beijing in the northwest is significant during 2000–2010, illustrating the changing relationship between these two neighboring municipalities. By integrating itself with Beijing, Tianjin has not only recovered from under Beijing's shadow during the centrally planned economy period, but is also benefitting from Beijing in order to flourish.

49. TZQ0044

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Rapid urbanization due to displacement – the case of Burkina Faso (Thematic 3)

Burkina Faso's urbanization process has been slow so far, with 26% of the country's population living in urban areas. Since 2015, the ongoing crisis in the Sahel region and continuing conflict in Burkina's North and neighboring countries have led to an unprecedented displacement crisis, with 1.12 million people being internally displaced. As most of them are seeking refuge in small or intermediate cities, many cities have tripled or doubled their population within the last two years, and even though local communities have shown a tremendous level of solidarity, communities, families and local authorities struggle to provide food, services and adequate housing in an environment, where water, firewood and arable land are already scarce. The protracted situation today threatens social cohesion and the level of vulnerability is very high, specifically for women, youth and children. COVID-19 and its negative impacts on the regional economy, has exasperated the situation and without access to water, sanitation or adequate housing, the pandemic has added additional layer of challenges. Conflict-induced displacement is not a new phenomenon, but in today's urbanizing world the resilience of cities must be improved to be prepared for (rapid) urban population growth and impacts of health or climatechange induced risks. Well-planned urban population growth can have positive impacts on a country's social, economic and environmental development, but cross-sectoral, multi-level governance, inclusive and area-based approaches are needed for improving the lives of people in vulnerable situations.

50. TZQ0045

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Integrated approaches for tackling rapid urban growth in Burkina Faso's cities (Thematic 4)

Burkina Faso is a land locked country in West Africa and among the world's least developed. Even though the level of urbanization is still low, many cities, including the capital, Ouagadougou, have been growing rapidly. Over the last 50 years, the cities have increased its population from 50 000 people to more than 3 million people today, only counting those living within the city's administrative boundaries. Greater Ouagadougou metropolitan area has multiplied its spatial footprint, from around 10 km2 to more than 500 km2. While many parts of the city center have been well-planned, the city's peri-urban municipalities, have increased their density to an extend that today, in some parts, there are more than 60 000 inhabitants in a area of 600 ha. As most settlement is spontaneous and unplanned, local authorities have not managed to provide services: water needs to be collected at waterpoints, there are no adequate access roads (e.g. for ambulances), very few schools and social services including health centers. As no streets nor pedestrian ways are paved, and many houses have been built in flood-prone areas and using adobe as main construction material, there is a high risk that floods and torrential rains will lead to severe damage of houses, goods and people. With no formal land tenure system, people in vulnerable situations also risk to be forcibly evicted. Integrated urban and territorial planning, area-based approaches and inclusive process are now needed for advancing sustainable urbanization.

51. TZQ002M

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Prévention des conflits par la planification participative d'occupation du sol en RDC : Processus de matérialisation (informatisation), leçons et implications des communautés en crise (Thématique d'autres)

Avec l'appui de l'ONU-Habitat, un travail sur la Gouvernance des terres en milieu rurale s'inscrivant dans le cadre de l'élaboration d'un Plan Communautaire d'Occupation Foncière a été initié depuis juin 2016 dans les Groupements Pimbo et Pitso en Secteur des Walendu Djatsi, Territoire de Djugu en Province de l'Ituri à l'Est de la République Démocratique du Congo. La méthode géo-spatiale pour la prise des images et des cartes, l'exégèse pour l'analyse des textes juridiques et l'enquête par sondage sur terrain pour les données socioéconomiques ont été utilisées. Ces méthodes ont été appuyées par les techniques de télédétection et de photo interprétation pour les données à caractère géographique. L'analyse documentaire et l'interview pour les données juridiques et l'enquête ménage pour les données socioéconomiques. Le Résultat est la mise en place d'un système d'information foncière (SIF) fonctionnel et des mécanismes de résolution pacifique de conflits fonciers afin de renforcer les droits d'accès des acteurs ruraux

(hommes, femmes, jeunes et peuples autochtones) à la terre et de promouvoir la gestion rationnelle et durable des ressources naturelles dans une coordination plus efficace. Face à une communauté Djatsi très liée à la terre ne connaissant pas la propriété individuelle proprement dite. La planification participative d'occupation des sols et le processus de l'informatisation des terres ont révélés des défis, ils nous ont appris des leçons et nous ont démontré les limites de la technologie devant une communauté dont le respect des coutumes est une arme identitaire.

52. TZQ003F

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Local Traditional Knowledge in its Urban Context: A Case Study of Bai Ethnic Minority in Dali, China (Thematic 3)

This research studies the role of Local Traditional Knowledge (LTK) during the cultural preservation of an ethnic Chinese city, Dali, from the perspective of Bai minorities. With ethnic minorities as the central focus, mixed research methods are employed to ensure the reliability and validity of residents' perceptions. The findings provide empirical evidence to the cultural process that has been reshaping Dali's urban landscape. In particular, this study captures the dynamics and complexities of integrating LTK during rapid urbanization. By delineating the urban-rural difference, it develops a better understanding of how urbanization influences the transformation of cultural traditions and the built environment.

53. TZQ000V

Medase, Stephen Kehinde (ND)

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City Heterogeneity, Innovation and Employment Growth: Evidence from sub-Saharan Africa (Thematic 3)

This paper examines how distinct urban location choices interact with the link between innovation and employment growth. We consider three kinds of cities in the analysis, namely agglomerated, business and capital cities. These three types of cities exhibit individual benefits that could support firm innovation and growth. Firms' closeness to customers, competitors, pools of skilled personnel, shared resources and administrative seats is perceived as a competitive

advantage that top managers desire to leverage to promote performance. The primary hypothesis is that employment growth is affected differently by the location choices of innovative firms. We utilise an instrumental variable treatment model (direct-2sls) to account for potential endogeneity and treating innovation and city variables, respectively. Our results show that agglomeration, being in capital and business cities, does matter in predicting employment growth for innovative firms. Interestingly, our results show all innovation types to predict employment, which differs from a few innovation studies, especially regarding process innovation. The paper's important takeaway is that firms can attain growth and enhance performance in the three types of urban locations with the right mix of resources and managerial effectiveness. Firms are likely to benefit from economies of scale, pools of high-quality personnel, and less impact on governmental procedures that impede business performance.

54. TZQ000T

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Housing on the Horizon: Low-rise, High-density Housing Strategies for Luanda's Expanding Periphery (Thematic 6)

Angola is one of the fastest urbanizing countries in Africa. Rapid urbanization, coupled with severe housing shortages, has produced sprawling informal settlements throughout the nation's capital, Luanda. The bulk of this housing is self-built at very low densities and limited to one or two stories; the vast majority of residents lack title to the land they occupy. Addressing this situation involves both the redevelopment of much of Luanda's existing urban fabric and new strategies for the build-out of the city's peri-urban landscapes. This involves finding ways to build at higher densities, which is difficult to do without access to capital. Good design is also key to the success of high-density development -- at the scale of the building, site, and larger public realm. Strategic architectural interventions, coupled with investment in infrastructure, will produce a more sustainable urban morphology and strengthen housing markets as communities evolve in harmony with the public realm. This thesis explores strategies and prototypes for sustainable and affordable low-rise, high-density housing on Luanda's periphery. The design portion of the project explores a model neighborhood for a micro-financed, not-for-profit development that offers residents the opportunity to own their units. It is intended as an alternative both to bottom-up, informal settlements and top-down, high-rise, governmentsponsored housing.

