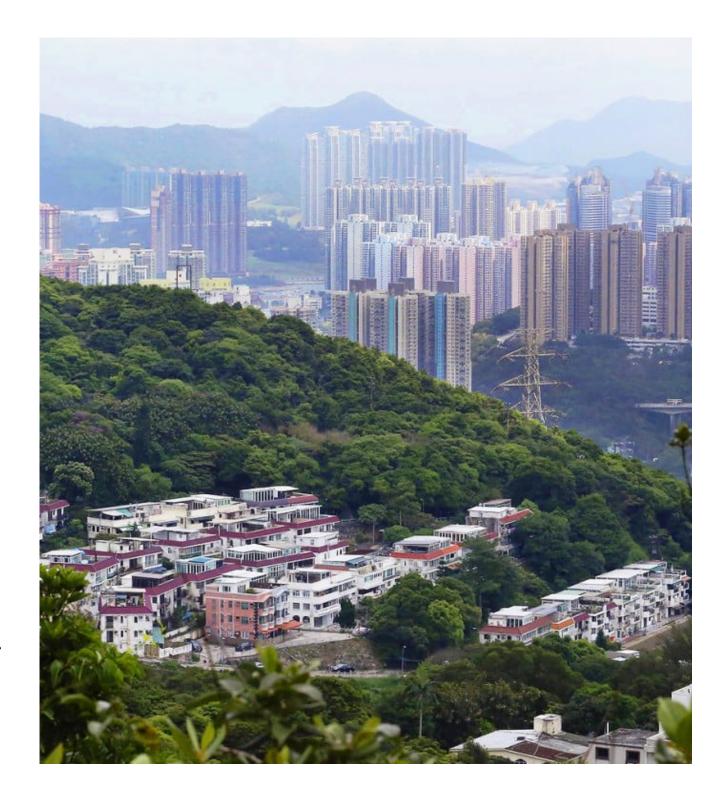
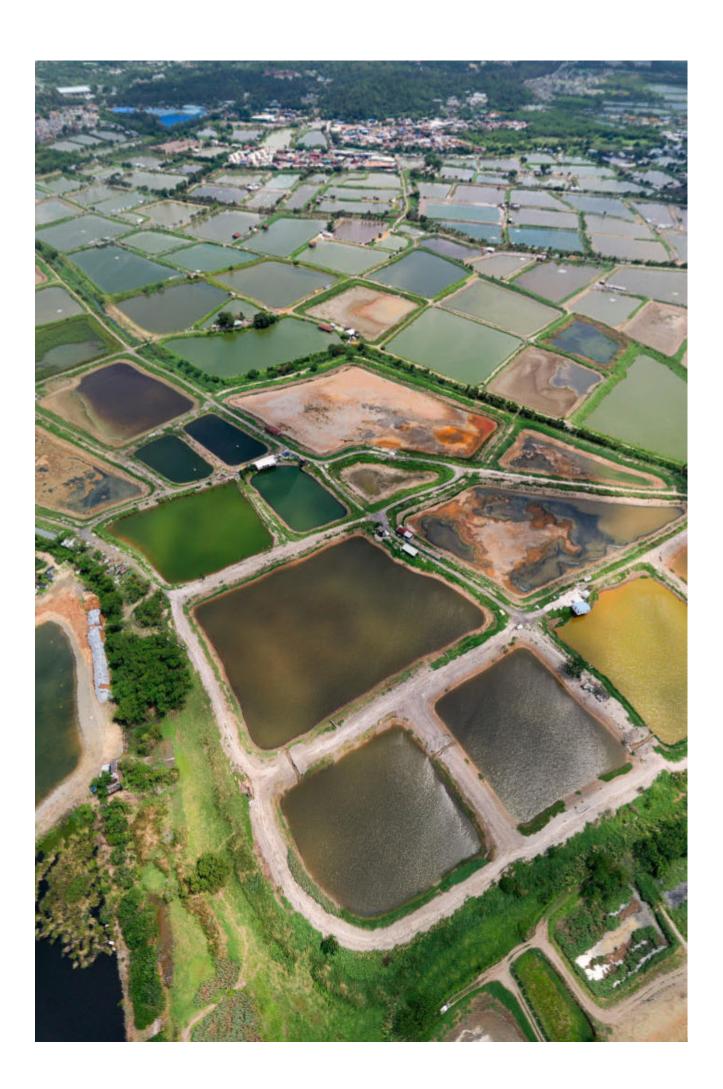
# Research Plan by Zuza Sliwinska

# New Territories, somewhere between the neon sign and a chicken shed.

Reconstructing the value of rural in Hong Kong.





### **Contents**

01 Motivation	04
02 Introduction	05
03 Problematization	07
03.1 Problem Statement 03.2 Research Objective 03.3 Research Question(s)	09
04 Theoretical framework	13
04.1 Definition of framework 04.2 Definition of key terms 04.3 Key theories	13
05 Methodology	17
06 Relevance	18
07 Research diagram	20
08 Bibliography	22

### 01 Motivation

The *city of the future*<sup>1</sup> implies its preoccupation with the realm of the urban. However, with a growing density of population in global cities and the land between them, attention of governments and architectural practitioners turn to less explored, and so far ignored rural territories, looking to accommodate spilling urban population and industries. The rural landscape will inevitably change under these pressuring forces. However, its transformation towards total urbanization or a completely new, yet unknow status should not be left unattended. Whether its future will be dimed by complete urbanization of vast land, its occupation with invasive agricultural production trying to catch up with the demands of an unsaturated population (Ballard, 1962), or return to romanticised ideal of lush countryside, these processes must be questioned, and the idea of rural rediscovered (Koolhaas, 2017, p.4). The choice of dialectic between rural and the urban has power to push the future of our kind in either direction.

