



Deep Bay
(Shunshan Bay)

Ming Bay

Tsing Chau Wan

Tsuen Wan

Tolo Channel

Luk Keng Bay

Cheling Spa Wan

Three Fathoms Cove

Yam O Bay

Kwun Tong Tsai Wan

To Kau Wan

Tsu Keng Wan

Discovery Bay

Causeway Bay

Silver Mine Bay

Sai Wan

Shi Ma Wan

Tin Wan

Tai Kwan Wan

Hung Shing Ye Bay

Tung Wan

Luk Chau Wan

Treasure Bay

Repulse Bay

Shik Kwei Chau*

Mo Tat Wai

Tai long Wan

Tung O Wan

Joss House Bay

Shik O Wan

Tung Tai Wan

Beau fort Island*

Tai Tam Bay

Tung lung Chau*

Island Bay

Shik O Wan

Clear Water Bay

Po Toi*

Clear Water Bay

Sung Kung

Lung Ha Wan

1. Tam Shui Wan
2. Shik Tsai Wan
3. Kung Tsai Wan
4. Lung Ha Wan

- A. Wok Tai Wan
- B. Sai Tso Wan

ZEROTOPIA- THE PROJ.ACTION OF A PLACE

Sylvia Yeung

MDes in Urban Environments Design
School of Design
The Hong Kong Polytechnic University

Research Thesis submitted in partial fulfilment of the requirements for the SD5709-
Capstone Project of the MDes UED programme (2016-2017).

The Hong Kong Polytechnic University
School of Design
Master in Urban Environments Design

ZEROTOPIA- THE PROJ.ACTION OF A PLACE

Sylvia Yeung - 16106142g
Tutor: Laurent Gutierrez

Hong Kong
2017

ABSTRACT

This Capstone Project consists in the studies of the future imaginary of Hong Kong.

Elements of Hong Kong has been used as reference for many important movies and games about the future- from Blade Runner (1982), Ghost in the Shell (1995) and Pacific Rim to the more recent ones from the same series. In most of this references, Hong Kong is just an inspiration for the projection of the future. In reality, the cities illustrated in this movie are usually an American or a Japanese city.

Based on that, how could the future of Hong Kong be? In a more imaginary scenario?

The process of exploration is divided in three different parts that leads to the final scenario(s). The first part is the theory and the analysis of how Hong Kong is used as a initial point for the projection of the future according to different medias (movies, animation, comics, games). The second part consists in the analysis of the facts of the present in Hong Kong, based in two main plans: Hong Kong 2030+ and the 17 goals for a sustainable growth by UN. The third and last part consists in the development of the project, resulting in a storyboard with illustrations, an alternative imaginary based in Hong Kong's present issues.

The restriction of land and space to grow in Hong Kong is evident. Besides evolution of reclaimed areas, Hong Kong is still contained in a finite piece of land, where 60% of the territory is water and 40% is land. In this 40%, only 25% is occupied. From this 25%, 27% is reclaimed land, meaning that most of the settlements are in the flat lands, leaving the hills and water almost untouched in comparison with the total.

This compression of 7,350,000 people in this small piece of land affects the population, generating some problems: poverty, hunger, inequalities and mostly low quality of life. With the rise in sea level induced by climate change, the situation is not going to get better specially if the way to inhabit Hong Kong keeps the pattern.

Proposing an imaginary future, Futuro.topia brings the opportunity of water as a possibility of a different future for the present Hong Kong.

Keywords: Hong Kong, future, imaginary, projection, diffusion, reflection, refraction, urban environment

CONTENTS

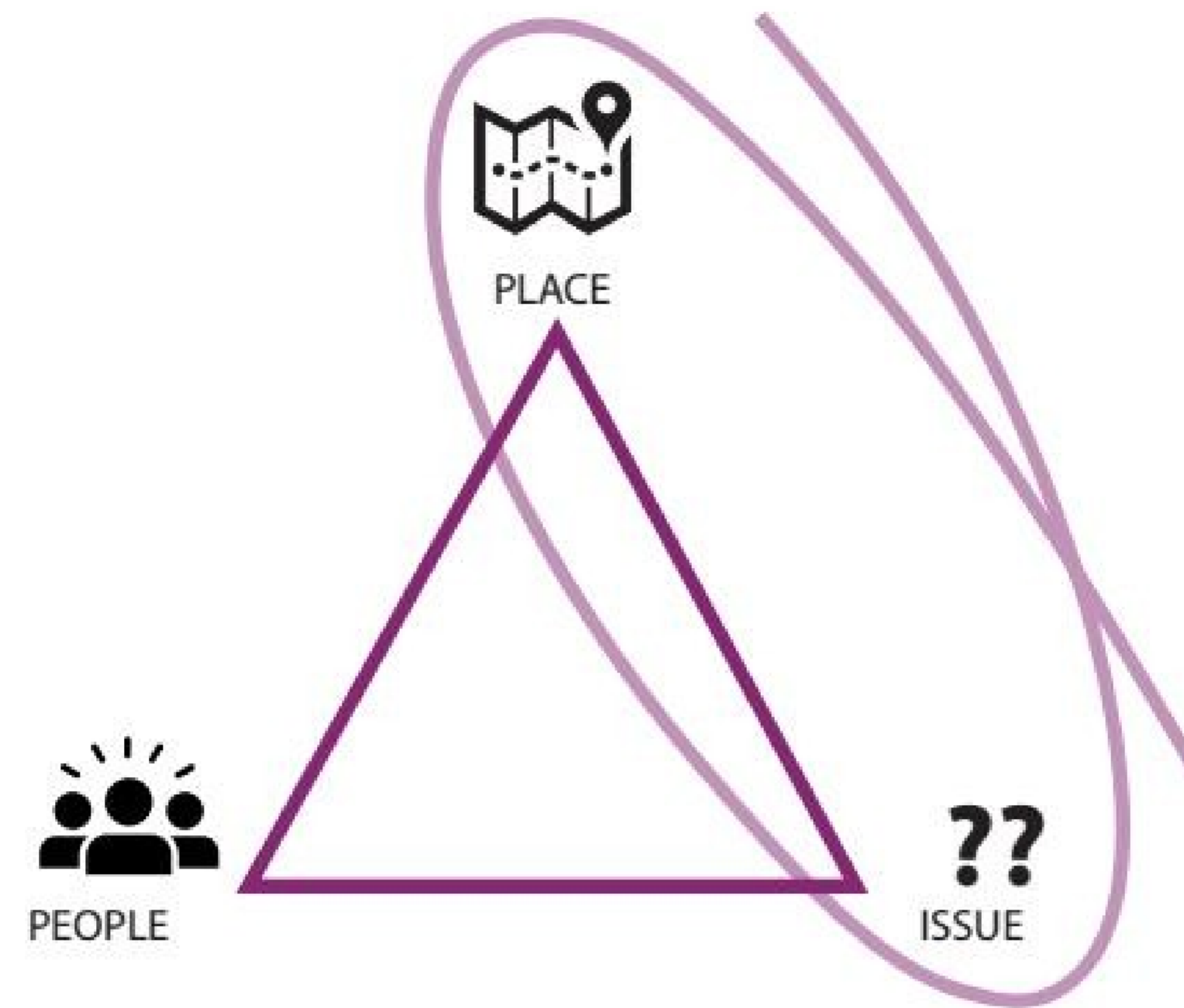
ABSTRACT	7
THE MYTH / SUPPOSITION	11
THE START	13
THE THEORY	14
LEARNING WITH THE MASTERS	16
THE FACTS/ REALITY	31
COMPARISON	31
IN BETWEEN SCALES - HONG KONG AND UNITED NATIONS	33
IMAGINATION	43
THE FUTURE - 2047+	43
THE CHALLENGE	45
NEW CARTOGRAPHIES	47
CONCEPTUAL MODEL- NOW	48
CONCEPTUAL MODEL- FUTURE	49
HONG KONG 2017	52
HONG KONG 2047+	53
OVER VIEW - HONG KONG	56
LANTAU ISLAND	58
HONG KONG ISLAND AND KOWLOON	60
NEW TERRITORIES EAST	62
NEW TERRITORIES WEST	64
ZERO.TOPIA	69
ILLUSTRATING SCALES	70
MANUAL TO ZERO	73
FINAL THOUGHTS	91
EXTRAS	93
WHAT IF THE PROJECT WAS A GAME?	94
SPECIAL THANKS	108
ICONOGRAPHY	109
BIBLIOGRAPHY / REFERENCES	111



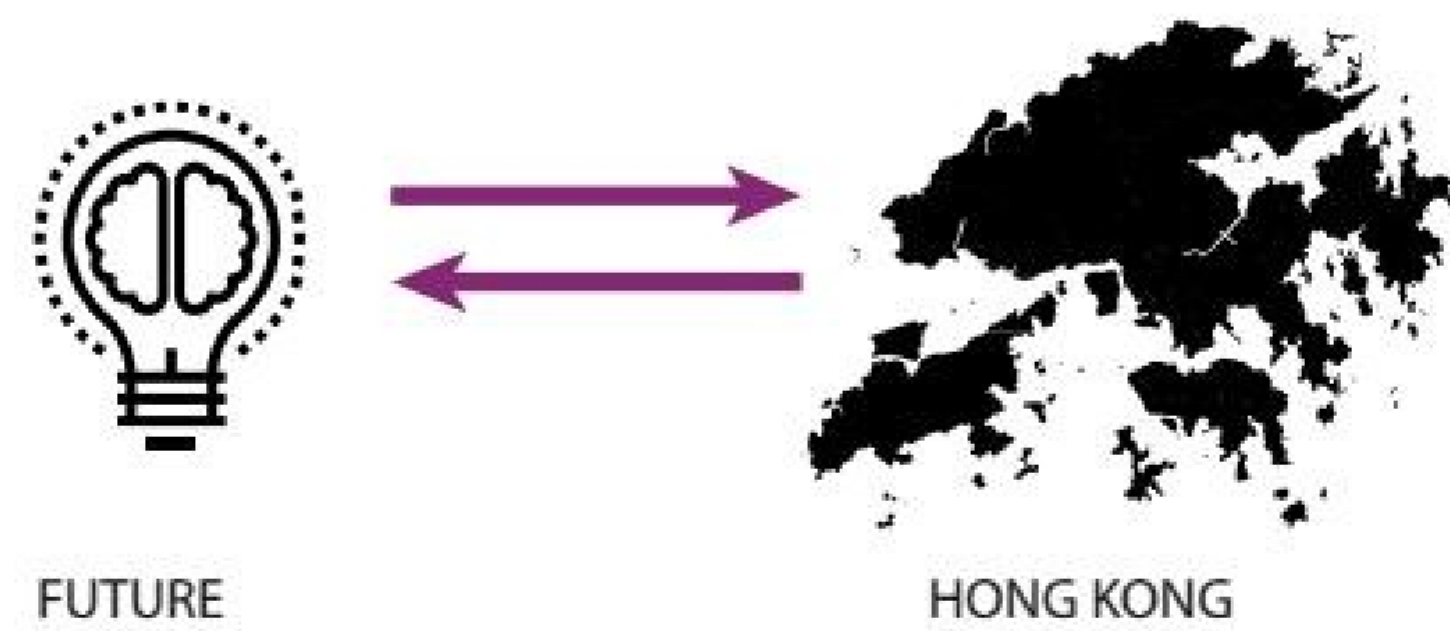
THE MYTH / SUPPOSITION

THE START

Usually the work starts with a question about a topic. The main triad that drives the questions linked to design are: the place, the issue itself and people. In this case, all started with the issue: the future, then came the place: Hong Kong.



What is the future of the cities? What is the future of Hong Kong, more specifically? How is it seen through different ways?

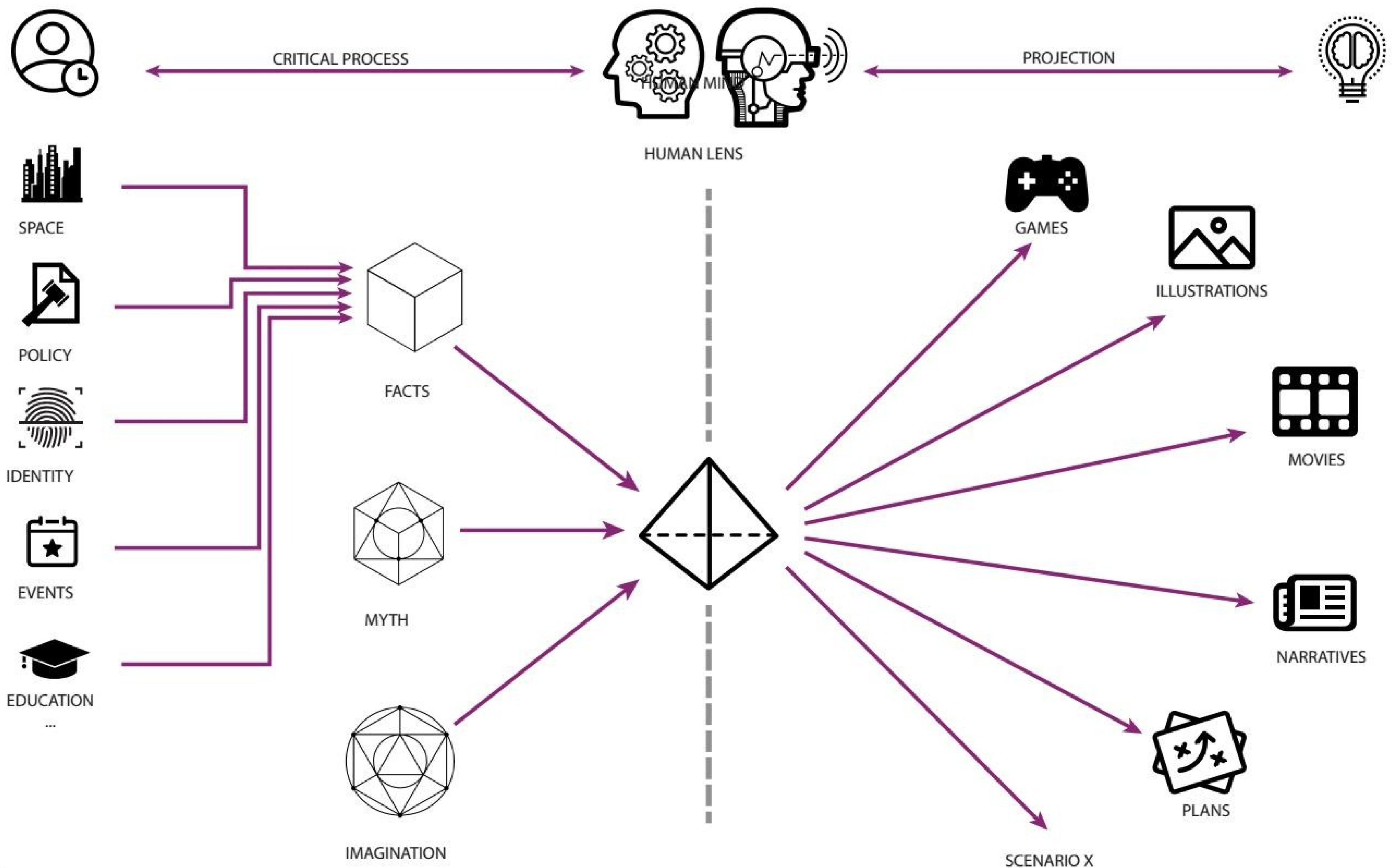
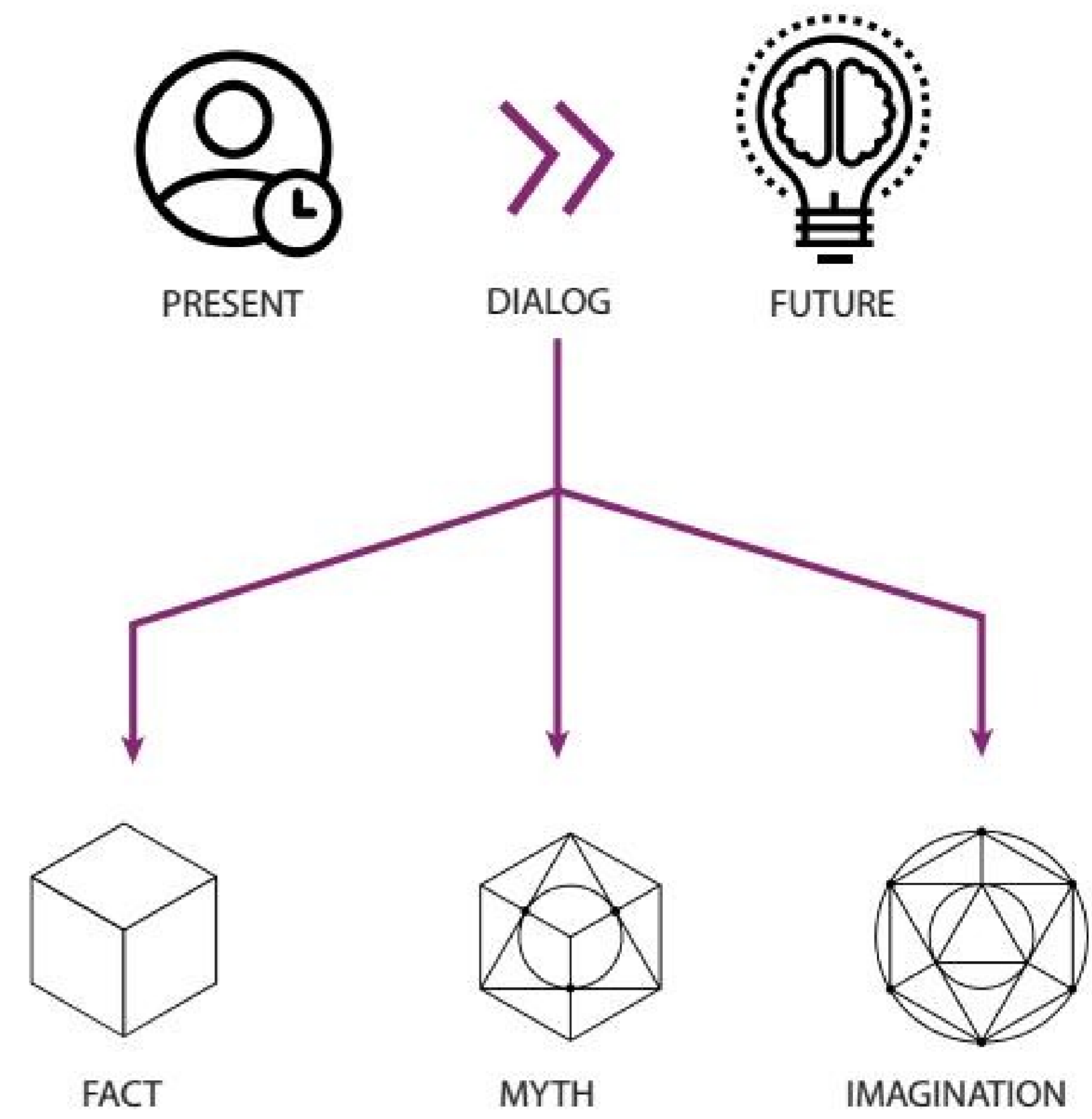


HONG KONG HAS BEEN USED AS BACKGROUND INSPIRATION IN MANY MOVIES AND GAMES AS IMAGINARY FUTURE, BUT HOW ABOUT THE IMAGINARY OF HONG KONG'S OWN FUTURE ?

THE THEORY

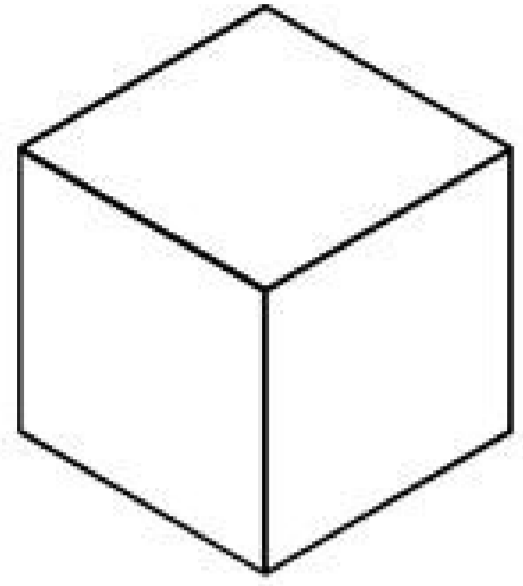
To project and imagine the future, an analysis of the present situation is required. Doing that is establishing a dialog between present and future by highlighting issues or concerns from the present and projecting alternatives for it in the future through a critical thinking.

The process of this dialog between present and future is based in three inputs that help guide the vision of the future: facts, myths and imagination. As an output, the projection can be represented in the form of a game, illustrations, movies, narratives, scenarios.

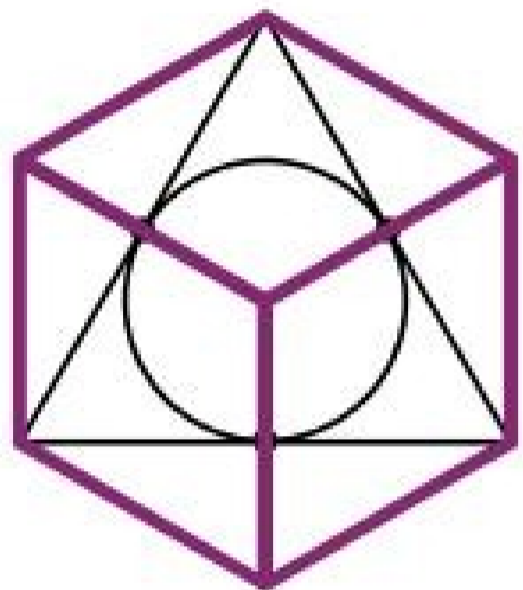


THE TRIAD

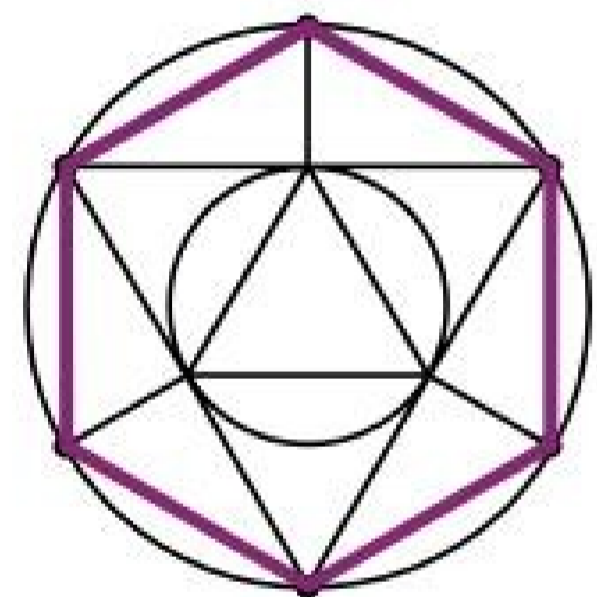
The projections and visions can be dismembered in three aspects: reality or facts, mythology and imagination. With these three elements, is possible to filter and process the present, building a logic that leads to a possibility of future.



REALITY: roughly it can be defined as things than can be seen and proved real by the five senses. It can also be resumed in numbers and data, since is closer to the tangibility of the self. But there are rare exceptions like hallucinations there will not be considered in this studies.



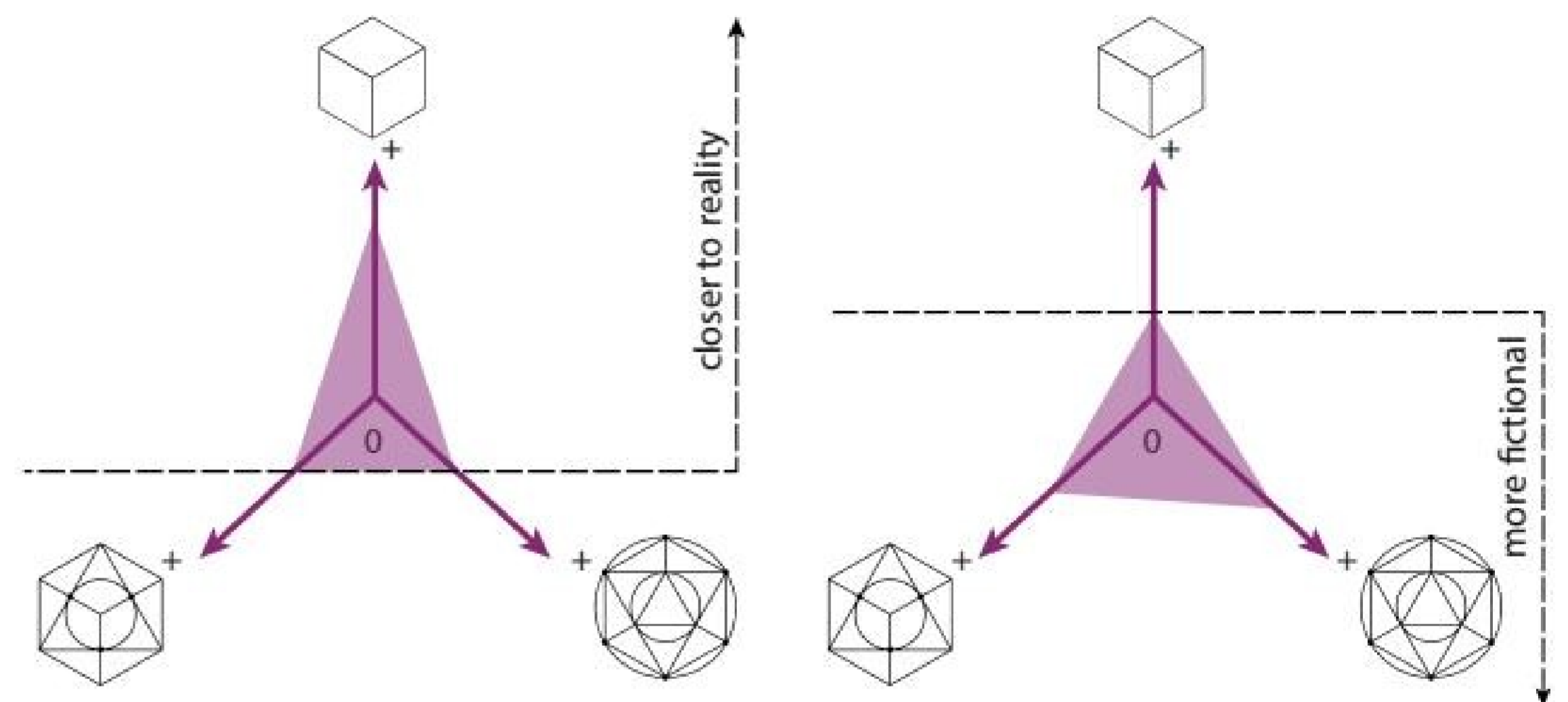
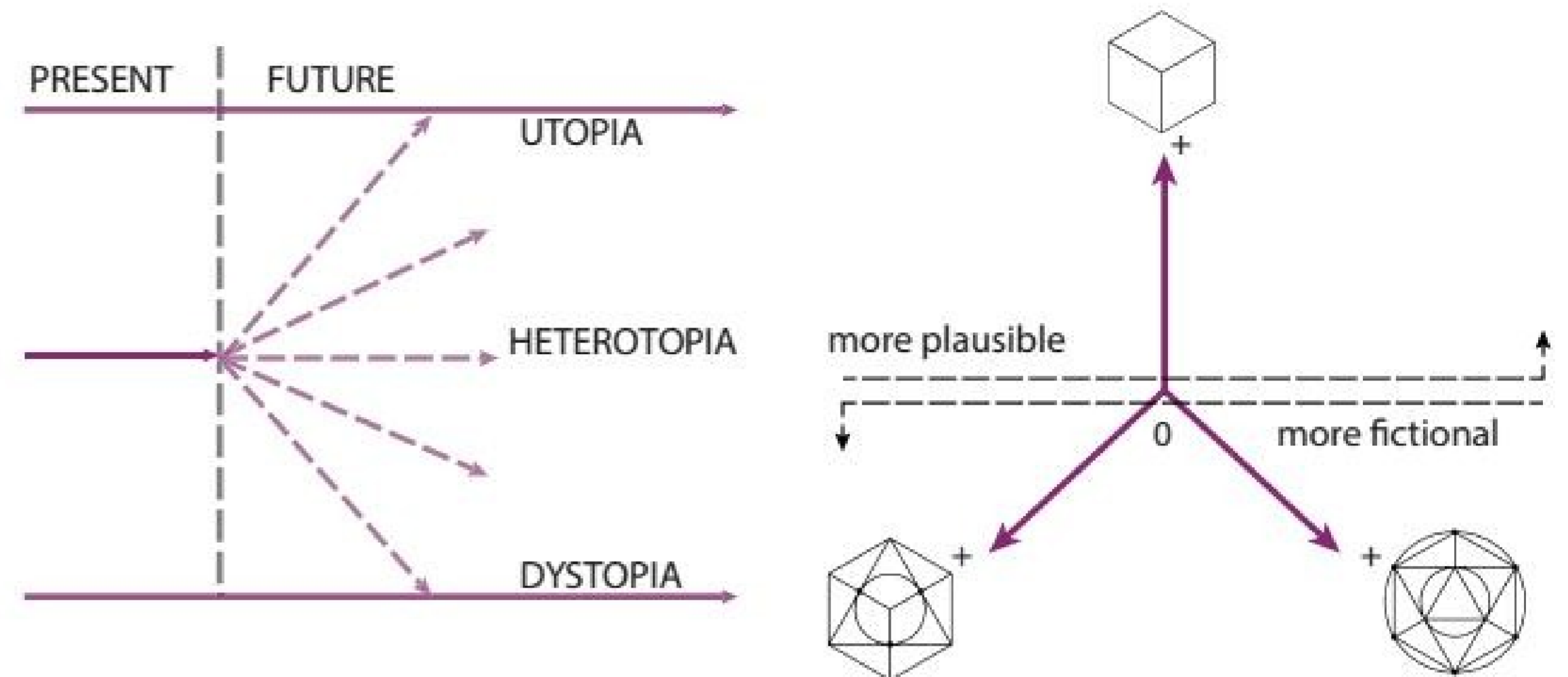
MYTH: many authors have tried to define what this concept. According to Lewis, myths are thing that carry a certain power but are ultimately untrue. For Tolkien, they are the "best way of conveying the truth which would otherwise be inexpressible". In other words, they can be ways to express fragments of the truth. For Claude Levi Strauss, myth are the dilemmas of the human existence. For Joseph Campbell, it is a control system trying to explain some natural phenomenon and rites.



IMAGINATION: According to Tolkien, imagination can be also the synonym of creativity. In this case, can be something with traces of reality, but no boundaries or limits. Imagination is far more complex than reality and myth. According to the Oxford dictionary it is the faculty or action of forming new ideas, or images or concepts of external objects not present to the senses. Imagination not necessarily presents a rational line of thinking.

FUTURE VISION

How can the three elements be related? The future visions always present the three of them, in different weights, creating different possibilities of imaginary future, possibly getting closer or further from reality, reaching parts of the many "topias" in between the utopia and the dystopia.

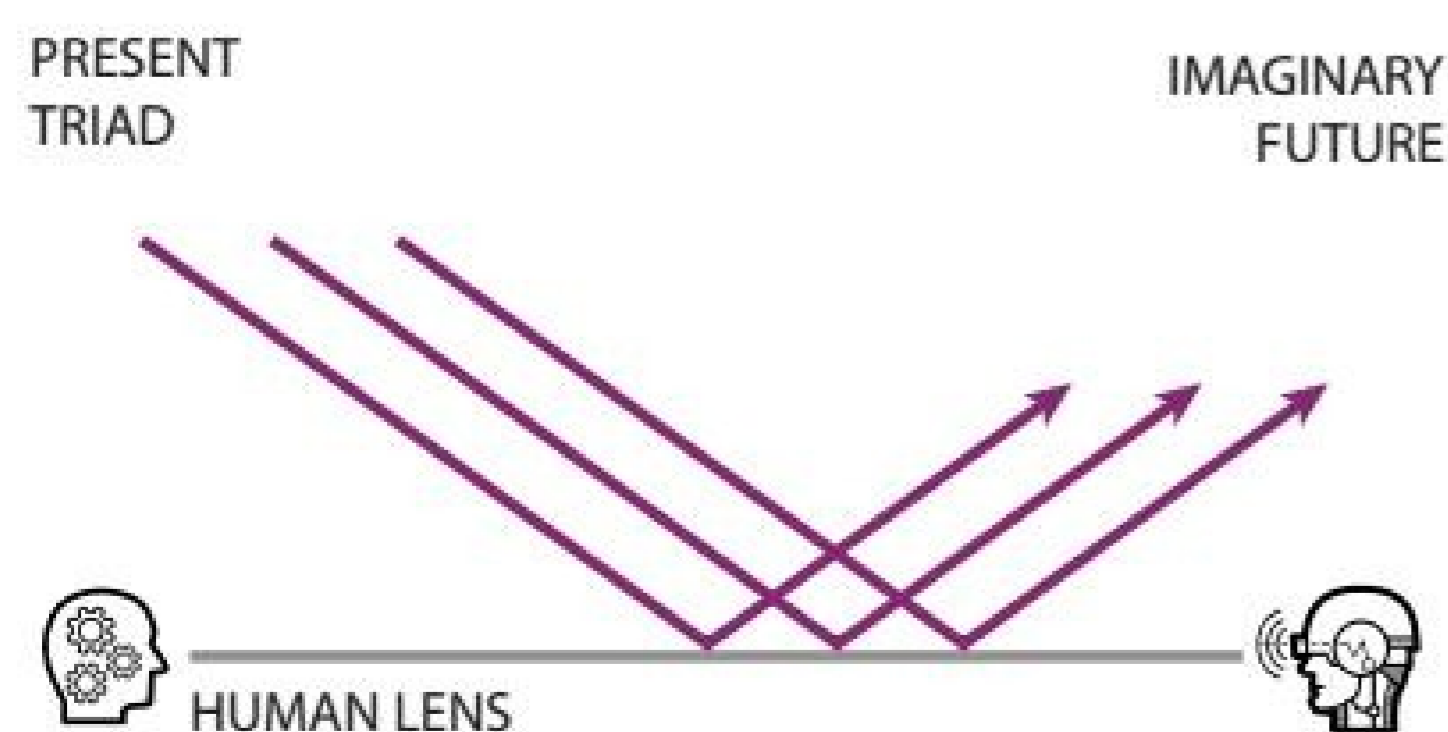


BALANCING AND REFLECTING

The vision of the future can be put like a reflective surface, according to different weight of the three parameters of the present, the result can be different.

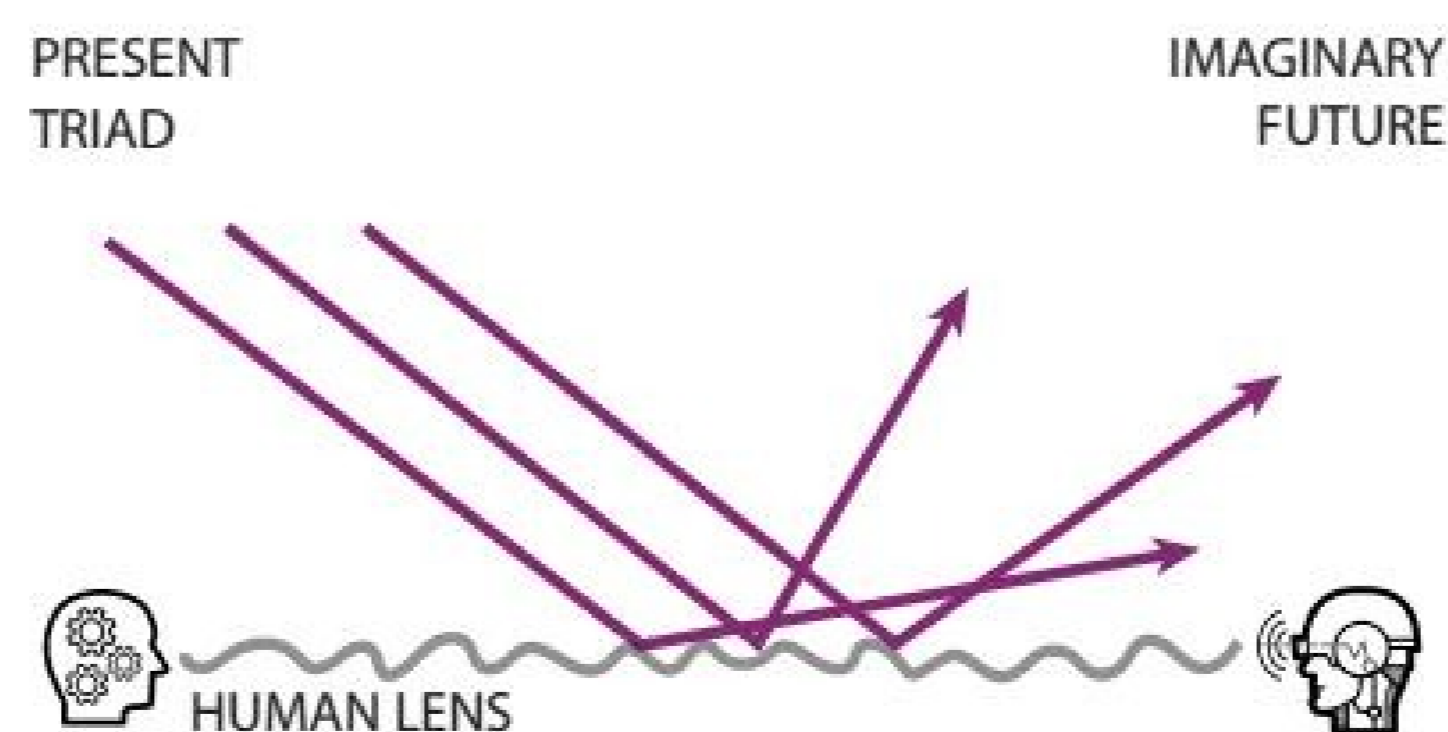
SPECULAR REFLECTION

More 'perfect' and closer to reality, like the reflection of a mirror, clean and neat.



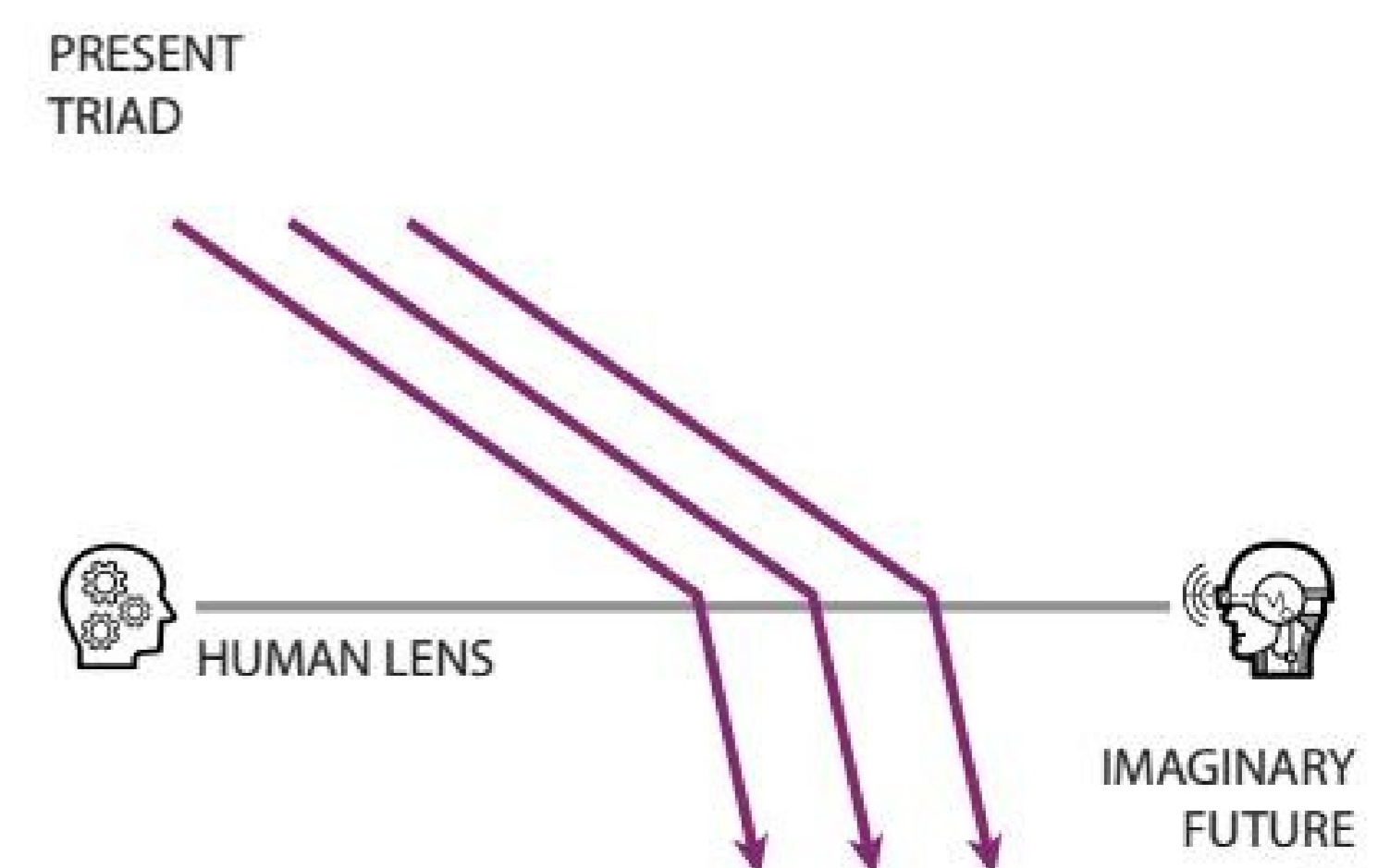
DIFFUSE REFLECTION

Is not perfect. Could be interpreted as more critical way to project the future, making possible some 'distortions'.