55. TZQ000R

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Politique de relogement et la réhabilitation des quartiers insalubres au Maroc, le cas du grand Agadir : Réflexion sur les méthodes, les stratégies et les impacts (Thématique 6)

L'urbanisation non réglementaire et insalubre, constitue un élément déterminant du fonctionnement des villes du Maroc. Le dénombrement des quartiers d'habitat clandestin et insalubre réalisé par le Département de l'Habitat en 2014, a révélé l'existence de 800 quartiers clandestins et insalubre, abritant une population avoisinant 3,6 millions d'habitants. Le présent travail de recherche vise à étudier la politique de relogement et la réhabilitation des quartiers insalubres au Maroc, et plus précisément ces dernières années dans le grand Agadir, en analysant d'une part les méthodes, les stratégies et les outils des pouvoirs publics qui couvrent une large palette d'interventions (éradication, relogement, restructuration et recasement...) en appliquant différents programmes (Programme Villes Sans Bidonvilles (VSB), Programme de la Mise à niveau urbaine et intervention dans les quartiers sous équipés « MANU »...). Et d'autre part l'impact des méthodes, des pratiques et la façon dont la politique de relogement et la réhabilitation a été abordée, les moyens mobilisés (financiers, fonciers et institutionnels) pour réussir ces programmes, le rôle de l'accompagnement social et la participation des communautés dans la conception et l'exécution des opérations de relogement et de réhabilitation, l'intégration du développement social et des activités génératrices de revenus avec l'amélioration physique des conditions de logement et des solutions adaptées pour les plus vulnérables.

56. TZO0026

Mohamed, Haqoun (P)

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Urban environment projects: the qualifications and opportunities of the city of Fez to achieve sustainability (Thematic 3)

The city of Fez is considered among the Moroccan cities of economic importance, due to the major projects it knows on several economic, social and environmental levels. However, the city has recently been involved in creating some projects of a sustainable nature. We will work to identify the various projects in the city, and monitor the qualifications and opportunities that the city has to become within sustainable cities. The city has witnessed several transformations that covered multiple areas such as housing production, industry and urban transport, as well as the increase in population density in the city's neighborhoods, which undoubtedly contributed to transformations in the urban environment of the city. Environmental problems became a clear threat to the city, prompting the authorities responsible for the future of the city to establish a group of projects to preserve the aesthetics of the city and raise the quality of the urban environment.

57. TZQ001S

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Auto-construction ou logements abordables au Cameroun : financement, bonnes pratiques et leçons apprises (Thematic 6)

L'auto-construction est une stratégie mue par les habitants moins nantis des pays en voie de développement en général et les Camerounais pauvres en particulier pour bâtir leurs villes et leurs villages. Il s'agit d'une riposte populaire aux faillites de l'État, incapable d'offrir des logements décents à ses citoyens. Elle touche 90% des populations urbaines camerounais. Plusieurs sources assurent le financement de l'auto-construction au Cameroun. Face à l'incapacité du CFC, bras financier du tritype de la mise en œuvre de la politique nationale de l'habitat, les auto-constructeurs ont recours à plusieurs sources : banques, tontines, coopérative d'habitat, aides familiales, prêts informels, prêts usuraires, etc. Les matériaux locaux et exotiques utilisés dans les constructions sont multiples, évolutives et varient d'une région administrative à l'autre. A l'analyse de l'auto-construction en milieu urbain au Cameroun, plusieurs leçons se dégagent de l'ingéniosité des citadins dans la recherche de solutions idoines à leur problème de logement.

58. TZQ0049

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Virtual demand and neoliberalism: transformational planning for the post-neoliberal and - COVID Era (Thematic 2-Panle A)

Neoliberal planning suggests that demand should have a physical manifestation and be transported to the "mortar and brick" entities to get that satisfied. Although the "physical" form of demand has been rapidly transforming into a "virtual" mode, the conventional physical perception of demand still persists. Due to lack of such perception, the actors are at constant struggle to transform the business into a blend of physical and virtual or totally virtual where showroom syndrome could be the catalytic-bridge between the physical and virtual modes. In the context of COVID-19, the hastened surging demand for virtual i.e. e-commerce further reinforces the need for transformative stores. With the added impacts of COVID, the stores are seen to be at the loss of business, bankruptcy, and total shut down leading to mass alterations in the contemporary land use of the city. With the advancement of ICT, the effects of the pandemic has also equally reflected in the mounting demand for virtual office spaces. E-commerce and virtual office suggests an opposite facet of what the neoliberal credo does where demand could

be transported to any virtually invisible stores or office spaces to repurpose their functions. Based on the emerging transformations, it is critical to capture the new 'convenience' emanated from virtual business or office, which has challenged the contemporary 'convenience' of physical shopping and office. This has further challenged the neoliberal doctrines and ideology.

59. TZQ0015

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Appraising Covid-19 pandemic and the impact of climate change on urban residents: Implications for sustainable development of cities in Lagos State, Nigeria (Thematic 2)

The paper focuses on impacts of rapid rate of urbanization in Nigeria without adequate preparation for its negative consequences which resulted in a situation where cities have become home to population concentration and centers of economic growth; notwithstanding, the propensity for adaptation and mitigation of stressors. It posits that the intricate ways of urbanization resulted in the creation of blighted high-density areas without adequate infrastructural facilities inhabited by the vulnerable low income which face devastating health and economic hardship arising from the critical effect of stressors. It avers that given the potential of innovative techniques by which desirable cities of the future are created, properly managed post-stressor and distraught urban areas bode well for resilient cities. Exploring the dynamics of stressors in cities by investigating its effects on residents and establishing the relationship with housing quality rationalizes its implication for post-stressor sustainable development and creation of resilient cities. It utilizes liveability and revitalization, as conceptual framework. Using a combination of mixed methods for data collection and analysis of 350 questionnaires for stressor's effects measurement and coping mechanism of residents, recommends environmental sustainability and quality of urban governance that proffers resilient cities creation as responses to challenges of rapidly urbanizing world.

60. TZQ004K

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The Cayman Islands' policy response to COVID-19: a critical assessment (Thematic 1)

Caribbean countries are exposed to a combination of natural disaster risks (i.e. hurricanes and earthquakes) and man-made disruptions (i.e. COVID-19 and reputational crises involving AML and taxation). With both fronts coinciding in 2020, a humanitarian crisis could have taken place

across the Caribbean. The Cayman Islands proved to be a safe haven. This paper is a critical assessment of how the Cayman Islands have managed the COVID-19 response. The Cayman Islands (Cayman) exemplifies a very successful COVID-19 response, with no significant local transmission since July 2020, 499 cases mostly from returning travellers while in quarantine and only 2 deaths. Cayman has a population of ca. 65,800 (Fall 2020), a very high GDP per capita (91,052 USD, 2019) and has one of the most comprehensive public financial management legal frameworks in the Caribbean. Cayman's COVID-19 response has been extremely expensive, including full border closures since 15 March 2020, a 3-month continuous local lockdown, mandatory 2-week compulsory quarantine for all arrivals, PPE and monthly stipends for Caymanian tourism workers. The conference paper is structured in three main sections, comprising an outline on the Cayman Islands as a Caribbean country and a leading global financial offshore centre, an account on the COVID-19 policy response and a critical assessment focusing on local economic policies, border management and the vaccination campaign.

61. TZQ001B

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Implementation of A Mobile Digital Tool for Collecting Spatial Information for Better Land Management: The Example of the City of Bertoua (East-Cameroon) (Thematic 5)

The issue of local development is closely linked to that of land and estate law, as planning involves land management. Moreover, it has not escaped the Cameroonian legislator that the Decentralized Territorial Collectivities (DTC) must have land for the realisation of their various planning and development projects. This is the raison why, the laws relating to Regions and Municipalities transfer to them, competences in the field of urban planning, territorial development and town planning. In addition, these texts define the general framework for the appropriation or use of land belonging to the private estate of the State, the public estate and the national estate. However, the problem is that almost all of Cameroon's DTCs do not have a Geographical Information System (GIS) on their territory. These areas are therefore poorly or not very well known, which is a hindrance to the control of local land resources. The current world (21st Century) is resolutely turned towards digital technology, which offers powerful and adequate tools for the management of spatially referenced information. This article is part of the e-governance issue in Africa, it is a contribution to the improvement of land management of local communities in Cameroon, based on a test carried out in the city of Bertoua. Its main

objective is to present the methodological approach used for the design and operationalization of a mobile digital tool for the characterisation of urban land for better decision-making

62. TZQ000D

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Location Choices of Micro Creative Enterprises in China: Evidence from Two Creative Clusters in Shanghai (Thematic 7)

The creative industry's location choice has drawn scholarly and policy attentions. Creative enterprises tend to cluster in particular places, such as disused industrial areas, old towns and districts, sites in close proximity to universities. Location behavior of micro creative enterprise (MCE), a subsector of the creative industry, has received comparatively less attention in the literature, while their location choice has been impacted by more complicated factors. Using two local micro creative clusters M50 and the Bridge 8 in Shanghai, this research aims to understand the motivations of MCE location choice and various location determinants at the neighborhood level. The findings uncover how the market, local authorities, and the creative class influence the development of local micro creative clusters. The study discusses how two different development patterns have reshaped urban forms and how perceived attributes of places attract MCEs. MCEs' location choice has been determined by economic factors such as industrial agglomeration, low rent cost, and geographical proximity to the labor market of creative talents. Institutional and creative factors are also considered by MCEs. The results reveal the differentiation between subsectors of micro creative industries in their reliance on location determinants. Location choice of MCEs also depends on industrial characteristics, enterprise development stage, and behavioural factors.