"The outward growth of cities had at last been checked; in fact, all over the world former suburban areas were being reclaimed for agriculture and population additions were confined within the existing urban ghettos. The countryside, as such, no longer existed." - J.G. Ballard, Billenium, 1962.

# Motivation & Introduction

## 02 Introduction

Throughout history, expanding cities have always run over villages (Meulder & Shannon, 2014), disrupting ecological patterns and native ways of living. In Hong Kong, in the 1950s, a demand for additional space to accommodate new urban developments triggered by the industrialisation of the city and migration inflow from Mainland China pushed the colonial government to claim indigenous land north of the Kowloon Peninsula. Named New Territories, it accommodated nine New Towns constructed between the 1950s and late 1990s. Initially, these new developments respected the rural landscape and indigenous population pre-occupied with farming, - promoting the area as an opportunity for urban residents to live closer to the countryside. However, shortly, residents of New Towns claimed almost half of Hong Kong's total population, showing the initiative's scope (Lung, Lee & Chow, 2005). Today, the total population of the nine New Towns is 3.4 million, with 7.5 million people across Hong Kong.

The word rural in the Hong Kong context has not yet been clearly defined by law, most likely due to its fluid spatial and socio-economic character over time. In 1972 the Small House policy was introduced, transforming the romanticised Ming and Qing dynasty-style countryside landscape into suburb-like, free-standing and standardised, concrete village housing (Lung et al., 2005). The morphology of the region has further evolved with accelerating urbanisation in the territory. Expansion of infrastructure to connect new developments with 'the city', and the industrialisation of Hong Kong, have caused the rural population's structure to shift from agricultural to industrial (secondary industry), leading to a dependency on the urban. New Territories are planned to undergo further urbanisation as the last relatively unoccupied area in an otherwise filled-to-the-brim city. The transformation of this territory has to be also read through its evolving political context, specifically the imminent 2047 dissolution of the border between Hong Kong and Shenzhen, putting an end to the one country, two systems scheme, and exposing located on the fringe of the city land, to new land use policies.



# 03 Problematization

#### **Keywords**

Hong Kong, New Territories, urbanisation, rural transformation, rural ecology, adaptation, non-extractive architecture, active conservation, adaptation

#### **03.1 Problem Statement**

New Territories - between the city and the land

In Hong Kong's west New Territories (NT), the Northern Link new metro line project will link Kwu Tung Station with Kam Sheung Road Station by 2037. This project will connect remote places in north and west New Territories, creating new economic drivers and bringing the rural population closer to the opportunities presented in 'the city'. This intervention, however, will also generate destructive consequences to its socio-cultural and ecological context.

With transportation infrastructure in place, the area becomes increasingly attractive in the eyes of potential developers, accelerating current urbanisation processes. The project includes the construction of three intermediate stations traversing now predominantly rural areas (Mass Transit Railway, 2020), initiating new and justifying already put-in-plan urban developments (Bolchover & Hasdell, 2017, p.104). To facilitate construction, some villages situated on the new metro line trajectory will face relocation and destruction of resumed by the government land. A series of re-settlements and reclassification of the land from rural to urban, or in some cases industrial, will lead to imminent de-construction of the remaining rural ecosystem, together with its practices, tangible and intangible heritage, and surrounding natural environment. Despite efforts to conserve individual heritage resources, such as ancestral halls, temples and walled-villages, in the context of a changed setting, the heritage value of the New Territories as a cultural landscape is depreciating (Lung et al., 2005) together with its environmental value. The displacement of human and non-human life and the shift in activities have negatively influenced the territory's ecology, especially the neighbouring wetland.

The Mai Po Wetland area sustains both natural and human life, acting as a feeding ground for migratory birds and local fauna and a threshold between Deep Bay waters and the land – the natural barrier protecting the region from inundation. Caught in the vicious loop of territorial and economic transformation of the NT, resettled farmers are no longer



Fig.2 Tung Tai Wai industrial site which has been adapted from previous fragment of wetland. (Source: Google Earth).

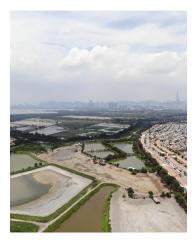
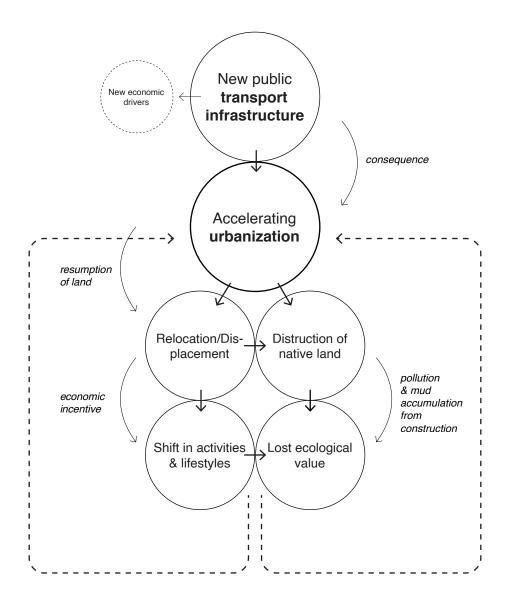


Fig.3 Drying up and filling in ponds which form a wetland ladnscape.