REFRACTION

It can be interpreted as super critical, almost reaching the maximum of irony, by bringing the worst part of the present and projecting into the future.



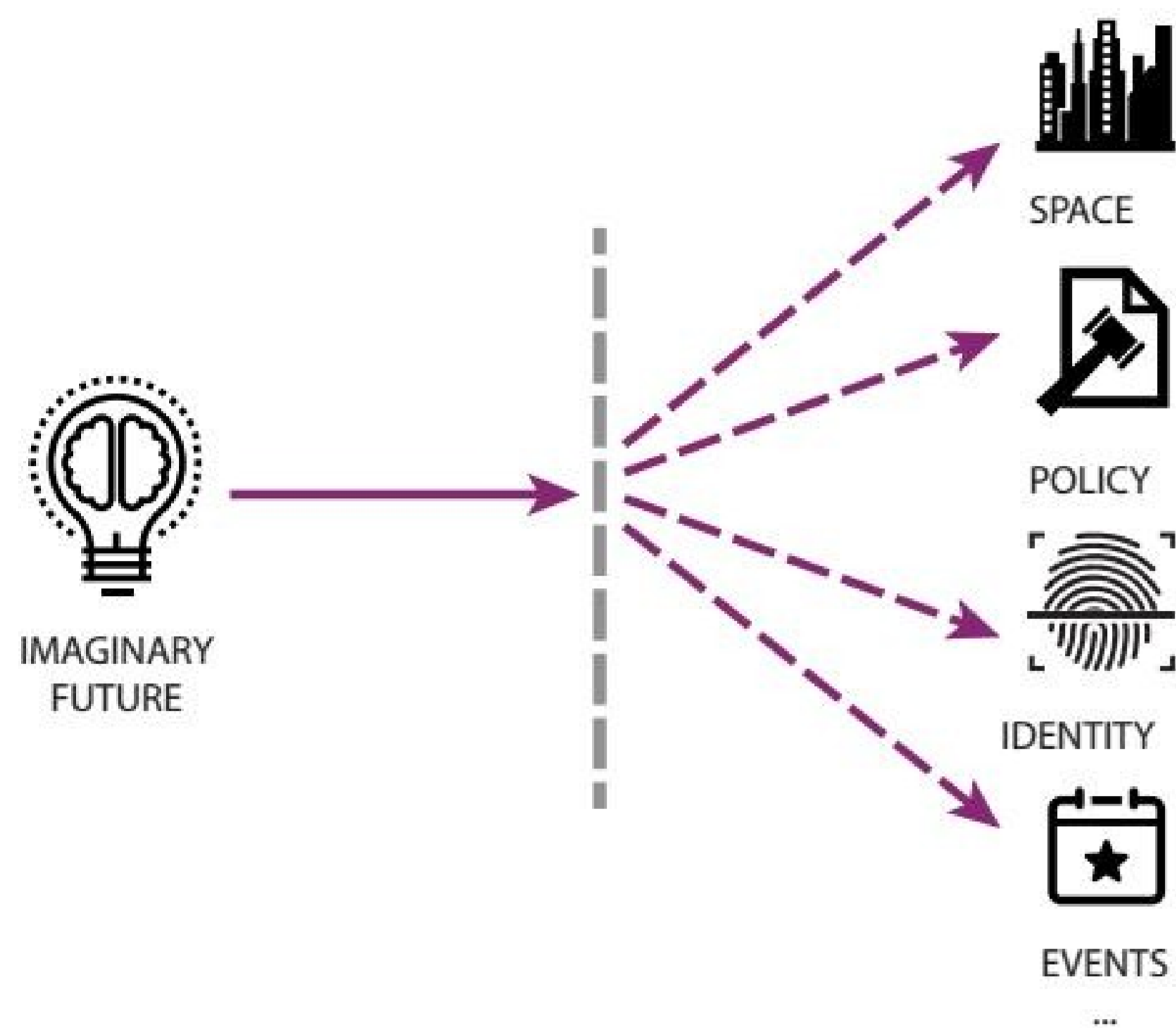
LEARNING WITH THE MASTERS

THE PROCESS OF ANALYSIS

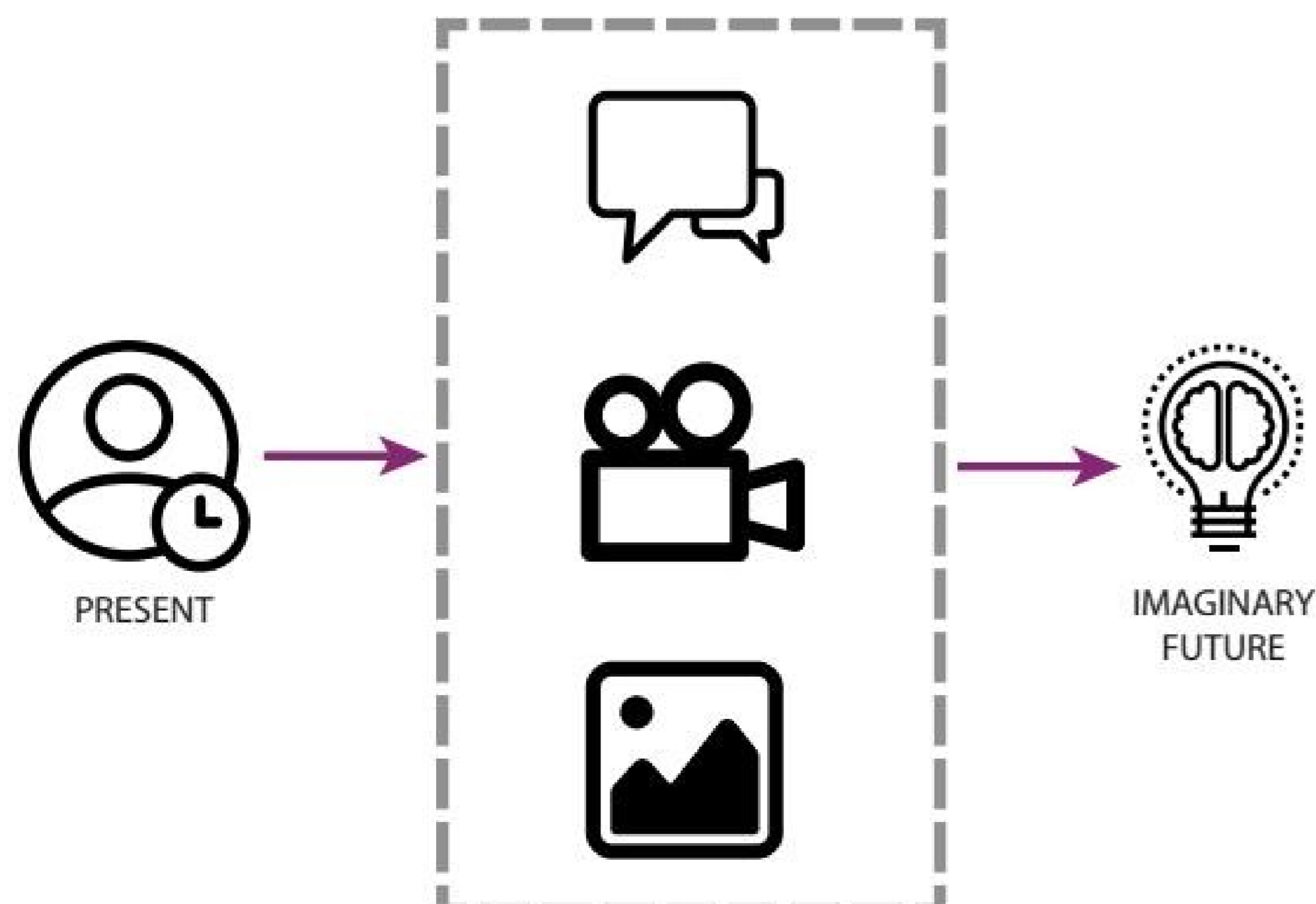
The analysis and study of references will be break in two parts:

1. Study cases of Hong Kong
2. Processes of syntheses

Through the studies cases of Hong Kong is possible to have the reverse relationship. From the final imaginary vision, is possible to extract clues and traces of the moment it was written or created.



On the second case, the target is to 'reveal' the process of syntheses and the different ways to write the imaginary. Is the in between process of translation of the present and transformation into future using distinct methods and approaches



1. STUDY CASES

With a set of parameters is possible to start the analysis of cases that uses the reality to project and imagine a possible vision of future. All of them are spread through different medias, from movies to real city planning. The common factors among them were:

1. They were set in Hong Kong or were inspired by Hong Kong
2. They are in the future
3. They are prospective



2. REFERENCES

There are different ways to illustrate and tell a story about the imaginary future. According to a designer point of view.

1. They are in the future
2. They are prospective
3. They have the city as one of the main elements or ways to describe the future



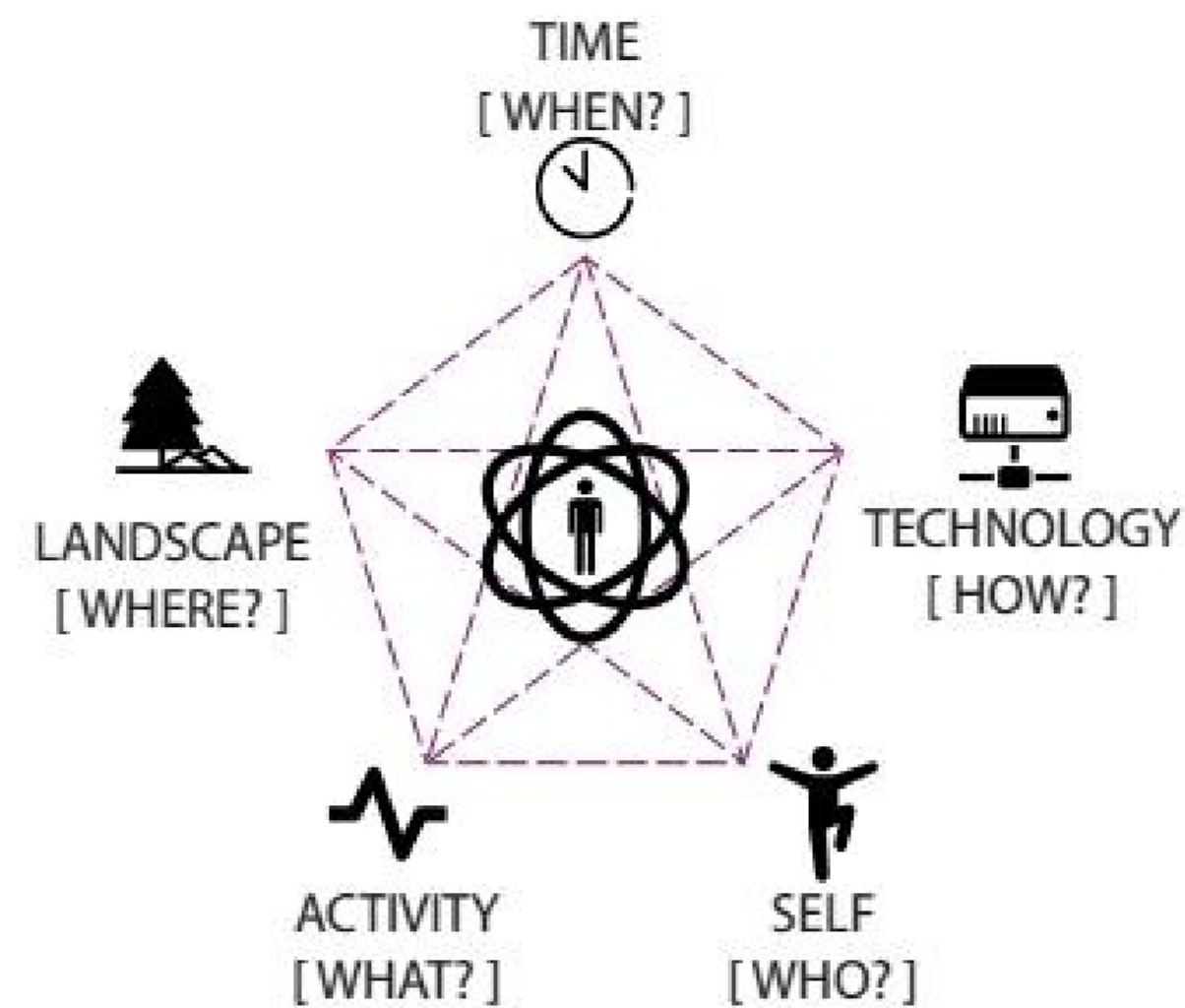
GRID OF ANALYSIS

The grid of analysis is a common point that allows a deeper study and analysis of different examples. The parameters of this grid include five main categories, that helps define the environment and its interactions (inter.actions).



ENVIRONMENT

According to the Oxford dictionary, environment can be defined as the surroundings or conditions on which a person, animal or plant lives or operates.



Each one of the five points can be seen in a different way and can be broken into sub categories that can be more tangible or less tangible. Some of them are easily seen, other can just be felt, not necessarily grasped or touched.



TIME

According to the Oxford dictionary, environment can be defined as the surroundings or conditions on which a person, animal or plant lives or operates.



Time of origin
When was the vision created?



Time of the future
When is the targeting time?



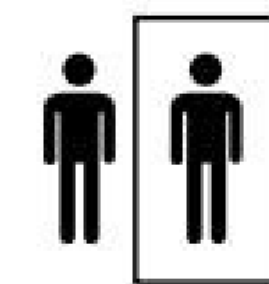
ACTIVITY

The action that are taken in the place. The interactions between people, and the framed environment.



EXCHANGE

The relationships between individuals. What are people doing?



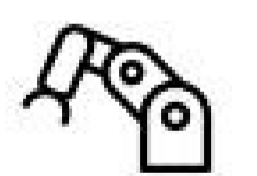
EXPOSURE

How are the activities showed? What are the characteristics of it?



TECHNOLOGY

Innovations and elements that links the actions and individuals.



MOBILITY

The ways to move in the city, the transportation systems and efficiency.



COMMUNICATION

Exchange of ideas and ways to be connected with other individuals or central of process information.



THE SELF

The individuals and organizations involved in the scene.



IDENTITY

The elements that group these individuals in the same categories.



LANDSCAPE (SPACE)

The characteristics of the surroundings, the elements that turns the space into a place, with specific characteristics and features.



NATURE

Natural elements and phenomenons



CITYSCAPE

The shape and physical form of the space portrayed in the scene

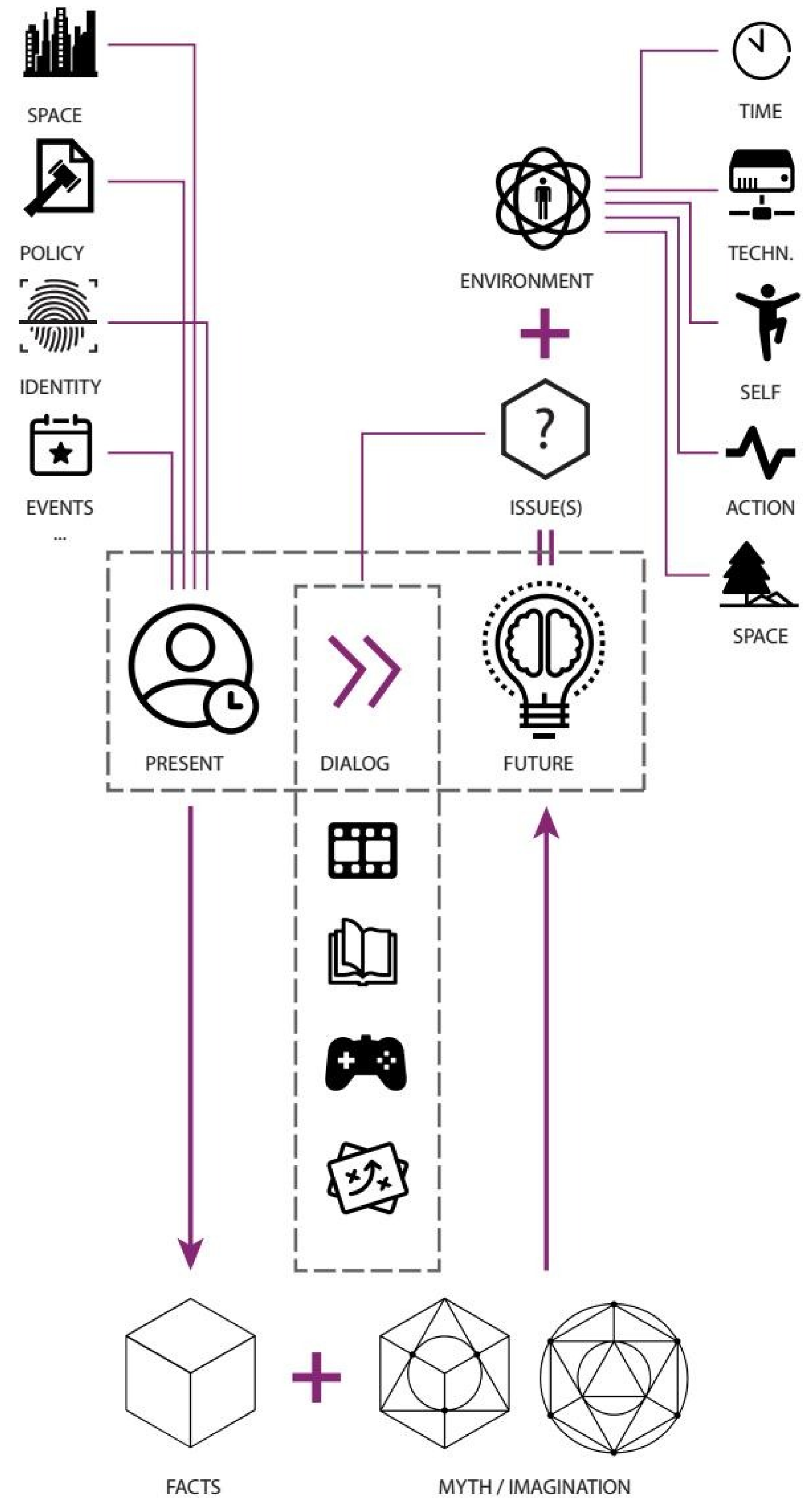


AMBIANCE

Feelings and elements that cannot be easily seen or described and still help define the environment

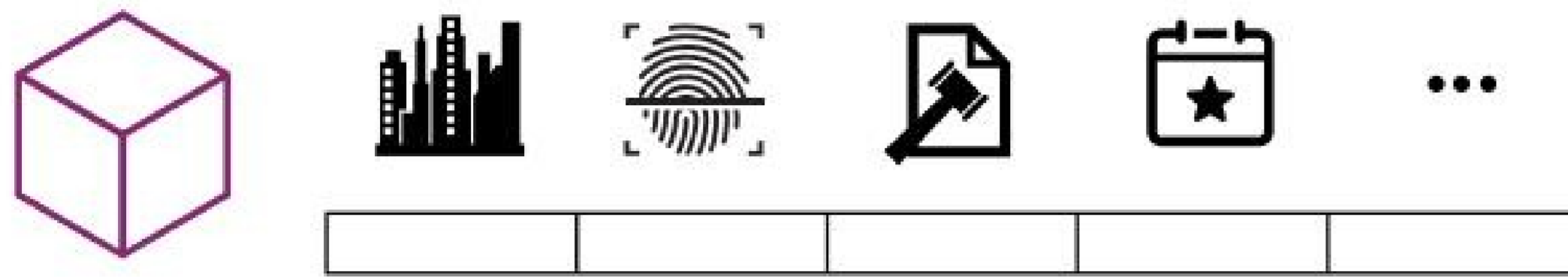
1. STUDY CASES

According to the five parameters established before, how are the study cases related? How do they connect the imaginary future and the dialog with the present, going beyond a simple image reference?



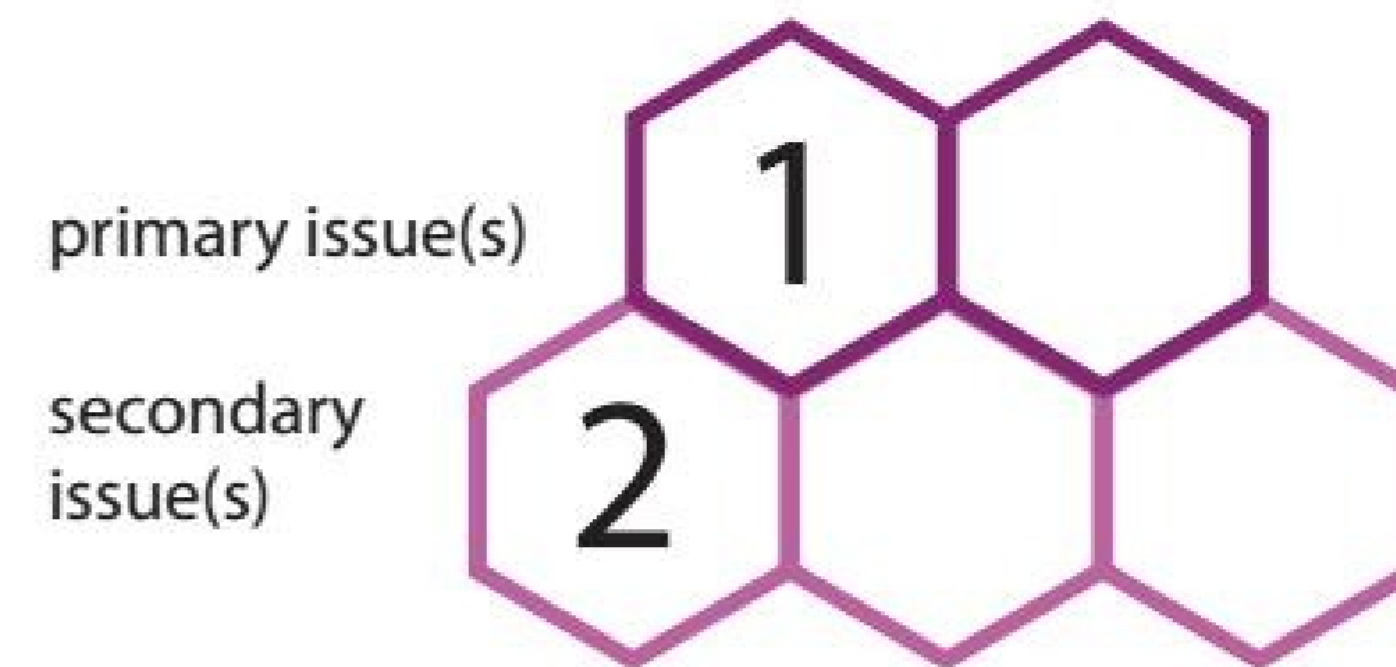
1. REFERENCES TO THE PRESENT

How deep are the references of the present in the movies? The stories are different, but is it just a spacial reference or it goes in deeper levels like culture/ identity, policy, a specific event or other associations linked to Hong Kong?



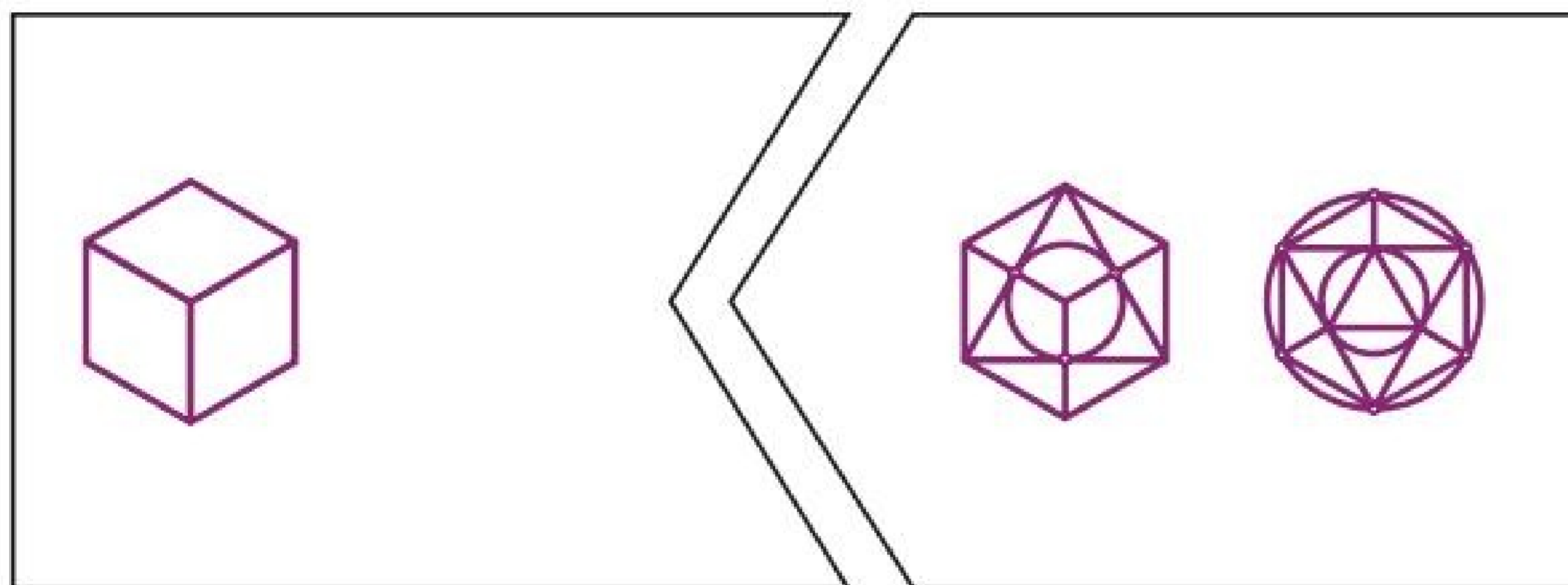
2. MAIN ISSUES

Each one of this visions have a particular approach according to specific topics that guides the narrative. Most of them have other focuses rather than the city itself.



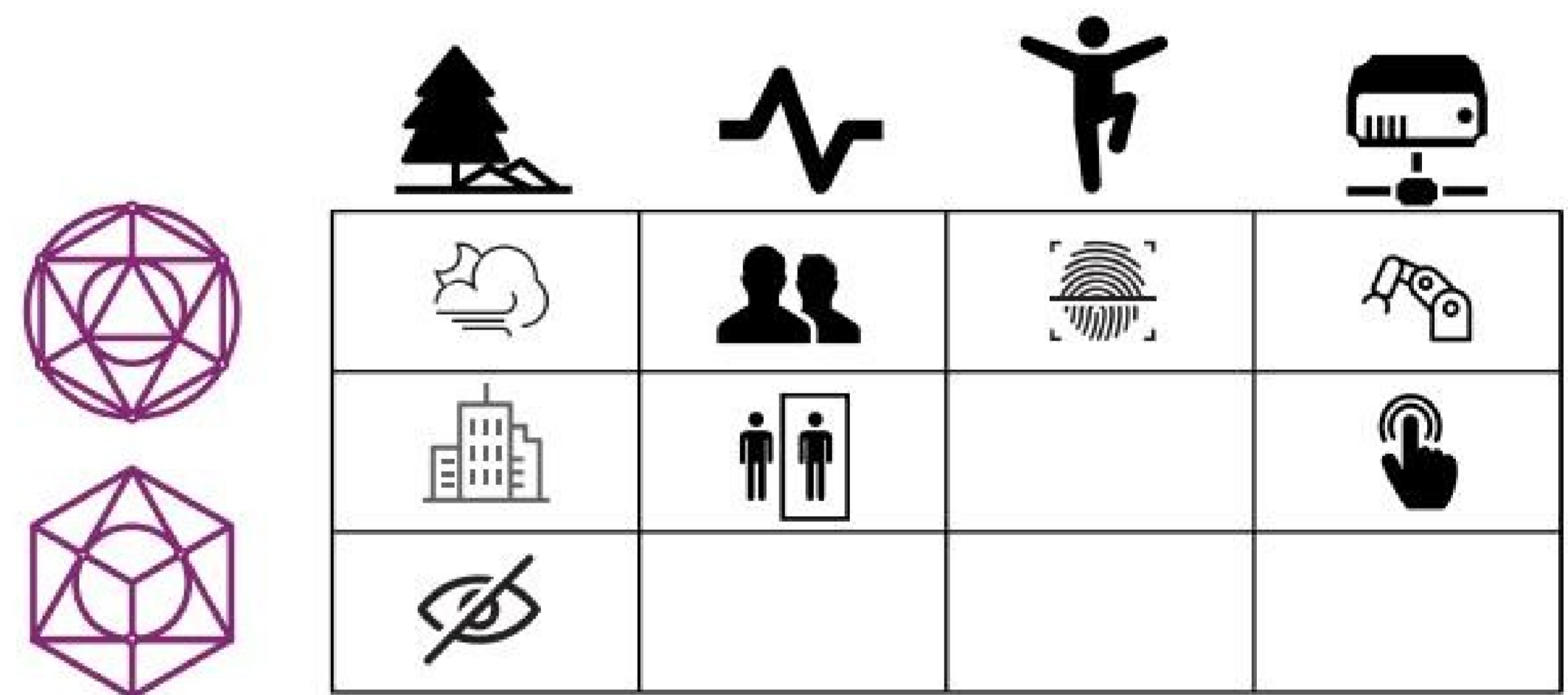
3. VISUAL REFERENCE

The link and association between the present and the imaginary put in a clear way. On the left side, the real city, on the right side, the imaginary, making reference to the reality.

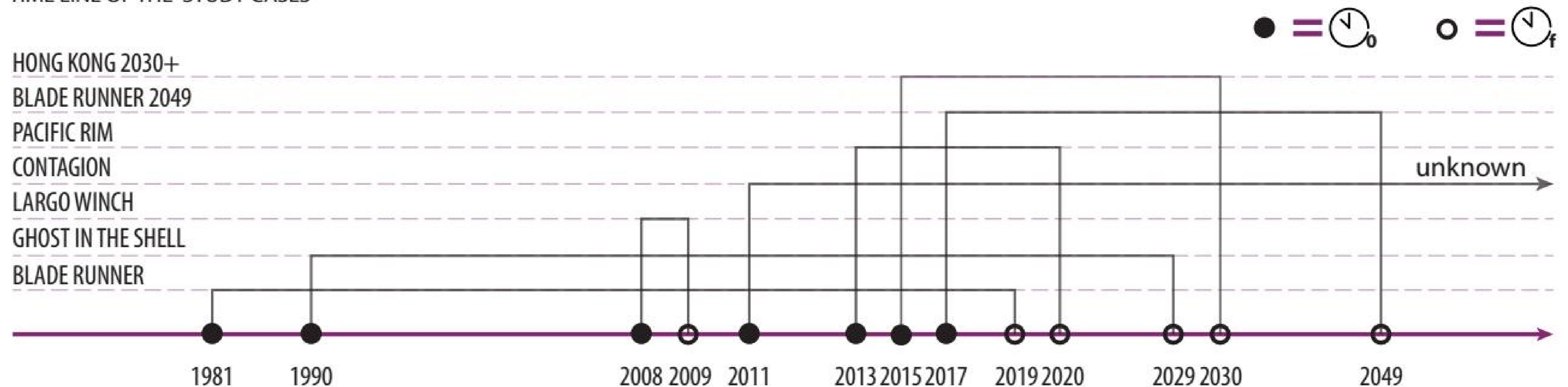


4. THE NEW CREATION

What is new and brought by the imagination and myth of the authors? How are the new relationships between the elements mentioned before: landscape, activity, the self, technology...? How are they manifested in media?

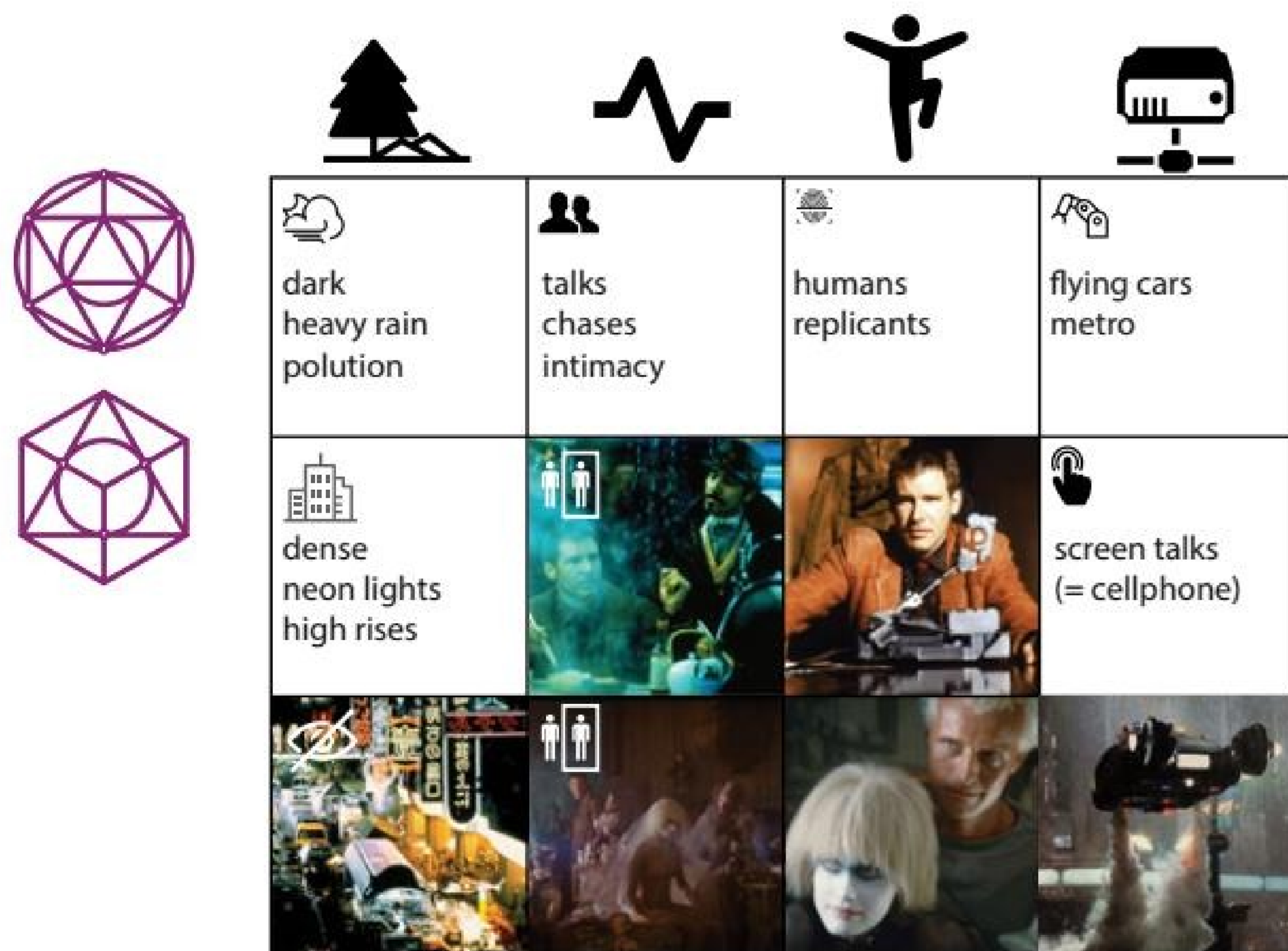


FROM THE BEGINNING TO THE END
TIME LINE OF THE STUDY CASES



BLADE RUNNER

Yuen discusses the film's stylization of a futuristic Los Angeles, modeled after the Hong Kong cityscape. Ridleyville, as he calls it, sustains the film noir tradition through "dark and explosive scenes of riot and chaos". Yuen suggests that the chaos of a typical Hong Kong street scene represented in the protracted scenes of cityscape in Blade Runner serve to illustrate a society confused about its own identity, about to implode at any moment. [1]



In Blade Runner, the conflict and tension between the Replicants, or cyborgs mimicking humans, and people of flesh and blood parallel the modern day consequences of increasingly expansive consumerism and intrusive technology encroaching on people's lives. Indeed, a look into Hong Kong's development in the past few decades as well as its present status as a world economic center today lends insight into why directors such as Scott and Oshii chose to represent this city in their films. Yuen asserts that Hong Kong has potential for becoming the "forerunner of what the contemporary capitalist world city will eventually become", and that its recent re-absorption by mainland China has highlighted the city's historical struggle between British colonialism and traditional Chinese culture. This is what lends Hong Kong its distinctive "feeling" as a city, differentiates it from other ultra-modern East-Asian cities such as Singapore and Tokyo, and ultimately what led Scott and Oshii to incorporate it into their films. [1]



Right: Jockey Club Hong Kong, Gallen Chui
Top: Blade Runner

[1] Zhu, Ray. (2016). Case Study: Hong Kong's Influence on Blade Runner, Ghost in the Shell, and Cyberpunk Cinema. Medium website. [Available at: <https://medium.com/@ray.zhu/bridging-the-gap-sci-fi-cinema-and-depictions-of-hong-kong-sar-b15800678c29>]. Accessed in September, 2017.

BLADE RUNNER 2049

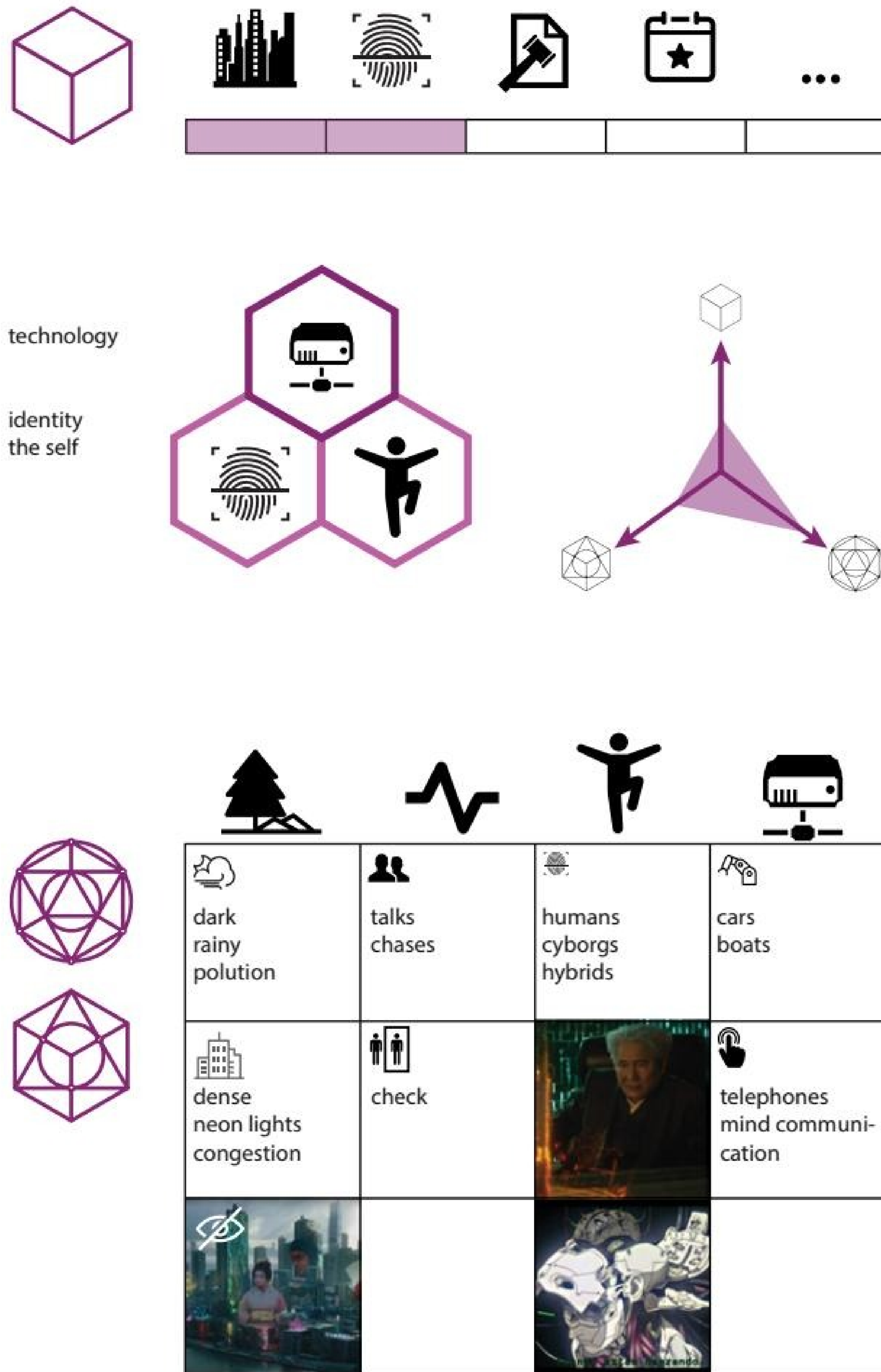
Coming soon
Watch on the Mid Autumn Festival



Conceptual illustrations.
<http://www.bladerunner2049movie.com/gallery/>

GHOST IN THE SHELL

Oshii commented that his first thought to find an image of the future setting was an Asian city, but finding a suitable cityscape of the future would be impossible. Oshii chose to use the real streets of Hong Kong as his model.[2] He also said that Hong Kong was the perfect subject and theme for the film with its countless signs and the cacophony of sounds.[3]



[2] Redmond, Sean (2004). *Liquid Metal: The Science Fiction Film Reader*. Wallflower Press. pp. 101–112.