63. TZQ003H

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Mixed-Income Housing Development Framework for South Africa using Delphi Method - A Case Study of Cornubia, Ethekwini and Cosmo City, Johannesburg (Thematic 6)

This research is to raise important questions and stimulate additional debate about a housing strategies and typologies known as mixed income housing development. South Africa over the years has witnessed a number of residential segregation / fragmentation on the basis of both income and ethnicity being the aftermaths of Apartheid government. Recent housing research studies has uncovered the reasons why the poor households tend to be confined to the most deprived neighborhoods and settlements with the poor infrastructures, services delivery, high crime rates and lowest levels of both public and private amenities / investment. This study supports the planning argument that isolation and poverty combine to produce other disadvantages for neighborhood residents leading to a host of negative outcomes. The term 'mixed-income housing development' as used in this research is becoming an increasingly interesting area of investigation, but there remains certain gaps and many open questions about how best to approach the implementation and delivery, what are the areas that it can improve the quality of life and prospects of low-income families? Despite the importance and popularity of the concept of mixed-income housing in national housing policy circles of most developing economies, very few studies have attempted to use Delphi approach to evaluate the conditions under which programs have succeeded or failed and the implication for future programs. This calls for an investigation. The goal of the research is to respond to this and add to existing body of knowledge about mixed-income housing development using the case study Cosmo City, Johannesburg and Cornubia, Ethekwini. The conclusion and findings of this research shows that the housing backlog can be tackled by this.

64. TZQ0014

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Youth as a Core of Community-led COVID-19 Response in Informal Settings: Lessons Learned and Way Forward (Case study on the Youth of Mathare, Nairobi, Kenya) (Thematic 2)

Young people in informal settlements have been hit hard by the COVID-19 pandemic. Given that youth comprise the core population of slums characterised by high population density and lack of adequate infrastructure, young people in informal settings are particularly vulnerable to

COVID-19 transmission. The restrictions on movement and social life have adversely impacted their physical and mental health. Oftentimes youth have been targeted by police and other law enforcement officials. While being disproportionately affected, youth globally have been playing a significant role in community-led containment of COVID-19. Over the past 10 months, UN-Habitat has been collaborating with youth in Kibera and Mathare, Nairobi's biggest slums comprising over a million residents, putting them at the frontline of COVID-19 emergency response. Youth of Mathare managed to build up a team and used their creativity to design programmes sensitive to their local community contexts. By now, this team has grown to include 34 youth-led groups across East Africa and Latin America, forming a full-fledged COVID-19 Emergency Youth-led Coalition. Numerous interventions made by youth have contributed to the effective prevention of COVID-19 and helped increase the resilience of the entire community. In this presentation, we would like to showcase a study of youth-led COVID-19 response in Mathare's informal settlement and celebrate their efforts in protecting their community from the public health crisis.

65. TZQ0047

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Gaining prominence while addressing uncertainties: role of community-based organisations during the covid-19 pandemic in Khulna city, Bangladesh (Thematic 2-Panle A)

During the COVID-19 pandemic, community-based organisations played a significant role in addressing the uncertainties of everyday life of the urban poor living in informal settlements in Bangladesh. Different media reports highlighted that informal settlements dwellers were not severely affected in terms of health hazards caused by the pandemic. What can explain this surprising phenomenon? This paper is an attempt to showcase the role of community-based organisations in addressing the uncertainties of the COVID-19 situation taking Khulna city in Bangladesh as a case in point. The paper addresses the question: 'How do community-based organisations in urban informal settlements deal with uncertainties particularly in a pandemic situation?' This paper is explorative and based on qualitative data from in-depth interview with the dwellers living in the Railway slum of Khulna city. In the case study context, the community-based organisation referred to as Community Development Committee (CDC) was formed under an aided project of UNDP and UKAiD called "Urban Partnership for Poverty Reduction

Programme" (UPPRP) in 2012. During the pandemic situation, the CDC was involved in awareness building, tracing any affected persons, giving medical support, promoting hygienic practices and supporting the livelihood of the dwellers. In the absence of any direct government intervention during the pandemic situation apart from the relief work, activities of this particular organisation were the only organised efforts in the urban informal settlement. This organisation worked with local government and different NGOs in addressing the vulnerabilities due to the pandemic situation. In prior studies, no explicit role of this organisation was identified in wider urban development activities.

66. TZQ002H

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Modeling local warming at enhanced resolution using satellite imageries (Thematic 3)

Warming, i.e., increments of temperature, is evident at the global, regional, and local level. However, understanding the dynamics of local warming at high spatial resolution remains challenging. In fact, it is very common to see extremely variable land cover/land use within built-up environments that create micro-climatic conditions. To address this issue, our overall goal was to generate a local warming map for the period 1961–2010 at 15 m spatial resolution over the southern part of the Canadian province of Alberta. Our proposed methods consisted of three distinct steps. These were the: (i) construction of high spatial resolution enhanced vegetation index (EVI) and normalized difference vegetation index (NDVI) maps; (ii) conversion of air temperature (Ta) normal (i.e., 30 years average) at higher spatial resolution using vegetation indices (VI); and (iii) generation of a local warming map at 15m spatial resolution. In order to execute this study, we employed MODIS-driven air temperature data, EVI and NDVI data, and Landsat-driven vegetation indices. The study uncovered that around 58% (up to positive 1 °C) of areas in the considered study region were experiencing increased temperature; whereas only about 4% of areas underwent a cooling trend (more than negative 0.25 °C). The remaining 38% did not exhibit significant change in temperature.

67. TZQ0017

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African Cities under Cyclones, Floods, Landslide and Lethal Diseases: A threat to the Humankind caused by the Natural Disasters and COVID 19 (Thematic 3)

African cities have struggled against negative impacts of natural disasters that have created more challenges to poor city dwellers at accessing enough resources to food, decent housing and safe water, as the sparse household income is spent in process of rebuilding houses or trying to reconstruct roads or deadlocks because of the destruction caused by the cyclones, floods and landslides. Most of African cities share common post-independence challenges in relation to these aspects. With the outbreak of Covid 19 in 2020, African cities apparently were immune with exception to African cities from some countries such as South Africa and Egypt. While the entire world was struggling against faster widespread of infections, Africans were enjoying as 'untouchable' one. To explain that two main assumptions were advanced as follows: 1) Weather conditions characterized by high temperatures and 2) African leaders imposed at the early-stage drastic measures that included lockdown or State of Emergency that limited the movement of people. However, 2021 has demonstrated that none continent is safer or immune from this lethal disease. Conjoining urban rapid growth, both natural disasters and Covid pose a meaningful threat to progress towards achieving SDG 11. This communication aims at discussing how Africans are battling towards meeting SDG 11 in the midst of both lethal disease and the natural disasters.