Fig.4 North-west New Territories map, showing the new metro link trajectory. (Source: Google Earth) capable of maintaining the semi-natural wetland habitat and its fish ponds. Harmed by mud and pollution accumulation - by-products of intense urbanisation, ponds fall into a state of neglect, diminishing their ecological value, hence the argument for their preservation, unlocking new land for yet another development (Bolchover et al., 2017).



 $\land \textit{ Fig.5 Vicious loop of urbanization and land degradation (Source: Author)}.$ 

#### Conundrum – preliminary conclusion

The morphology of Hong Kong's rural village merging with the edges of the wetland grid of ponds has become a historic register of the changing uses of the land and the dialogue between human intervention and natural processes (Bolchover et al., 2017). Today's NT region is entrapped between conflicting forces of urban development and preservation of its rural socio-cultural heritage embedded in natural processes and patterns. At the same time, the rural population should not be looked at as a homogeneous group upon which these forces are enforced. Despite a few communities still voicing their right to land and willingness to preserve agricultural and cultural practices, many

9

roblematization

villagers, tempted by better economic prospects in the city, decide to sell their land for profit and move to secondary industries. With no economic or agricultural productivity, the very existence, current and future value or potential of Hong Kong's rural ecology in NT comes into question.

Considering the evolving context of rural Hong Kong, its transformation seems inevitable. In an ideal scenario, the balance between the forces of economic development and provision of housing for expanding population, together with preservation or even regeneration of the natural flows and environmental value of the site, can be achieved. Ideally, the economic incentive is created for the rural population to continue sustaining the land. The potential new meaning and role that rural territory can take in the future context of a transitioning region cannot be guaranteed through the preservation of the system as it is currently presented. It should instead allow for its constant re-positioning, in the sense of its form and value it generates, to its context. However, focusing on conserving its core function as a porteparole of the natural environment in the conflict between humans and nature made.

#### 03.2 Reseach Objective

Considering the problematic of NT, this project aims to question the phenomenon of rural de-construction by identifying the value, rural holds to Hong Kong. Despite the possibility of concluding no value in the preservation of rural in NT, this project takes an optimistic approach and attempts to identify what the future potential could be in evolving context. Hence, it suggests a guideline/strategy which will allow, through spatial intervention, to adapt the rural landscape to the new needs of Hong Kong and the new lifestyles of the rural population. In summary, this research looks for potential in non-destructive rural transformation for adaptation to its socioeconomic and political setting, considering its ecological context.

#### 03.3 Research Question(s)

To achieve above aims, the project will be structured around the main research question:

Considering ecologic context of New Territories in Hong Kong, togheter with growing population density, and its consequent pressure for urban expansion; how can architecture play a role in re-defining the value of fragile rural ecosystem in transitioning territory to ensure its survival, by making use of its physical and metaphysical position between the natural and manmade?

This question can be dissected into supporting sub-questions which will form a framework for theoretical investigation, to then guide choice of research and design methods:

#### Theory

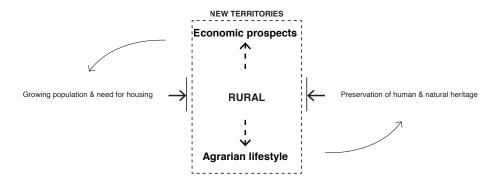
With the motivation to sustain the rural and considering the different interests of stakeholders involved in its de-construction, (A1) what is the current value of this territory? Consequently, (A2) what are the positive and negative consequences of its erasure or survival in accelerating the transformation of its context? While defining the current value of rural brings arguments for its preservation, it also poses the question of (A3) the meaning of preservation in this context and how can an architectural intervention facilitate it?

#### Research Methods

A choice of either physical or metaphysical preservation of the rural ecology brings a question of (B1) what is the condition of the rural, by which forces is it driven and what are the co-dependencies between them, and (B2) what are the barriers it experiences in the battle against spreading urban? (B3) What tools can be used to generate the potential of this territory by embracing its unique environmental value?