[3] "Production Report". *Ghost in the Shell (DVD)*. Extra: Production I.G. 1996.

There are different versions for *Ghost in the Shell*: manga (1990), anime (1995, 2015) and movie (2017). The original story was based in Japan. Only in the manga, some landscapes are far from looking like Hong Kong. In the other media, it is clearer the similarity between the city of the story and Hong Kong.



Left: Picture of the author
Right: *Ghost in the Shell* 1990 (manga)

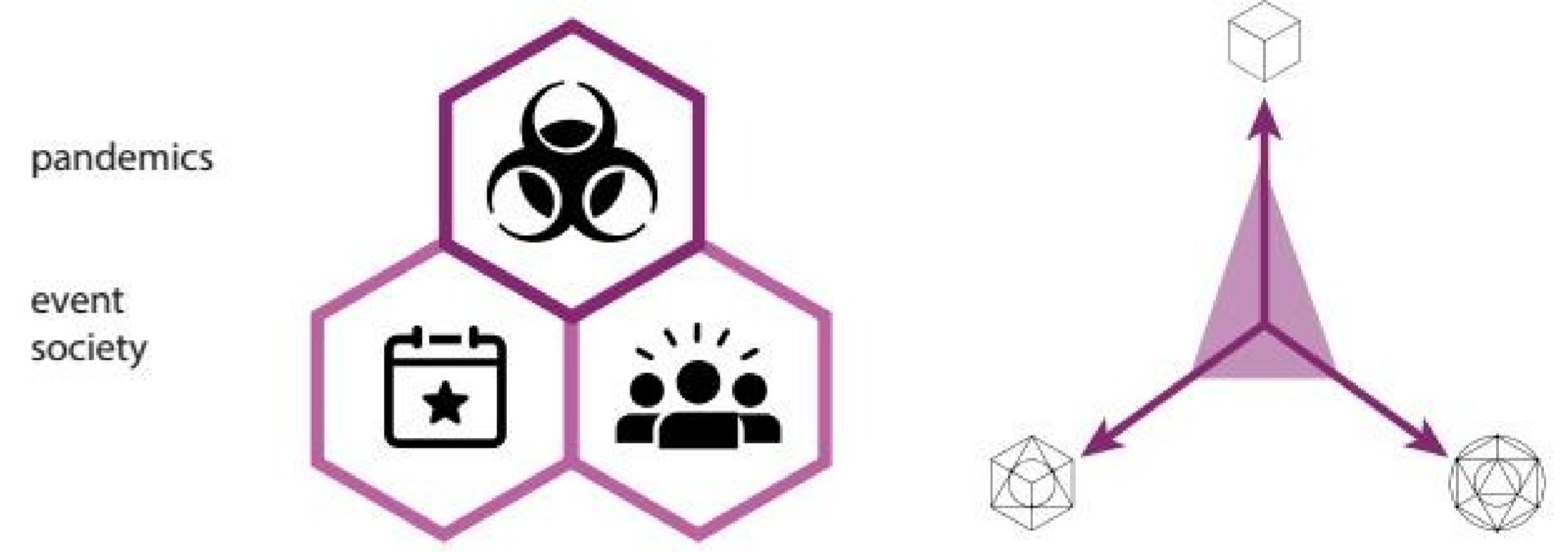
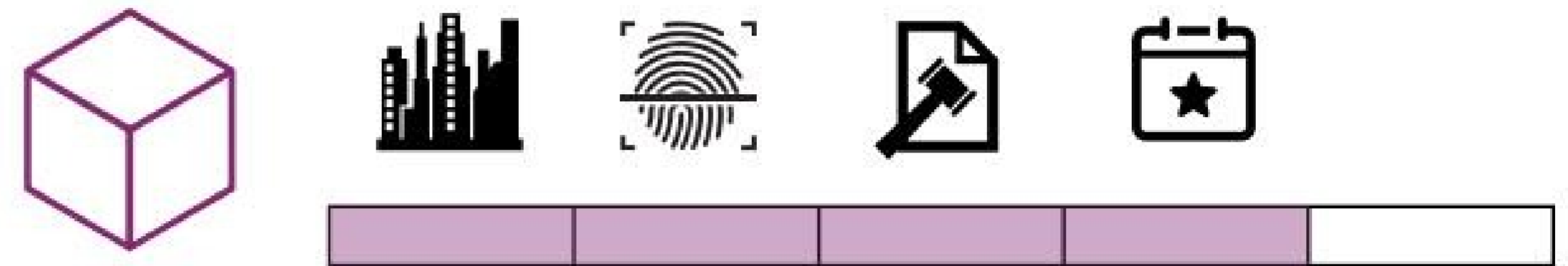


Left: Picture of the author
Right: *Ghost in the Shell* 1995



CONTAGION

In this movie, Hong Kong is the starting point of the spread of the disease. It is a reflection about the 2003 SARS epidemic and 2009 flu pandemic. The biggest critique of this case doesn't involve only Hong Kong but also another international cities in a possible pandemic event.



Left: Google Images
Right: Ghost in the Shell 2017



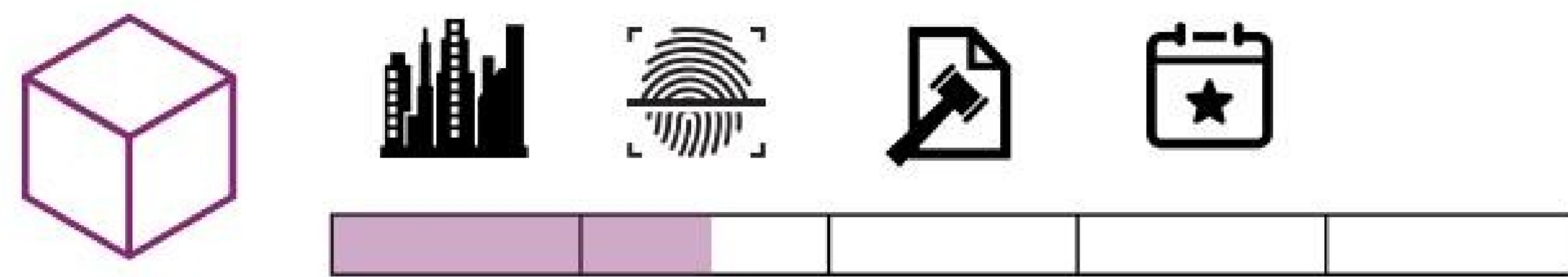
Left: Picture of the author
Right: Contagion scenes



Left: Google Street View
Right: Contagion scenes

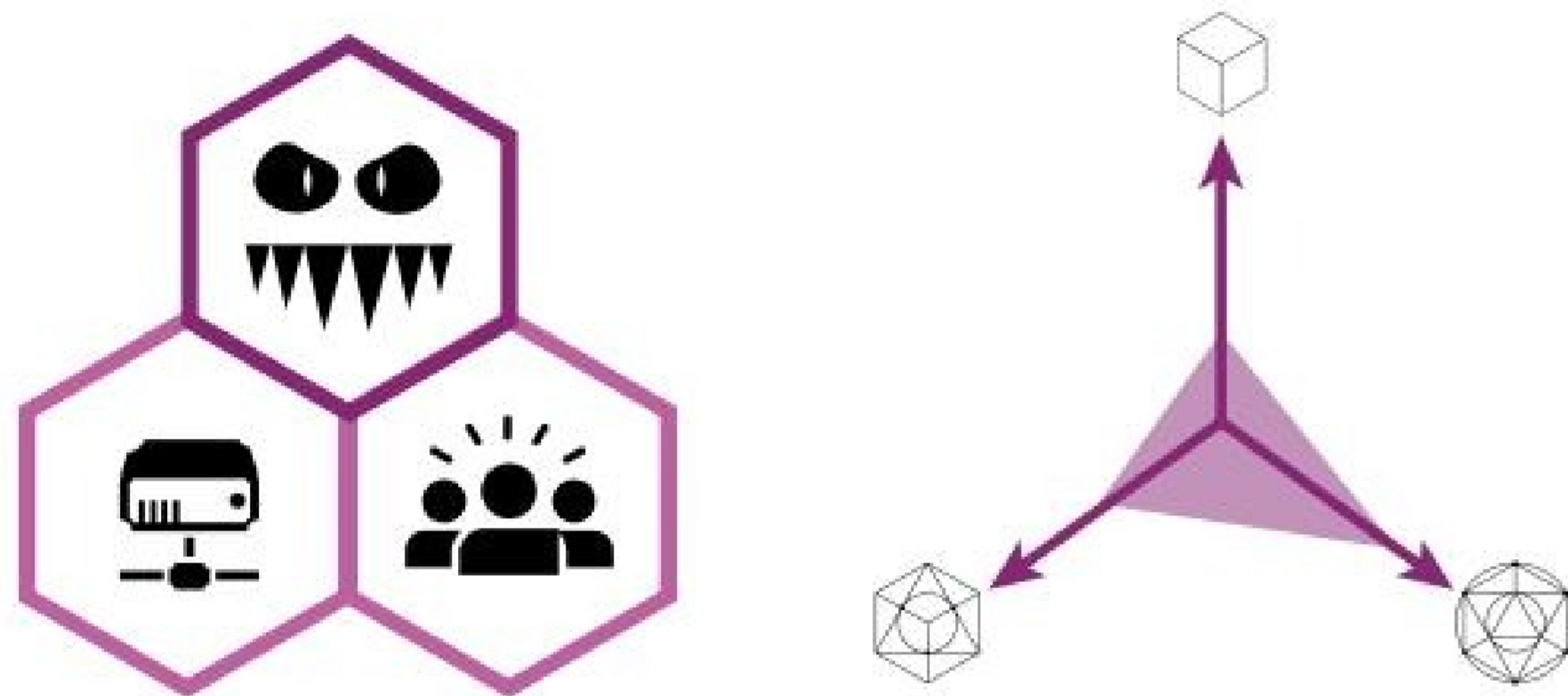
PACIFIC RIM

According to Fong, sets he was involved with were: Hong Kong streets, Hannibal Chau's secret lair, the Hong Kong underground evacuation bunker, The Alaska Shatter dome/"Suiting Up" airlock, The Hong Kong disaster zone and mood development on Shatter dome launch bay/repair mezzanine, as well as some on-set prop design. [4]



monsters

technology
society



Left: Google Images

Right: Pacific Rim Concept - Henry Fong



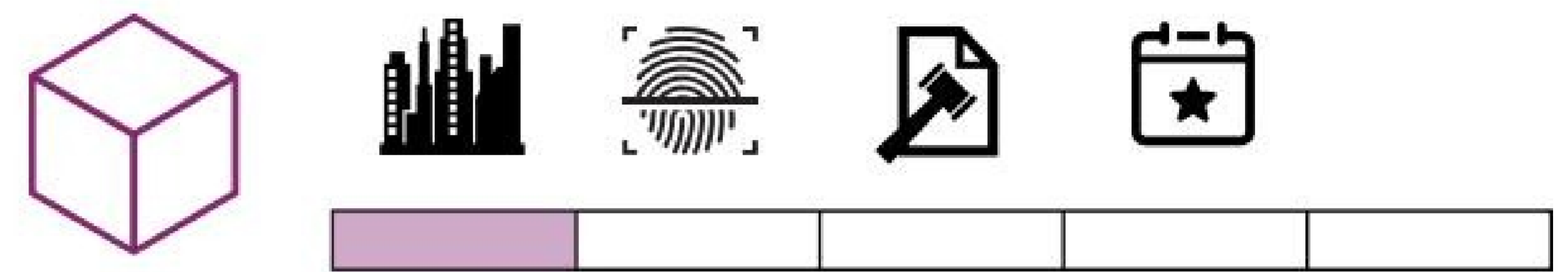
Left: Google Images

Right: Pacific Rim Scene

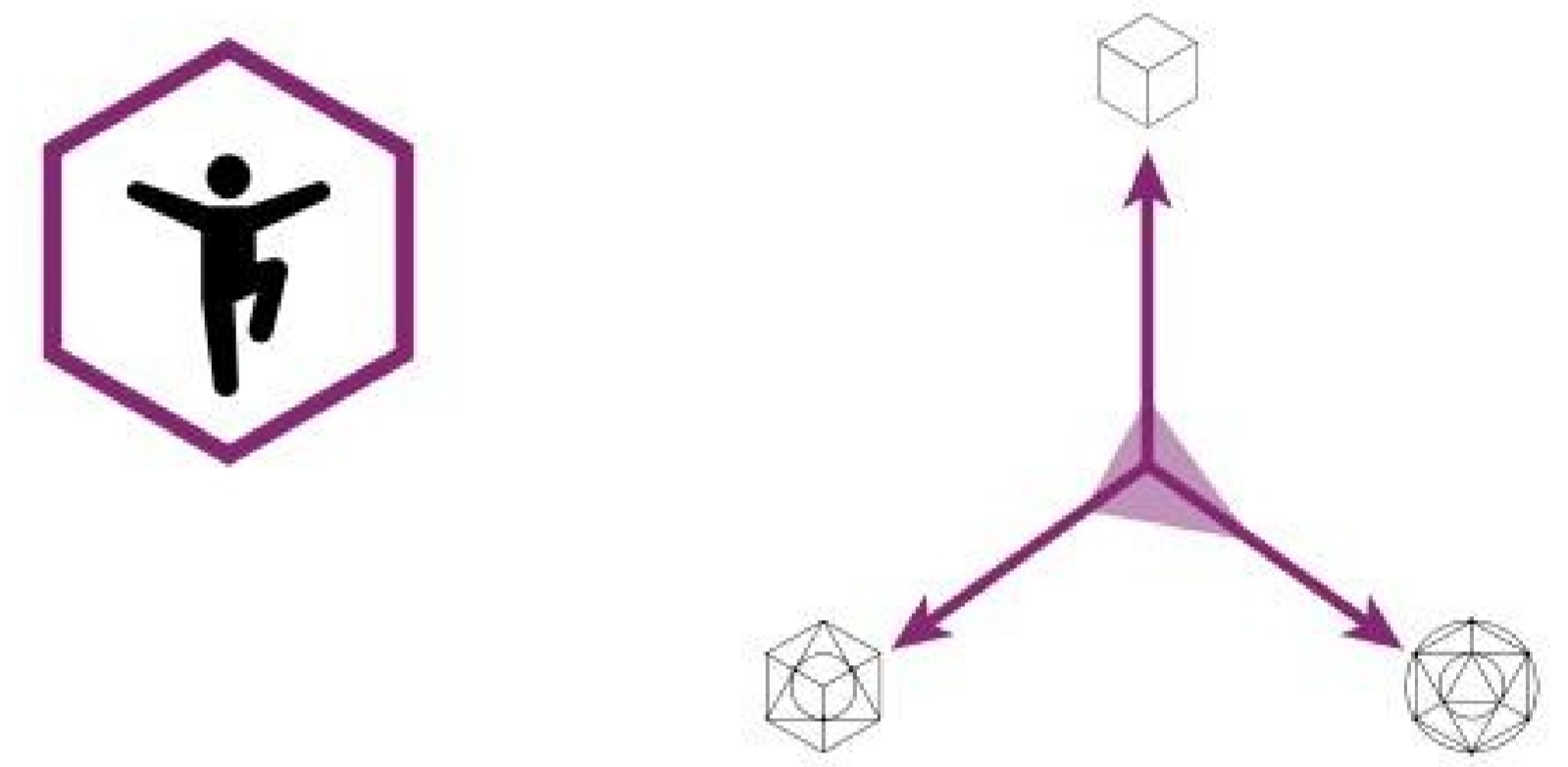
[4] Mitchell, Maurice. (2013). Exclusive: PACIFIC RIM Concept Art and Interview with Henry Fong. Film Sketchr website. [Available at: <http://filmsketchr.blogspot.hk/2013/07/exclusive-pacific-rim-concept-art-and.html>]. Accessed in September, 2017.

LARGO WINCH

The original story was written 40 years ago and the picture is about New York's headquarter. But this was 20th Century. I believe that in the 21st Century, the capital of the world should be in Asia. That's why Hong Kong was chosen as the main location for the movie set. [5]



the self
(revenge)



Left: Picture of the author

Right: Largo Winch Poster- Google Images



Left: Google Street view

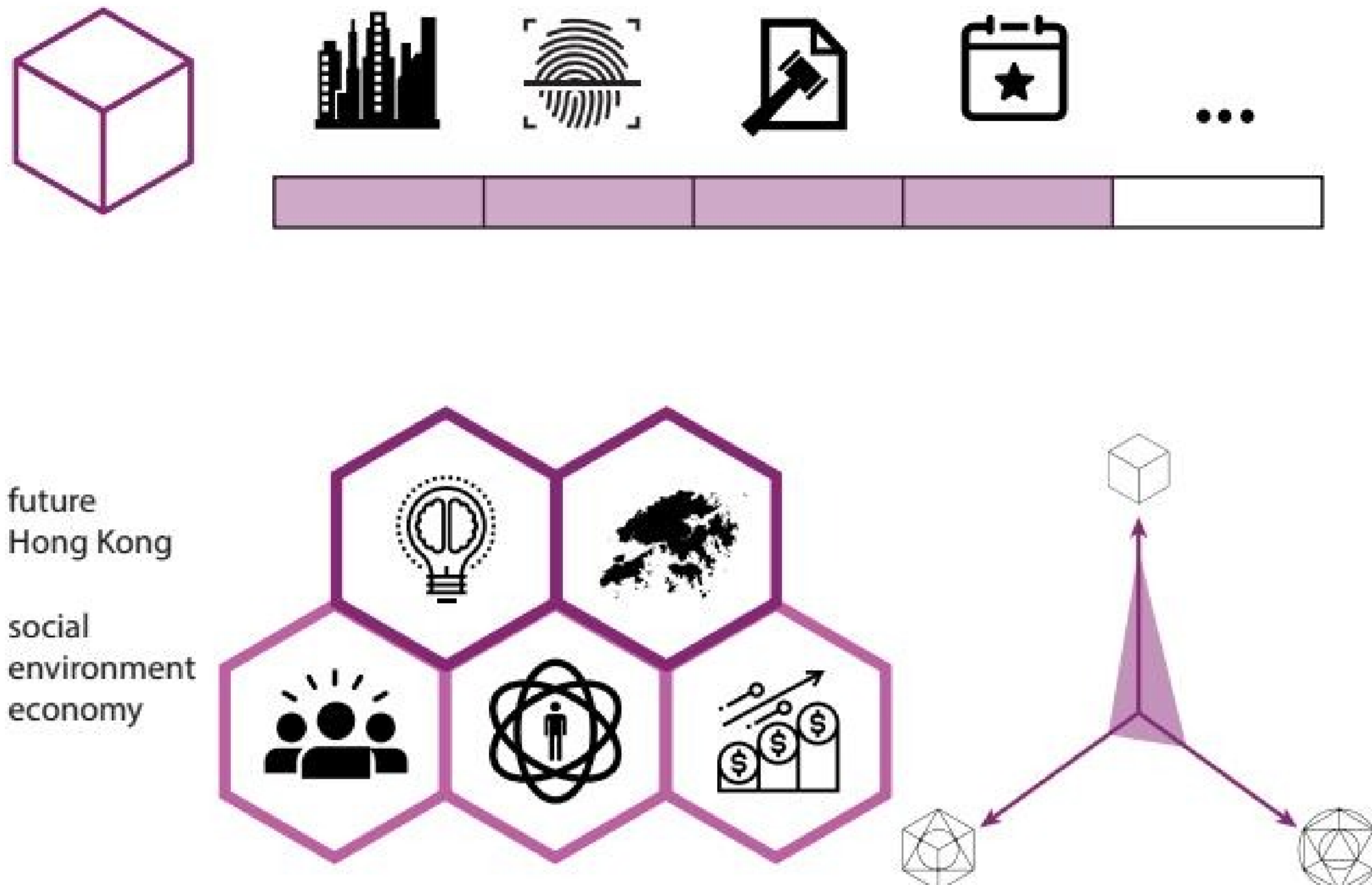
Right: Largo Winch Scene

[5] Salle, Jerome. (2008). South China Post vimeo. You Tube. [Available at: <https://www.youtube.com/watch?v=8XenXNfG6nk>]. Accessed in September, 2017.

HONG KONG 2030+

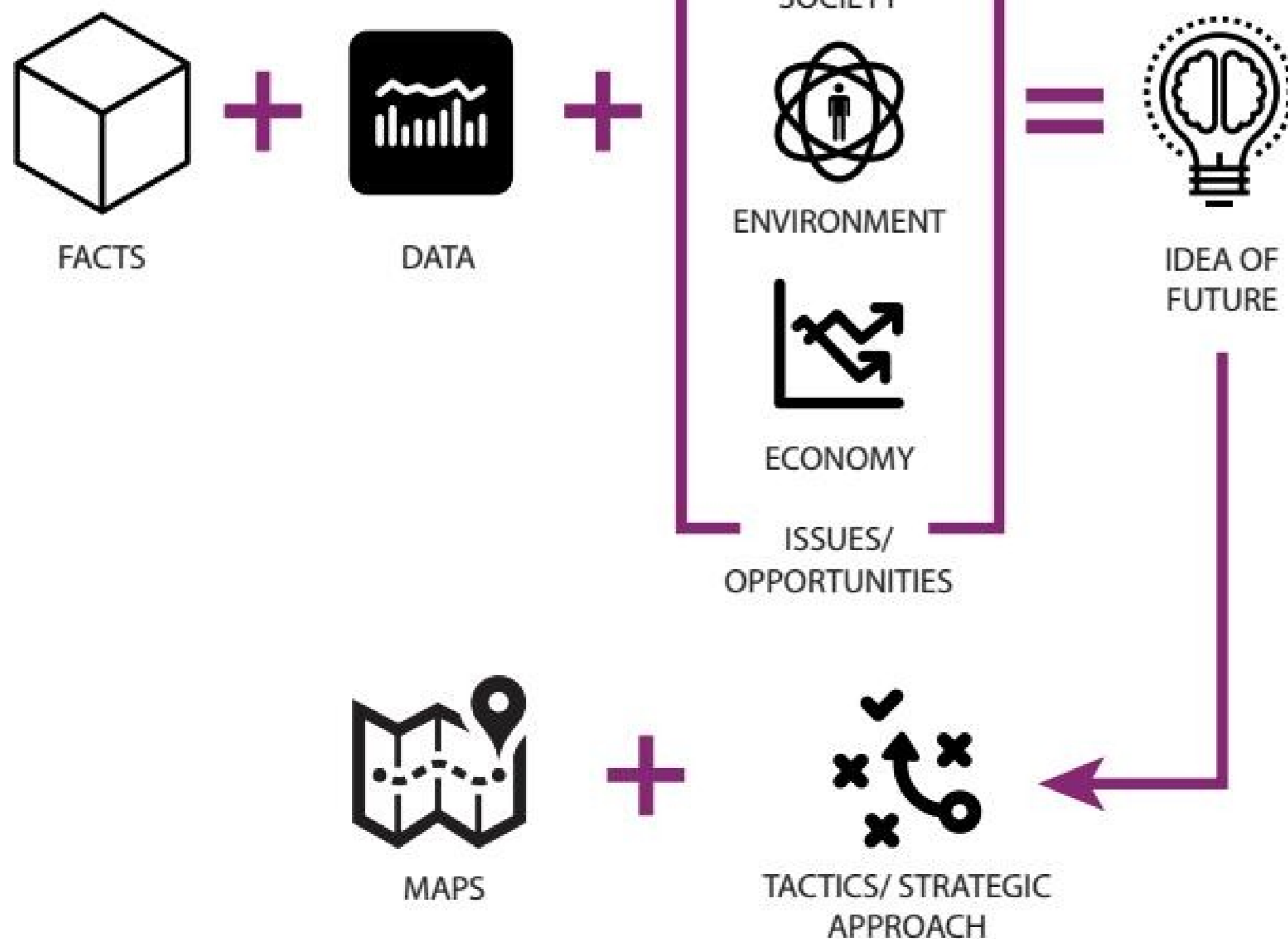
A vision for the city of Hong Kong proposed by the local government, facing some external and internal challenges.

“Updating the territorial development strategy to guide planning, land and infrastructure development and the shaping of the built environment of Hong Kong beyond 2030.”



future
Hong Kong

social
environment
economy



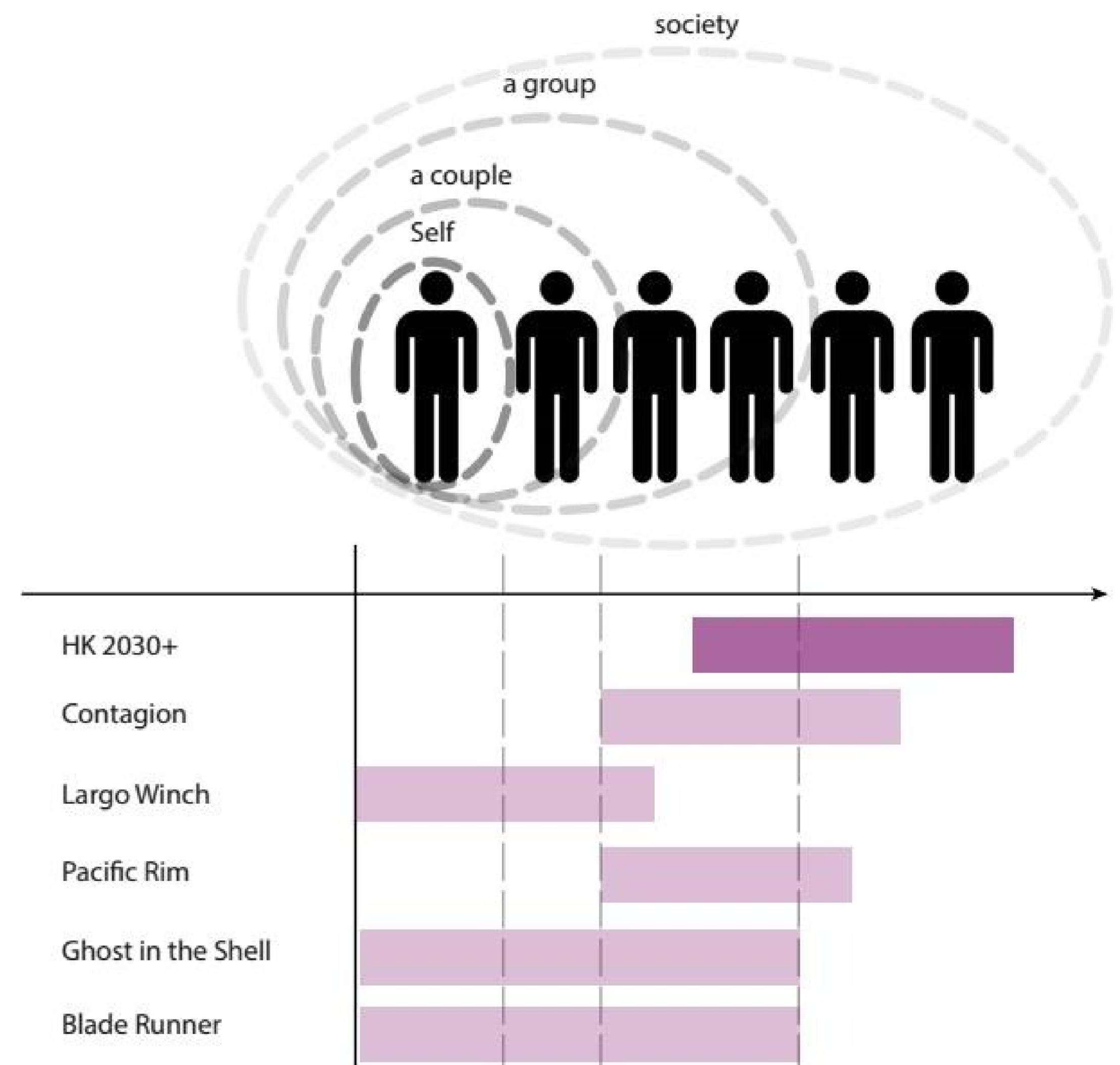
The tactics and planning are divided in different categories, from building block 1 to building block 3, New Territories North development and East Lantau Metropolis.

All of them express wishes and intentions based on real data and projections that aim to be as close to reality as possible.



THE FOCUS (WHO?)

The closer to the self the imaginary is, the less it will have details about the surroundings.



COMMON ELEMENTS

Elements that could possibly express the idea of future and are present in most of the study cases.



URBAN DENSITY

Most of the narratives happen in big cities, with high rises



CHAOTIC ENVIRONMENT

Heavy weather, dark streets, foggy days, cloudy days...



URBAN INTENSITY

Crowded streets, intense movement of people and cars, noises, bright lights at night

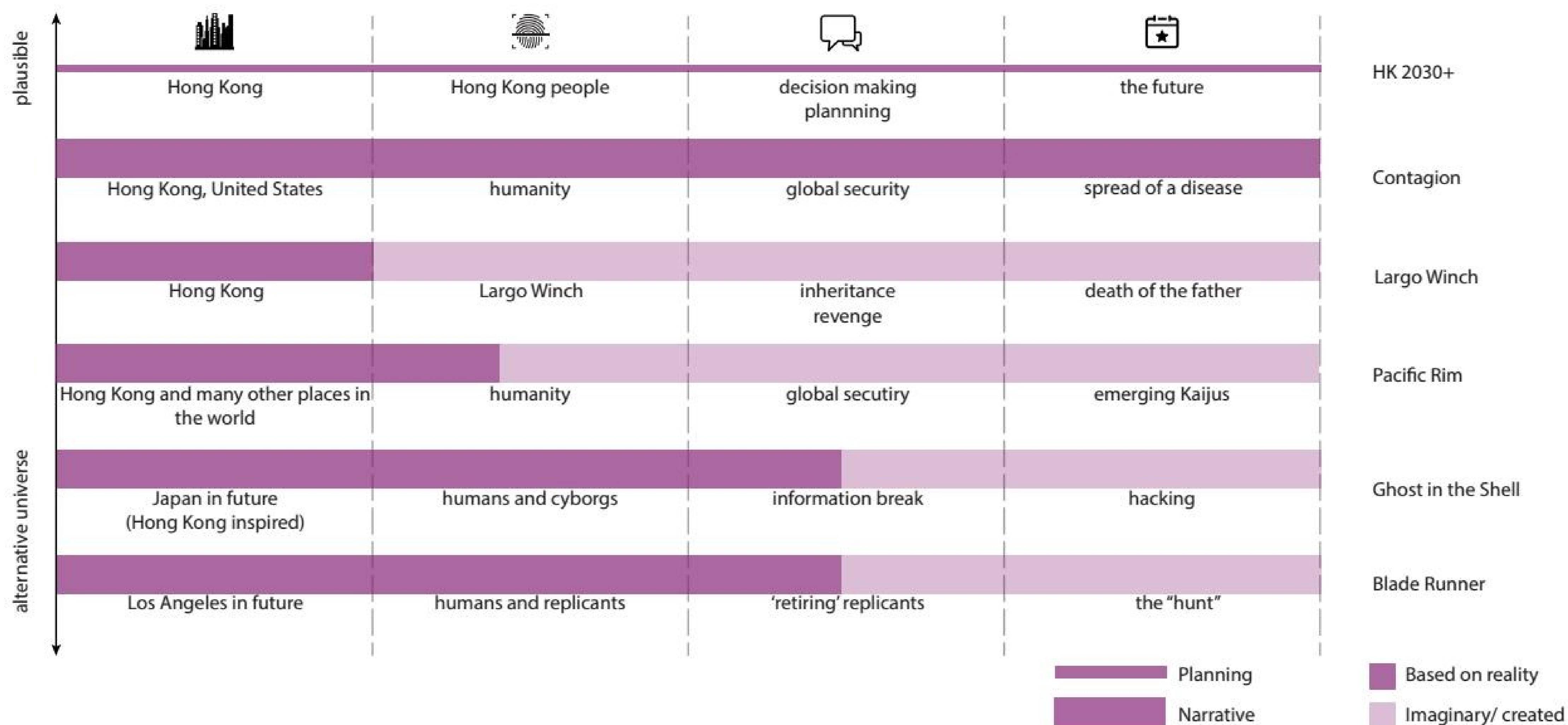


THE EVENT

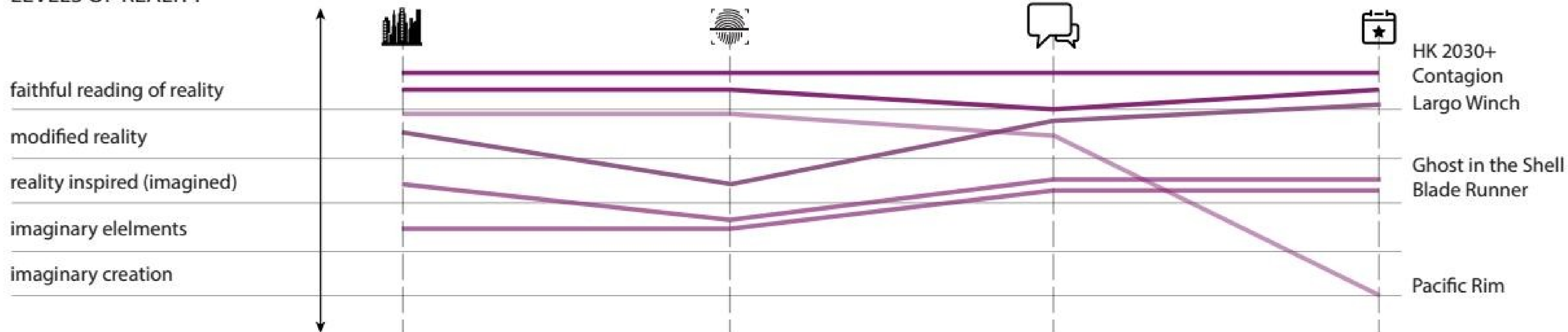
Elements that changes the whole story and implies a decision making

THE ISSUES OF THE NARRATIVES

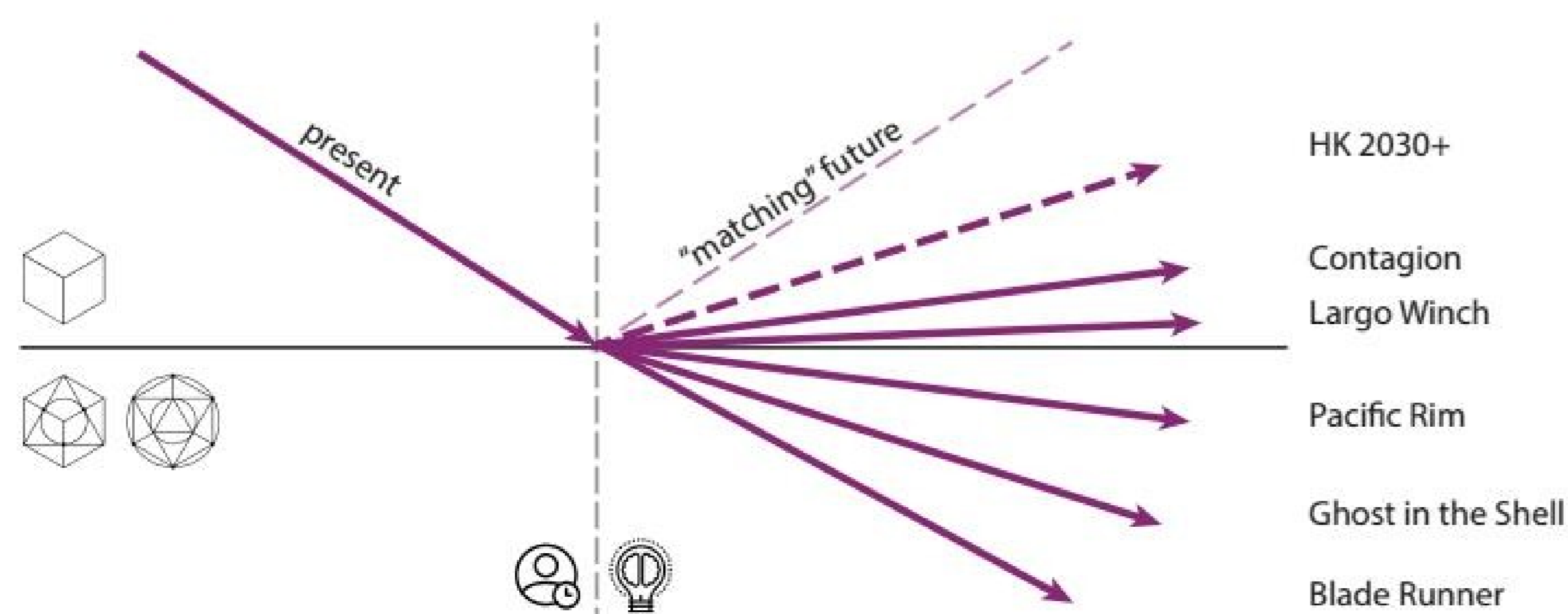
All the visions have a context about space, identity, the issue and a specific event that triggers the story. The articulation and intensity of each parameter is different, producing a different narrative or final image (HK 2030+).



LEVELS OF REALITY



REFLECTION OF THE FUTURE



Notes about the study cases:

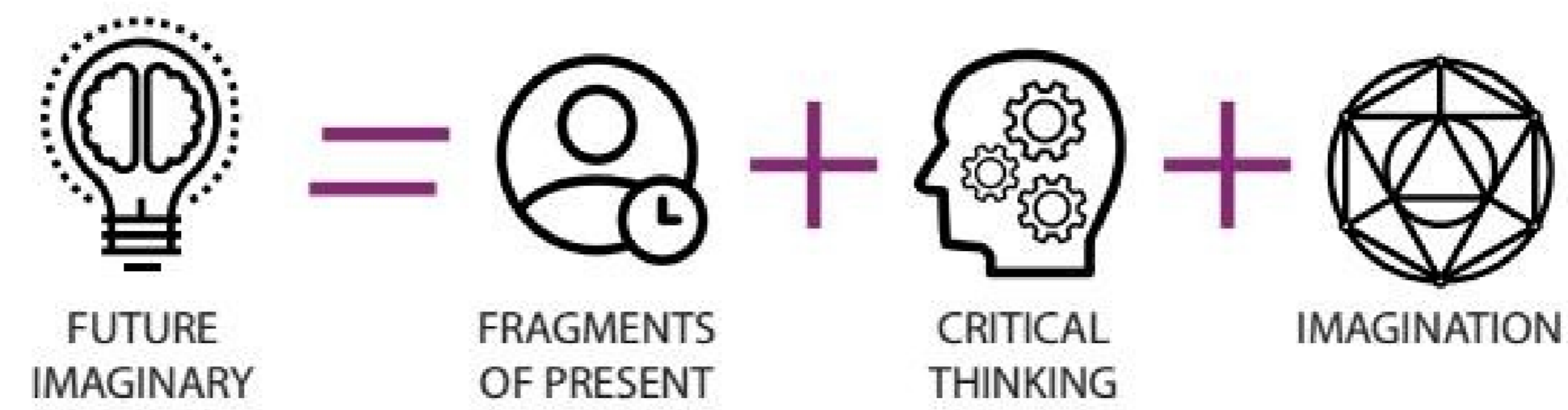
The future is about possibilities. Since the study cases are in the majority movies, there is the need to create a fictional story. Most of them, tends to fall into a chaotic vision about the future. In the other hand, HK 2030+ is the final scenario Hong Kong's government wants to reach, lacking the story of how to get there but being pretty reasonable and plausible.