68. TZQ003W

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Vaccine Distribution in a Pandemic: Socio-economic Inequities in Neighbourhood-Level Vaccine Delivery (Thematic 1)

In 2010, the global health community declared the Decade of Vaccines, a 2020 vision of a world where all individuals are free from vaccine-preventable diseases but this calls for further commitment. As COVID-19 vaccines are being authorized and approved all around the world, the scale of distribution remains unprecedented. The motion for vaccines is growing faster than ever and in order to prevent and mitigate the risk of new viruses from spreading and harshly targeting health resources, distribution processes must take on an equitable lens. Neighborhood-level socio-economic inequities persist in vaccine distribution systems from lack of translation to lack of digital inclusion. Equitable allocation of the COVID-19 vaccine is needed to mitigate health disparities and prioritize marginalized groups in vaccine distribution. There exists a range of historic and ongoing barriers to vaccination distribution that aggravates urban inequity. Within

urban regions, socio-economically privileged neighborhoods had the lowest COVID-19 rates. Using the case study of the urban center of Toronto, Canada, this paper will answer the following questions: Q1: Are there similarities between urban inequities found in the vaccine distribution of past pandemics and the distribution of the COVID-19 vaccines? Q2: How has the globalized era created an increased divide of vaccine inequities for vulnerable and disadvantaged communities?

Q3: How can equity frameworks be shaped for vaccine distribution? Further, this presentation will propose certain recommendations including reducing access-related challenges and culturally contextual communications to strengthen health management of cities for equitable allocation of vaccines.

69. TZQ003Y

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Gender and Climate Change Adaptation: Perspectives from Philippine cities (Thematic 3)

Global climate change is one of the most pressing challenges of our time. Both developed and developing countries are/will be experiencing the impacts of climate change, but the more significant negative implications are for vulnerable and marginalized communities located in developing countries, especially women. Due to socialized roles, women and men experience, adapt, and cope with climate change in different ways; i.e., the impacts of climate change are gendered. Concomitantly, adaptation and responses to climate change vary depending on geographical context. The gendered impact of and responses to climate change in urban areas is understudied in the literature. My paper will discuss research and practical contributions to policy approaches in order to enhance our understanding of the gendered nature of climate change adaptation in Philippine cities. I will present gendered experiences of Philippine women in the context of climate change adaptation and examine the processes involved at multiple and intersecting scales (individual, household, community, local/urban and global levels).

70. TZQ004B

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Blockchain for Urban Development – Guidance for City Leaders (Thematic 5)

Rapid urbanization and technological advancements are among the megatrends reshaping the world. Today, more than half of the world's population live in urban areas, compared to roughly 30% in 1950. By 2050, estimates suggest that two-thirds of the world's population will reside in urban areas. These projections have significant sustainability implications as urban areas concentrate much of the world's economic, social, and cultural activities. On the other hand, rapid improvements in transistor capacities, connectivity and new technologies are accelerating digitization and making frontier technologies smarter and more efficient. These technological breakthroughs are changing how society lives, does business and governs itself. In addition, they are becoming increasingly critical in addressing long-standing issues related to urban development such as limited tenure security, livelihood generation activities, and access to basic services. Blockchain is one of the relatively new and rapidly developing technologies that could assist in accelerating the achievement of the 2030 Sustainable Development Goals. It is seen as providing an innovative solution to numerous challenges from land registration to energy management. This paper explores the potential application of blockchain in addressing challenges related to sustainable urbanization as well as the risks and challenges associated with its implementation. The paper targets urban stakeholders including city leaders, managers and policymakers who may be interested in adopting blockchain technologies in the provision of services. The main objective of the paper is critically discussing the potential and concerns of blockchain through an urban looking glass. It aims to expand the discussion on the potential applications of blockchain to include sustainable urban development. A key argument of this paper is that blockchain itself, like many technologies, is not a panacea for sustainability challenges in urban areas and must be adopted whilst integrating human-centered approaches, robust business processes, and considering appropriate capacity, local culture, infrastructure, and governance systems.

71. TZQ0048

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Exploring spatial dynamic of human mobility change due to COVID19: A spatial development perspective (Thematic 2-Panle A)

The aim of this contribution is to explore on spatial dynamics on the COVID19 induced human mobility changes at sub-national scale. An exploratory approach has been adopted for data analysis after harmonizing and linking spatial and non-spatial information. The correlations analysis was conducted by using multiple open data offers on spatial development related

variables such as land use and settlement structures. The influential factors of human mobility were investigated by exploring on the association with the relevant environmental variables, lockdown characteristics and facts on covid19 statics. As a practical case, this study focused on Germany, where human mobility information has been collected from global data offers and further processed for spatial linking. The spatial development related variables were collected from a national level research data infrastructure which offers qualified geospatial data services in use of official and statistical sources. The COVID facts and lockdown data has been collected from available European research data. The result of the analysis reflects on the key discussion on transformational challenges and needs at the arena of spatial planning and resilient design of habitat for the new future.

72. TZQ003D

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Peri-Urban Land Expropriation and its consequences in Bahir Dar City, Ethiopia (Thematic 7)

Land expropriation is a tool for accessing land for development projects of cities. It is a very crucial tool for developing countries cities like Bahir Dar for supplying sufficient land for projects and residential services. Even though it is a tool for accessing land, it's consequences on accessing livelihood strategies of households and land utilization of the surrounding farming individuals was crucial. The intent of the study was to assess implementation practices of land expropriation in Bahir Dar City, Ethiopia and exploring its consequences on livelihood outcomes and land utilization practices of partially expropriated households using mixed sequential explanatory research approach. Both quantitative and qualitative data were collected using survey questionnaires, interview and group discussion with expropriated households, municipal officials and experts. The result shows that expropriation in the study area was not implemented in a participatory, transparent and consensuses based with stakeholders. Due to this, households were dissatisfied on the compensation paid and its ability for create positive livelihood outcomes for expropriated households. To maximize their benefits obtained from their landholding, households motivated to shift from subsistence to commercial production, because the rate for commercial crops is much higher than subsistence crops during expropriation, others shift their land use to non-farm purposes by contracting their plot for housing construction. The study proposed independent either public or private valuation enterprise and appeal system; and there should have an alternative land supply mechanism by individual/private landholders.

73. TZO0012

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Research on the construction and Prospect of rural landscape and rural tourism under the background of Hainan free trade port construction (Thematic Others)

On June 1, 2020, the overall plan for the construction of Hainan free trade port was officially released. In the plan, it is clearly proposed to build Hainan International Design island. In this context, the construction of Hainan rural landscape and the development of Hainan rural tourism industry are also moving towards the goal of internationalization. How to promote the development of rural industry and improve the quality of life and happiness index of villagers through the construction of rural landscape and rural tourism in Hainan is the main problem we are concerned about. Although there are some achievements, we still need to make timely planning for the construction of rural landscape and rural tourism industry in Hainan based on the attitude of seeking truth from facts, the concept of scientific development and the idea of sustainable development Overall planning and reasonable arrangement.

74. TZQ0020

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Social Barriers the Filipino Community Faces in Côte-des-Neiges, Montreal (Thematic 3)

This research project assessed how linguistic barriers impact the social integration of the Filipino population in Côte-des-Neiges, Montreal. Additionally, to understand which services and amenities can potentially increase their level of integration. With this, I provided clear recommendations to the municipal government and community organizers. This research utilized an in-depth literature review to provide background knowledge of the community, migration patterns, urban school models, and socio-demographic information. Online surveys were conducted that addressed demographic, social barriers, and linguistic abilities. It was concluded that the Filipino community was satisfied with their community, however, they were not fully integrated because of linguistic and cultural differences. This correlated with literature that suggested that communities in Montreal are multicultural and can co-exist alongside watch other but rarely mix. The Filipino was economically dissatisfied despite their high levels of education, mainly based on their inability to speak French at an advanced level, which hindered upward mobility.