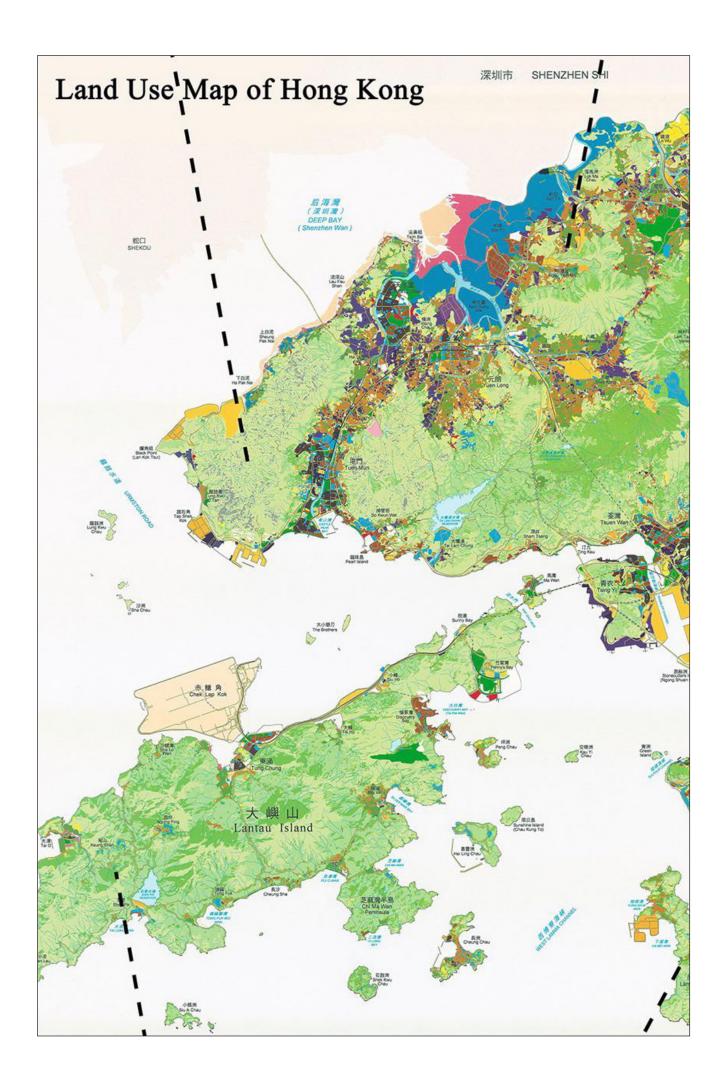
#### Design Methods

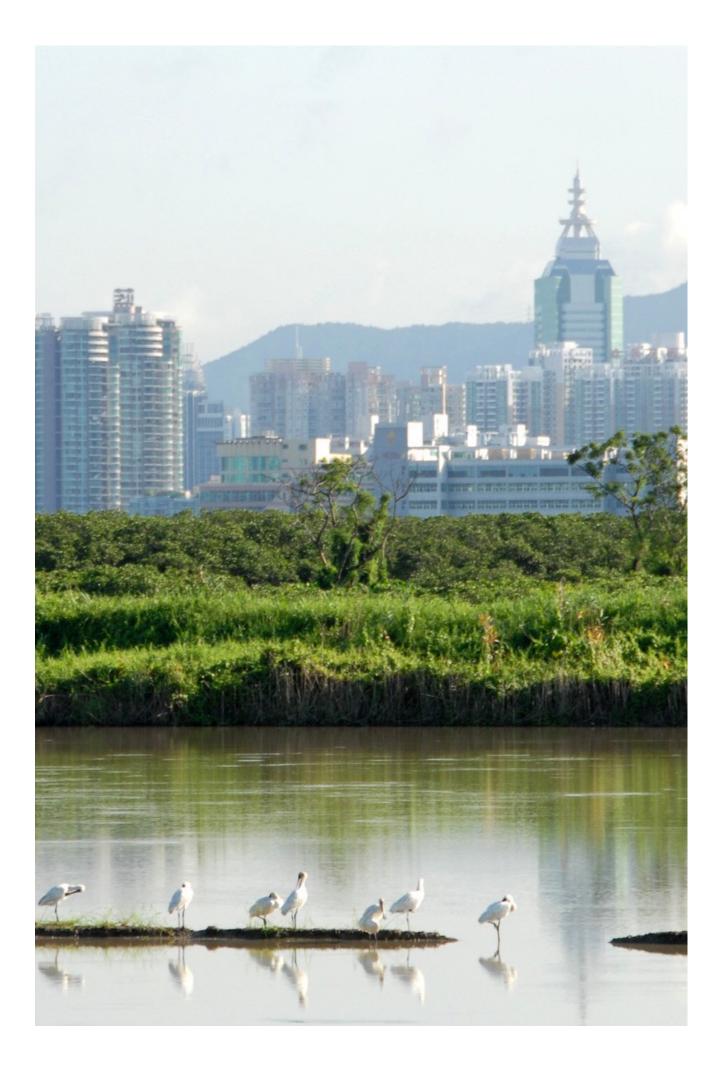
The architecture reflects harm on the world and which consequences, ironically, the practice is aiming to solve. In Hong Kong, power structures can be blamed for favouring urban development over the protection of rural culture and ecology of the land; however, architectural production navigates this favouritism in exchange for economic profit. In that context, (C1) how can the practice address the harm imposed on the land and its people through architectural intervention without causing more disruption?



<sup>↑</sup> Fig.6 New Territories and rural population between the conflicting forces and motivations.
(Source: Author)

<sup>&</sup>gt; Fig.7 Land use map of Hong Kong, showing rural settlements in light brown. (Source: HK GOV)





# 04 Theoretical Framework

#### 04.1 Definition of framework

The theoretical framework ties together two interdependent flows of investigation through which the condition of New Territories can be read – anthropic and ecological perspectives. Firstly, in response to the urbanisation of the territory, the topic deals with questions of the existence of rural in its context, its future potential and its relation to other systems; hence it belongs to the realm of metaphysics. Secondly, it explores ways of practising non-disruptive architecture and decreasing the harm caused to the land as a by-product of architectural production. In that sense, the topic is spread between epistemes of tectonics and ecology, or perhaps the ecology of tectonics, embedding the concept of buildings as parts tied together in a broader context of natural and cultural systems (Beim, 2015).