2. REFERENCES

There are different ways to approach and express the imaginary future. Although the result is different, they all present a deep analysis and critic about the present.

"VISION IS SEEING A FUTURE STATE WITH THE MIND'S EYE.
VISION IS APPLIED IMAGINATION."

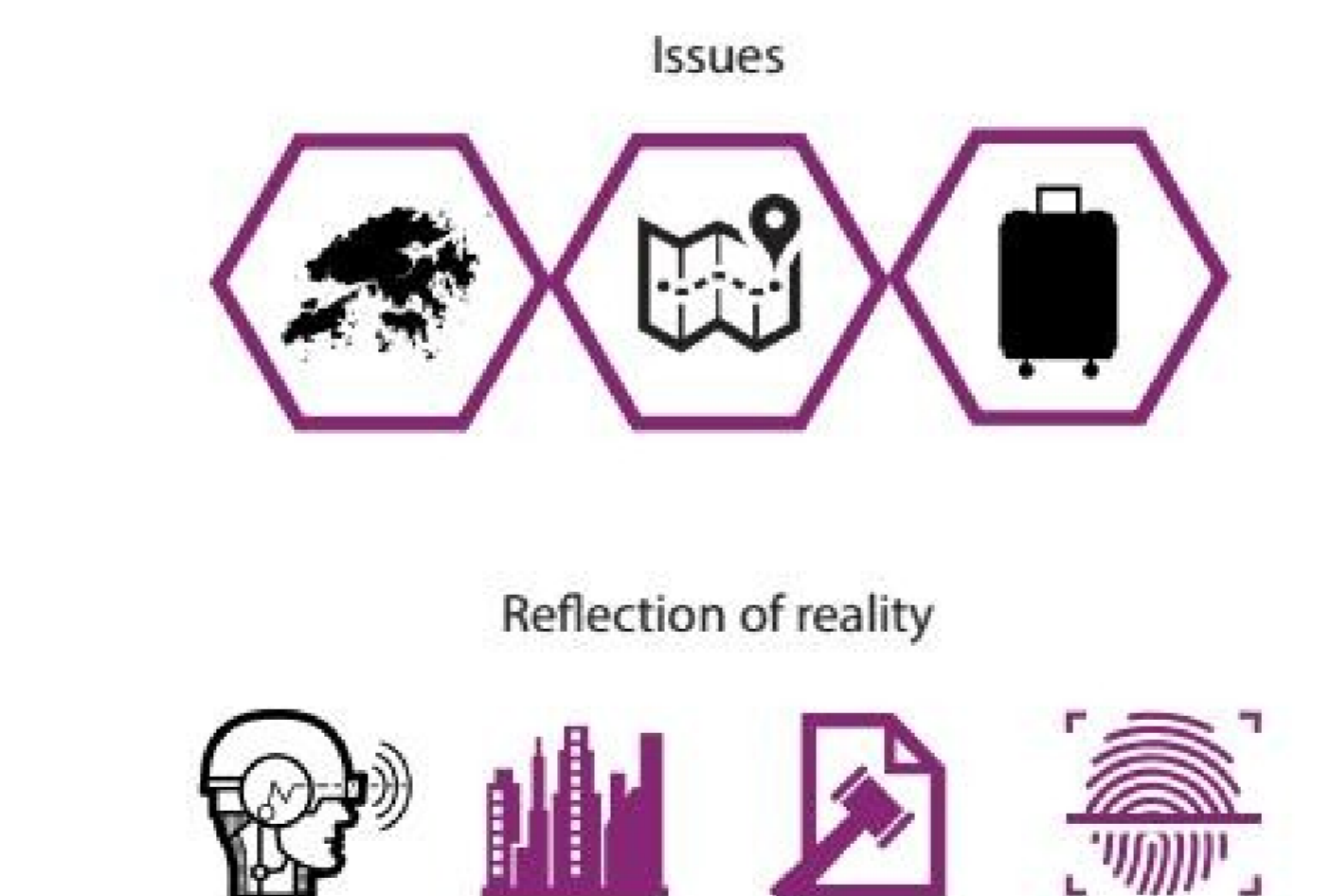
STEPHEN COVEY



The 2046 guide book by James Law follows the structure of classic tourist guide books. Fact, getting around, things to see and do, places to stay, places to eat etc. are all combined to build up information about a space/city to come.

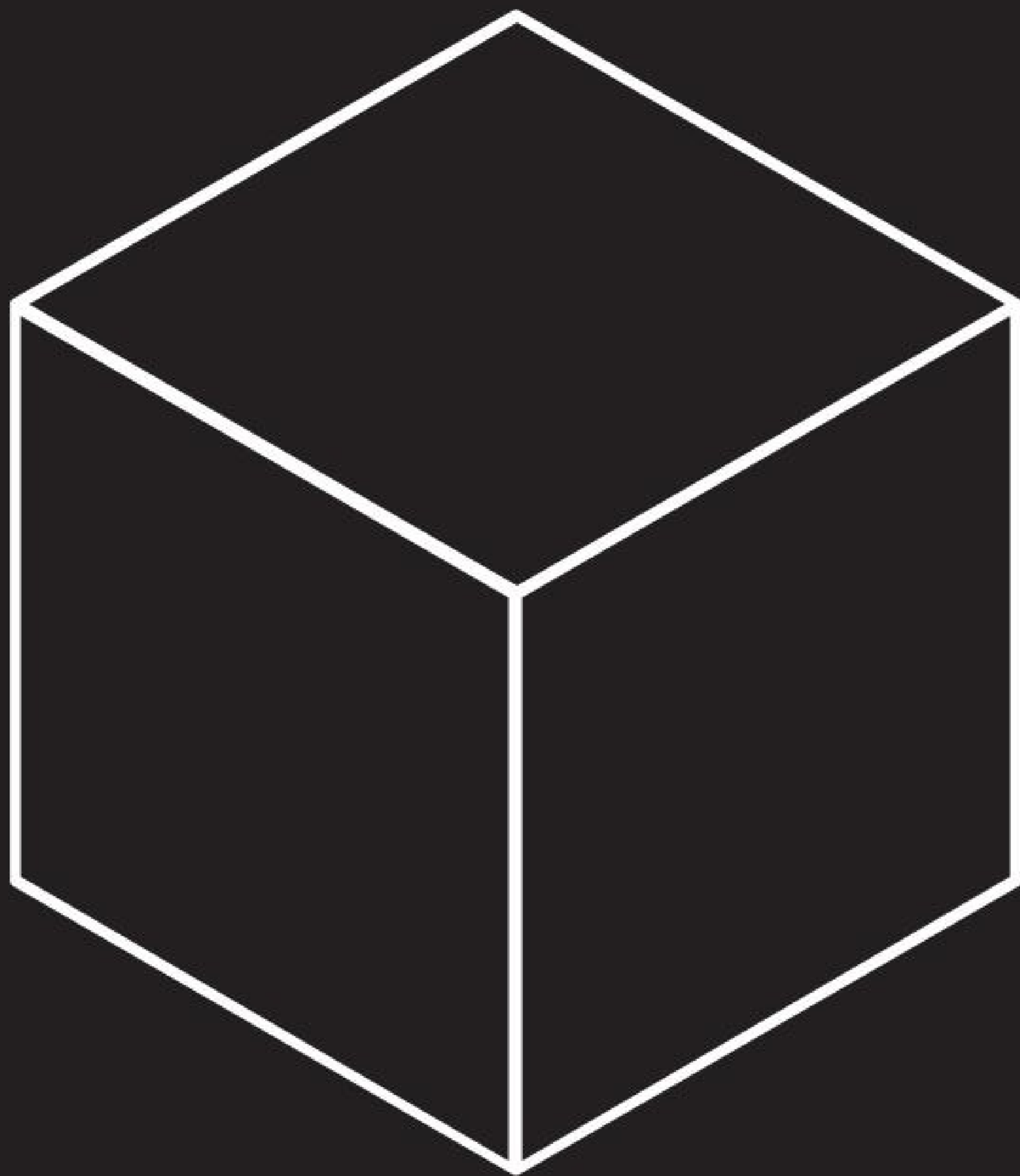
If "cartography is a form of representation that often replaces the territory itself by imposing its own narrative upon it", the project, according to the studio, aims to address "many urban population's future needs while also providing distinctive hubs for tourism".

"It's less science fiction, more design fiction. (...) But rather than some fantasy filmmaker view, we want to build it into a critical investigation of emerging technologies and biologies. Is this a future we want to be moving towards, or is it a cautionary tale?"



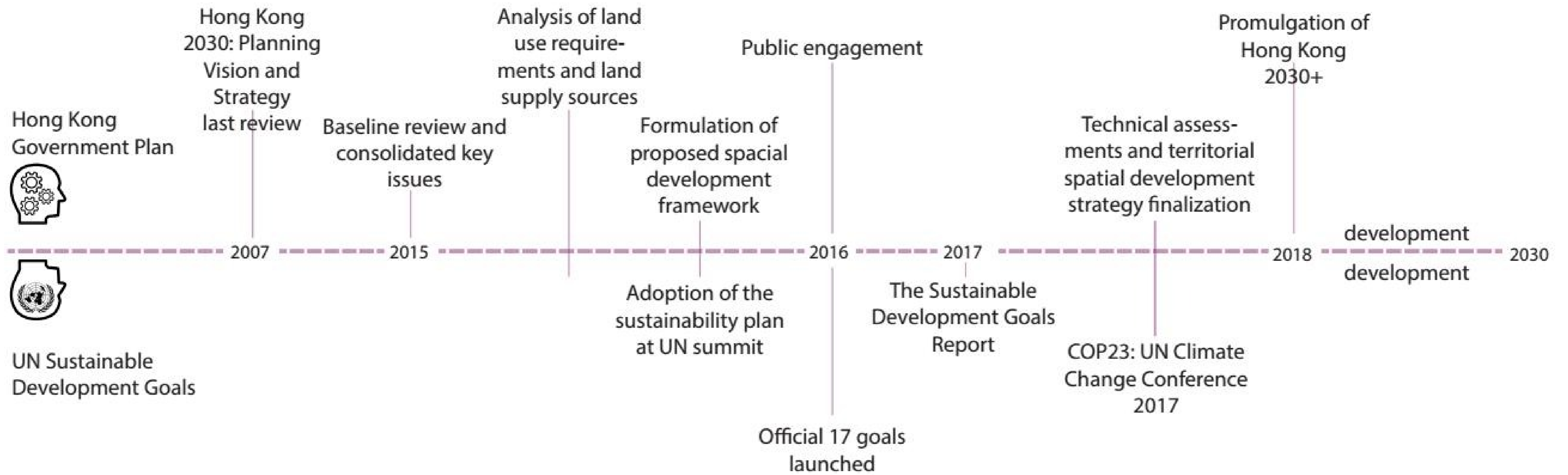
THE AUTHOR	026
PREFACE	029
INTRODUCTION	031
FACTS ABOUT 2046	034
History	274
Geography	274
Climate	274
Biology & Environment	274
FACTS FOR THE VISITOR	061
Weather	281
Directions	281
Maps	281
Public Office	281
Disasters	281
Religion & Customs	281
Transportation	281
Language	281
Health	281
Education	281
Arts & Culture	281
Government & Politics	281
Science & Technology	281
Media	281
Law	281
Business	281
Finance	281
Energy	281
Environment	281
Food & Beverage	281
Healthcare	281
Home & Living	281
Industry	281
International Relations	281
Law	281
Media	281
Politics	281
Religion	281
Science & Technology	281
Society	281
Sports	281
Transportation	281
Travel	281
Urban Planning	281
Visual Arts	281
Work	281





**THE FACTS/
REALITY
COMPARISON**

IN BETWEEN SCALES - HONG KONG AND UNITED NATIONS



2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

In 2015 was set the 2030 agenda for sustainable development, an agreement within countries to be reached in 15 years.

There are 17 targets, 169 goals, originated from 3 main ideas:

- End of Poverty
- Protect the Planet
- Ensure Prosperity for All

The main concerns behind the goals are people, planet, prosperity and peace. For the goals to be reached, the plan counts with the cooperation of governments, the private sector and civil society.

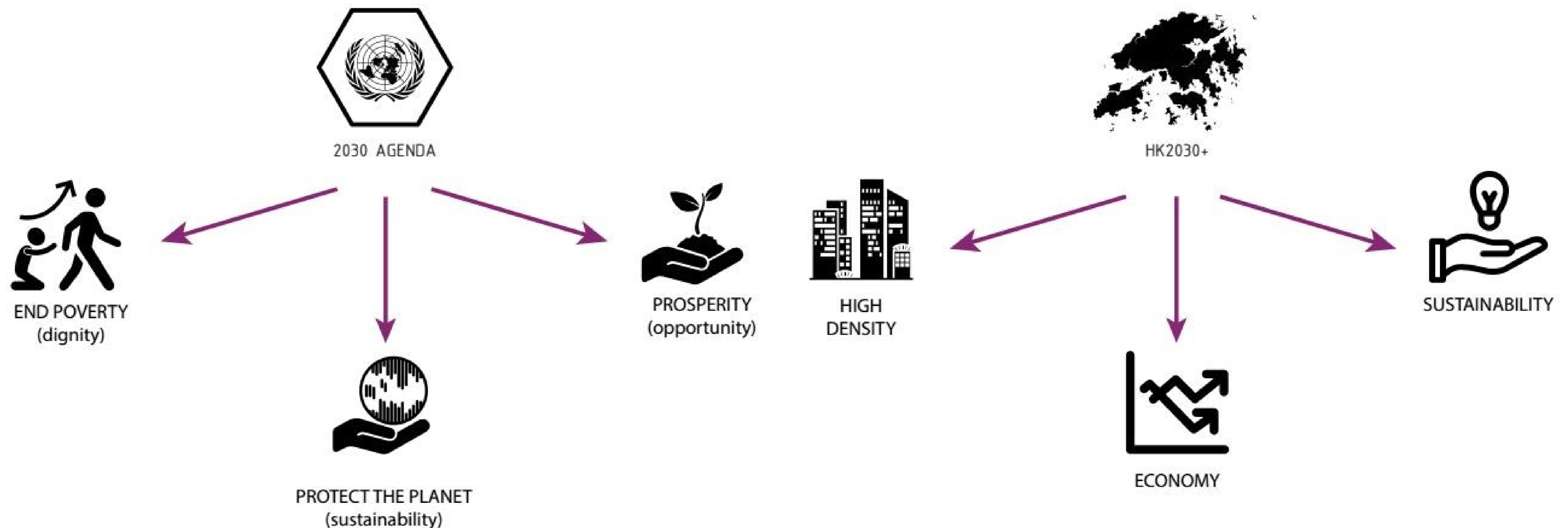
HONG KONG 2030+

Since 1970, once every 10 years, Hong Kong revises the plan for the city development. The last review, "Hong Kong 2030: Planning Vision and Strategy" ("Hong Kong 2030"), was promulgated in 2007.

Hong Kong planning for 2030 is divided in three blocks:

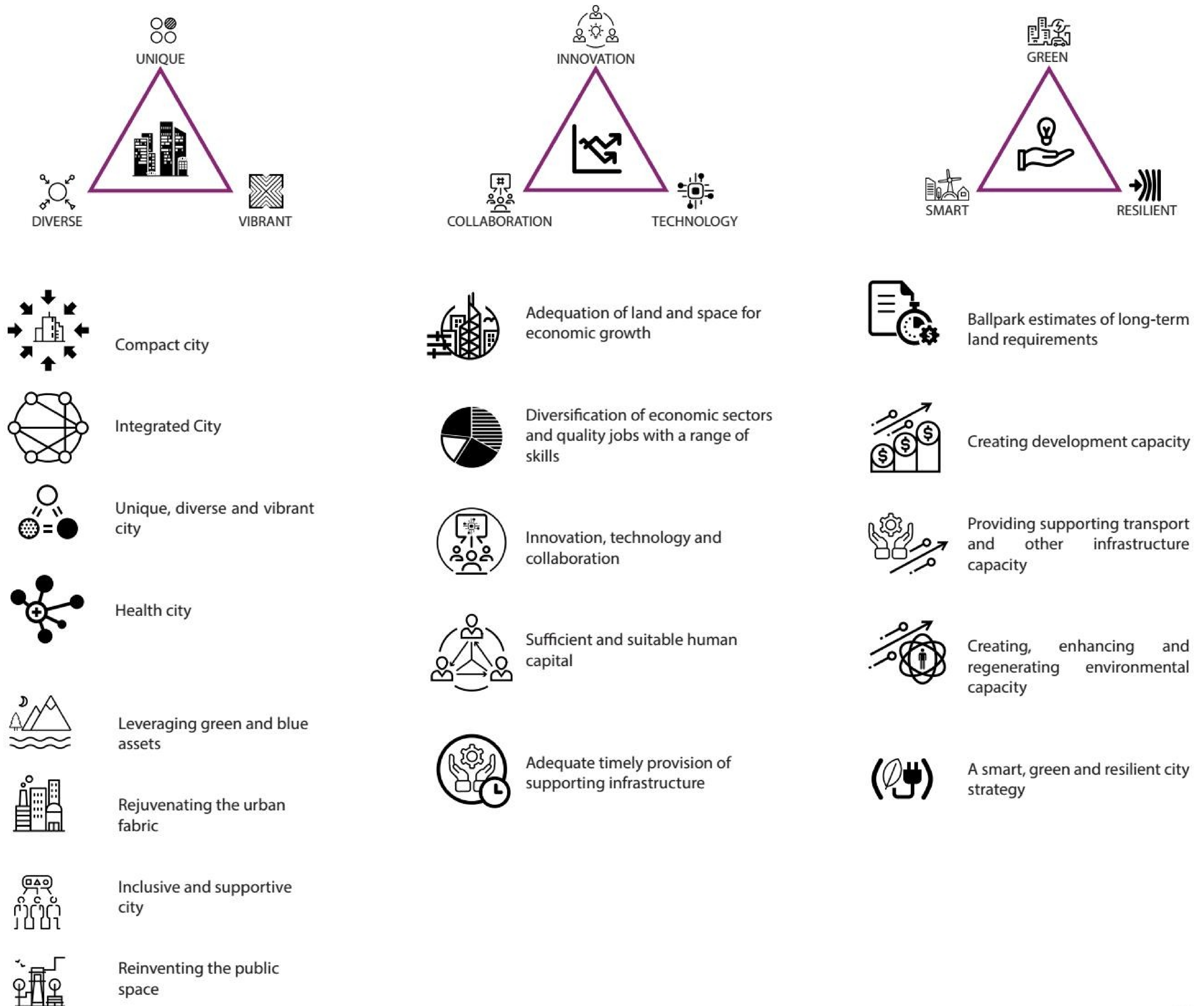
- Planning for a Livable High-density City
- Embracing New Economic Challenges and Opportunities
- Creating Capacity for Sustainable Growth

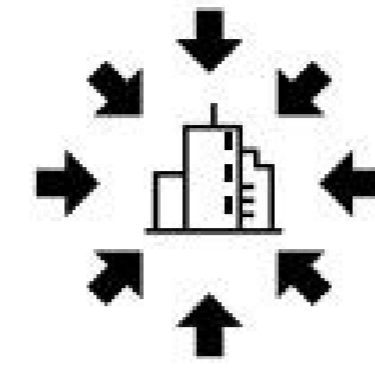
Each block is divided in more precise and detailed parts. All of them put together, aims to reach a brighter future in terms of society/community, environment and economy.



HONG KONG 2030+ STRATEGY

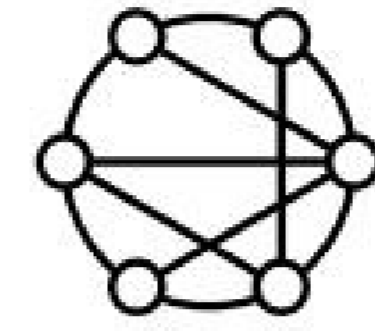
According to the masterplan, there are guidelines towards the improvement of the quality of life in a high density city, the change of focus of the economy, targetting knowledge, innovation and cooperation between different countries for the development of technology and the sustainability, trying to balance the consumption and the production of natural resources. Each of this main goals has more specific guidelines towards actions that can be done in the city.





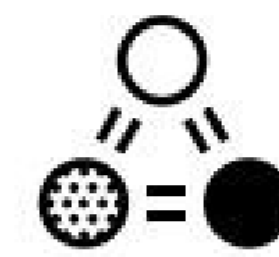
Compact city

- Transit-oriented development- sustainable, efficient and cost-effective
- Railways as backbone + other modes of public transport
- Fostering functional and vibrant urban spaces by mixing uses



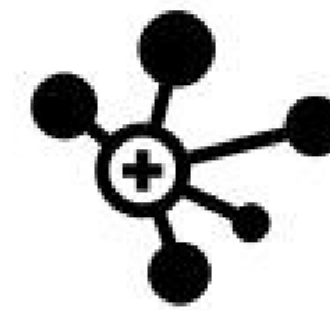
Integrated City

- Good connectivity
- Physically and functionally integrated city
- Fostering a low-carbon first or last-mile trip to mass transit and a walkable and bicycle-friendly city



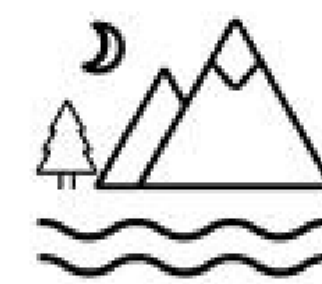
Unique, diverse and vibrant city

- Enhancing the uniqueness of the city natural assets, urban-rural-countryside-nature...
- Promoting a sense of place and genuine choices of lifestyles



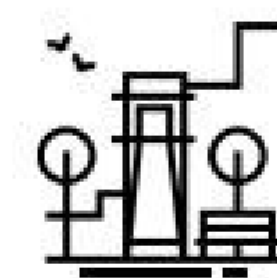
Health city

- Environment that conduces healthy and active lives



Leveraging Green and Blue Assets

- Enriching existing green and blue
- Integrating green and blue space planning and providing eco-corridors
- Developing and implementing an urban forestry strategy
- Cultivating community green networks
- Promoting a sustainable built environment



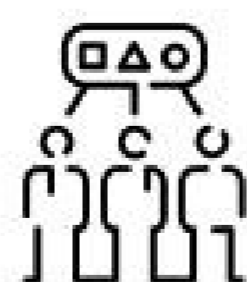
Reinventing the Public Space and Enhancing the Public Facilities

- Public space as the extension of the self, to be shared, functional and welcoming
- Reinventing public space in terms of functions, quality, design, accessibility, provision and management, etc.
- Improving or redeveloping substandard public facilities, enhancing the space provision and catering for changing demographic



Rejuvenating the Urban Fabric

- Many parts of the dense urban core are in need of rejuvenation, which will be a challenging
- Expediting the maintenance and rejuvenation of dilapidated urban areas concentrated in the densely built urban core
- Boosting building management and maintenance initiatives
- Facilitating redevelopment, rehabilitation, revitalization and preservation initiatives

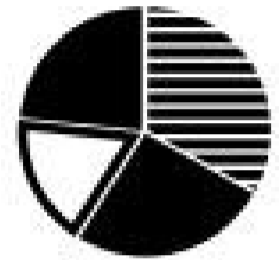


Inclusive and Supportive City

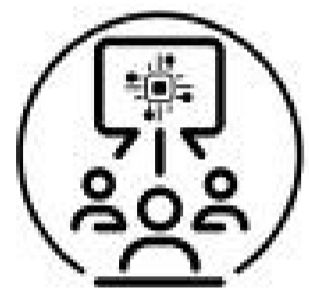
- The built environment has to take care of needs of all ages
- Promoting an age-friendly environment for "active ageing", "ageing in place" and "inter-generational support"
- Planning for a supportive environment to nurture the youth
- Providing a supportive environment for families
- Addressing housing needs of all ages



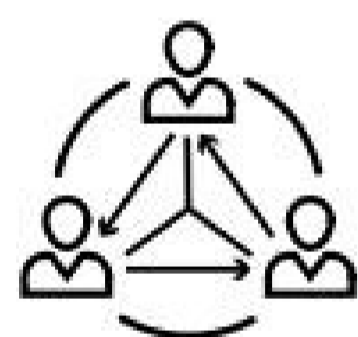
Adequation of land and space for economic growth
 -To ensure sustainable growth of our economy, we need to provide adequate land and space.
 -Providing land at the right locations to meet the current short-fall and continued demand from various economic sectors to sustain economic growth and to create new job opportunities. These include premier offices and premises for modern industries, innovation and technology.



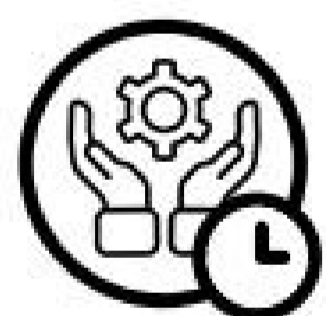
Diversification of economic sectors and quality jobs with a range of skills
 -To enhance economic resilience and adapt to the trend towards a knowledge-based economy
 -Enhancing economic capacity and resilience and providing quality jobs with a range of skills
 -Adapting to a knowledge and technology-based economy



Innovation, technology and collaboration
 -Hong Kong has been lagging behind in the development of innovation and technology.
 -Providing suitable land and space to cater for the development needs
 -Adopting appropriate planning measures to promote a tech-ecosystem, entrepreneurship and business start-ups, and collaboration
 -Establishing a close collaboration among the Government, relevant sectors/industries, academia and research institutes



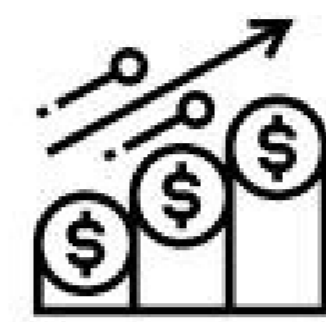
Sufficient and suitable human capital
 -We need to provide relevant education and training facilities and the right conditions to nurture
 -Providing adequate supporting infrastructure such as specialised or incubation workspaces
 -Providing appropriate land to establish world-class education/training facilities to build up a pool of talents



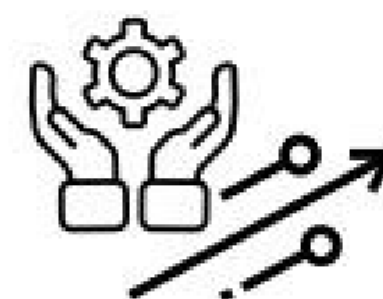
Adequated timely provision of supporting infrastructure
 -Increasing global and regional integration calls for better connectivity and infrastructure support.
 -Improving the efficiency of the city
 -Enhancing and/or regenerating the capacities of the existing supporting infrastructure for our pillar and emerging industries



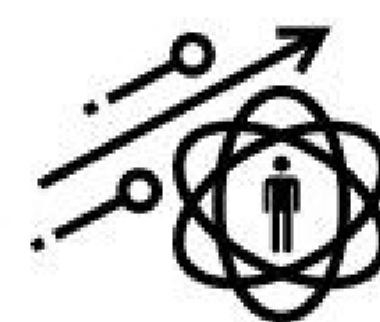
Ballpark Estimates of Long-term Land Requirements
 -To support population and economic growth and improve liveability, we need more land and space, transport capacity, infrastructure capacity and planning in advance.



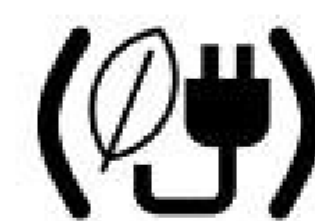
Creating Development Capacity
 -To create development capacity, a multi-pronged, robust and flexible approach through optimising the use of land and identifying new developable land is proposed by:
 - Optimising
 - Swopping
 - Creating
 - Innovating
 - Life-cycle Planning



Providing Supporting Transport and Other Infrastructure Capacity
 -A well balanced land use plan to optimise transport and infrastructure capacity
 -Providing supporting transport infrastructure with emphasis on environmentally friendly mass transit
 -Reshaping the travel pattern by designating more employment-related land use in new development areas to bring jobs closer to home
 -Promoting an integrated, smart, green and resilient infrastructure system



Creating, Enhancing and Regenerating Environmental Capacity
 -Development capacity needs to go hand in hand with creating, enhancing and regenerating environmental capacity
 -Biodiversity enhancement(revitalising farmlands, water bodies, promoting urban ecology...)
 -Environmental improvement(low carbon city, reuse of water, revitalisation of landfills...)



A Smart, Green and Resilient City Strategy
 The Smart, Green and Resilient (SGR) City Strategy focuses on minimizing demand for use of resources, promoting low-carbon smart economy and living, enhancing city efficiency, promoting business productivity, improving quality of urban living and enhancing climate resilience.

2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

This is an agreement between nations, targeting the sustainability and equal rights and opportunities for everyone. Each one of the 17 issues has smaller goals, being 169 in total. The target is also to make government, civilians and private companies work together to reach each one of the goals, trying to bring balance and a prosperous future for the next generations.

SUSTAINABLE DEVELOPMENT GOALS



HONG KONG'S ACTUAL SITUATION IN RELATION TO SDG PROPOSED BY UN:



1. End poverty in all its forms everywhere
Over 1.3million people live below the poverty line, around 19.7% of the population. [1]



2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Nearly two-third of poor households were in the state of 'food insecurity'. [2]



3. Ensure healthy lives and promote well-being for all at all ages
Hongkongers work an average of 2,300 hours each year, average of 1,700 hours per annum of other developed countries. [3]



4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
HK scored 4.8 for the quality of its education system, 20/140 economies. Innovativeness is an area where Hong Kong is not performing.[4]



5. Achieve gender equality and empower all women and girls
Around 60 percent of married women between 20 and 39 held a job, 30 percent less than their unmarried counterparts.[5]



6. Ensure availability and sustainable management of water and sanitation for all
Hong Kong will face increasing competition for water and it uses more water per capita than most first world cities.[6]



7. Ensure access to affordable reliable, sustainable and modern energy for all
Small amount of energy are produced by renewable energy sources such as solar and wind energy in Hong Kong. [7]



8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
1/6 migrant domestic workers in HK is in forced labor, working an average of 71h/week, some for more than 15h/day.[8]



9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
Innovativeness is an area where Hong Kong is not performing.[4] The economy is based in trading, services, finance and tourism. [9]



10. Reduced Inequalities within and among countries
Hong Kong wealth gap hits record high. Report finds richest 10 % in city earn 44 times that of the poorest.[10]



11. Make cities and human settlement inclusive, safe, resilient and sustainable
Check numbers 7, 8, 10. So HK is still far from being sustainable.



12. Ensure sustainable consumption and production patterns
Hong Kong overtook London as the world's top luxury real estate market in 2016.[11]



13. Take urgent action to combat climate change and its impacts
A hotter, wetter climate, with heavier rainfall, interspersed by longer dry periods. [12]



14. Conserve and sustainable use the oceans, seas and marine resources for sustainable development
Scientists say more than a quarter of 22,629 types recorded in China may be found locally, but warn that climate change and urbanization pose threat.[13]



15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainable management of forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
With challenges, we need concerted efforts across the society to conserve our valuable natural heritage. [14]



16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



17. Strengthen the means of implementation and revitalize the global partnership for sustainable development

[1] https://www.povertyrelief.gov.hk/pdf/poverty_report_2015_e.pdf

[2] <http://www.foodlinkfoundation.org/fast-facts/hunger-and-poverty-facts.html>

[3] <http://www.scmp.com/magazines/hk-magazine/article/2037410/pressure-points-how-stressed-out-hong-kong>

[4] <http://www.ejinsight.com/20151009-what-is-wrong-with-our-education-system/>

[5] http://www.chinadaily.com.cn/hkedition/2017-02/20/content_28259293.htm

[6] <http://chinawaterrisk.org/resources/analysis-reviews/8-things-you-should-know-about-hong-kong-water/>

[7] http://www.energyland.emsd.gov.hk/en/energy/energy_use/energy_scene.html

[8] <https://www.theguardian.com/global-development/2016/mar/14/forced-labour-common-among-hong-kongs-domestic-helpers-study-finds>

[9] http://www.hk2030plus.hk/about_b.htm

[10] <http://www.scmp.com/news/hong-kong/economy/article/2097715/what-hope-poorest-hong-kong-wealth-gap-hits-record-high>

[11] <https://www.mansionglobal.com/articles/62243-hong-kong-ranked-world-s-top-luxury-market-in-2016>

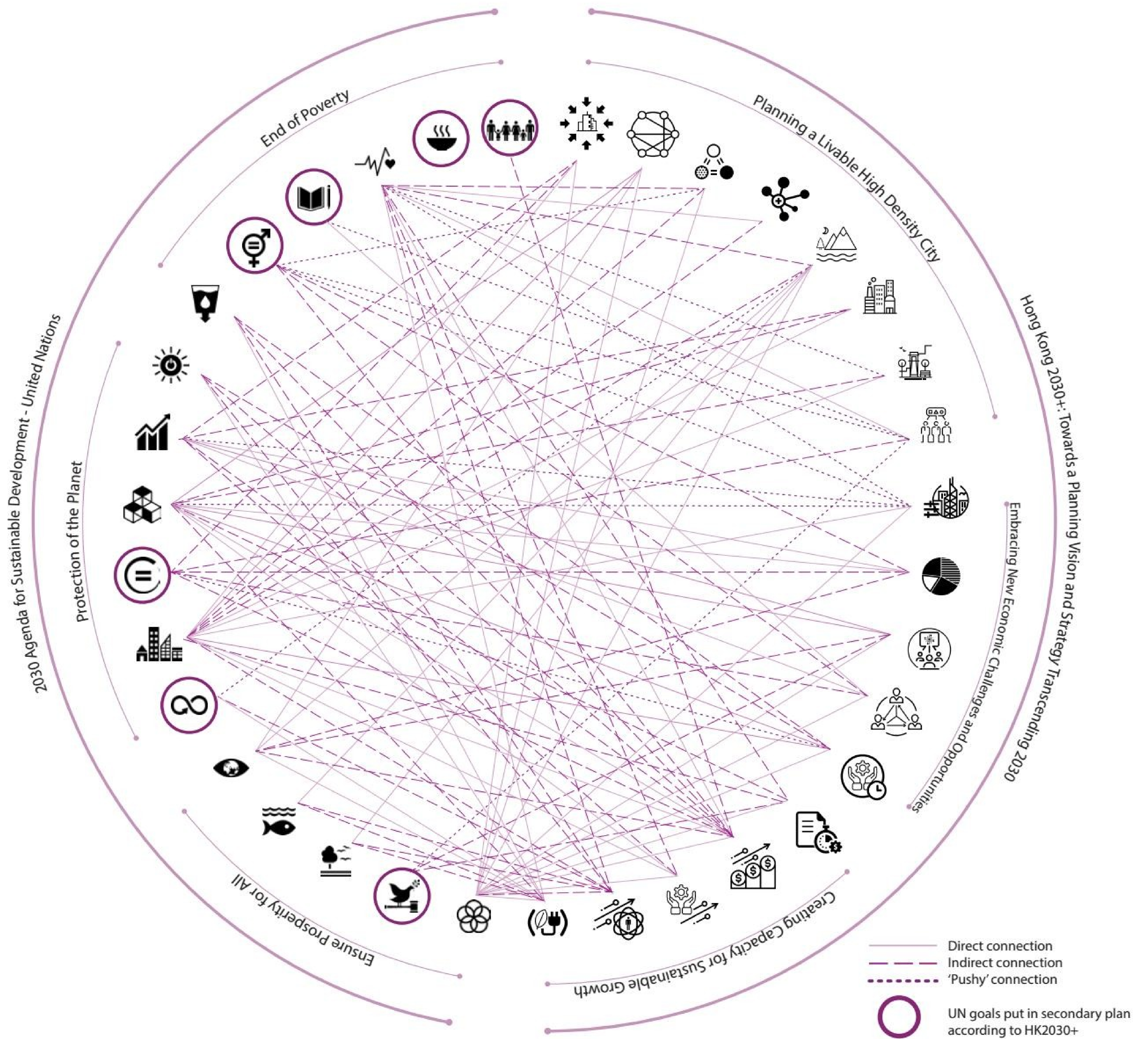
[12] http://bec.org.hk/ccfb/en-us/hong_kong_context_affected.html

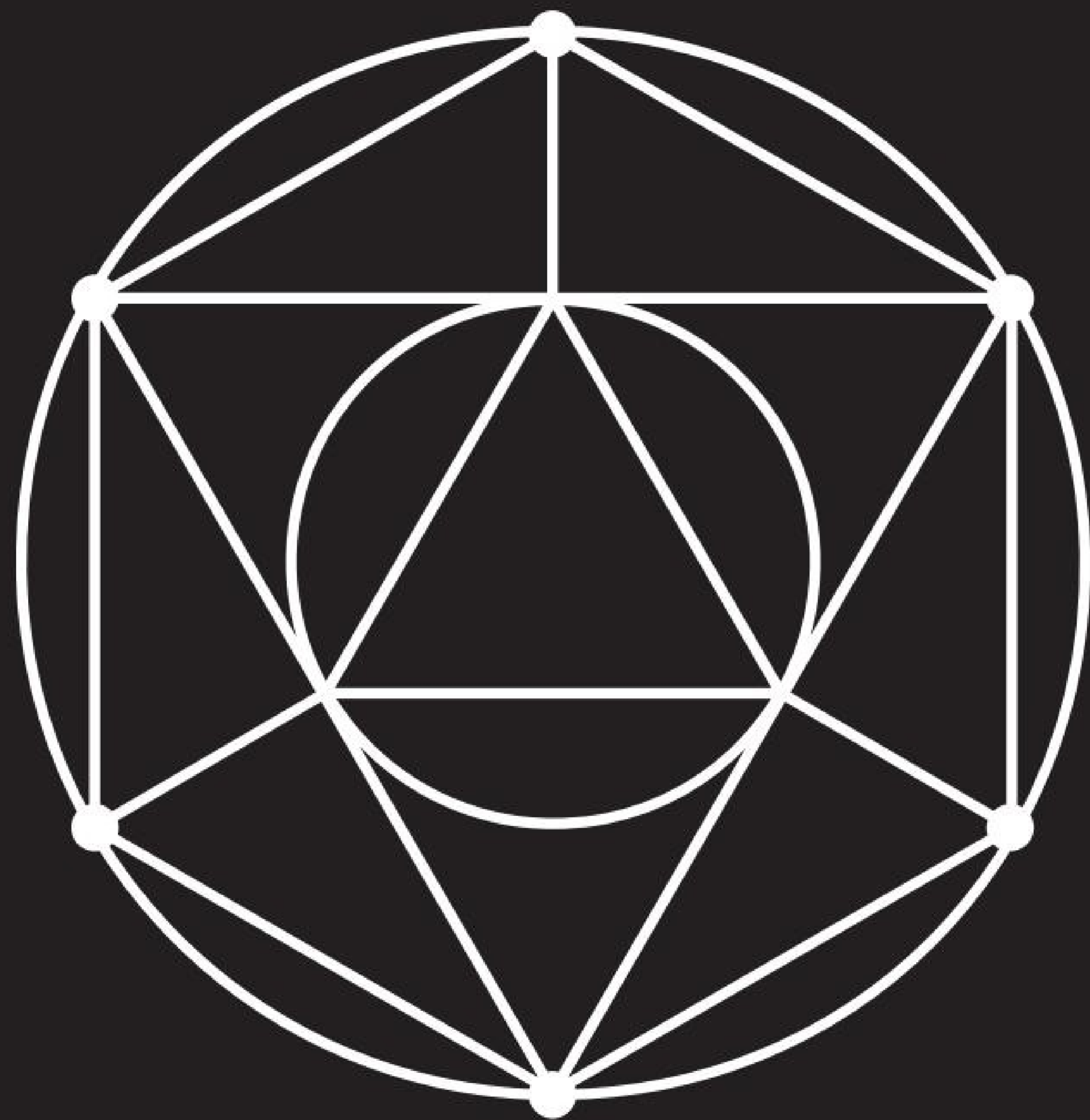
[13] <http://www.scmp.com/news/hong-kong/health-environment/article/2058023/under-sea-species-flourish-hong-kong-waters-study>