75. TZO001W

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Stratégies pour des métropoles d'Afrique subsahariennes plus résilientes : Une approche basée sur le développement durable des infrastructures urbaines (Thématique 3)

Les villes d'Afrique subsaharienne sont confrontées à la récurrence des catastrophes naturelles et technologiques elles-mêmes consécutives aux effets conjugués de l'inefficience des politiques urbaines, du changement climatique, des crises sanitaires et de la raréfaction des ressources. La résilience urbaine s'attèle à la recherche des solutions tant efficaces qu'efficients. Elle vise à préparer le système urbain à faire face des dysfonctionnements déterministes ou stochastiques. Dans le cadre de la mise en œuvre d'une nouvelle méthode de développement durable des infrastructures urbaines, une approche systémique visant à évaluer et gérer les risques et la résilience des réseaux techniques urbains (RTU) est développée. L'application du cadre méthodologique élaboré aux métropoles camerounaises est présentée. Il s'agit des réseaux suivants : voirie et transport, eau potable, énergie, éclairage public, assainissement, déchets et télécommunications. L'approche systémique de la résilience adoptée comporte quatre étapes fondamentales mettant en étroite corrélation les propriétés fondamentales des réseaux (connexité, connectivité, isotropie, homogénéité) à celles du territoire urbain concerné (cohérence, permanence, organisation): Élaboration d'une approche adaptée au contexte africain pour colliger les informations sur les infrastructures vitales ; Établissement d'une cartographie appropriée, des interdépendances entre les infrastructures vitales.

76. TZQ002G

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Solid Waste Management: Perspectives for Cities in Africa (Thematic 1)

Solid waste management poses a serious challenge to most cities in Africa due to rapid and uncontrolled urbanization. Failure to take proper action in the management of solid waste has resulted in severe consequences that range from economic, environmental, social, and health. This paper highlights the current waste management in the city of Yaounde and analyzes the waste generation, collection, transportation, treatment and disposal. In view of this, solid waste treatment is contracted to a private company called Hysacam, working for the Yaounde city

council. Its activities, however, cover only 60% as most urban populations live in areas dominated by informal settlements without access to collection and transportation of waste. From surveys and interviews, the increasing volumes of solid waste dumped along roads and streams releases toxic discharge leading to pollution, increases greenhouse gas emissions, proliferated vectors for illnesses and recurrent flooding. The analysis of waste shows pollutant figures higher than acceptable environmental standards in Cameroon such as: biological oxygen demand (850 vs. 50 mg/l), chemical oxygen demand (1980 vs. 200 mg/l), total dissolved solids (231 vs. 40 mg/l), phosphates (46.2 vs. 10mg/l). It is essential to sensitize and educate the population on the need for sustainable management of solid waste. Stakeholders of this domain should put in place measures to solve the problem of poor waste management services, and to involve the population in urban management and planning. The government should develop innovative measures to reduce and recycle waste based on a circular economy approach.

77. TZQ0042

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Spatial Patterns and Dynamics in the Face of the Pandemic: Towards Better Design, Density and Functionality of Human Settlements (thematic 4)

As the COVID-19 pandemic continues to wreak havoc on cities and communities, the world is learning new ways to cope and mitigate the likelihood and possible effects of future pandemics. It is not only a necessary time, but also an opportune one to re-think how regions, cities, neighbourhoods and buildings are planned, designed, built and maintained. This paper aims to study city and regional systems, their urban form, their distribution and access to resources and livelihood opportunities that make communities sustainable and resilient. Narratives around the spread of the pandemic is challenging characteristics representative of urban settlements such as density, concentration of people, and interconnectedness as accelerators. However, there is little evidence to relate these with higher transmission or mortality rates. Rather, lack of access to services and overcrowded conditions make certain populations or regions more vulnerable reaffirming the spatial inequities manifested in the form of slums, poor mobility, and unsustainable growth that exacerbate the problem and limit the ability to implement response and recovery measures. The paper explores the impact across the regional, city, neighbourhood and building scales to help inform medium and long-term actions. The paper assesses the enablers

and inhibitors for cities to become resilient, formulating forward-looking actions to help reposition urban areas to be more resilient to future shocks and stresses.

78. TZQ004R

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The Probable Effects of COVID-19 on Urban Planning, Built Environment and Real Estate and Implications for the Post-COVID Period: An Assessment in Turkey Perspective (Thematic 2- Panel A)

Overcoming the post-COVID-19 challenges through robust urban planning, built environment and real estate management will be a highly needed task for any country. After the 2020s, it has been observed that comprehensive changes have started to made in spatial planning, building regulations, and urban management. Legal formations have started to outline in short and medium periods and have strongly modified the contents of urban land management, planning, construction, and reveal new expectations. Nowadays, the fundamental actors of urban land use and planning are querying themselves and the legislators started to realise the future definition and direction of spatial planning will change after the COVID-19 pandemic in Turkey. Within the scope of this study, interviews and surveys to be applied to planners, real estate developers, engineers, architects, urban managers and other stakeholders. Analysis of the effects of the COVID-19 pandemic on the planning and built environment production in cities and the post-COVID period activities such as spatial planning, urban land use, architectural planning, construction and real estate development studies will be evaluated based on the results of the literature research, analysis of interview and survey results and therefore the resilience-oriented focus will be determined simultaneously. In summary, within the framework of urban growth and sustainability goals, planning approaches and possible changes in real estate development policies after the COVID-19 pandemic will be outlined and sustainability, resilience and change in space production and the use of land and building stocks will be evaluated altogether. As

Turkey is experiencing irreversible outcomes of the pandemic and government is trying to overcome such challenges by deploying a number of strategic and operational measures. Therefore, this study focuses on existing urban planning and built environment challenges in Turkey, factors to pursue urban sustainability and new and innovative strategies that will be needed to overcome the post-COVID-19 challenges.

79. TZQ002F

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Perspectives historiques des crises : vers un perpétuel retour au local ? Un exemple résilient d'agriculture urbaine au travers du jardin collectif de la résidence universitaire en Polynésie Française (Thématique 1)

Tandis que la pandémie de coronavirus perdure, la crise semble nouvelle et d'une ampleur jamais égalée. Sa gestion - caractérisée par l'arrêt brutal des activités de production et d'acheminement, la fermeture des frontières nationales, l'interruption du trafic aérien et le confinement de milliards de personnes - est effectivement une première dans l'histoire de l'humanité. Les questionnements eschatologiques qui surgissent actuellement reviennent de façon cyclique. De nos jours, aux catastrophes climatiques et environnementales, se surimpose une angoisse sanitaire ; les discours sur la nécessité de revenir à des modes de consommation et de production plus traditionnels se multiplient, des politiques comme des chercheurs en appelant à un retour au local. Là encore, ces propositions évoquent les réflexions passées. De fait, la crise sanitaire interroge la capacité des systèmes de production, notamment agricoles et industriels, à faire face à des catastrophes. Les mesures de protection mises en place à l'échelon étatique incitent à un retour au local. Dans une perspective résiliente, nous développerons un exemple d'agriculture urbaine, au travers du jardin collectif mis en place par les étudiants de la résidence universitaire de Polynésie française. Cette parcelle de nature en ville apparaît comme une réponse à l'augmentation des prix constatée depuis le début de la crise sanitaire. Après quelques mois, les étudiants, isolés et éloignés de leurs familles, constatent en outre que le travail de la terre crée du lien social dans la résidence. Il améliore leur cadre de vie et leur offre une occupation vécue comme apaisante, que certains relient à leur identité polynésienne, en invoquant la pratique du fa'a'apu (potager tahitien).

80. TZQ004L

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L'île de Saint-Barthélemy (Petites Antilles) face à la crise sanitaire de la Covid (Thématique d'autres)

Saint-Barthélemy est une petite île du nord de l'archipel des Petites Antilles (d'une superficie de 23 km2 pour une population d'environ 10 000 personnes). Toute l'économie de l'île repose sur le tourisme qui s'est progressivement imposé depuis les années 1980. À la veille de la crise sanitaire, en 2019, Saint-Barthélemy a accueilli environ 120 000 touristes de séjour, 126 000 croisiéristes et 36 000 plaisanciers. L'offre d'hébergement repose sur des hôtels haut de gamme et de luxe (25 établissements) et quelques 800 locations de villas, pour un total plus de 5500 lits touristiques. Les enjeux économiques autour du tourisme sont essentiels pour cette île française qui a le statut de collectivité d'outre-mer ; elle est associée à l'Union européenne (au titre de Pays et territoire d'outre-mer [PTOM]) mais n'en fait plus partie depuis2012. Les seuls revenus de la taxe de séjour sont de l'ordre de7 millions d'euros annuellement. La crise sanitaire arrive dans un contexte économique difficile, car l'île de Saint-Barthélemy a été très durement touchée par le cyclone Irma en septembre 2017. Les infrastructures touristiques ont été reconstruites, d'importants investissements réalisés ; tous les acteurs attendaient impatience la relance de l'activité. Les résultats de l'année 2019 et ceux des premiers mois de l'année 2020 étaient excellents et brutalement toute l'activité s'est stoppée. Il y eut un petit espoir à la fin de l'année 2020 avec une forte fréquentation, notamment des clientèles nord-américaines. Puis une nouvelle interruption brutale en mars 2021. Nous proposons d'analyser la situation touristique de l'île, d'une crise cyclonique à une crise sanitaire. C'est une période difficile, mais la capacité de résilience de Saint-Barthélemy est riche d'enseignements.