"Problems cannot be solved at the same level of awareness that created them." - Einstein

#### 04.2 Definition of key terms

Rural

13

Rural land in New Territories is split between original agri- and aquaculture use represented mainly by the indigenous population, agriculturally unproductive suburban-style neighbourhoods, and open storage facilities mainly used as a backup for the city's port. This project defines rural as a village development area where the population still relies on agricultural and/or aquaculture activities as either part of full-time occupation as a starting point for investigation.

#### 04.3 Key theories

Adaptive capacity

The long-term stability of systems depends on changes that occur during critical phases of cycles of long-term change (Chapin et al., 2009). Adaptive capacity is the ability to adjust to potential damage, take opportunities, and respond to consequences (IPCC, 2018) or deal with the emergence of complex systems (Holladay, 2022). It is used to evaluate actors' capacity to adopt to minimize the negative impact of change (Chapin et al., 2009). The existence and the value of rural in NT are driven by forces of urban, infrastructural and economic developments, hence shifting interests of stakeholders who transform its cultural and economic landscape, subjecting it to change (Lung et al., 2015). However, it is the aggressive speed and by-products of change which cause harm to humans and natural environments. Enhancing adaptive capacities takes an approach towards positive and actively

<sup>&</sup>lt; Fig.8 View over wetland with Yuen Lonf development at the back. (Source: Wikimedia)

navigated transformation (Chapin et al., 2009) of a system, in this case, rural population and the land, to re-shape its current state for mutual benefit between the rural population, natural environment and the city.

#### Regenerative design

\*to restore - to bring back to or put back into a former or original state
\*to regenerate - restored to a better, higher, or more worthy state

Source: https://www.merriam-webster.com/dictionary. Retrieved on 5th November 2022.

The harm imposed on the land and people through the built environment accumulates from the multi-level process of architectural production - construction processes, materials used, labour conditions, operational costs, and ecologic costs of dismantling the building (Malterre-Barthes, 2022). The sustainable development approach, defined as "one that meets the needs of the present without compromising the ability of future generations to meet their own needs" (UN, 2015), has focused on minimising this harm, slowing down the extraction of natural resources (Mang et al., 2012). However, it allows for one-way exchange, shifting life-supporting systems and natural resources through consumption to sink (Lyle, 1994). In contrast, through systemic thinking and stakeholder engagement, the regenerative design aims to facilitate self-renewing rather than solely limit the extraction (Mang et al., 2012), and leverage the ecological value of the object and its ability to thrive and evolve.

#### Neo- and semi-vernacular

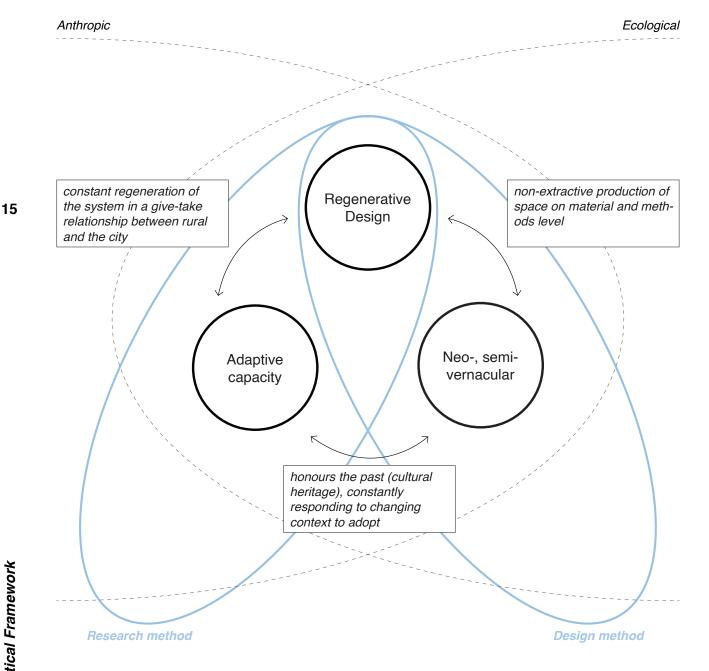
The contemporary aesthetic and technological approach of spatial design through reconsideration of vernacular context is the essence of neo-vernacular architecture (Turkusic, 2011). However, considering the mostly standardised appearance of concrete buildings in rural NT, the neo-vernacular approach has the potential to become an active conservation tool for rurality, embracing the traditional form combined with modern programmatic opportunities, hence continuing its utilisation by a local community as a key factor to its survival (Zhao et al., 2019) rather than solely reproducing its visual characteristics through modern construction techniques. In parallel, the semi-vernacular approach suggests using vernacular forms and a combination of traditional and contemporary building methods and materials in the production of space, with the ambition to sustain the intangible heritage (Zhao et al., 2019) of the region – it's genus loci. The project can situate itself between neo-, and semi-vernacular approaches. This approach can allow placing the community at the heart of the design process, hence opening the opportunity for a practice to facilitate rather than dictate the architecture, working towards reducing the harm caused by noncontextualised production as in the case of few new developments proposed in the area.