[14] https://www.afcd.gov.hk/english/conservation/Con_hkbsap/con_hkbsap.html

MATCHING THE GOALS

Comparative analysis - 2030 Agenda for Sustainable Development x Hong Kong 2030+

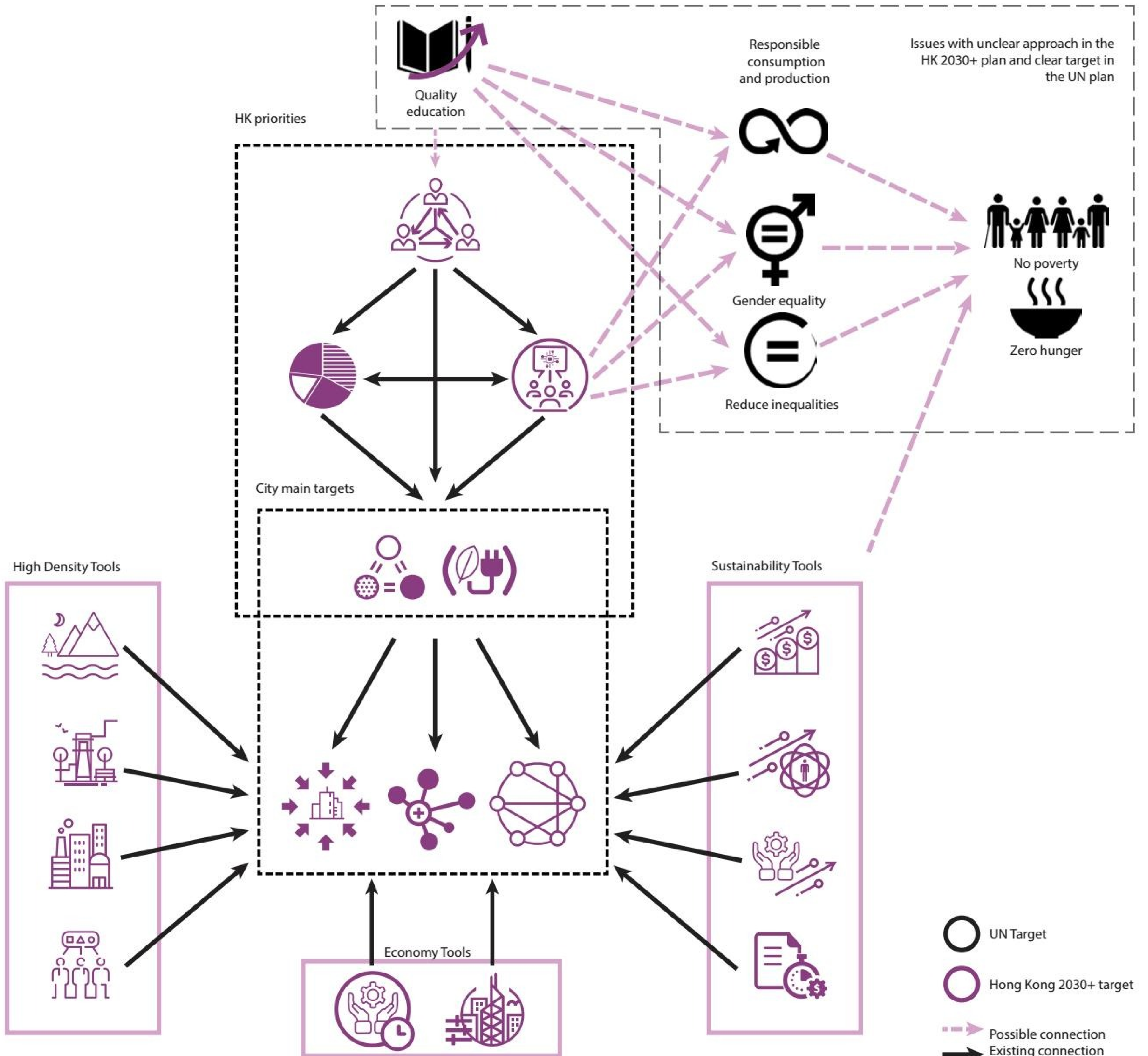




IMAGINATION
THE FUTURE - 2047+

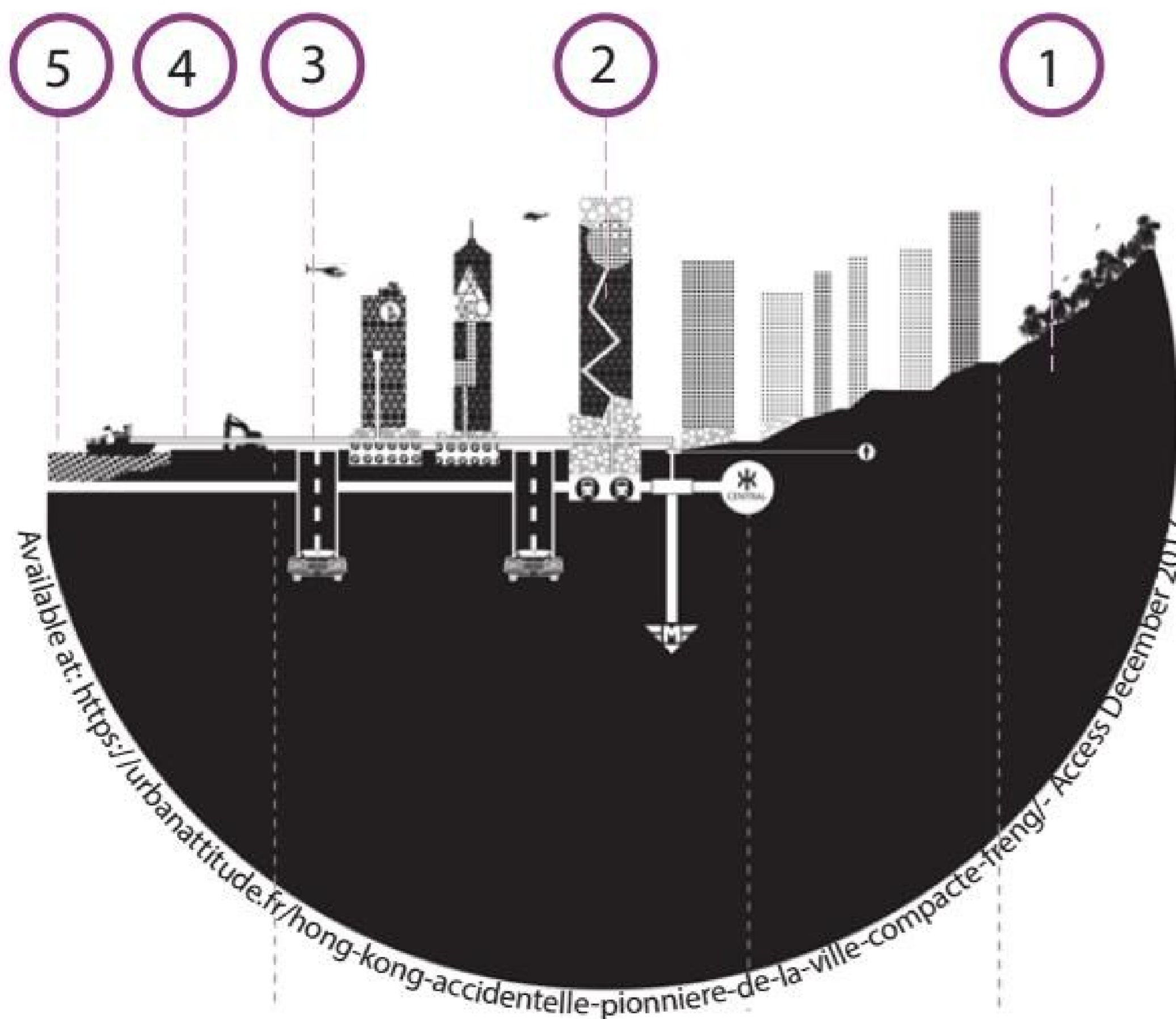
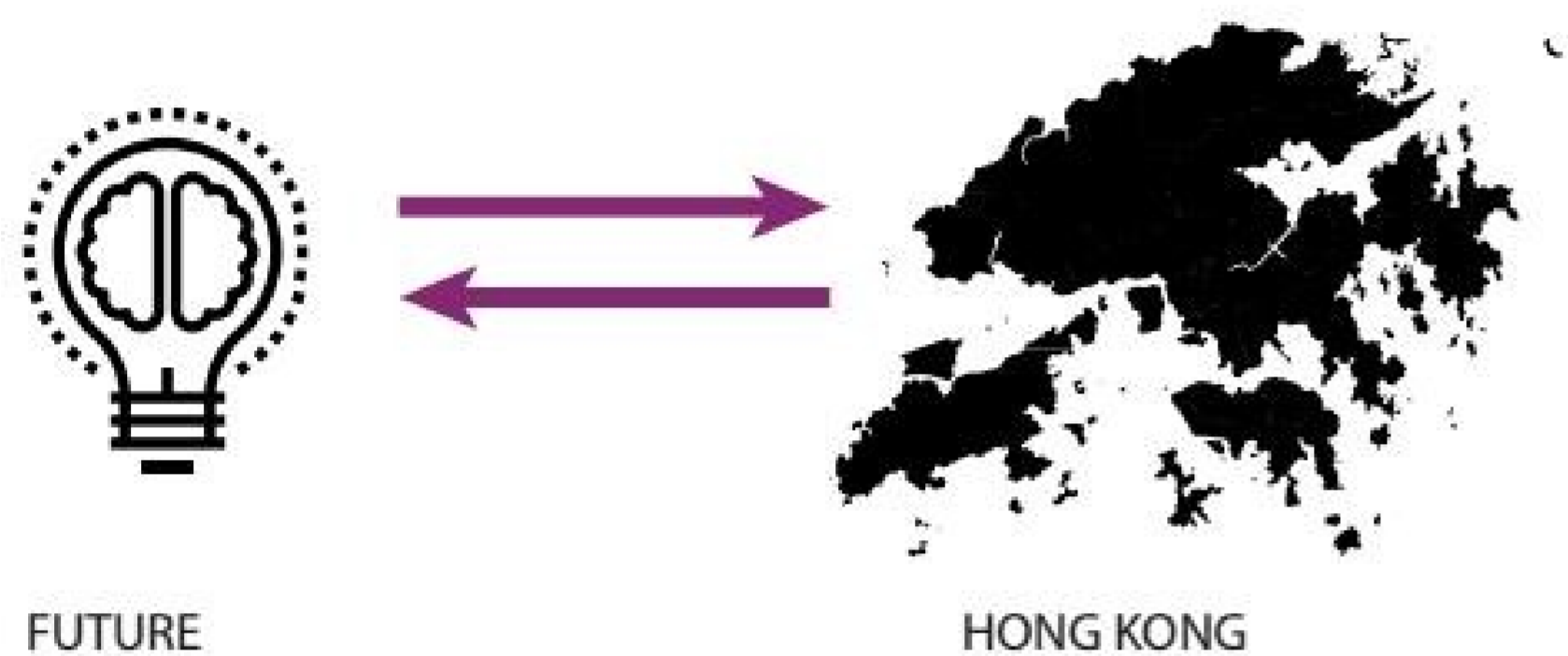
THE CHALLENGE

Reorganizing priorities of Hong Kong 2030+ for a better achievement of SDG.



HOW CAN THESE CONNECTIONS BE TRANSLATED TO THE CITY IN A VISUAL FORM?

WHAT ARE THE ALTERNATIVES FOR THE FUTURE DEVELOPMENT OF HONG KONG?



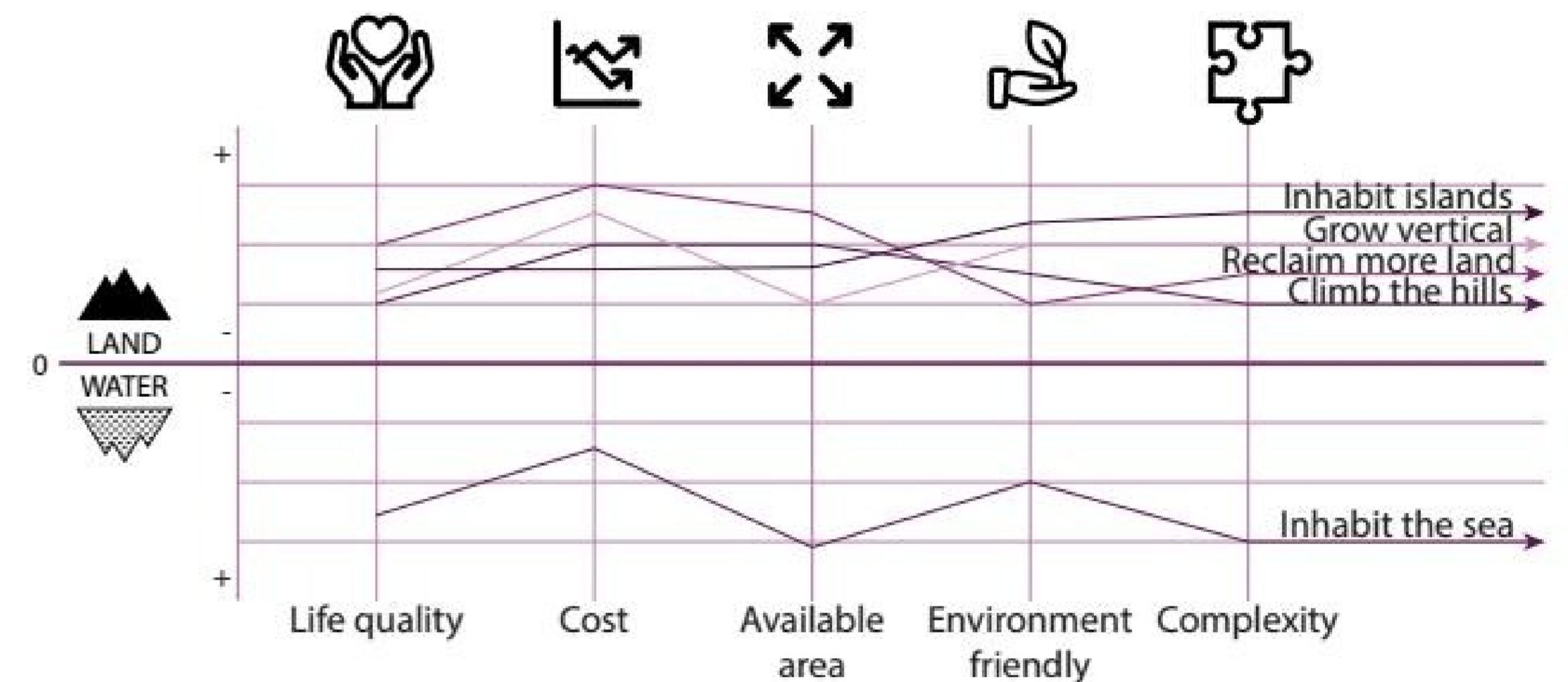
- 1. Climb the hills
- 2. Grow vertical
- 3. Reclaim more land
- 4. Inhabit more islands
- 5. Inhabit the sea

From the possibilities, occupying the water brings an "inversion" to the value of land. The cartography becomes the negative of the values and meanings of the actual maps.

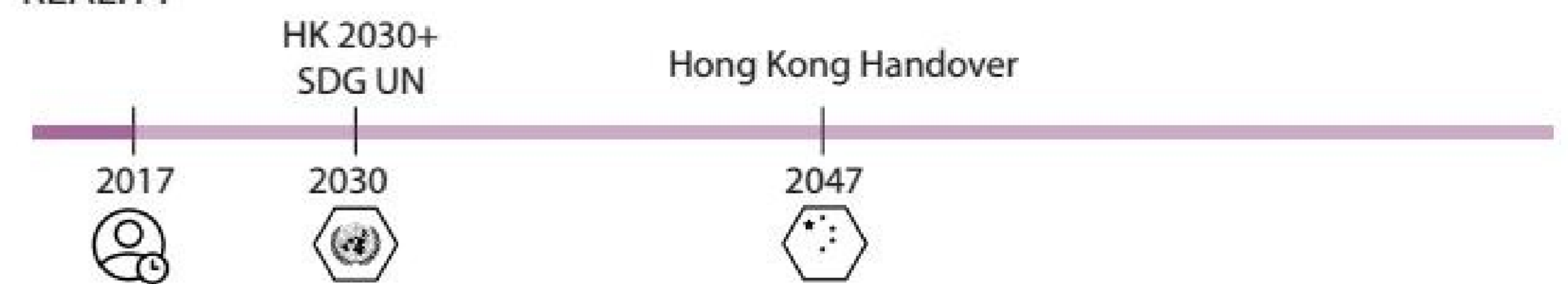
"THE LAND BECOMES WATER AND THE WATER BECOMES LAND."

This gives a new perspective of possibilities of human settlements. In the case of Hong Kong, it merges the culture, wisdom and the tradition of fisherman villages like Tai O, mixing with the technology and hope brought by the future.

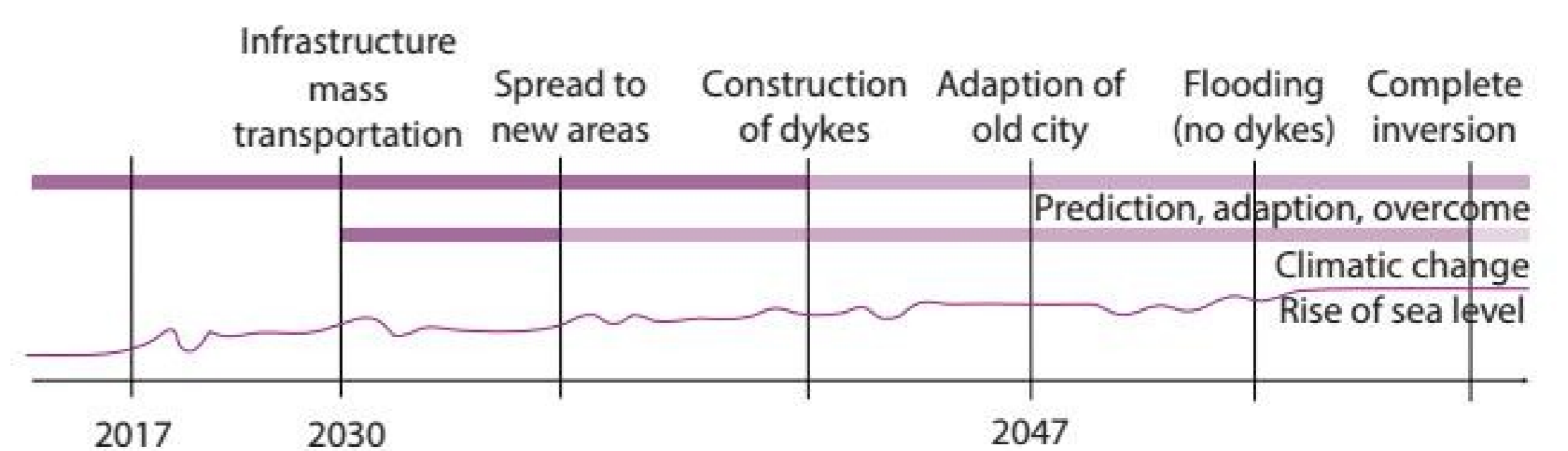
It is said that during the Opium War, the British asked the Tankas, also known as boat people, to help them fight. After winning the war, the reward given to them was the dreamed piece of land. For the imaginary future, land becomes the untouched and shared portion, while the sea becomes "the land" where people lives.



REALITY

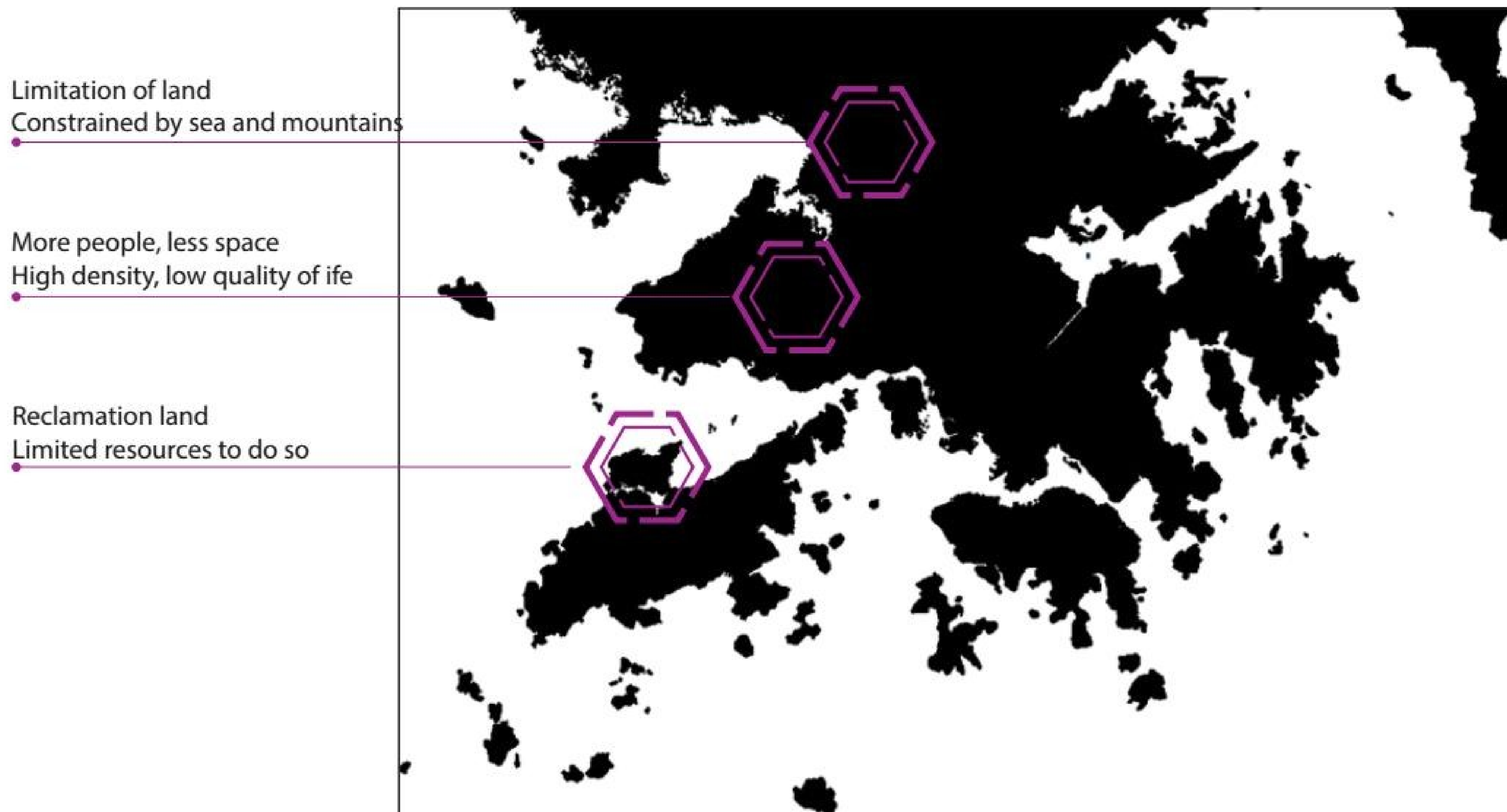


STORY DIMENSION



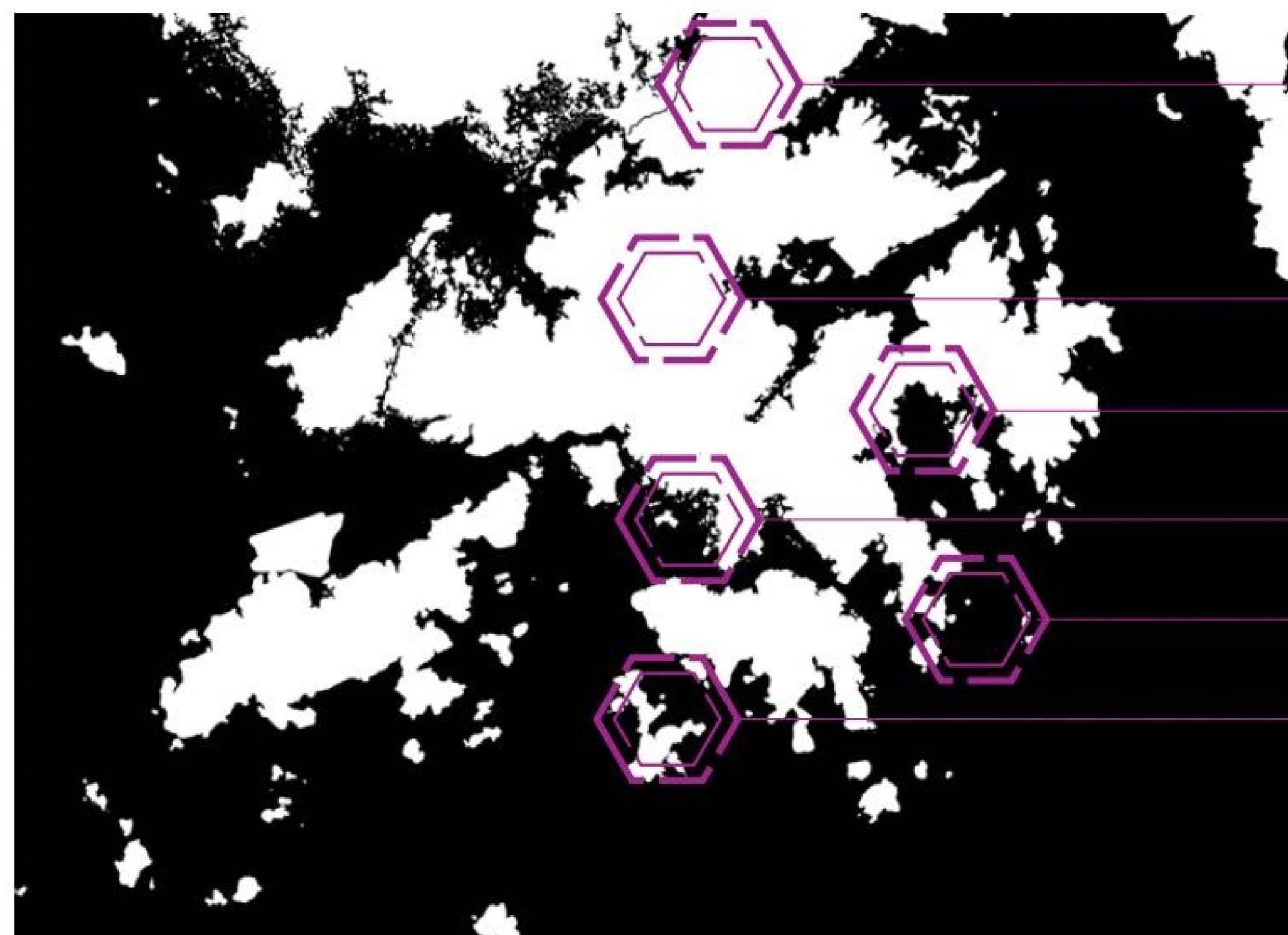
NEW CARTOGRAPHIES

The shift of meaning of both land and sea, requires a different way to represent the cartographies. What once used to be highlighted, now is the opposite. In this way, for the new scenario, the sea is the main actor on the maps and not the land anymore.



PRESENT

IMAGINARY FUTURE



Flat land
Agriculture purposes

Untouched mountains
For leisure and meditation
Rediscovering bays
Most valuable areas
Land+ sea+ protection

Geographic changes
City affected by climate change

Exploration of the sea
New possibilities for mobility

Living on water
New/old ways to live

CONCEPTUAL MODEL- NOW



CONCEPTUAL MODEL- FUTURE





On the left:

With the rise of sea level, the shape of the islands tend to change and what once used to be beaches, tend to disappear.

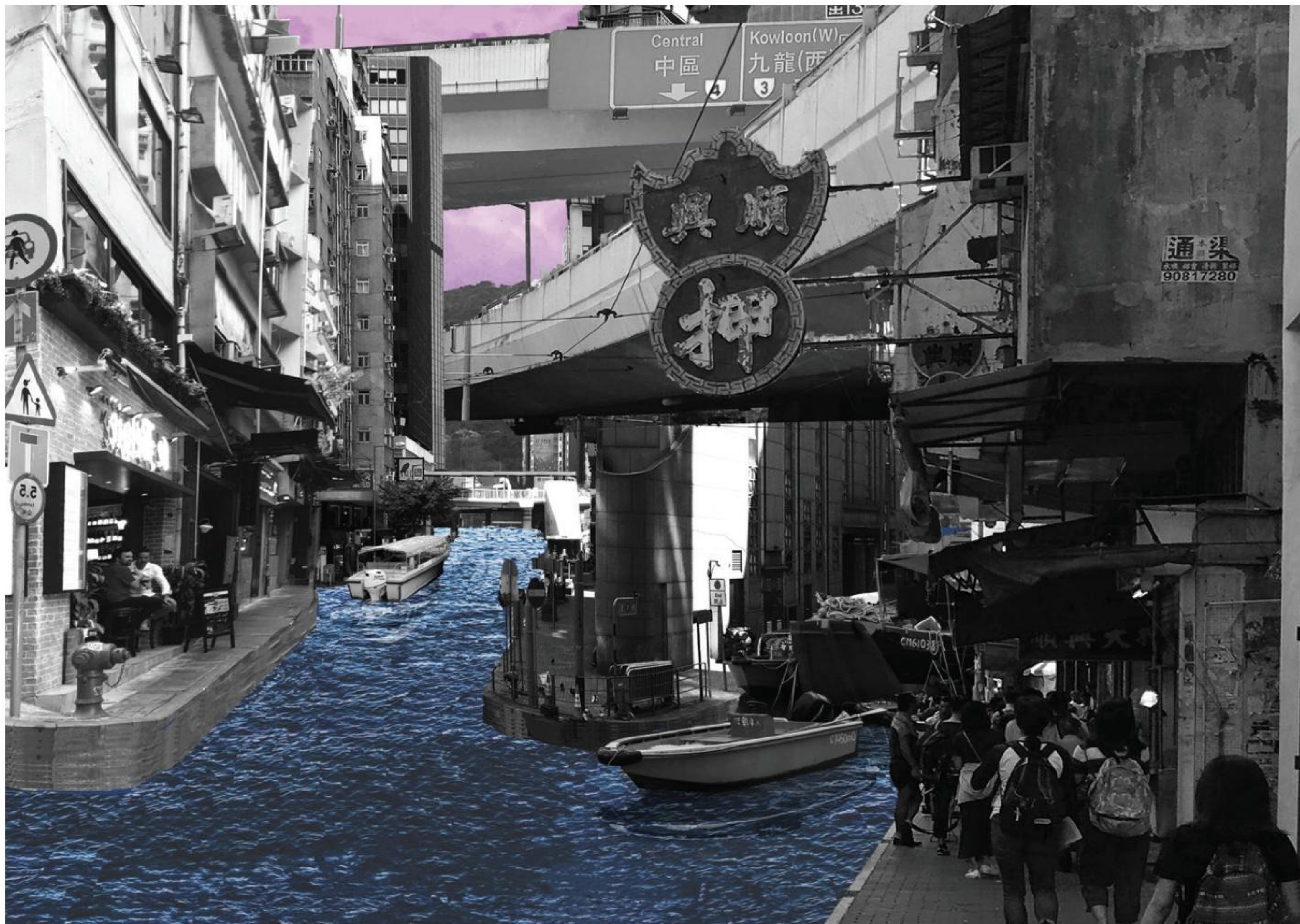
Little by little, people starts to occupy the bays and populate it with boats and floating houses. At the beginning, this occupation may look old fashioned since the development of technology and new ways to build floating houses are not sharp and well developed yet. But then, it starts to evolve, bringing new ideas, new morphologies and ways to organize the new settlements.



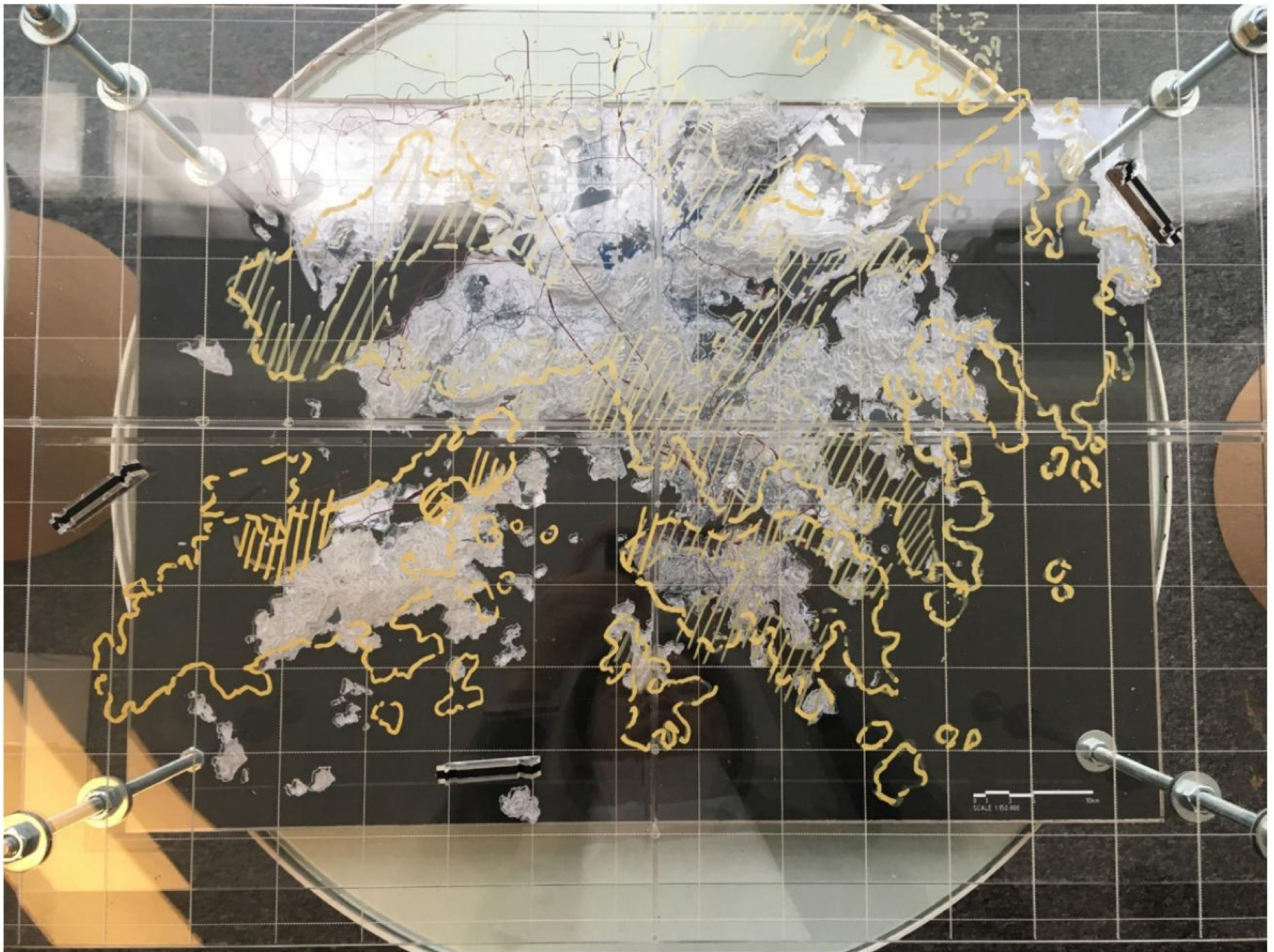
On the right

Is not possible to simply erase or forget the old city. Adaption will be needed and the following question is raised: Should we build a wall and protect the land or is it possible to live with the water without running away from it?

Not all land will be affected by the flood, but parts of the city will need to be redesigned. The image might look like an hybrid of Hong Kong and Venice but the point is the challenge, to bring the mix of land and water coexisting in the old city, making the transition between past and future.

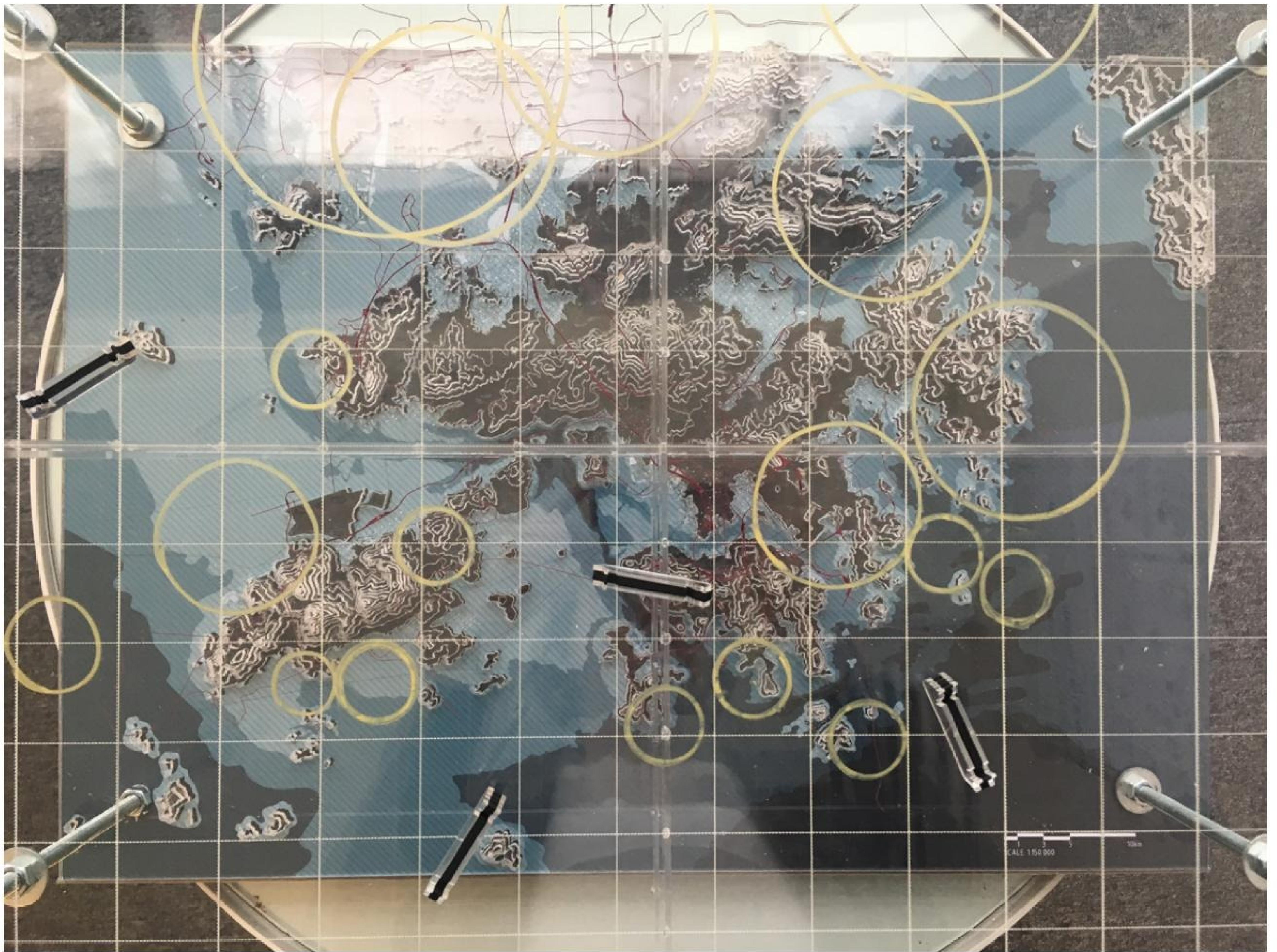


HONG KONG 2017



Limited to grow between mountains and sea, where there is only narrow areas to develop (hatched areas). The sea is used mostly for the commercial connections between different areas.

HONG KONG 2047+



Instead of being constricted by sea and mountains, bays and coves become the opportunities for the development, creating new centralities. The sea becomes the blank paper to the free navigation in many scales- from the commercial routes, to the smaller ones connecting the new centralities.