81. TZQ001D

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Présentation du Projet de Rénovation Urbaine de Bamako (Thématique 4)

Mali est un vaste pays continental de 1 241 238 km2 à vocation agro-pastorale avec une population estimée à 20 933 072 habitants en 2020, soit une densité moyenne de 16,79 habitants/km2, le taux de croissance moyen étant de 3,36%/an. Selon les estimations, Bamako la capitale, accueille sur une superficie de près de 24 000 ha, une population d'environ 2 420 001habitants soit 12,5% de la population totale du pays. Elle a une densité moyenne de 101,76 hab/ha. La ville s'est majoritairement développée ces dernières années sur la rive droite du Niger sur une superficie de 12'000 hectares, coupée du centre-ville de Bamako par le fleuve Niger (rive gauche, estimée à 7'000 hectares). Le centre-ville, sur la rive gauche, est le siège des grandes activités. Les principaux flux de déplacements s'effectuent en échange entre les quartiers périphériques et le centre-ville. Cette évolution urbaine a favorisé l'accroissement de la demande sur les prestations des services publics en général, et sur les transports collectifs urbains en particulier, ainsi qu'à une très forte sollicitation de l'espace public urbain, notamment par la circulation automobile, la circulation des deux roues motorisées et le stationnement. Ainsi pour faire face à ce phénomène, le projet de rénovation urbaine. Le projet a pour objectif d'améliorer le cadre de vie de la population de la ville de Bamako et environs, maitriser l'étalement urbain, de densifié le centre-ville et de réduire l'étalement urbain.

82. TZQ001T

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Métropolisation de la région de Dakar : entre enjeux urbanistiques et défis d'une urbanisation durable (Thématique 3)

La métropolisation de la capitale sénégalaise a induit des dynamiques fortes de recomposition du territoire urbain et de son hinterland. Les nouvelles stratégies de développement urbain portées par l'État se sont traduites par la mise en place d'un programme national de Villes Nouvelles, avec une expérience pilote menée à Diamniadio, combinée à une politique de réalisation de grands équipements structurants déclinés dans un montage PPP, faisant largement appel aux financements internationaux. Conçues comme réponse au dysfonctionnements liés à l'urbanisation accélérée de Dakar, ces nouvelles politiques ont engendré des effets de transformation du territoire porteuses de fragmentations nouvelles et de ruptures compromettantes pour l'équilibre harmonieux de l'espace métropolitain dakarois. Il s'agit pour cette communication d'analyser les effets accélérateurs de la dynamique de métropolisation de Dakar, de mettre en exergue les dysfonctionnements spatio-environnementaux, socio-économiques et urbanistiques qu'il engendre, corrélés à la densité, à la diversité et à la mobilité.

83. TZQ000Y

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De-hierarchization of the spheres of influence of urban development in Africa during the Covid-19 Global Pandemic, the example of Yaounde in Cameroon (Thematic 3)

Urban production in Africa has generally taken place under three types of influences. Firstly, external (global vision), then national (ideological vision of different political regimes) and finally from the bottom (popular vision). If the first influence has conformed urban development in Africa with imported models, the second is a process of appropriation of urban territory as a framework for the expression of exercised power. As for the third, it is the popular manifestation of the "refusal" to comply with planning policies and the rise of "individual liberalism" (urban disorder).

This paper aims to demonstrate how bottom up local techniques to control the corona virus (popular behaviours) has reconfigured the spheres of influence during the Covid-19 health crisis in Yaounde, a capital city in Central Africa. Through a multidisciplinary approach (sociohistory), the theoretical/ideological conception of the Yaounde urban project as a capital city since independence is presented in order to understand the role of each sphere of influence in the health crisis. Then, it will be necessary to analyze the social behaviours adopted by city dwellers to cope with the Corona virus pandemic and the process by which the popular has kept in suspense the control techniques enacted by both WHO and the Cameroonian government.

84. TZQ000L

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Special Economic Zones in South Africa's Eastern Cape Province: A Pathway to Industrialization, Urban Transformation and Development? (Thematic 7)

The success of the Chinese first SEZs around the 1980s (that is, Shenzhen, Zhuhai, Shantou and Xiamen) largely motivated the development of SEZs in different forms in various African countries. South Africa has set up several SEZs in the provinces of Eastern Cape, Free State, KwaZulu-Natal, Limpopo, Mpumalanga, North West, and Western Cape. Whilst South Africa's SEZs have been designed for specifically targeted economic and industrial activities meant to attract FDI, boost production, spur international competitiveness, generate revenue and create jobs; it is the actual delivery of set industrialization, urban transformation and development targets and objectives that has to be empirically assessed. Using the case study of SEZs in the Eastern Cape Province, namely Coega (in Port Elizabeth) and East London Industrial Development Zone (in East London); this paper therefore seeks to empirically evaluate the extent to which SEZs in South Africa are performing against set goals and targets in industrialization, urbanization and development. Methodologically, data is gathered through

interviews with key informants in the two respective SEZs. The concepts of Special Economic Zones, industrialization and urbanization provide an analytical framework of analysis. Findings are key in reflecting on the structure, successes, challenges, and complexities of actualizing SEZs in Africa for industrialization, urban transformation and development.

85. TZQ002D

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Healthy City: Governance and Epidemic Prevention (Thematic 1)

The sudden epidemic disaster that paralyzed the city also highlighted some shortcomings of urban development, construction and governance. From public health to new public health to "healthy cities", modern urban planning has gradually evolved from a single focus on public health to a focus on social, economic and cultural aspects of cities as the urban movement continues to advance. Short-circuiting and prevention are the key aspects of urban health and safety. To enhance the "immunity" of cities, we need a two-pronged approach of a comprehensive protection system in normal times and an effective prevention and control system in epidemic periods, a "protective net" to guard the health and safety of cities, a sound public health and emergency management system for cities, a system to deal with unexpected epidemics, and a rule of law system that can effectively respond to epidemics. We should improve the public health and emergency management system of the city, establish a legal system to deal with unexpected epidemics, and form a "legal network" that can effectively deal with epidemics.

86. TZQ0038

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Executive Agency and State Effectiveness: Comparing Sino-African Railways in Kenya and Ethiopia (Thematic Others)

Why do infrastructure projects that are similar in nature develop along starkly different trajectories? This question sheds light on the varying state capacity of developing countries. Divergent from structural explanations that stress external agency and institutional explanations that emphasize bureaucratic capacity, I propose a political championship theory to explain the variance in states capacity of infrastructure delivery. I argue that when a project is highly salient to leaders' survival, leaders commit to the project; leaders with strong authority build an implementation coalition, leading to higher effectiveness. I trace the process of the Standard

Gauge Railway in Kenya and Addis-Djibouti Railway in Ethiopia, relying on over 180 interviews. This research highlights the individual agency within structural and institutional constraints, a previously understudied area in state capacity.

87. TZQ001H

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Preserving the Heartbeat of Trench Town: A Vision for Urban Renewal (Thematic 3)

Urbanization has increased the demand for housing in major cities across the Caribbean. Jamaica is one of several islands dealing with the overwhelming difficulty of providing and improving the living conditions of individuals living in informal settlements. In the heart of Jamaica's capital, Kingston, the inner-city Trench Town neighbourhood is plagued with crime, historic political corruption and urban decay -- posing challenges for sustainable urban development. Through an in-depth analysis of the historical, political, cultural and architectural context of Trench Town, this thesis proposes a series of interventions to promote a higher standard of living. Increasing the supply and quality of housing, as well as accommodating informal economic activity can be a catalyst for community change. This redevelopment proposal for Trench Town will provide residents with the advantages of homeownership, reduce levels of crime, and stimulate employment opportunities and expand tourism.