Fig.9 House of Chickens, Erzincan, Turkey by SO? (Source: Archdaily)

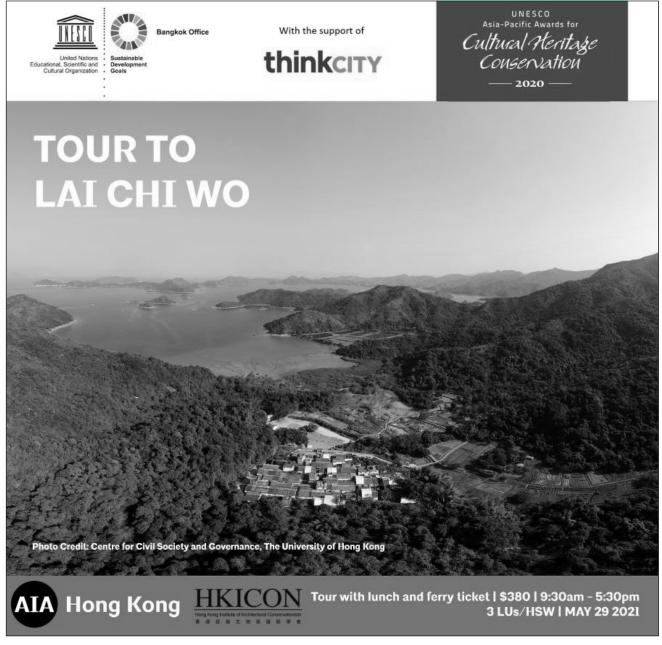
#### 04.4 Internal relevance

Internally, all three concepts support each other and support the project responding to both anthropic and environmental challenges by positioning its solution as one taking the side of the natural rather than manmade. The relationship between the regenerative design and the adaptive capacity lies in the system's need, while adapting to the new transition, to be able to regenerate itself constantly. This can be understood on an economic and social level but also on an ecological level. Hence, the semi-vernacular approach responds to two former, taking advantage of the transformation, however using the least destructive materials and methods to allow the system under pressure of change to regenerate.









17

## 05 Methodological Framework

The long-term stability of systems depends on changes that occur during critical phases of cycles of long-term change (Chapin et al., 2009). Following that thought and in response to the posed research question, this methodological framework relies on reading the complexity of territory as a palimpsest, an approach described in Land as Palimpsest (Andre Corboz, 1983); hence mapping path dependencies which have formed current condition of New Territories. It is combined with the investigation of adaptive cycles derived from described adaptive capacity theory. Together, they form a unique framework allowing for an understanding of transformation processes in rural NT over time and conceptualization of the region as a superimposed system of layers accumulated through the chronological evolution of the territory, which, however, is read and interpreted through its changing value and its ability to adapt. Mapping of these layers will be achieved using the following research methods:

#### Literature review (academic & non-academic)

A quantitative study of primary sources - maps, governmental data and planning applications, will provide an overview of current ecologic, political and socio-economic conditions and future development plans, hence urbanization patterns. To supplement, a qualitative study of mixed primary and secondary sources will outline the historical past of NT and strategies for its preservation. A limitation in the review of historical sources comes mainly from one-sided colonial narration during the pre-handover period. Non-academic literature in the form of letters, blog posts, and documentaries will hold a crucial role in balancing that limitation and determining the value that rural holds for different stakeholders.

#### Case study

Across NT, there have been documented instances of displacements caused by rural de-construction, concentrated in the last twenty years. Studying cases such as Choi Yuen village, or the more recent Tsui Keng project, will allow an understanding of the villages' limitations that have led to their de-construction and the position of the local government. In some cases, the ecological impact will also be possible to study. This method, however, comes with a limitation in portraying a diverse body of rural population as one bonded by only one motivation, finding expression in media-covered activist-like protests.

#### Interviews

To supplement limited literature sources and to balance the limitation of the case study method, interviews will both activists, different