The possibilities of growth and the navigation system

The transportation systems (specially the metro system) pushing further the development of new areas

The natural topography of the land to be used in favor of the development and with respect





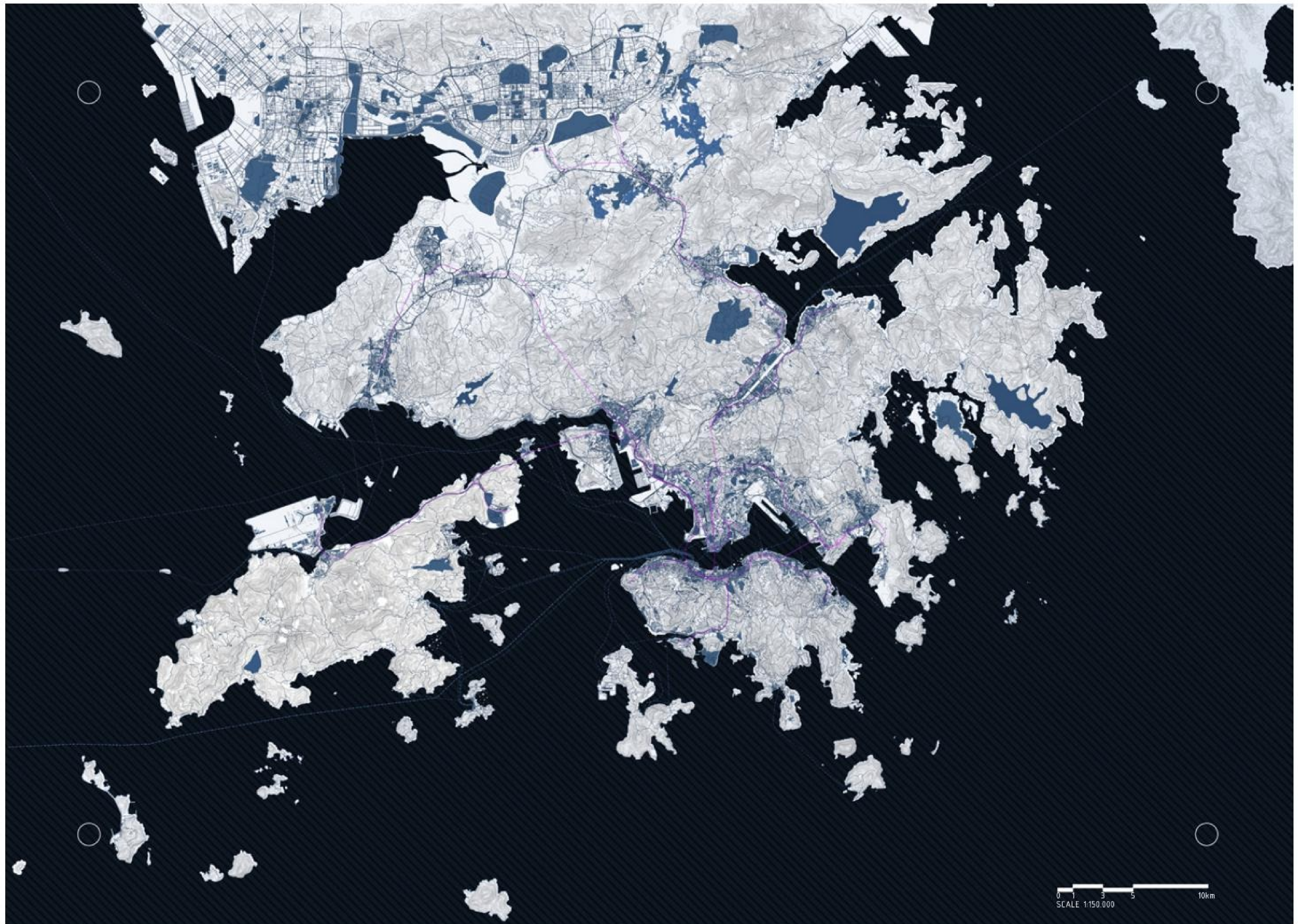
The possibilities of growth and the navigation system

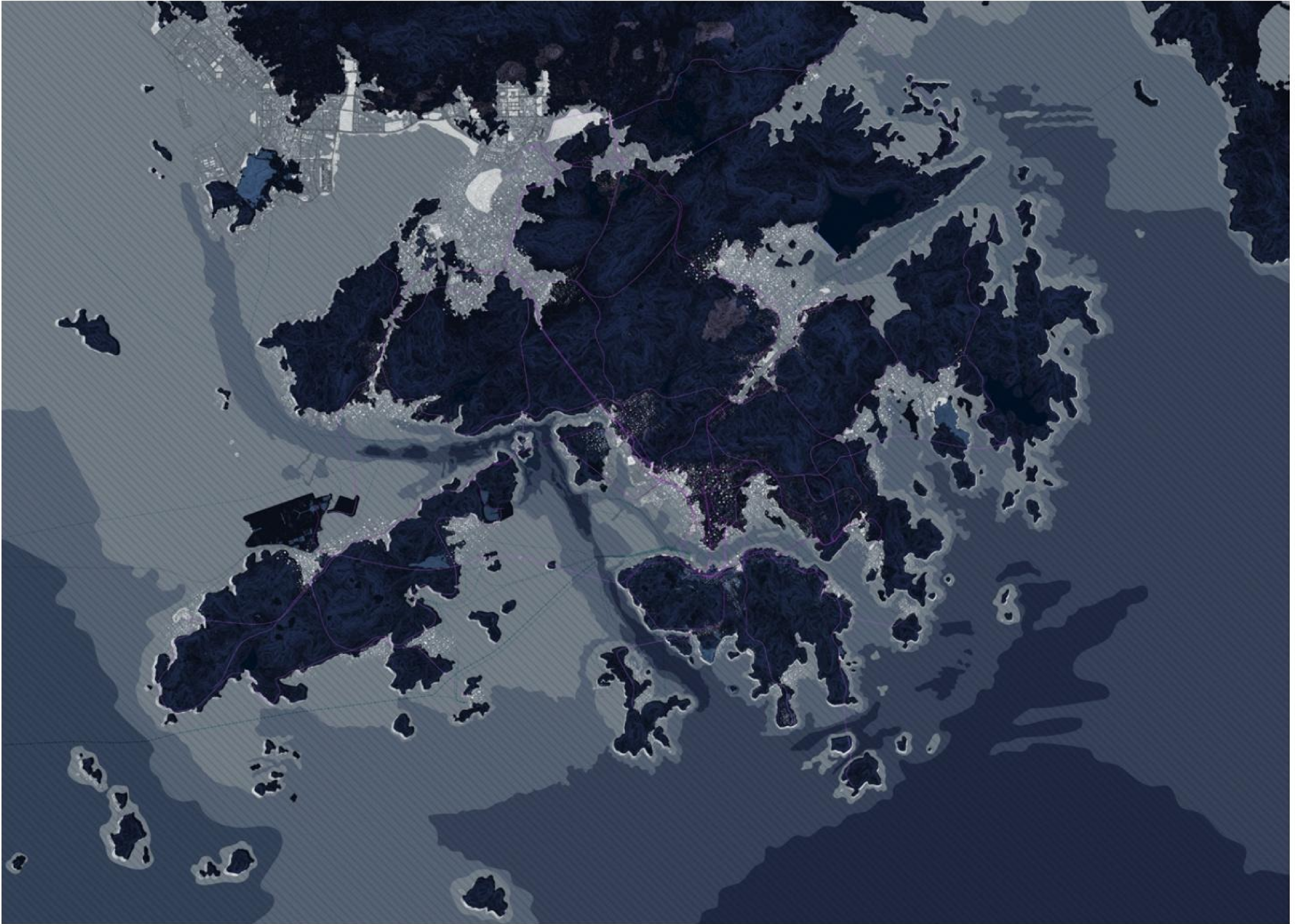
The transportation systems (specially the metro system) pushing further the development of new areas

The natural topography of the land to be used in favor of the development and with respect

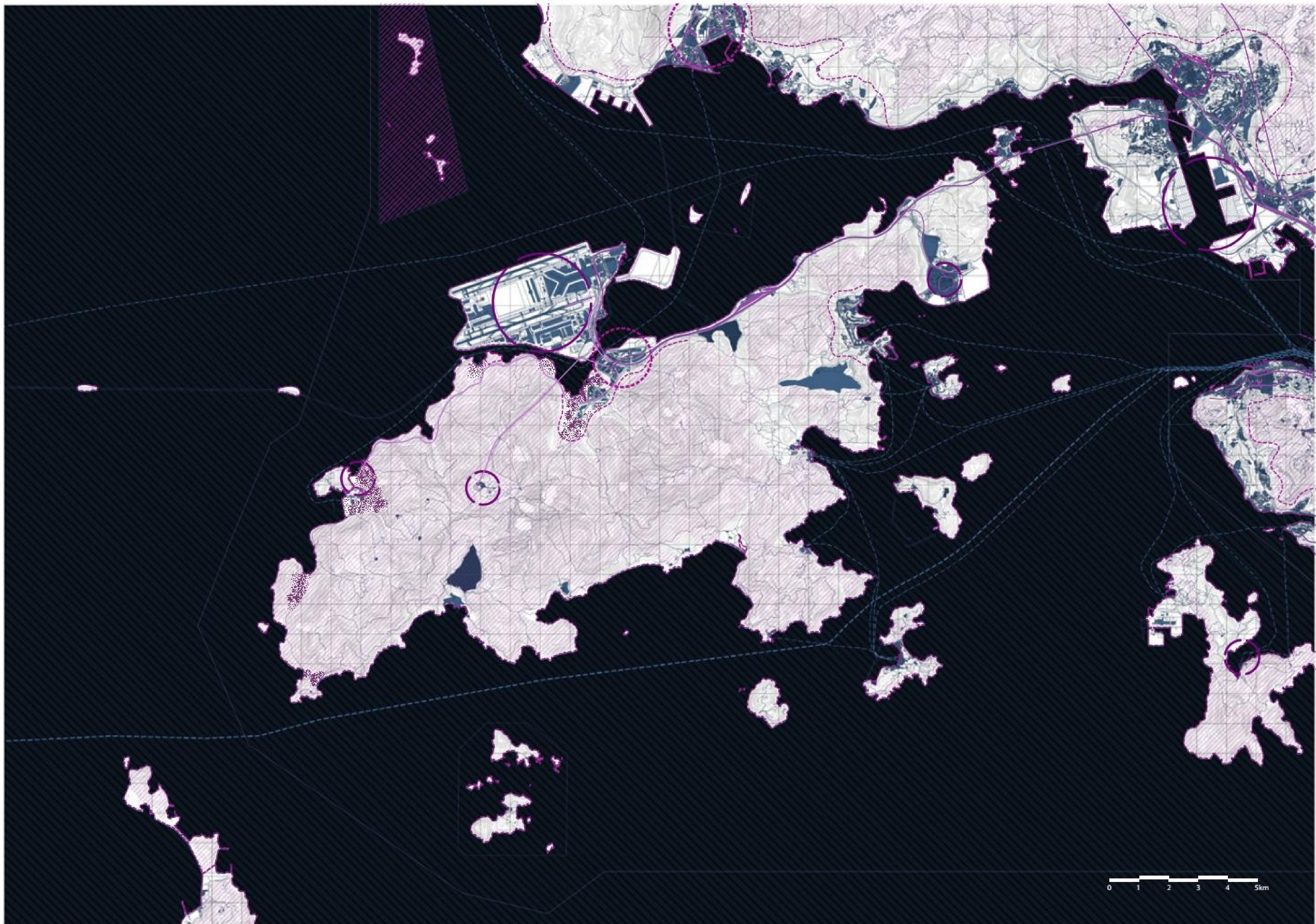


OVER VIEW - HONG KONG



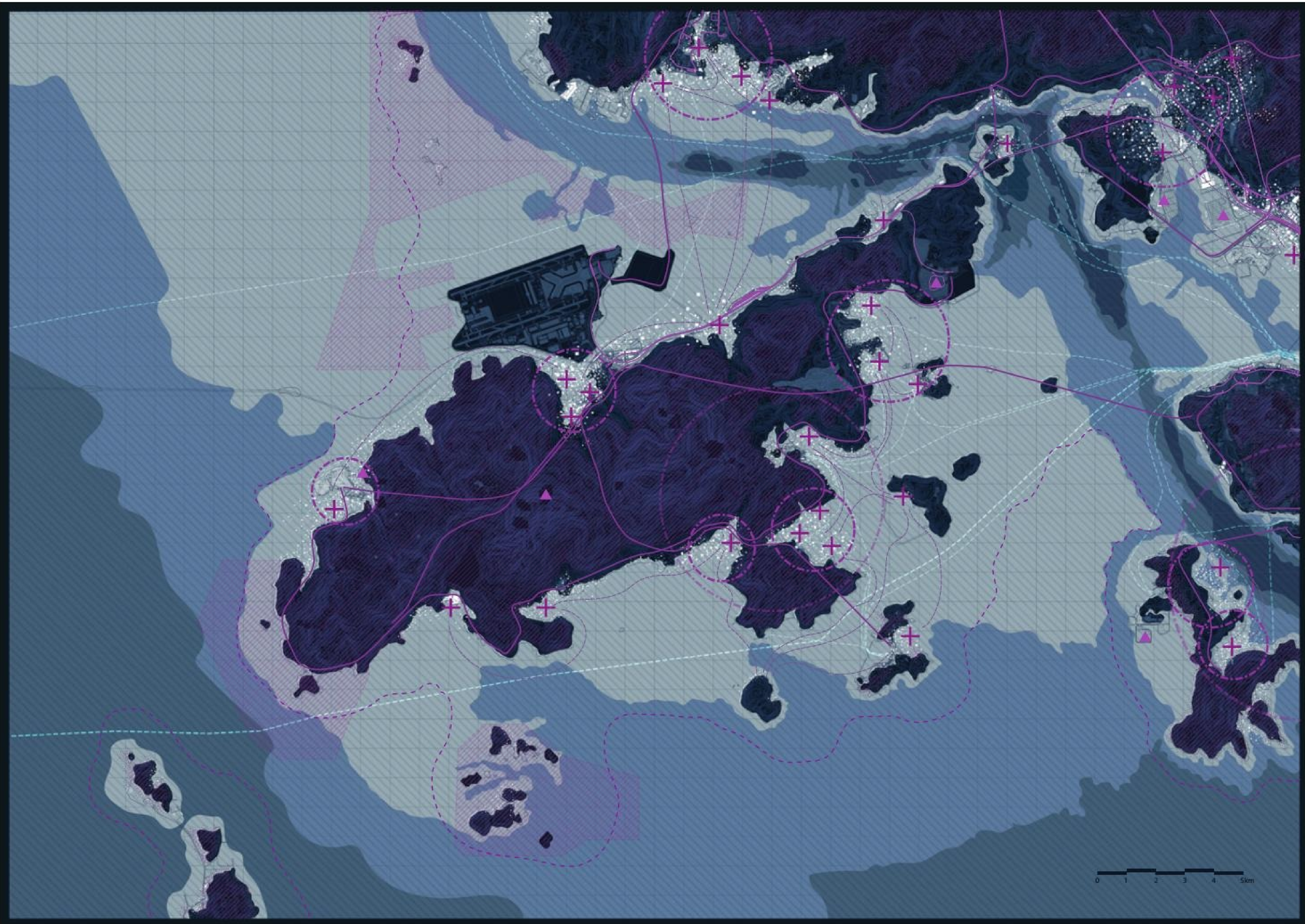


LANTAU ISLAND



The City of Now
Centralities, constrains and capacity

-  Ecological areas
-  New Development targets (Hong Kong 2030+)
-  Boundaries for city growth
-  Existing metro lines
-  Possible urban spread
-  Consolidated centralities (Economic / touristic areas)



The City of Tomorrow
Centralities, conscience, constrains and capacity

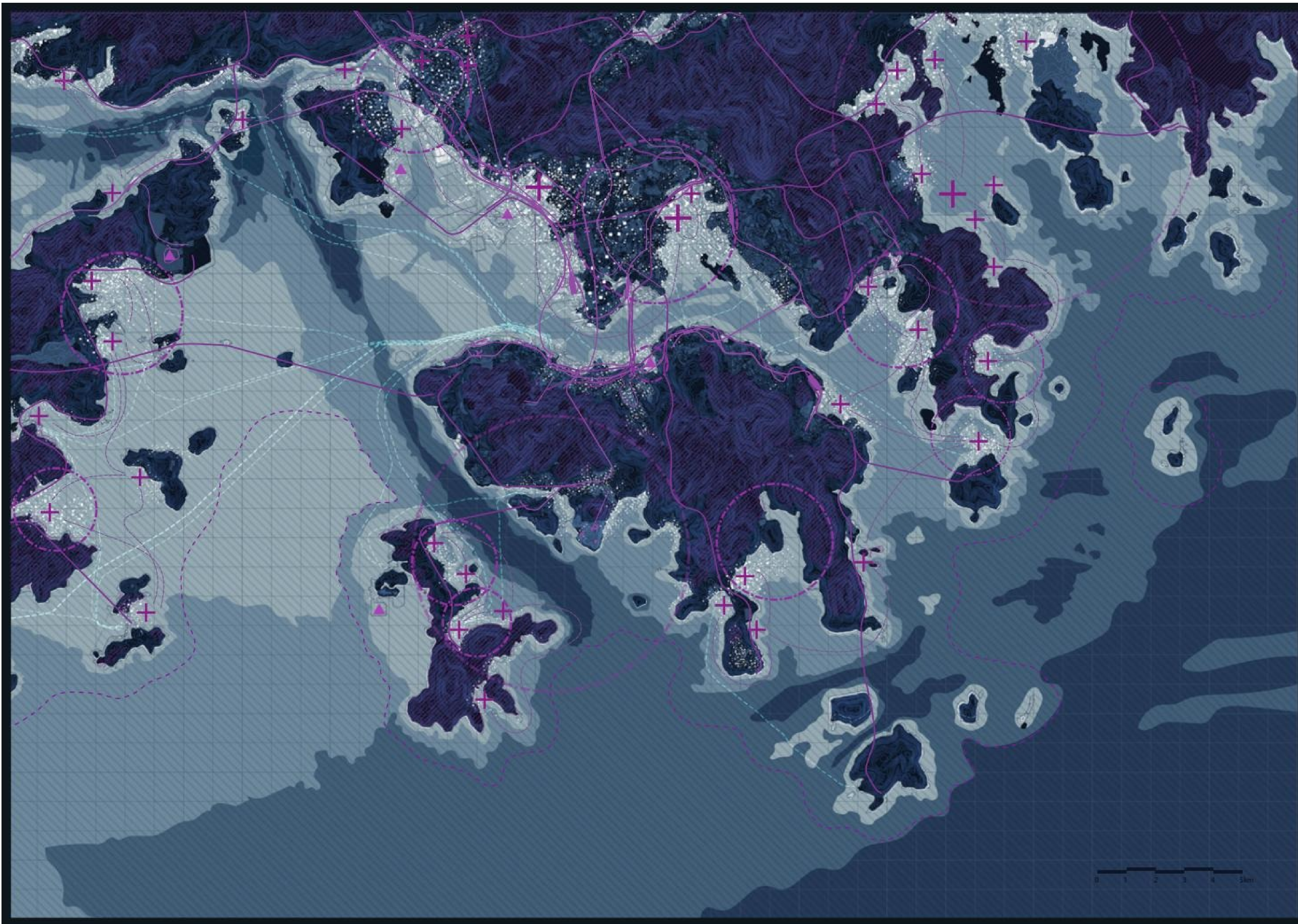
- Ecological areas
- Boundaries for city growth
- Existing metro lines
- Possible metro lines
- Possible urban spread
- Potential areas
(By grouping smaller 'units')
- Memories
(Areas with cultural/ economical meaning)
- + Potential new centralities
- Possible water routes

HONG KONG ISLAND AND KOWLOON



The City of Now
Centralities, constrains and capacity

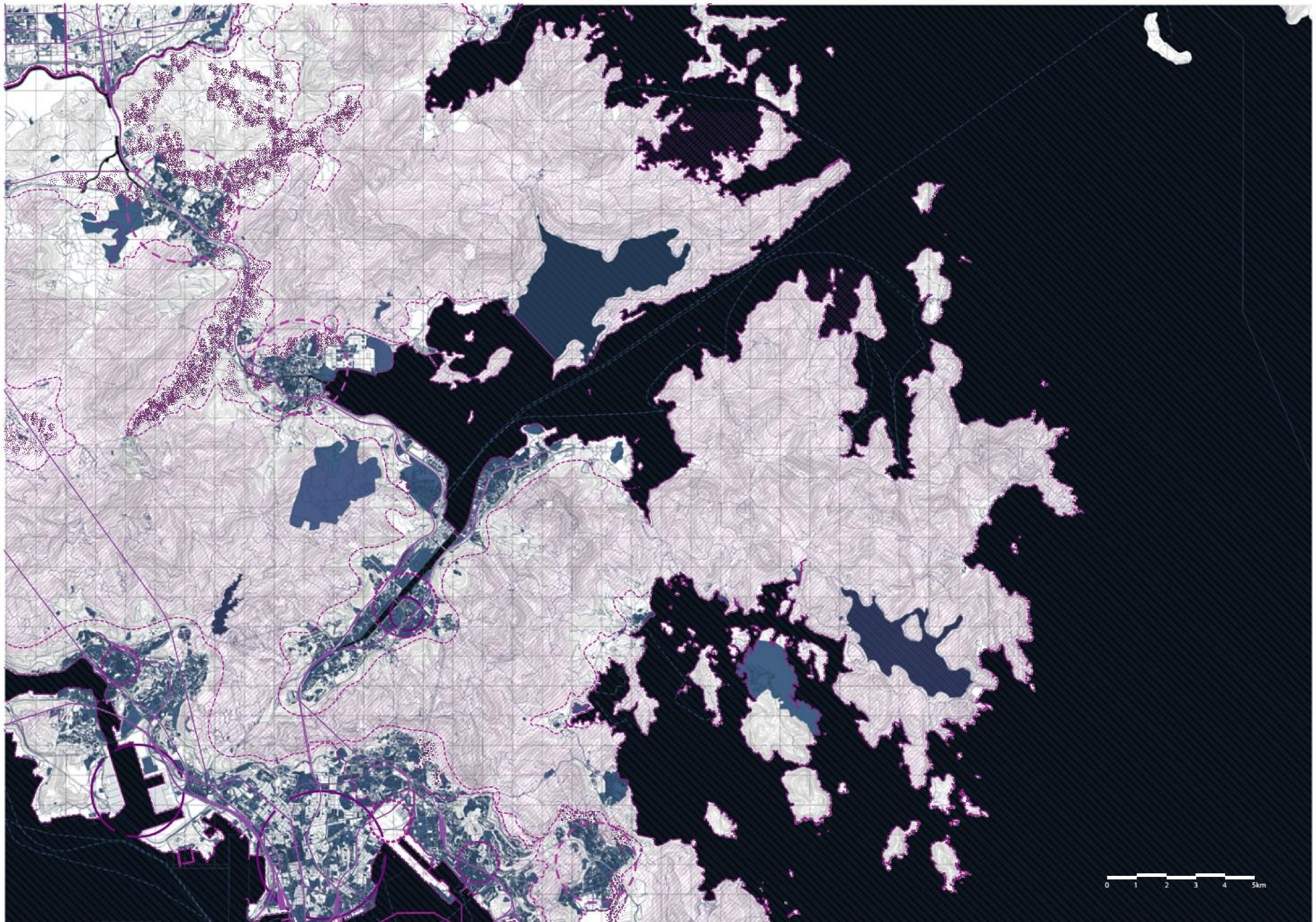
-  Ecological areas
-  New Development targets (Hong Kong 2030+)
-  Boundaries for city growth
-  Existing metro lines
-  Possible urban spread
-  Consolidated centralities (Economic / touristic areas)



The City of Tomorrow
Centralities, conscience, constrains and capacity

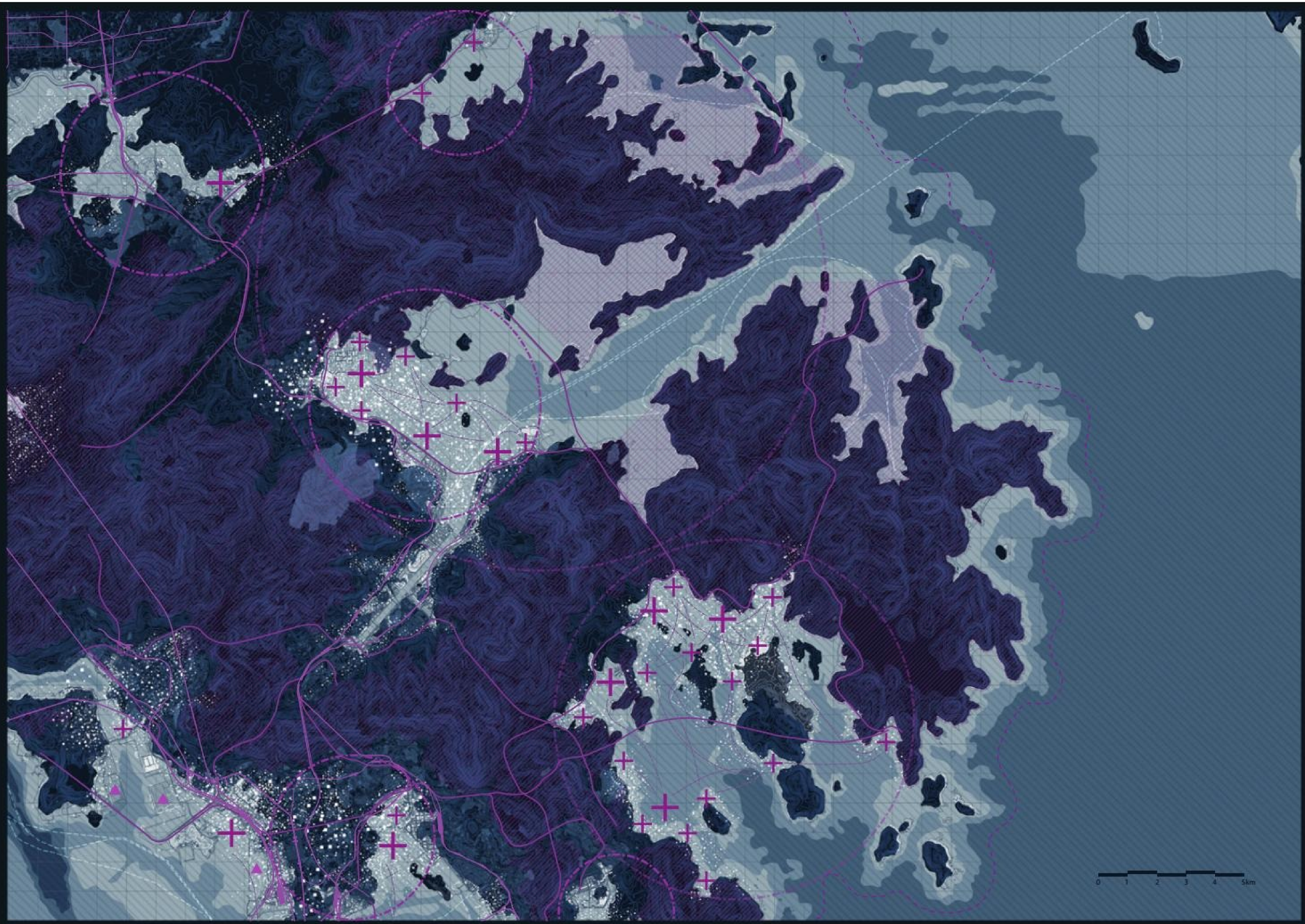
- Ecological areas
- Boundaries for city growth
- Existing metro lines
- Possible metro lines
- Possible urban spread
- Potential areas
(By grouping smaller 'units')
- Memories
(Areas with cultural/ economical meaning)
- + Potential new centralities
- Possible water routes

NEW TERRITORIES EAST



The City of Now
Centralities, constrains and capacity

-  Ecological areas
-  New Development targets (Hong Kong 2030+)
-  Boundaries for city growth
-  Existing metro lines
-  Possible urban spread
-  Consolidated centralities (Economic / touristic areas)



The City of Tomorrow
Centralities, conscience, constrains and capacity

Ecological areas

Boundaries for city growth

Existing metro lines

Possible metro lines

Possible urban spread

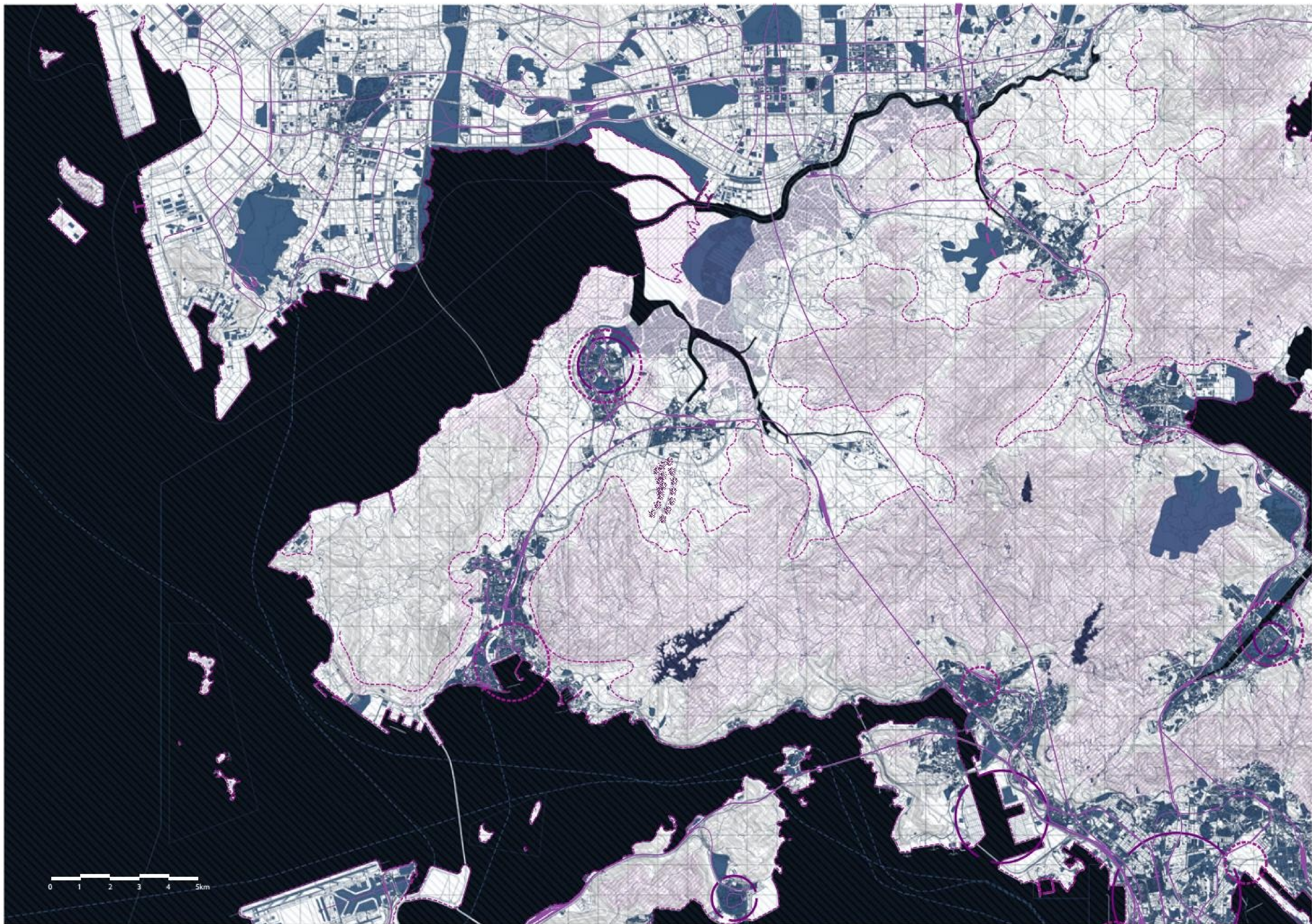
Potential areas
(By grouping smaller 'units')

Memories
(Areas with cultural/ economical meaning)

Potential new centralities

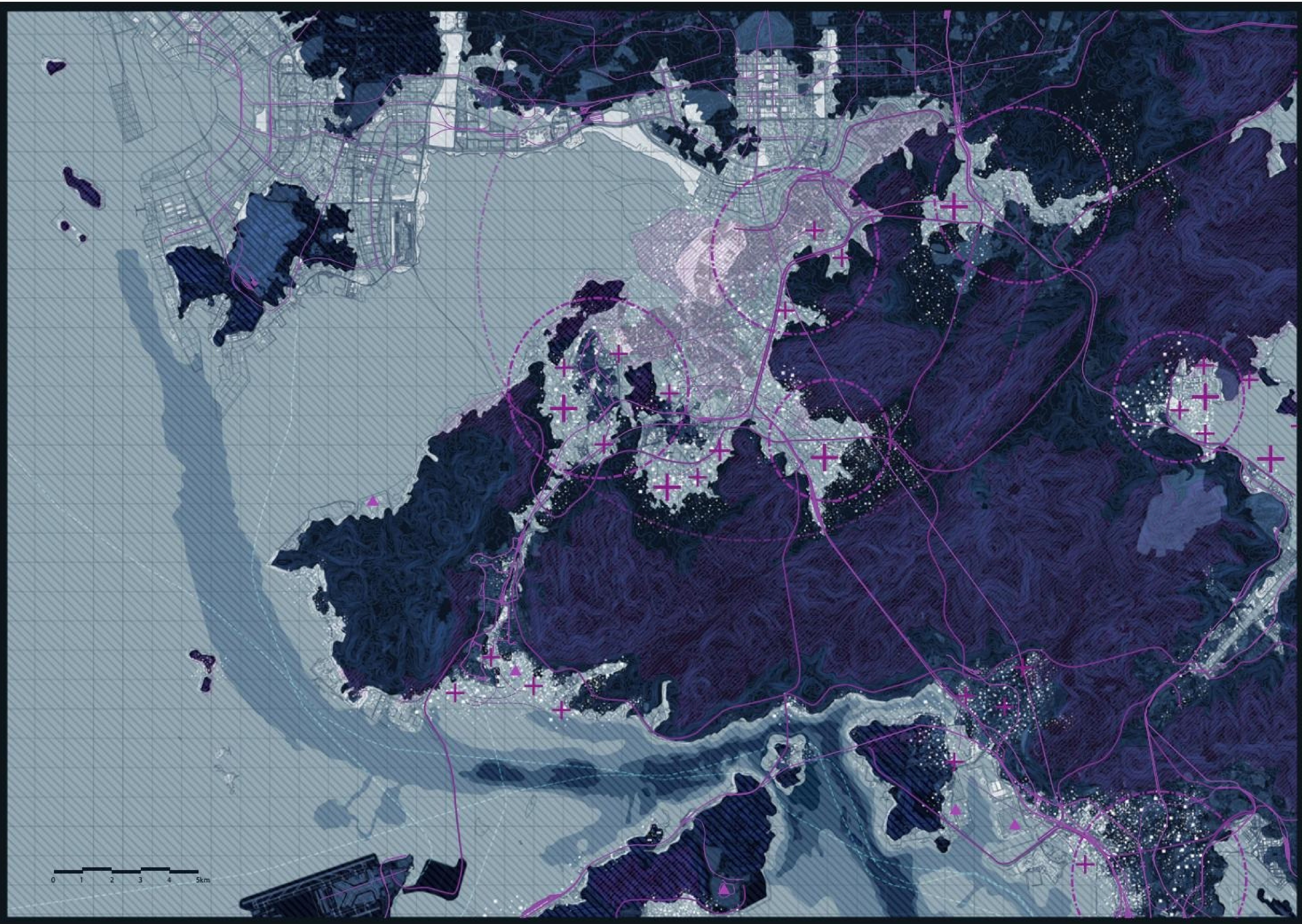
Possible water routes

NEW TERRITORIES WEST



The City of Now
Centralities, constrains and capacity

-  Ecological areas
-  New Development targets (Hong Kong 2030+)
-  Boundaries for city growth
-  Existing metro lines
-  Possible urban spread
-  Consolidated centralities (Economic / touristic areas)




The City of Tomorrow
Centralities, conscience, constrains and capacity


 Ecological areas

 Boundaries for city growth

 Existing metro lines

 Possible metro lines

 Possible urban spread

 Potential areas
(By grouping smaller 'units')

 Memories
(Areas with cultural/ economical meaning)

 Potential new centralities

 Possible water routes

BAYS AND COVES BECOME THE MOST
VALUABLE AREAS, PROTECTED FROM THE
OPEN SEA, CONTAINING THE MIX OF LAND
AND SEA, RESULTING IN A SPECIAL PLACE
FOR THE NEW SETTLEMENTS

EL MAR

NECESITO del mar porque me enseña:
no sé si aprendo música o conciencia:
no sé si es ola sola o ser profundo
o sólo ronca voz o deslumbrante
suposición de peces y navios.
El hecho es que hasta cuando estoy dormido
de algún modo magnético circulo
en la universidad del oleaje.
No son sólo las conchas trituradas
como si algún planeta tembloroso
participara paulatina muerte,
no, del fragmento reconstruyo el día,
de una racha de sal la estalactita
y de una cucharada el dios inmenso.

Lo que antes me enseñó lo guardo! Es aire,
incesante viento, agua y arena.

Parece poco para el hombre joven
que aquí llegó a vivir con sus incendios,
y sin embargo el pulso que subía
y bajaba a su abismo,
el frío del azul que crepitaba,
el desmoronamiento de la estrella,
el tierno desplegarse de la ola
despilfarrando nieve con la espuma,
el poder quieto, allí, determinado
como un trono de piedra en lo profundo,
substituyó el recinto en que crecían
tristeza terca, amontonando olvido,
y cambió bruscamente mi existencia:
di mi adhesión al puro movimiento.

Pablo Neruda



1. Tam Shui Wan
2. Shuk Tsai Wan
3. Kung Tsai Wan
4. Lung Ha Wan
5. Ma Wan

- A. Wok Tai Wan
- B. Sai Tso Wan

no bay names?
FREEDOM - SEA

0 1 3 5 10km
 SCALE 1:150,000

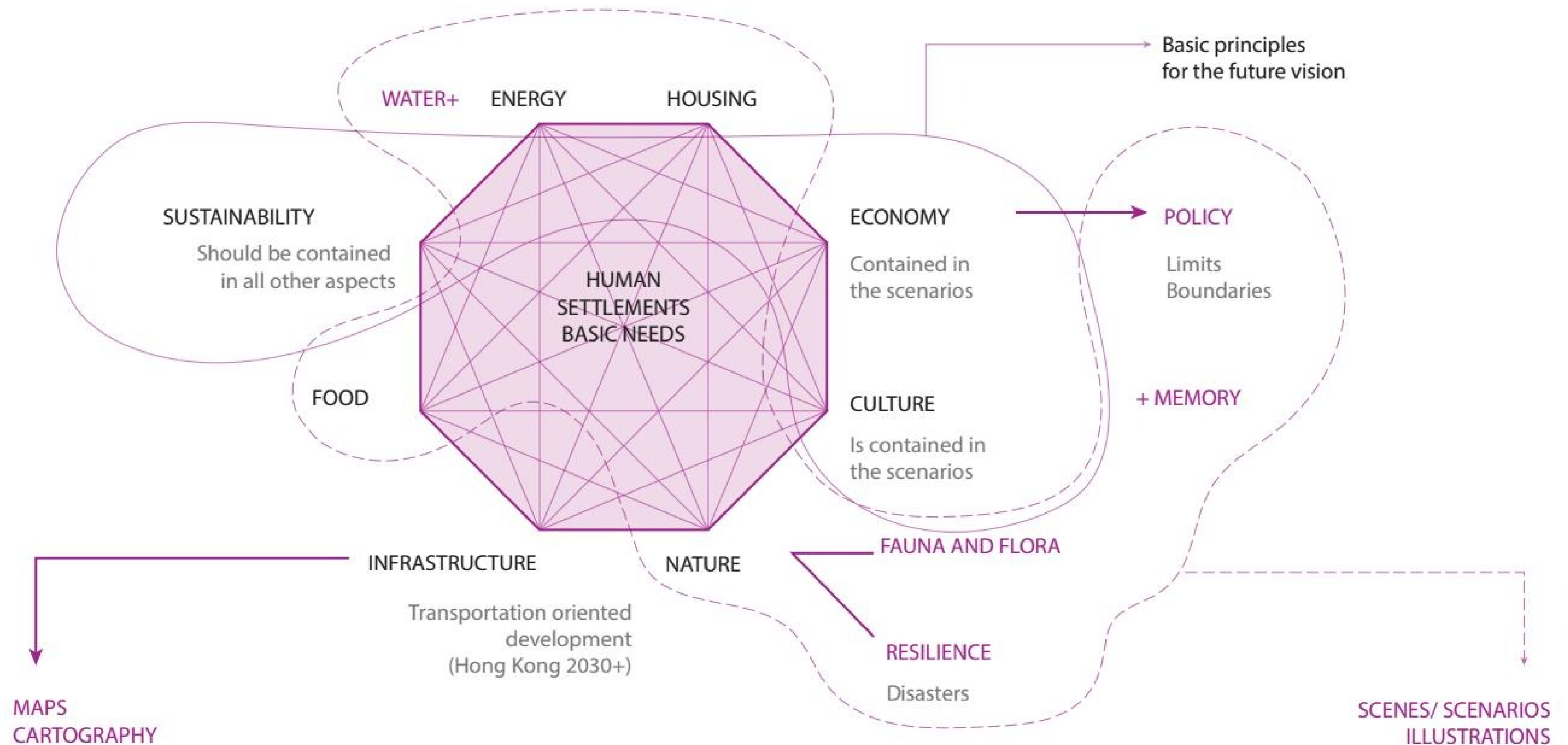
ZERO.TOPIA

The name ZERO.TOPIA comes from the fusion of the word “zero” and the Greek τόπος (tópos, “place, region”). Zero can refer to neutral or something with no value, but in this case, it means start, beginning and also the level in which the city develops. Therefore, zero.topia becomes the place of a new start, a start at the ground zero, the level of the sea.