88. TZQ0037

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Digital City in Response to COVID-19: A Comparative Study on Health Code between Wuhan and Daegu (Thematic 2)

This paper aims to explore how the health code helps to prevent health crises in the pandemic of COVID-19. In China, health codes are used to identify the user's health status through different electronic credentials. After China, many countries also developed their own health codes, among which South Korea's health code is the most similar. However, the effectiveness of the two countries' epidemic control is not the same. And this comparative study will show the different pandemic prevention effects of Chinese and Korean health codes, taking Wuhan city in China and Daegu city in Korea as examples, and construct an improved digital response to the

pandemic by means of health codes. This paper will firstly make a literature review to study the consequence of COVID-19, the global measures in this fight and the development of health code. Then, a comparative study based on SEIR model will be carried out to test the effect of Chinese health code in city of Wuhan and Korean health code in city of Daegu during 2020. Finally, the paper will conclude a better digital solution for modern city health management. In the post-epidemic era, this research will contribute to the smart city which promotes managers to apply health codes to urban management in a more efficient way.

89. TZQ001V

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Tourist mobility in the Burkina-Ghana border areas faced with the dual security threat and Covid- 19 (Thematic 5)

For almost five years now, Burkina Faso has been overcome by the insecurity that has already been rampant in the Sahelian zone. Although the border localities with Mali are the most targeted by the attacks, the effects are nonetheless felt throughout the country as far as the border with Ghana. In Tiébélé, a town on the border with Ghana, the local economy, which has developed around agriculture and tourism, is facing a security challenge. In trying to curb this crisis, the area is again hit by the health crisis related to Covid 19. By combining a methodology that combines spatial and mobility analysis to understand the phenomenon and resilience strategies, the results reveal that tourist attendance has led to a decline in tourist infrastructure that can no longer be rehabilitated due to a lack of resources. However, in order to compensate for the cross-border mobility of populations whose villages are crossed by the border line, agreements between the security forces and populations are advocated to facilitate travel.

90. TZQ000K

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China's integrated rural-urban development: a development mode outside the planetary urbanization paradigm? (Thematic 7)

In 2007, the United Nations reported for the first time that more than half of the world's population lives in cities, which signifies the advent of "Urban Ages" and the "complete

urbanization society." The planetary urbanization as a new paradigm shift in urban geography furnishes urban geographers with an inclusive theoretical bedrock to conceptualize the ongoing radical urbanization processes worldwide. However, given the notion is inherently Western, it has obscured and ignored some key aspects of urbanization when viewed from the outside. As such, this paper serves as a dialogue between the concept of planetary urbanization with the rapid urbanization practices in China, arguing that China's urbanization does not fully realize in the way as portrayed by planetary urbanization. We argue that integrated rural-urban development is an indigenous approach at work in China, aiming to effectively balance development in both rural and urban areas. This inconsistency stems from three major reasons: the entrenched land ownership dichotomy, the institutional barriers, and the socialist ideology. China's practice exemplifies an alternative to the planetary urbanization paradigm, calling for further attention to the theme in urban geography.

91. TZQ000M

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Conventional vs. Emerging Energy: Future City Transformation and its Socio-environmental Benefits (Thematic 7)

A successful transformation from conventional to renewable energy can contribute to climate change mitigation and regional development. As the co-host city of the 2022 Winter Olympic Games and the only National Renewable Energy Demonstration Zone in China, Zhangjiakou urgently needs to transform from its conventional energy dependence. This paper establishes a Long-range Energy Alternatives Planning System (LEAP)-Zhang model to examine the environmental and socio-economic effects of renewable energy substitute in various urban sectors over the 2016-2050 period. Two scenarios are designed, i.e., the business as usual scenario (BAU) and the integrated scenario (INT) (including three sub-scenarios, i.e., renewable energy alternatives scenario (REA), industrial structure optimization scenario (ISO) and energy saving facility scenario (ESF)). Results indicate that under the INT scenario, Zhangjiakou's greenhouse gas emissions would peak in 2030 with 13.23% of lower energy consumption when compared with the BAU scenario. Compared with the conventional energy, renewable energy shows competitive advantages in terms of greenhouse gas reduction, employment opportunities and economic costs. The total number of employees would be 1.71 times by 2050 under the INT scenario more than that in the BAU scenario. Feasible low-carbon pathways and co-benefits strategies associated with industrial transformation and renewable energy substitution should be pursued in future actionable plans.

92. TZQ000G

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Hambourg (Allemagne) : quelle réinvention du couple diversité culturelle/densité pour un cœur métropolitain européen au 21ème siècle ? (Thématique 4)

Ville-État d'Allemagne, un État fédéral, Hambourg dispose de pouvoirs élargis en matière de politique et gestion de l'espace sur un petit territoire (755 km2, 1,8M h. en 2018). En 1983, le projet politique « L'entreprise Hambourg » (Unternehmen Hamburg) doit transformer Hambourg en une ville « attractive et créative ». Elle s'impose comme le cœur d'une vaste région métropolitaine polycentrique (Metropoloregion Hamburg, 26 000km2, 5,1M h., 2018). Pour consolider sa fonction de capitale de région métropolitaine, la Cité-État cherche à attirer et ancrer une population étrangère jeune, correspondant au projet politique. C'est l'esprit de « Cosmopolis » (The whole world in a single place), I'un des axes de l'IBA Hamburg (International Bauausstellung, Exposition Internationale d'Architecture, 2006-2013) : la ville doit devenir un « creuset du monde » et de sa diversité, faisant « cohabiter » des individus aux cultures différentes. Hambourg connait de grandes opérations urbaines pour traduire cette politique et consolider sa fonction de centre structurant métropolitain. Nous présenterons le nouveau quartier tertiaire Hafencity et l'aménagement de l'île de Wilhelmsburg, autrefois réservée aux populations étrangères pauvres. Nous insisterons sur des démarches intéressantes utilisées en vue de créer cette diversité sociale. Nous pointerons les attributs de ce projet de société urbaine internationale, porteur d'inégalités et de fragmentations spatiales générant des luttes urbaines.

93. TZQ0043

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New conception system of six-dimensional framework for resilient city planning (Thematic 3)

Through a review of domestic and international resilient city planning and construction practices, it has evolved from the early single resilient adaptation to cope with extreme climate disasters into the comprehensive resilient adaptation to various extreme or unknown threats. Concentrating on the goal of being able to withstand risks, quickly recover from shocks, and continuously learn and innovate, scholars' discussions on the characteristic criteria of resilient cities have quite common features. Qi Zheng summarized it into six dimensions: diversity, redundancy, robustness, resilience, adaptability and learning ability. In this paper, urban functions are divided into four main functions including community residence, public service, ecological recreation and historical heritage according to residents' physiological, living, social

interaction and cultural needs. These six dimensions of resilient concepts are applied to the urban functions, and new interpretations are made in order to clarify the relationship between them. Take diversity and redundancy for example. As multiple functions always coexist in a single city component, different components are likely to be endowed with the same repeated functions, which undoubtedly promotes the redundancy of urban functional capacity in that aspect. It is also emphasized that when cities face different impacts in different urban functions, resilience often behaves in different forms. Specific resilience strengthening strategies can be proposed based on these characteristics or principles to better guide the implementation of resilient urban planning.

94. TZQ0039

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Understanding Urban Land Growth through a Social-spatial Perspective: A Case Study of Wuhan, China (Thematic 3)

Understanding urban spatial growth from a social perspective is crucial for urban planning. We take Wuhan as a case to examine urban land growth patterns and how social factors relate to the urban land evolution between 1990, 2000 and 2010. We first classify land cover using Landsat images and examine the urban growth patterns during different stages based on landscape metrics regarding area, density and shape. We then extract key social factors using principal component analysis and census data. Third, we apply geographically weighted regression (GWR) to depict the link between urban land metrics and social factors. The results indicate that the urban land coalescence and diffusion simultaneously exist, for which redevelopment, infilling and edge expansion dominate the city center, and diffusion dominate the peripheral areas. The social factors have global regression relationships with urban land areas while local spatial non-stationarity presents in the relationships with the urban land patch shape irregularities. Industrial upgrading, educational levelling up and population aging are the main mechanisms. The authors conclude that sustainable urban planning and management should consider the coexistence of

different urban spatial growth models, and introduce social factors to the targeted layout of urban land. This works for cities in rapidly urbanizing countries or regions.