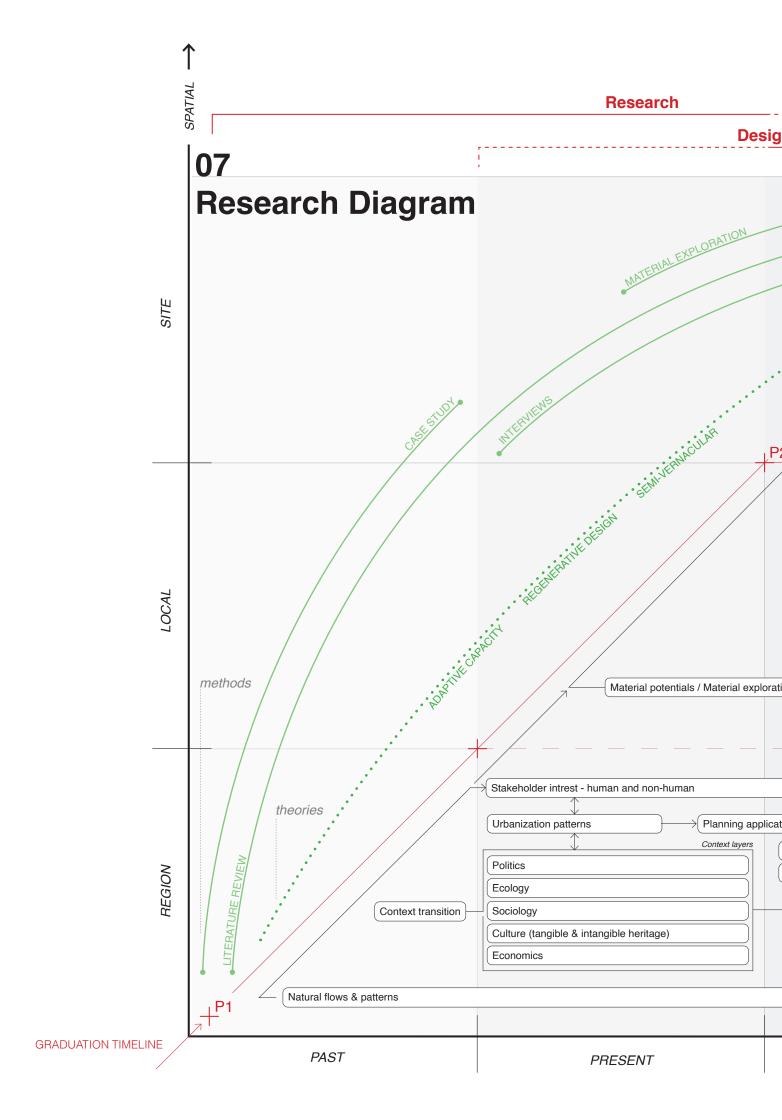
# villagers, and farmers but also voices from new urban development in the region residents and the architects or developers engaged in these projects will provide a complete picture of the condition. These will be conducted on-site if possible, or through email exchange and video calls. The ethical limitation in this method lies in the preparation of questions and interpretation of collected data according to the interviewer's cultural background and hence, inborn prejudice or position that the research has taken. It could be challenged by collaboration with local research body and peer review.

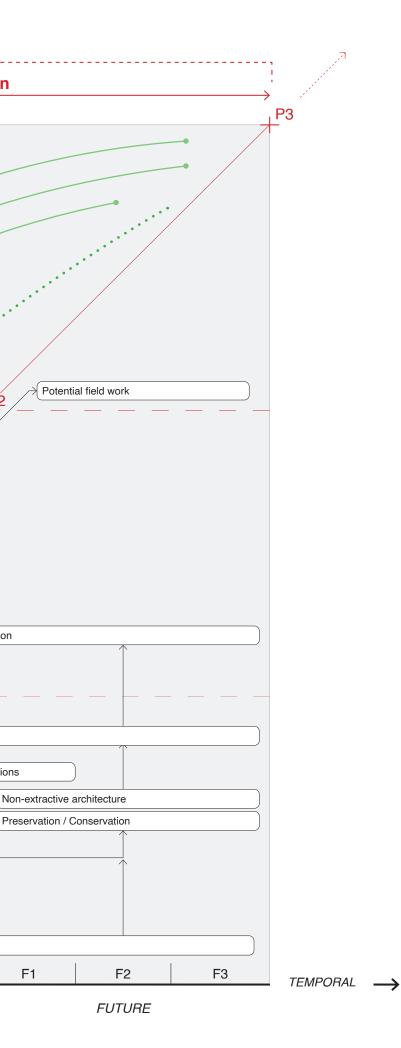
The **design approach** follows the idea of palimpsest as a research methodology and continuous transformation of context described in a theoretical framework. It situates design across an extended timespan (multiple futures) rather than specific points in time (present or future). Using the argumentation combined through the research and in response to the non-disruptive approach of architectural production described through regenerative design, the semi-vernacular theory becomes a design method exercised through material exploration, such as the implementation of cattail plants from neighbouring wetlands in rural house construction. The limitation of introducing the material comes in policy-making, which considers some non-standard concrete housing as squatter residence – hence illegal.

### 06 Relevance

This project stands relevant in the face of the growing population worldwide and its spillage to rural territories. These changing patterns occur at an unprecedented speed in the Asian context, especially territories with small space, forecasting the potential consequences, hence justifying the choice of location for the study. Despite the scale of this global challenge, few studies pay attention to rural adaptation and its capacity to accommodate changing lifestyles and programs beyond current proposals of tourist or visitor centres. This research aims to fill that gap, allowing for a more practical solution that does not focus solely on preserving rural heritage but also on sustaining and regenerating the context within which the rural exists - hence the natural environment. Chosen theories become relevant, not solely as a framework for positing the challenge within the existing field of knowledge but also as a question of finding the balance between natural and human forces in architectural practice.







< Fig.13 Research Diagram (Source: Author)

## 08 Bibiliography

#### Research and methods

Wang, D., & Groat, L. N. (2013). *Architectural research methods* (2nd ed.). Wiley.

#### Theoretical (selected chapters)

AR (2022). *Ecologies: How to do no harm.* Architectural Review. Curated by Emilie Peirson.

Avrami, E. C. (Ed.). (2021). *Preservation,* sustainability, and equity (Ser. Issues in preservation policy, third volume). Columbia Books on Architecture and the City.