ISSUES AND CONCERNS

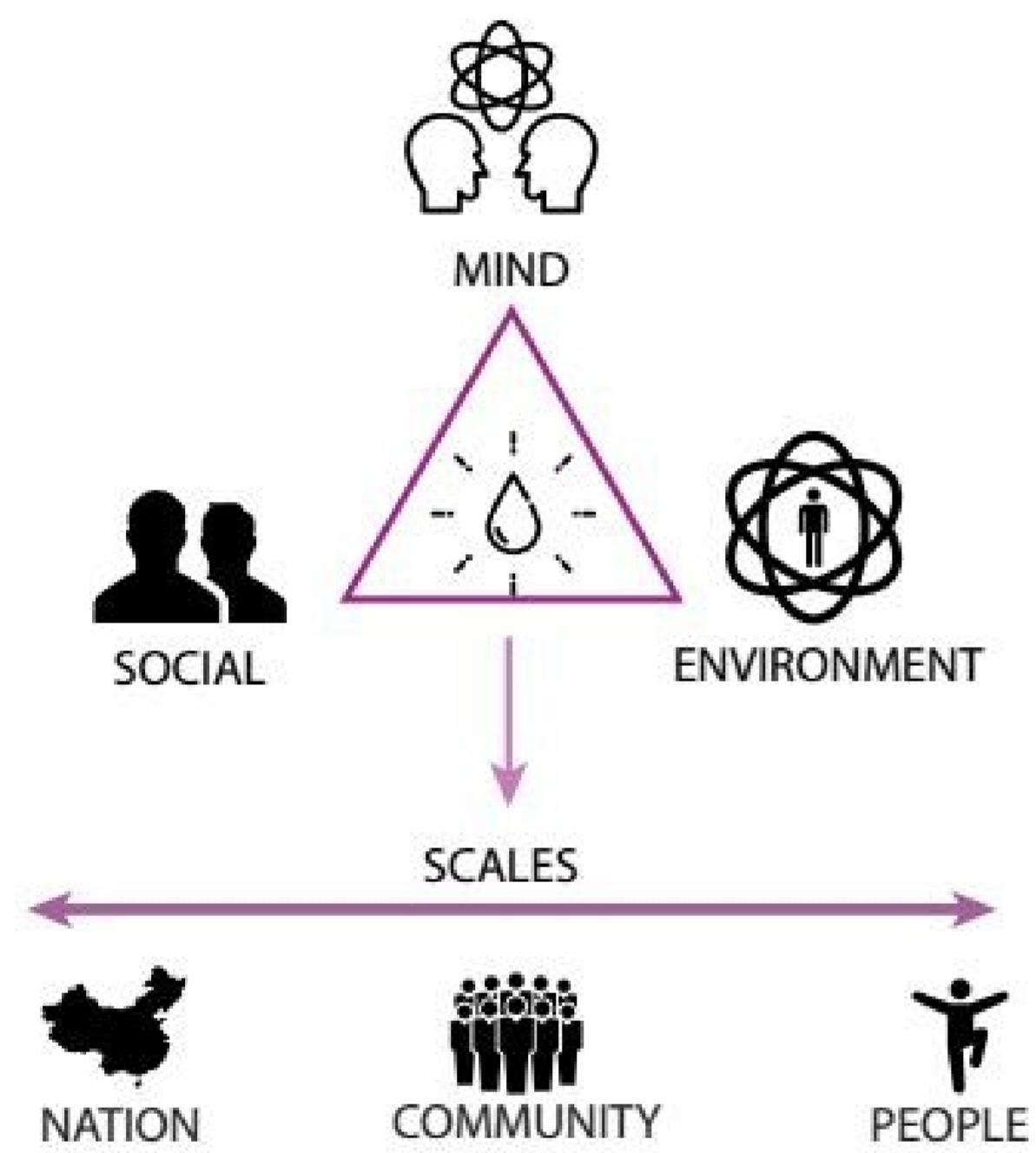
There are eight main issues represented in the illustrations, a sample within many perspectives and situations of a human settlement (original base from The Why Factory), adding to that, there are also some concerns brought by the Hong Kong 2030+.

The main idea of the illustrations is to bring awareness about the actual conditions of the city and the need of planning ahead in case of sudden changes. The intention is also to show the bond between human being and the space, the need of basic devices that will allow us to transform raw natural resources into useful basic tools for the daily life tasks.



ILLUSTRATING SCALES

A way to describe the "ecosophy" dimension including the mind (psychology, feelings), the environment (physical features) and the social (relationship within individuals and with environment).



AQUEOUS SOLUTION

The overview of the system, at the scale of the city.
Water is a good solvent, being able to mix with many other elements, meaning a new possibility for the city of tomorrow.



SURFACE TENSION

The level of the community.
Water has a high surface tension, showing resistance and unity invisible to the human eye, a parallel of a network among a group of people.



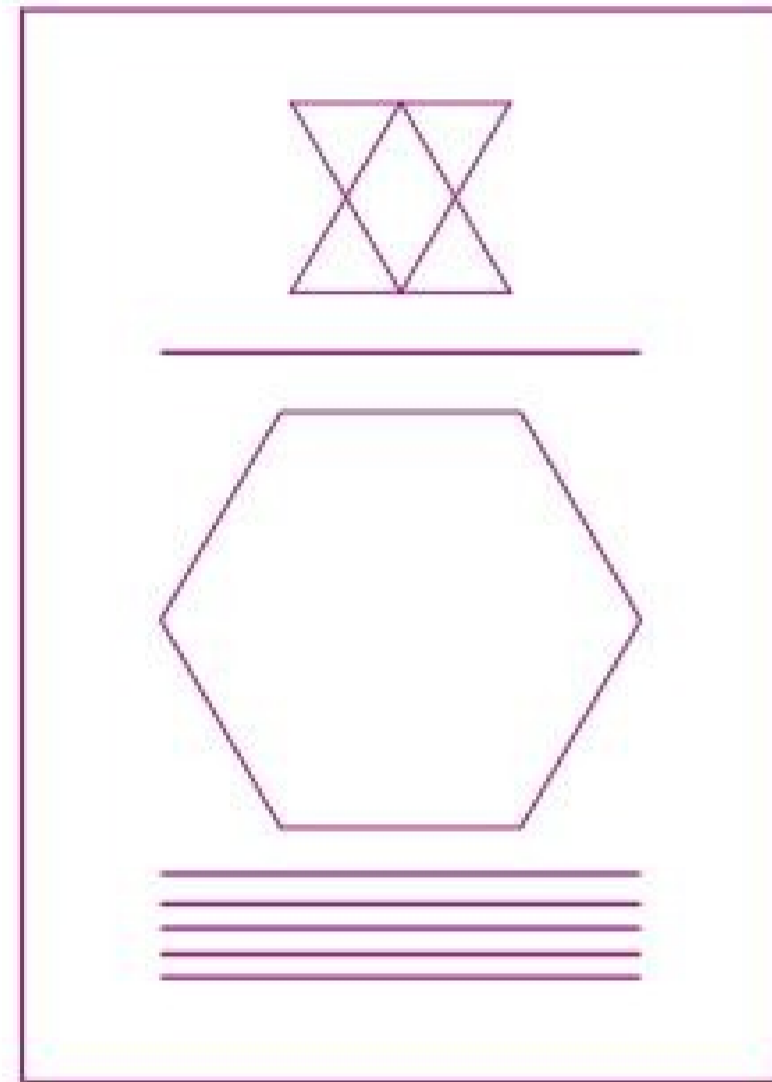
SURFACE TENSION

The level of the community.
Water has a high surface tension, showing resistance and unity invisible to the human eye, a parallel of a network among a group of people.

MANUAL TO ZERO

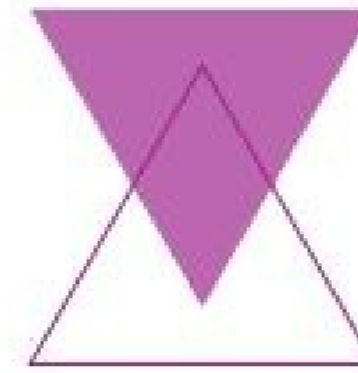
FUTURE IMAGE.NARY

Like a dictionary, the image.nary brings glimpses of a vision of the future according to a certain vocabulary, creating an illustrated dictionary. Both images and words are framed by the context of water.

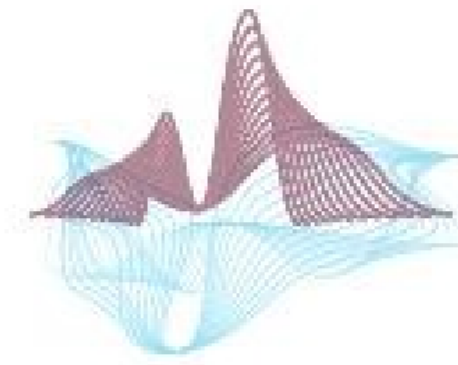


1. Conceptual diagram
Relationship between issues and environment
2. Name
Given according to a property or process of water in nature
3. Illustration
Creation of an environment based on physical features and the self
4. Context
Link between the name and the scenario, including a brief description of the situation

ABOUT THE DIAGRAMS



Triangles
Relationship between different elements, expressing a certain hierarchy or power over the other element.



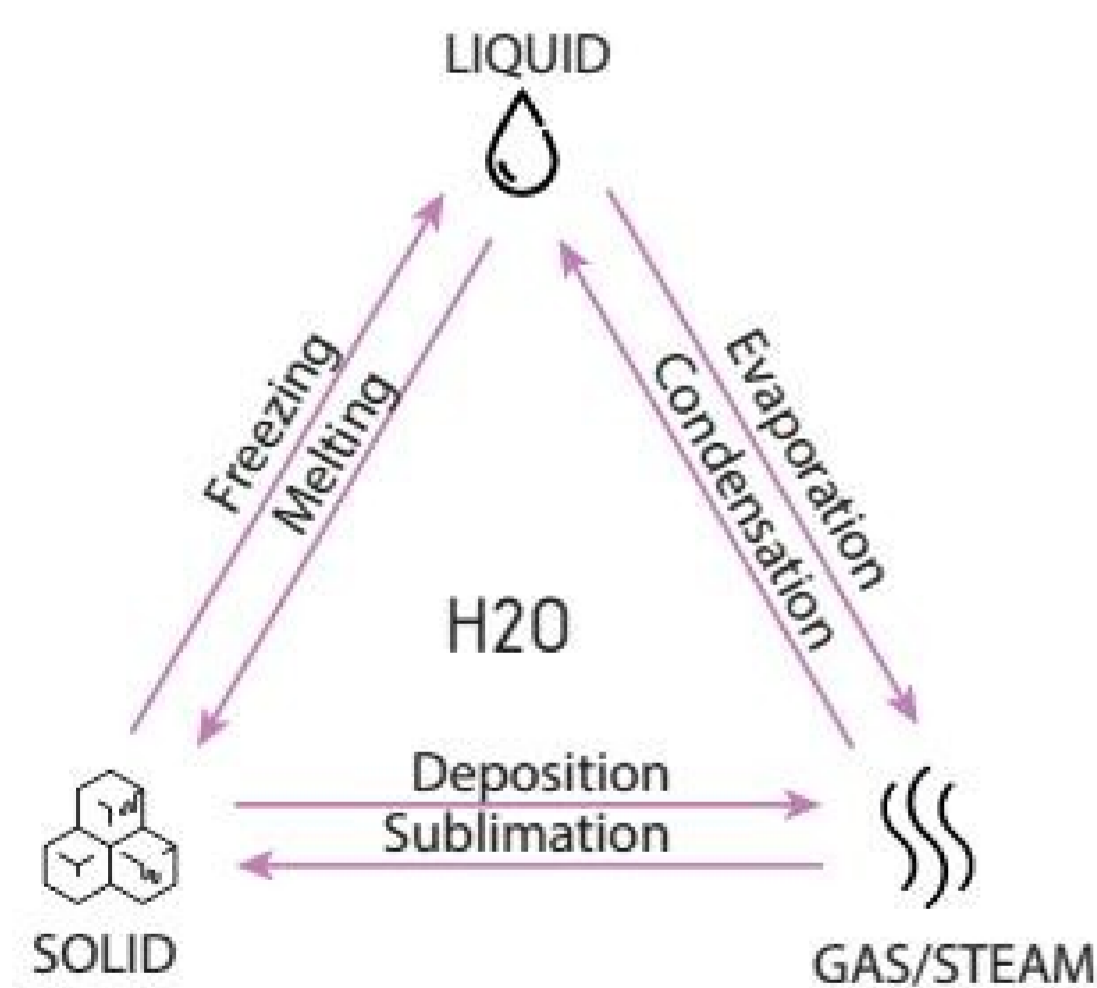
Waves
The representation of fluidity and interactions of air (from land and mountains) and sea according to each issue, differentiated by colour.



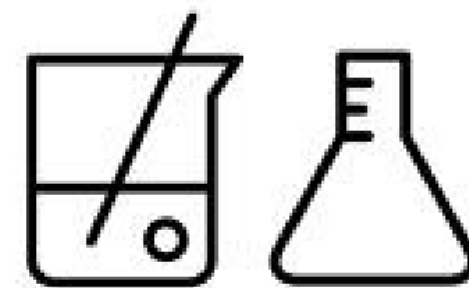
Graphic Elements
Icons and images representing a specific issue- housing, fresh water, energy, nature, memory, boundaries, food and resilience- and the interaction in the present and future

ABOUT THE NAMES

The names usually refers to physical and chemical process of elements. In the case of water, it has special features if compared to other elements.



Aqueous solution- solution in which the solvent is water

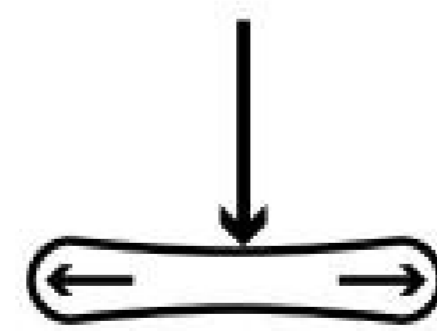


Amphoteric compound- molecule or ion that can react both as an acid as well as a base

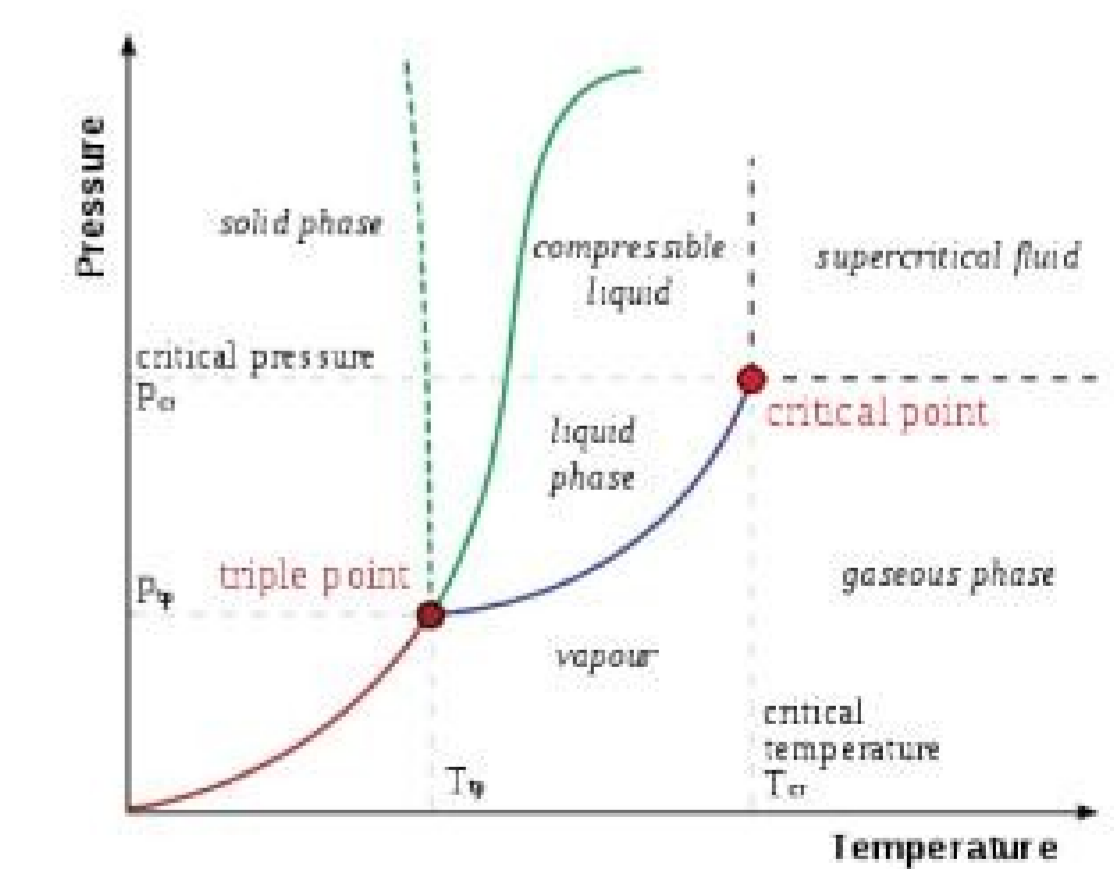
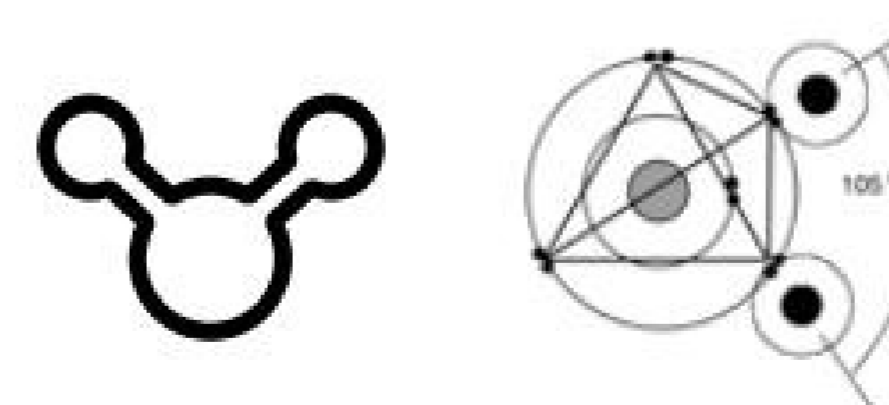


Triple point- the temperature and pressure at which the three phases (gas, liquid, and solid) of that substance coexist in thermodynamic equilibrium

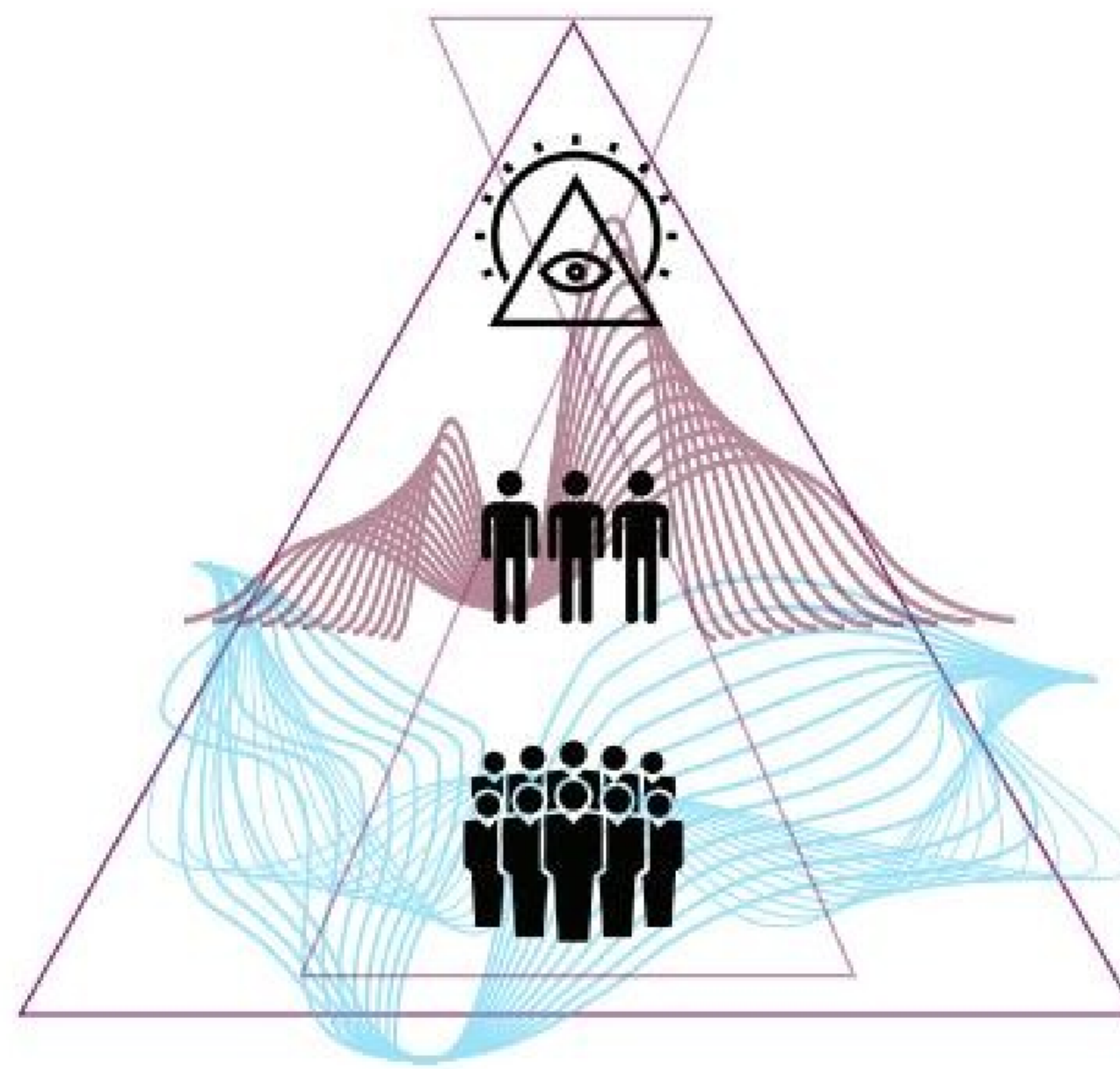
Surface tension- the elastic tendency of a fluid surface which makes it acquire the least surface area possible.



Electronic structure- series of energy levels that it are possible for a bound electron to occupy.



SUBLIMATION

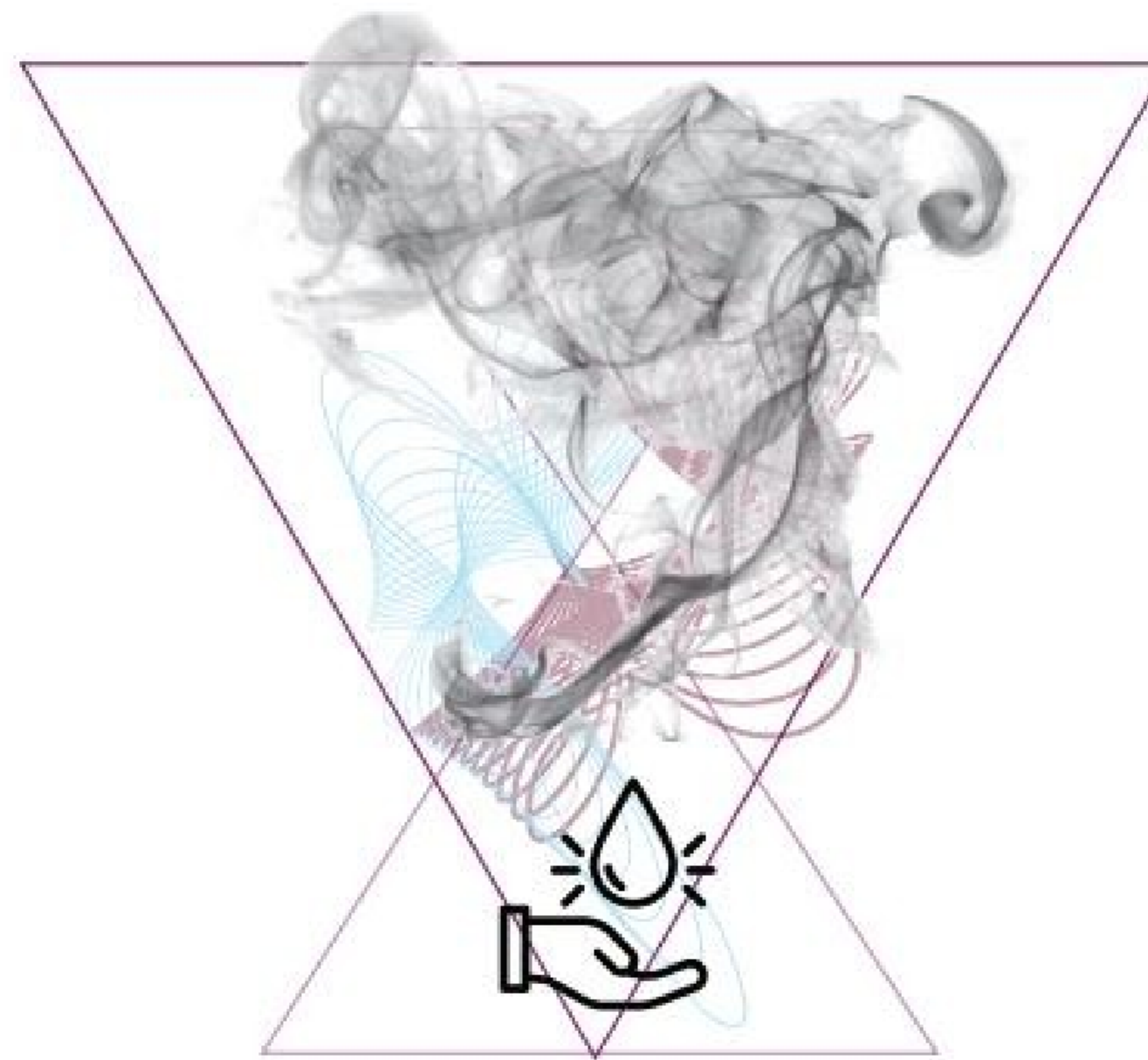


Is easy to see the order of things in this place- the higher the location, the higher the social class or economic status. On the top, there are only gods, in the sea, those who cannot afford to build houses in the mountains. But there is a trick to dodge that reality.

The sky can be reflected on the sea. This means that for many people, those that live in the sea, can be also the ones that conquered the sky. A quick way to ascend into the sky, a sublime dream.



CONDENSATION

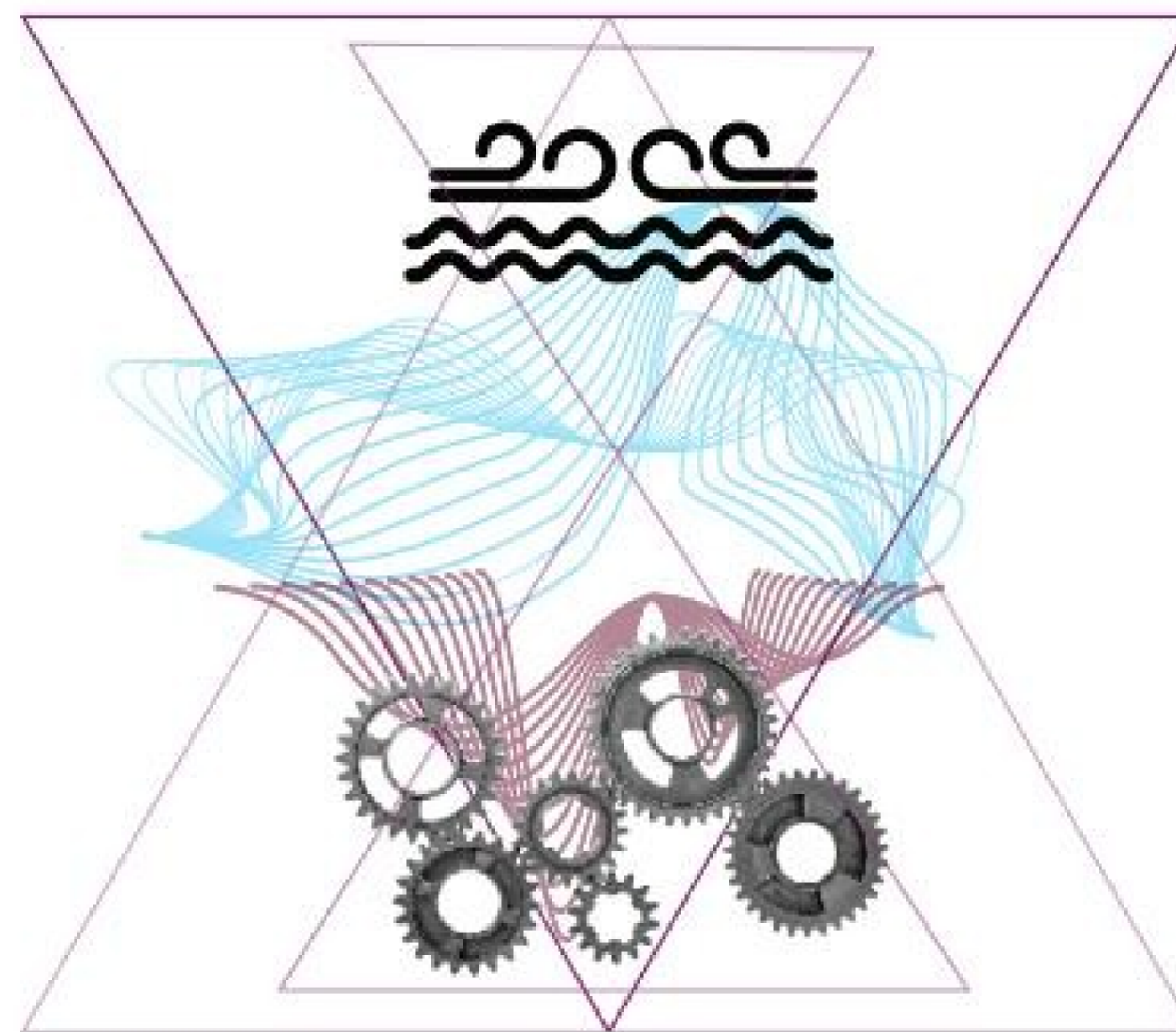


The irony of living in water, in this case, is the saltiness. It makes the water inappropriate for human consumption. Also, with the rise of the sea levels, part of the fresh water is blended and turn into brackish.

Since the underground water is not easy to access, a new technology was developed. Besides the collection of rain water, there is another alternative: a very light and thin net that is able to capture and store the water contained in the air. Almost like magic, the invisible is transformed into fresh water.



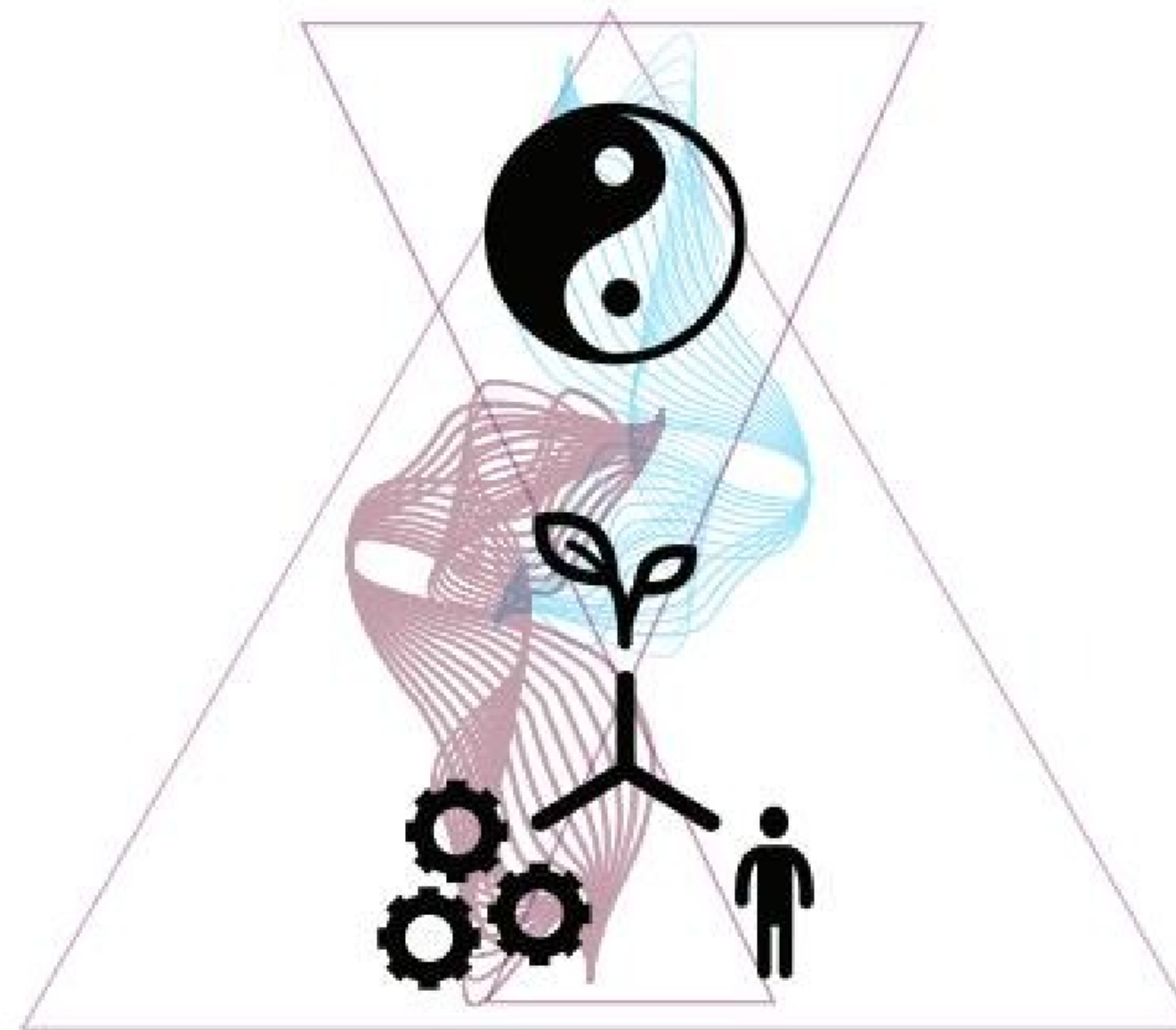
FREEZING



The good thing of living in Zero is the mix of possibilities from earth and sea. Instead of obtaining energy from coal or gas like in the past, other clean opportunities were brought through the development of new technologies. From the natural and fluid movement of water or air, it can be turned concrete energy and movements that will keep the city alive like an organism. Without this transformation, everything keeps frozen in time and space.



TRIPLE POINT

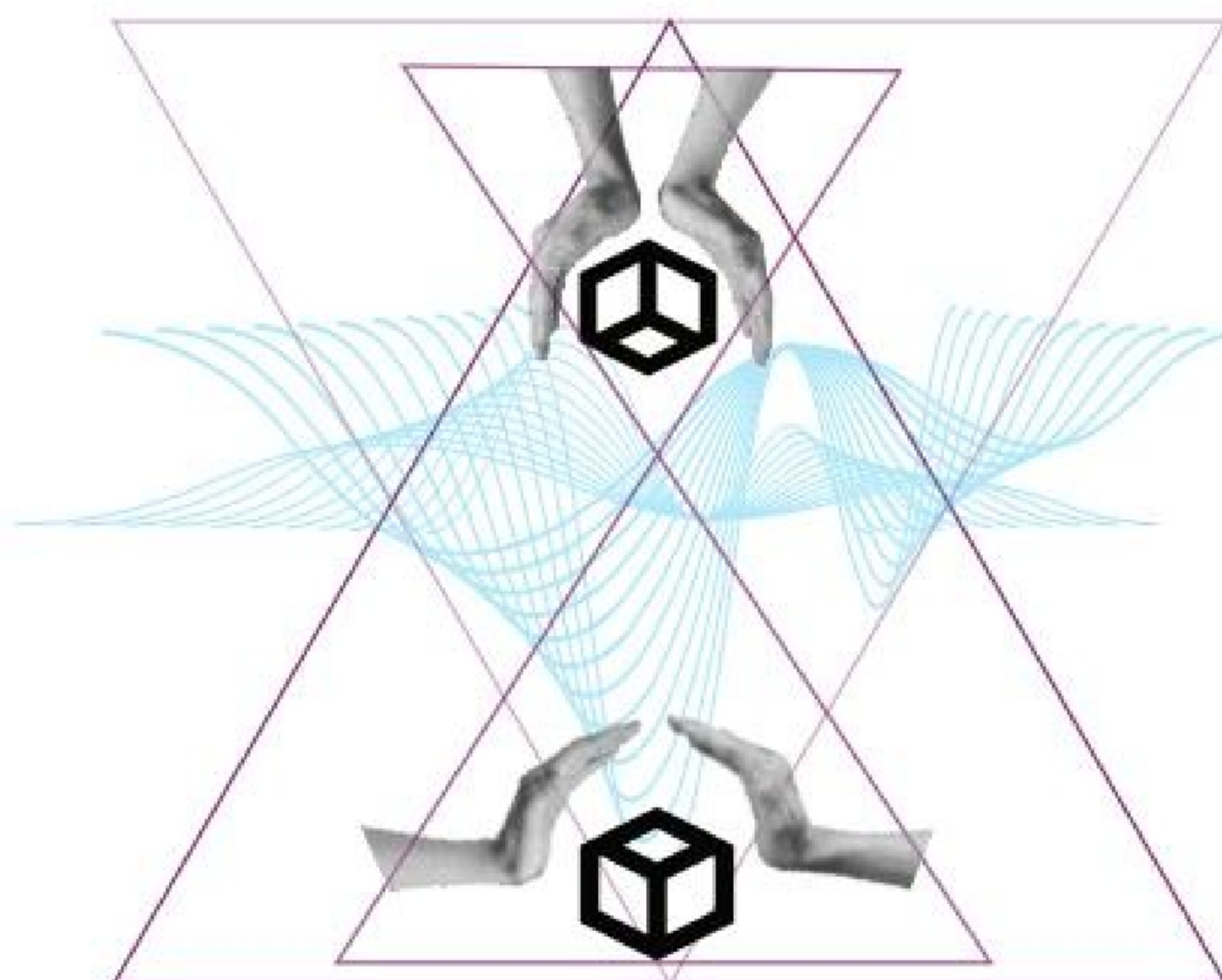


The equilibrium of temperature and pressure, balancing the different states of an element is very fragile.

The triple point of Zero is established with the equilibrium of nature, man and machine as an attempt of balancing of a peculiar original ecosystem through a delicate equation, specially after the climate change events that created a chain reaction, putting many species in danger.