95. TZQ003B

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Residents' preferences and perceptions toward Green Open Spaces in an Urban Area (Thematic Others)

Green open space is an important part of the natural-social ecosystem, providing ecological services that maintain the healthy development of cities and society. Residents' perceptions of these benefits are largely related to their social-economic background as well as their familiarity with the development of green open spaces in their neighborhoods. Understanding residents' perceptions of green open space will contribute significantly to urban planning by providing practical information that facilitates residents' needs. Using the urban development zone (UDZ) of Wuhan, this study aims to understand residents' preference toward green open space, their perceptions of ecological services and improvement, with the focus on the linking between social factors, preference, and views. In this study, data is collected through online questionnaire surveys and interviews. The results demonstrate how respondents' views vary and which social factors significantly relate to them. Significant changes in natural space changes are reflected in the public's perception of the ecological functions of these spaces. Responses to improving green open space reflect the residents' pursuit of natural affinity and practicality. We conclude that it is better to enhance public involvement by providing residents' views, which helps to recognize actual needs in long-term green open space planning.

96. TZQ003G

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Modeling urban expansion in different scenarios using the SLEUTH model: A case study of Jinan, China (Thematic 3)

The rapid urbanization process has caused many problems, such as cropland loss, deforestation, environmental pollution, and so on. Thus, it is of great practical significance to simulate and analyze urban growth with consideration of the contradiction between urbanization and ecological protection. This study used the SLEUTH model to predict the expansion of urban land in Jinan from 2019 to 2030 in three scenarios, namely historical growth scenario (scenario 1), environmental protection scenario (scenario 2), cropland and environmental protection scenario (scenario 3). The simulation results show that the urban expansion spatial pattern is similar in three scenarios, and mostly distribute in north-eastern and south-western of study area. The majority of new urban land under three scenarios mostly will develop at flat areas, around existing urban areas, and along the road. The quantities of urban expansion in three scenarios are obvious different. The historical growth scenario has the highest expansion area with 402.36km2 and most converted from forest and cropland. The quantities of urban expansion in scenario 2 (388.13km2) and scenario 3 (295.59km2) with restriction of cropland and ecological land are obvious lower than that in scenario 1. The farmland and environmental protection measures obviously reduce the loss of cropland and forest, but increase the loss of other build-up land. This suggests that urban expansion area in future ought to mainly select at existing build-up areas located in suburban rather than farmland and ecological land.

97. TZQ003R

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Research on the Planning Strategy of National High-tech Zone Oriented by City-Industry Integration---A Case Study of Zaozhuang High-tech Zone (Thematic 7)

In recent years, the integrated development of industry and city has gradually become one of the main goals for the development of High-tech Zones in China, compared with the previous focus on economic output. Therefore, how to achieve the matching and integration with the city's multiple functional requirements while maintaining the High-tech Zones as the city's economic output highland has become an important issue that many High-tech Zones need to consider. On the basis of combing the relevant policies of the central and local governments, sorting out the existing theories and case literature, and combining with the development requirements of the new era, this paper puts forward the "1 + 1 + 5" strategy set of city-industry integration for Hightech Zones, that is, taking the modern industrial system of planning as the core, promoting its integration with innovative functions, and forming five basic integration with the ecology, structure, life, history, culture and landscape of the city. Based on this framework, this paper proposes targeted planning strategies for the development of Zaozhuang High-tech Zone, including the life space organization mode of jobs-housing balance, with the expectation to provide valuable case references and ideas for the future development of the High-tech Zones. This work was supported by the General Program of National Natural Science Foundation of China [51878393].

98. TZO000H

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Mobilité des réfugiés écologiques : Cas des Nomades de la Moyenne Moulouya (Maroc) (Thématique 4)

Les zones arides et semi-arides du Maroc ont connu durant les décennies quatre-vingt et quatre-vingt-dix du XXème siècle d'intenses périodes d'aridité et de sécheresse. Il en a résulté une profonde transformation et détérioration des structures nomades. Le nomadisme pastoral a en effet régressé et le compte à rebours pour la sédentarisation forcée a commencé. Nous tenterons de nous focaliser dans cette intervention sur le cas des nomades de la région de la Moyenne Moulouya. Ces derniers, dont le métier était principalement l'élevage extensif, ont décidé, en raison des rudes conditions climatiques, de la sécheresse et de la dureté de la vie, de décamper vers les centres urbains avoisinants, en particulier le centre de Missour. Ils y ont établi leur quartier : « El Marayer » situé à l'angle nord-ouest de la ville, bâti des habitations en pierre, en terre et en bois sur les rives de la vallée El Marayer et sous ses berges et exercé des métiers qui leur sont étrangers (les métiers de construction, le transport de marchandises à l'aide de véhicules à tracter ou à pousser...). N'ayant pas pu supporter la dureté des conditions climatiques, ces migrants espéraient trouver refuge en ville, mais ils se sont retrouvés chassés hors de ses murailles. Ils ont alors établi, afin d'assurer un abri pour eux et pour les leurs, un quartier non intégré et ont, par conséquent, aggravé la situation de ce centre déjà défavorable.

99. TZQ003V

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Homelessness Migration in Canada: 2008-2017 (Thematic 6)

People experiencing homelessness are often considered as highly mobile. However, there is a gap in Canadian research providing evidence of mobility, particularly at the national level. This research aims to address this gap, with the following aims: (i) to explore the extent and scope of migration among people experiencing homelessness within Canada, (ii) to map the patterns and trends of homeless flow at the national level, and (iii) to describe and compare characteristics, including gender, family status, immigrant and indigenous status, among migrants and non-migrants. Findings from this research reveal that fewer than 10% of people have emigrated from where they first accessed shelter; people experiencing homelessness originally from a small city tend to migrate to a city with greater population; and seasonal trends are evident but weak.

100. TZQ0013

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Research on Ecological Relocation in Nujiang (Thematic 3)

Nujiang Lisu Autonomous Prefecture of Yunnan province is located at the southwest of China, people here lived in ecologically fragile mountainous areas. In Nujiang, ecological relocation is regarded as an effective way for the poor shaking off poverty and participating in ecological construction. During 2016-2020, nearly 100,000 resettlers have been relocated from mountainous areas to centralized urban communities. Based on the field survey, this paper summarizes the ecological poverty alleviation types during the relocation process in Nujiang and attempts to conclude the existing problems and suggestions which might provide successful experience for regions to effectively implement the ecological relocation projects. The results show that Nujiang's practice of ecological poverty alleviation consists of four types, namely, participation in ecological engineering construction, implementation of ecological compensation policies, establishment of ecological public welfare posts, development of ecological characteristic industries. Not only has the program lifted the poor above the poverty line, it has also delivered improvements in housing conditions, infrastructure, employment opportunities, public services and ecological environment. However, significant challenges remain to be

addressed for all resettlers, such as means of sustainable livelihoods, endogenous impetus and post-resettlement support programs to help resettlers adapt to the new community environments.

Presentation Option:

In-Person Presentation=P Virtual Presentation=V Not Decided Yet=ND

ICCCASU4 thematic areas:

Thematic 1:	Health crises in cities: learning from the past and planning for the future
Thematic 2:	Preparedness and management of COVID 19 and climate change in cities
Thematic 3:	Toward more resilient cities worldwide

Thematic 4: Forecasting and forward-looking urban risks management: managing increasing density, diversity, and mobility

Thematic 5: Privacy, surveillance, security, governance and collective wellbeing
Thematic 6: Housing access, affordability and finance: comparative strategies, best

practices and lessons learned from Canada, Africa and China

Thematic 7: Industrial Parks, Agro-processing Zones and Urban Transformation

Others: Any topics related to City building and Urban development