Beim, A., Bundgaard, C., Christiansen, K., Madsen, U.S. (2015). *Towards an Ecology* of *Tectonics: The Need for Rethinking Construction in Architecture*. Edition Axel Menges.

Cavalieri, C., & Viganò Paola (Eds.). (2019). Hm the horizontal metropolis: a radical project. Park Books.

Chapin, F. S., Folke, C., & Kofinas, G. P. (2009). A *Framework for Understanding Change*. In C. Folke, G. P. Kofinas, & F. S. Chapin (Eds.), Principles of Ecosystem Stewardship (pp. 3–28). https://doi.org/10.1007/978-0-387-73033-2 1

Jones, L., Ludi, E., Levine, S. (2010). *Towards* a characterisation of adaptive capacity: a framework for analysing adaptive capacity at the local level. Oversees Development Institute.

Lyle, J. T. (1999). *Design for human ecosystems: landscape, land use, and natural resources.* Island Press.

Mang, Pamela & Reed, Bill. (2012). Regenerative Development and Design. Encyclopaedia Sustainability Science & Technology. DOI: 10.1007/978-1-4614-5828-9\_303

PCC, (2014). *Annex II: Glossary* [Mach, K.J., S. Planton and C. von Stechow (eds.)]. In: Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, pp. 117-130.

Regenesis, Group. Regenerative Development and Design: A Framework for Evolving Sustainability. John Wiley & Sons, Incorporated, 2016. ProQuest Ebook Central.

Something Fantastic (Firm) (2017). Infrastructure space. (A. Ruby & I. Ruby, Eds.). Ruby Press.

#### Research and problematique

#### Governmental

The government of Hong Kong (2021). San Tin / Lok Ma Chau Development Node. Project Profile.

Environment Bureau (2021). Hong Kong Biodiversity Strategy and Action Plan.

NTN (2020). *Towards a planning vision and transcending 2030*. Preliminary concepts for the New Territories North Development.

#### Academic - Books

Bolchover, J., & Hasdell, P. (2017). *Border ecologies: Hong Kong's mainland frontier.* Birkhauser.

Bolchover, J., Lin, J. C. H., & Lange, C. (Eds.). (2016). *Designing the rural: a global* 

countryside in flux (Ser. Architectural design, volume 86, issue 4). John Wiley & Sons. Centre canadien d'architecture. (2021). The things around us: 51n4e and rural urban framework. (F. Garutti, Ed.). Canadian Centre for Architecture.

Corner, J. (1999). *Recovering landscapes* as a critical cultural practice. In: Recovering landscape: essays in contemporary landscape architecture. Princeton Architectural Press.

V-A-C Foundation. (2021). *Non-extractive architecture : on designing without depletion.* (Space Caviar, Ed.). V-A-C Press.

Yin, H.L., & Distefano, L. (2003). A Tale of Two Villages: The Story of Changing Village Life in the New Territories. Oxford University Press.

Zeunert, J., & Waterman, T. (Eds.). (2018). Routledge handbook of landscape and food (Ser. Routledge handbooks). Routledge. Selected chapters.

#### Academic - Articles

Amekawa, Y. (2011). *Agroecology and Sustainable Livelihoods: Towards an Integrated Approach to Rural Development.* Journal of Sustainable Agriculture 35(2):118-162. DOI: 10.1080/10440046.2011.539124.

Davis, S. G. (1962). *The Rural-Urban Migration in Hong Kong and Its New Territories*. The Geographical Journal, 128 (3), 328–333. https://doi.org/10.2307/1794048

Folke C., J. Colding, and F. Berkes, (2002). Building resilience for adaptive capacity in social-ecological systems. In: Berkes F., J. Colding, and C. Folke (eds). Navigating Social-Ecological Systems: Building Resilience for Complexity and Change. Cambridge University Press, Cambridge, UK.
Landicho, L.D., and Ramirez, M.A.J.P (2022).
Enhancing Adaptive Capacity of Rural Farming
Communities in Southeast Asia: Experiences,
Lessons, and Best Practices for Scaling-up.
Asia-Pacific Network for Global Change
Research (APN)

Lung, D., Lee, H. & Chow, T. (2005). *The changing "rural" setting of Hong Kong's new territories in the 20th Century.* In: 15th ICOMOS General Assembly and International Symposium: Monuments and sites in their setting-conserving cultural heritage in changing townscapes and landscapes, 17 – 21 oct 2005, Xi'an, China.

Turkusic, E. (2011). Neo-vernacular architecture - contribution to the research on revivial of vernacular heritage through modern architectural design. Conference Importance of Place - 4th International Conference on Hazards and Modern Heritage. Sarajevo.

Zhang, X., & Pan, M. (2022). *Emerging rural spatial restructuring regimes in china: a tale of three transitional villages in the urban fringe.*Journal of Rural Studies, 93, 287–300. https://doi.org/10.1016/j.jrurstud.2020.09.005

Zhao, X. & Greenop, K. (2019). From 'neovernacular' to 'semi-vernacular': a case study of vernacular architecture representation and adaptation in rural Chinese village revitalization. International Journal of Heritage Studies, 25:11, 1128-1147, DOI: 10.1080/13527258.2019.1570544

#### Non-academic - Books

Welsh. F. (1993). *A history of Hong Kong*. Harper Collins Articles