DEPOSITION

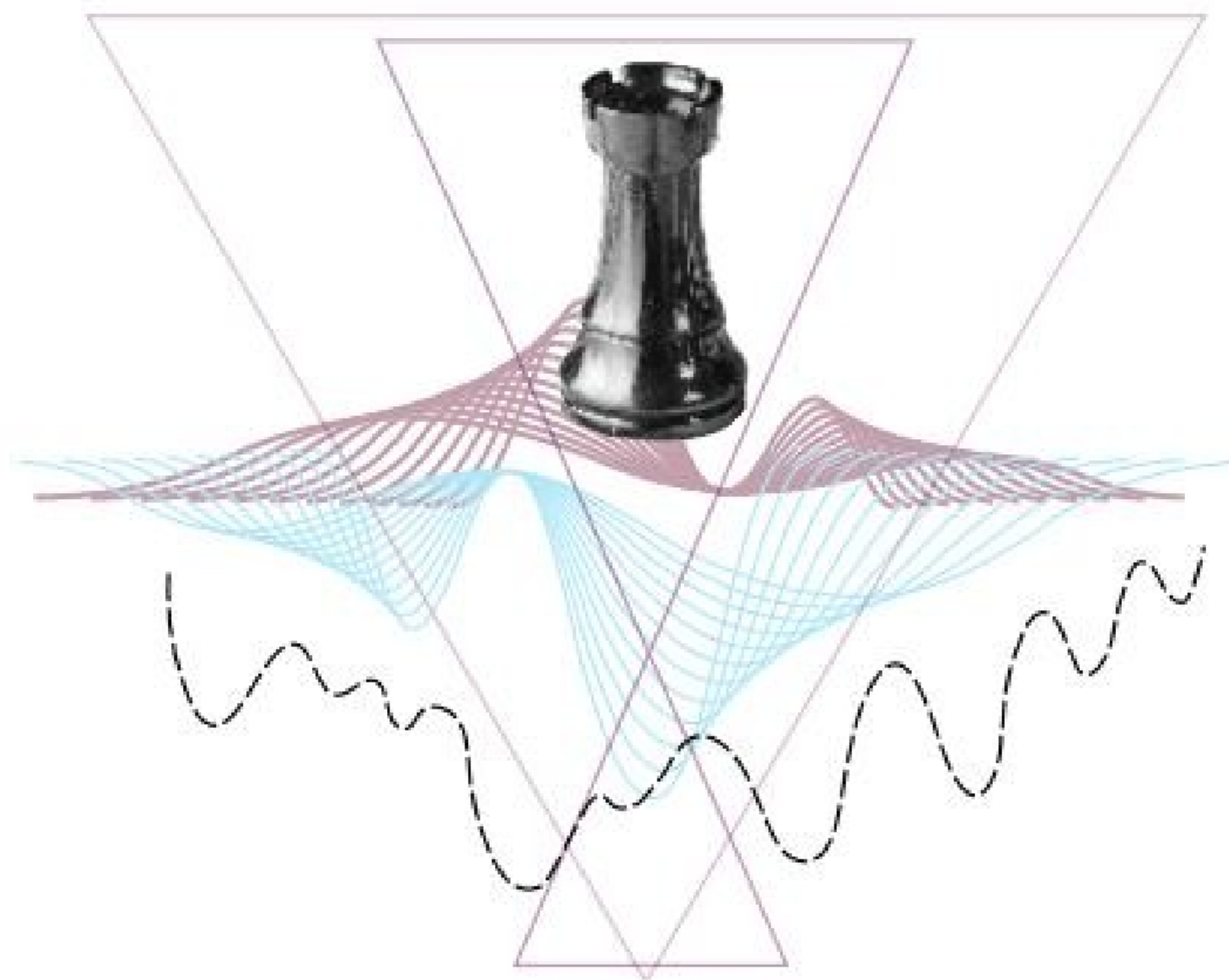


A trace of the ancient city before it was taken by the ocean. The transformation of old memories into physical objects located in the bottom of the ocean, creating a layer of a parallel city, the city from the past.

Although in the ocean, this deposition can still be seen by people when scuba diving or using a special device to scan the deepness of the ocean.



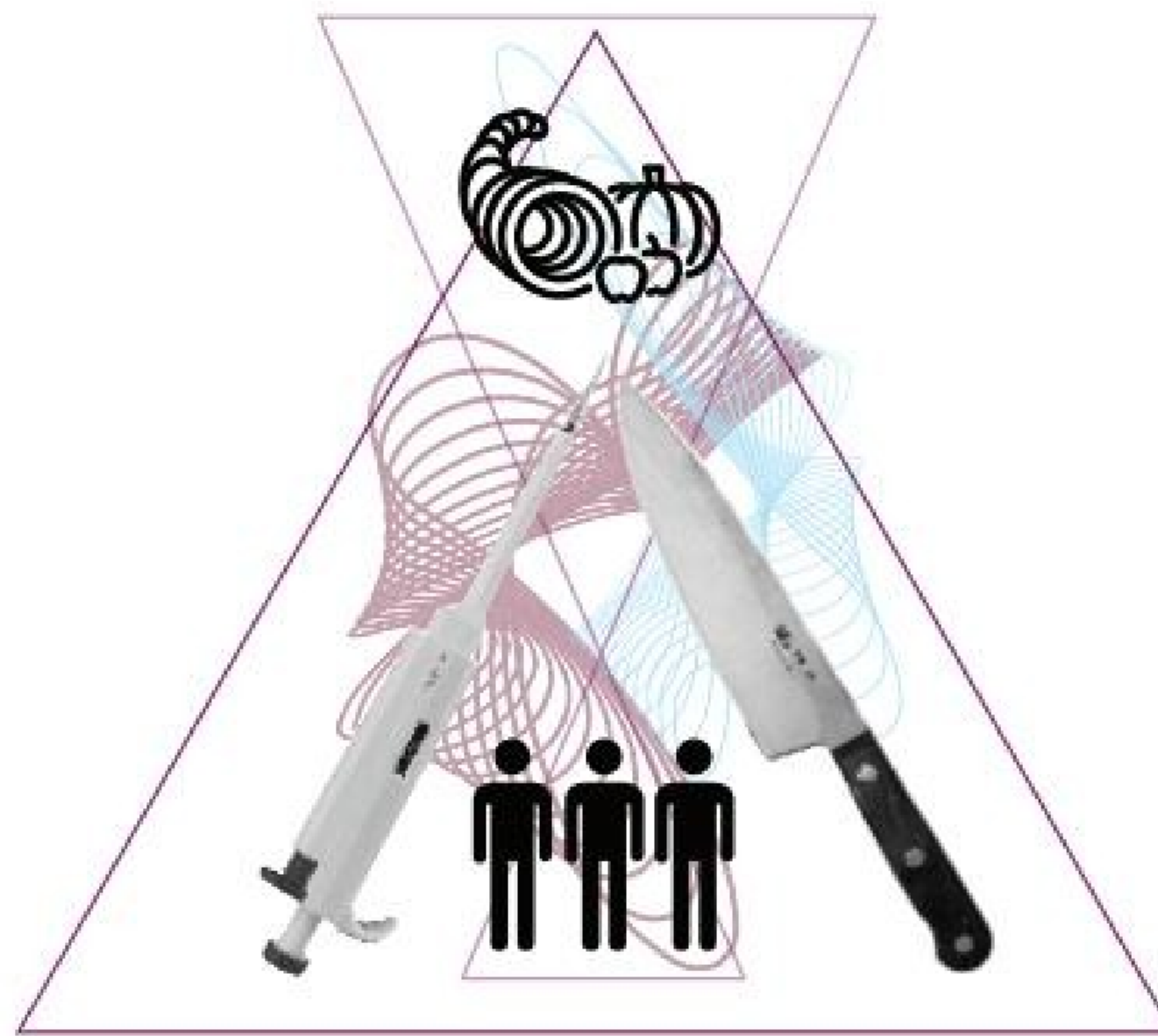
MELTING



With the geographical and morphologic changes in the territory, there were also changes in the conception of the borders. Instead of walls and towers, now there are only imaginary lines and bridges on water. In one hand, bridges can be a physical boundary but at the same time, they link different parts of the territory. From the solid state of the construction, to the liquefaction of the flows and imaginary lines.



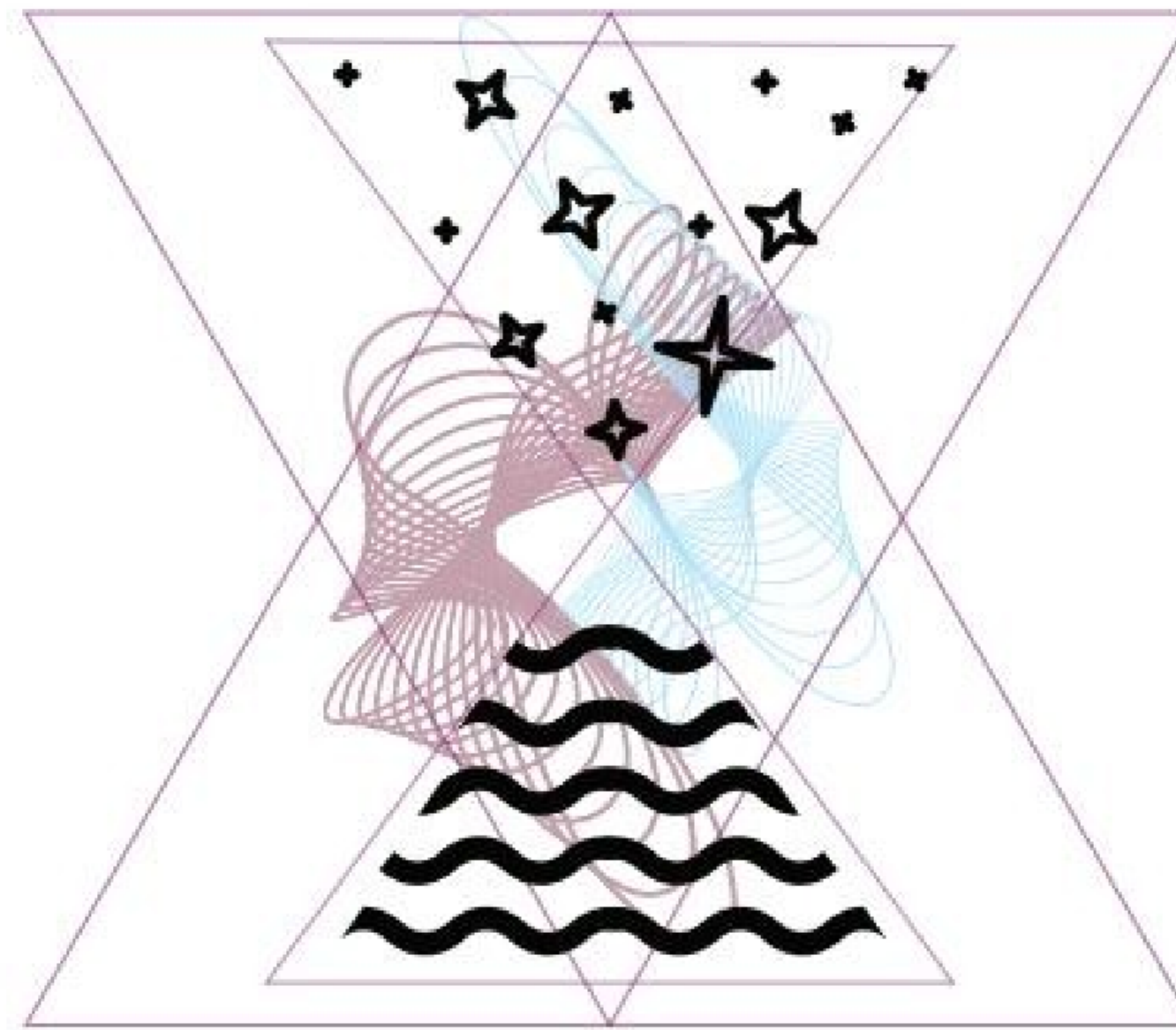
VAPORIZATION



The transformation of water in nutrition and nourishment for the community. A mix of products offered by local land, sea and laboratories. Unfortunately, nature was not able to offer everything the old city used to consume. In this way, there was a reinvention of dishes. The cuisine of the next century that mixes traditional ways to prepare the food and the new technologies that synthesize the nutrition needed in a more durable ingredient.



AMPHOTERIC



Living in the edge and being able to adapt and overcome challenges of earth and sea is one of the challenges of the future. The ability to blend and survive natural disasters from cyclones to thunderstorms and eventually tsunamis is a perfect description of Zero.
The development of technologies made this city capable of standing by itself and surviving to extreme conditions and enjoying the best of both worlds.



FINAL THOUGHTS

This is a process of a story telling, which implies a critic towards actual issues or situations. It also involves the imagination and a peculiar point of view directing or somehow distorting part of the reality to make a point. Between the ideal (utopia) and the worst case scenario (dystopia), there are many "in betweens". All of them take different doses of each element, producing a different result to the same question: What / How could the future of Hong Kong possibly be?

The water is only one of the millions of possibilities for the imaginary future. This particular way to tell this story is just a piece of exploration that includes the previous experiences and learnings of one person over one year and a half in Hong Kong. This exercise required previous skills learned along the master degree like the ability to create an specific glossary, changing or adapting the meaning of words and the process of mapping, focusing on specific issues and abstracting it from the territory.

No matter the choice, the city implies much more than physical features and one single scale. Through this work was possible to study different ways to see the city, mixing aspects, from physical features to the psychological dimension and understanding of the city.

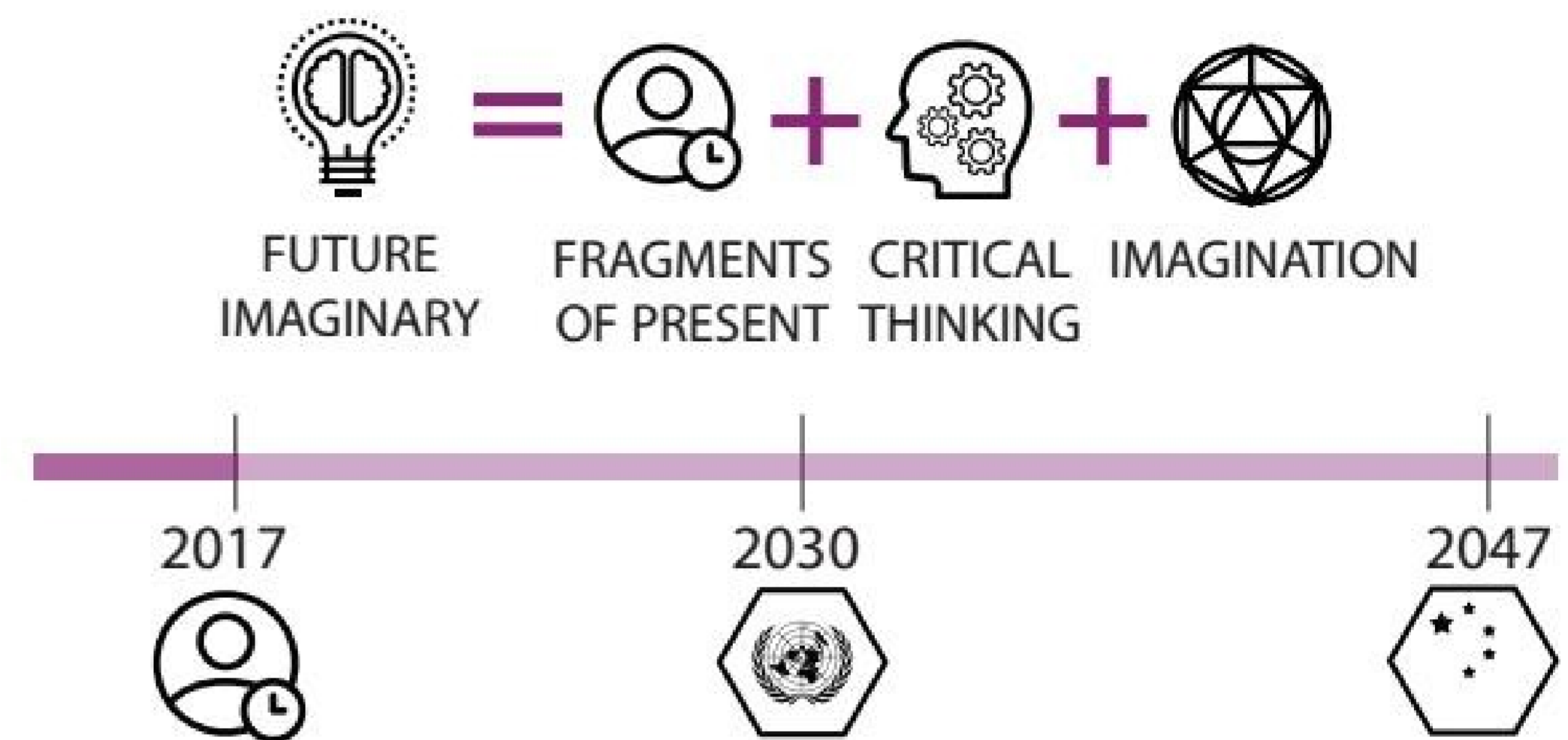
The choice of the illustrations is also only one of the many different media that could have been used to demonstrate and tell a story. In the extras is possible to see a sketch of what it could have become if applied to another field- a board game.

EXTRAS

WHAT IF THE PROJECT WAS A GAME?

HONG KONG IS A LABORATORY FOR EXPERIMENTATION, A COMBINATORY OF REALITY AND IMAGINATION.

Hong Kong makes part of the "one country, two systems" plan. For the future of this place, that are two main dates: 2030, the deadline to reach the development goals proposed by UN and 2047, the complete handover of Hong Kong back to China.



The future can be compared to a sheet music: it has some specific marks that will change the rhythm and pace of the son. It also means the possibility of different combinations and complexity, according to the person that is composing the song. There is no right or wrong, there are possibilities.

Two musical staves are shown. The top staff is labeled "J.S. Bach - Brandenburg Concerto No. 3 in G major" and features a melodic line with slurs. The bottom staff is labeled "J. Hisaishi - Laputa, Castle in the Sky" and features a more rhythmic, repetitive melodic line. Below the staves is a horizontal timeline with three vertical markers: 2017, 2030, and 2047.

Following that thinking, what would be your song for Hong Kong's future?

A blank musical staff with a treble clef, intended for the user to write their own song for Hong Kong's future.

Player X - Discover of Futuro.topia

2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

In 2015 was set the 2030 agenda for sustainable development, an agreement within countries to be reached in 15 years.

There are 17 targets, originated from 3 main goals:

- End of Poverty
- Protect the Planet
- Ensure Prosperity for All

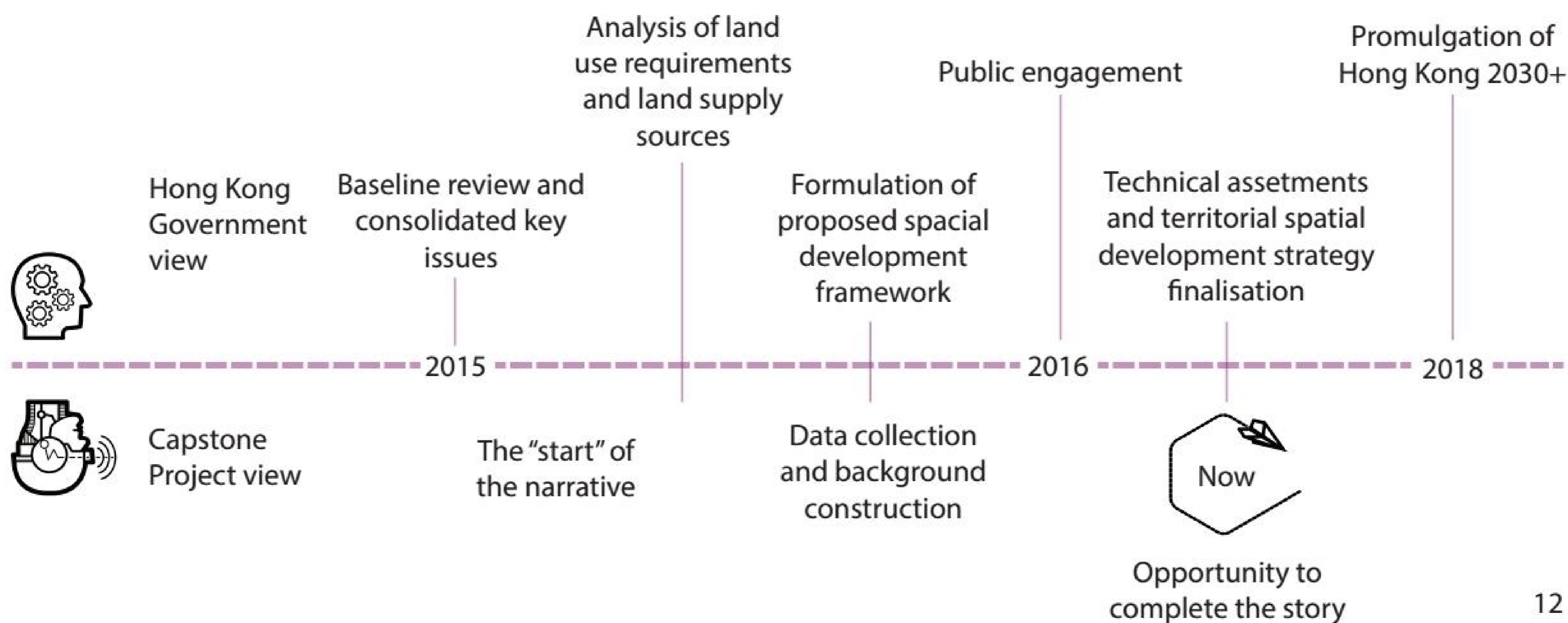
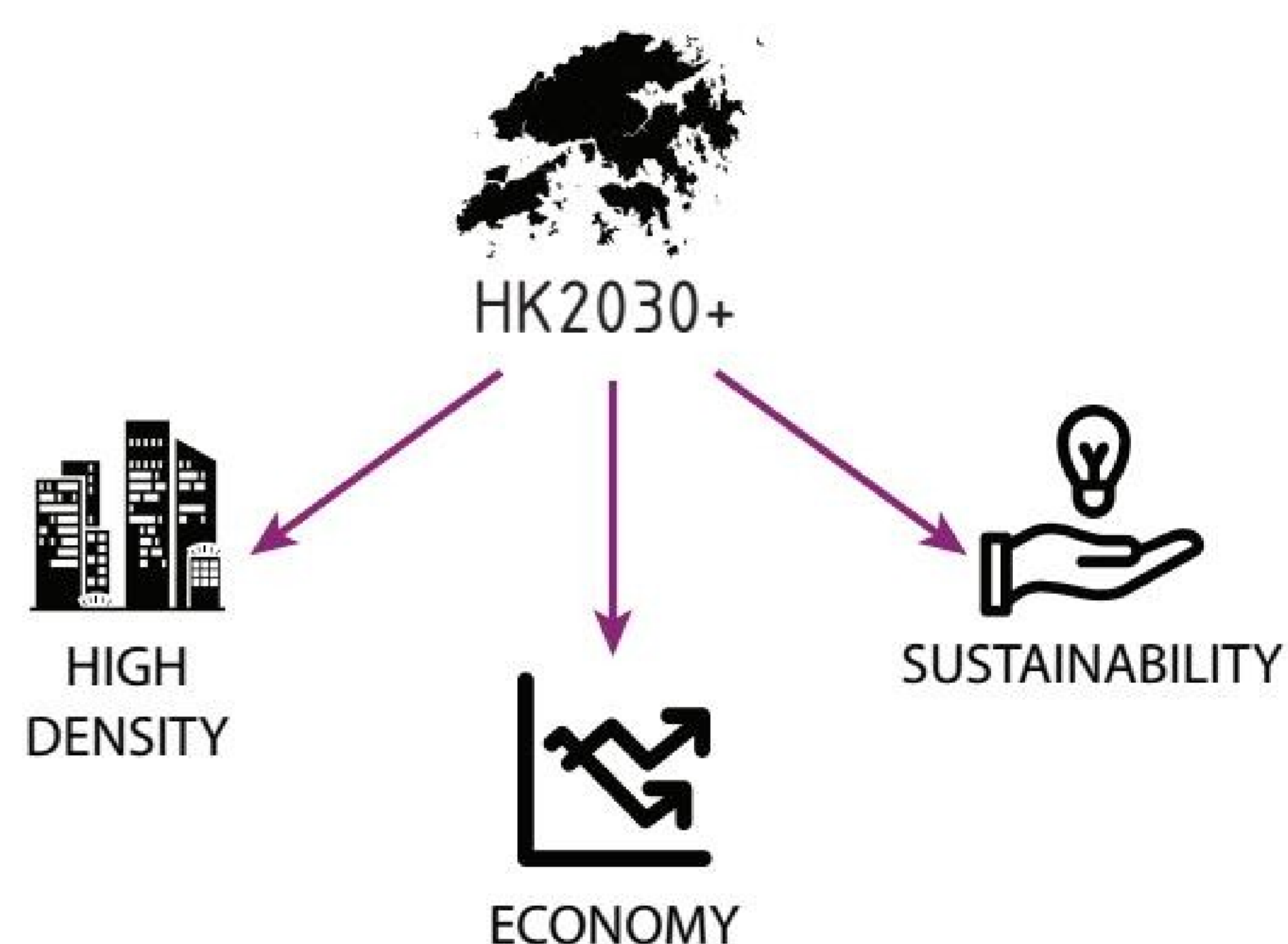


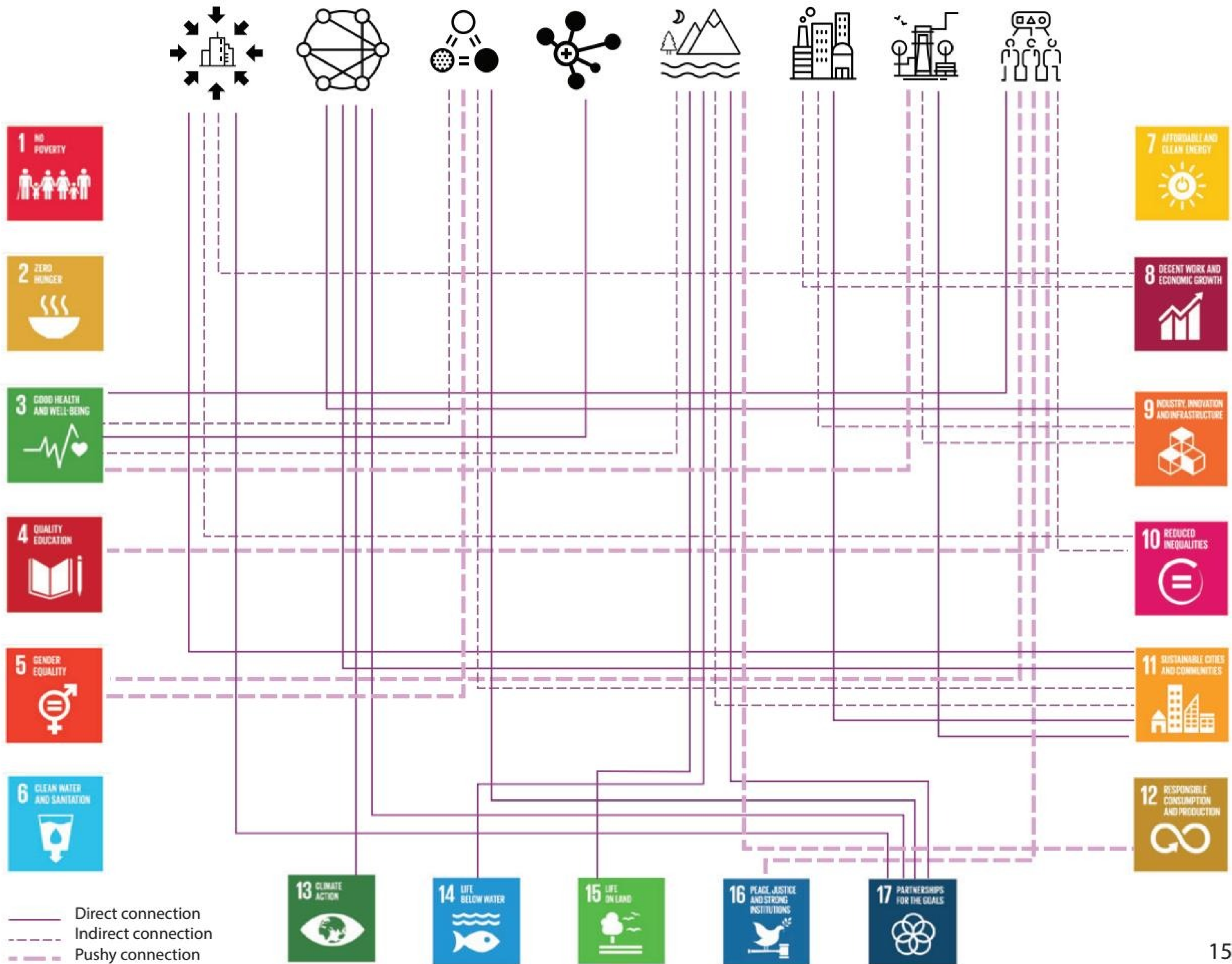
HONG KONG 2030+

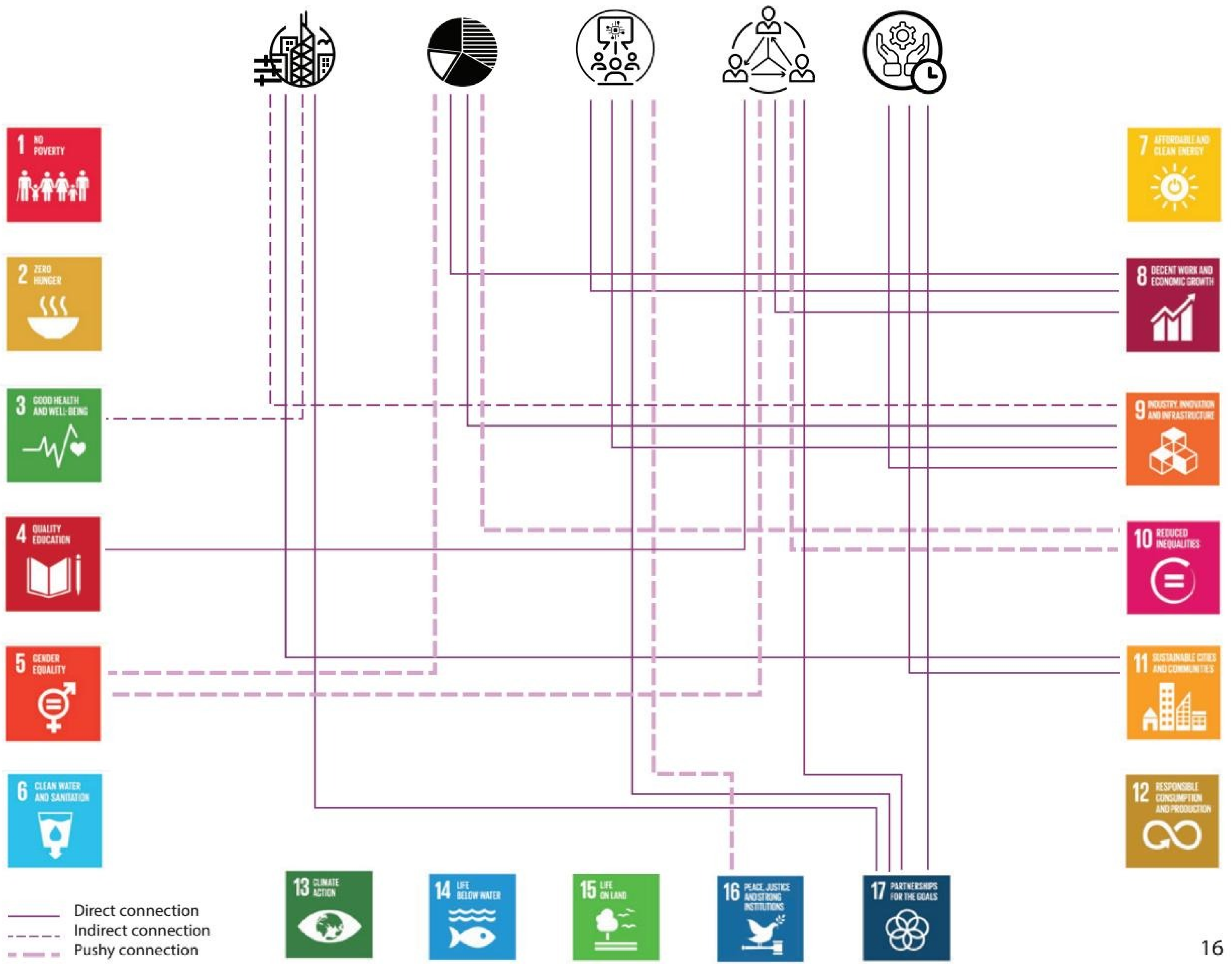
Hong Kong planning for 2030 is divided in three blocks:

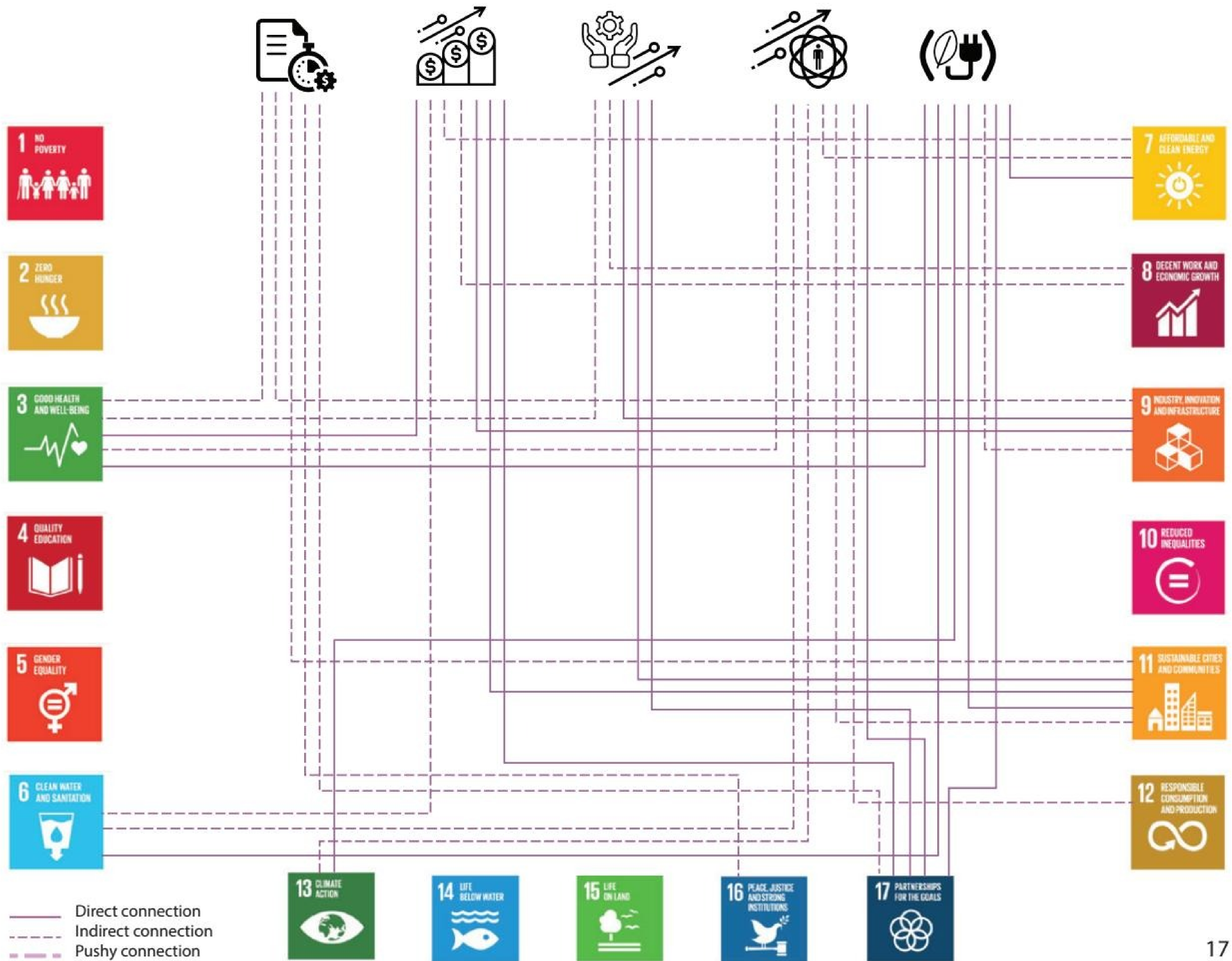
- Planning for a Liveable High-density City
- Embracing New Economic Challenges and Opportunities
- Creating Capacity for Sustainable Growth

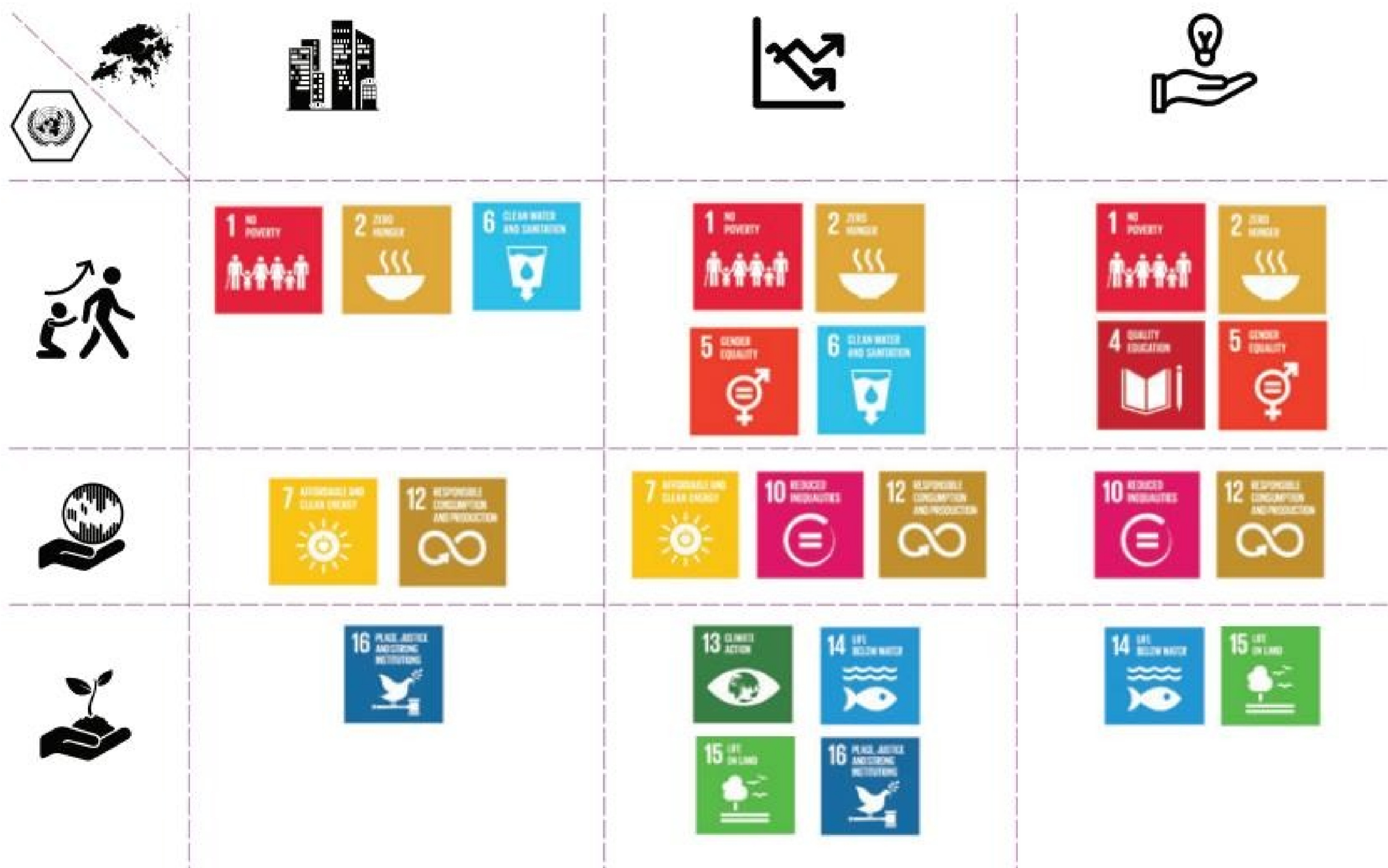
Each block is divided in more precise and detailed parts. All of them put together, aims to reach a brighter future in terms of society/community, environment and economy.











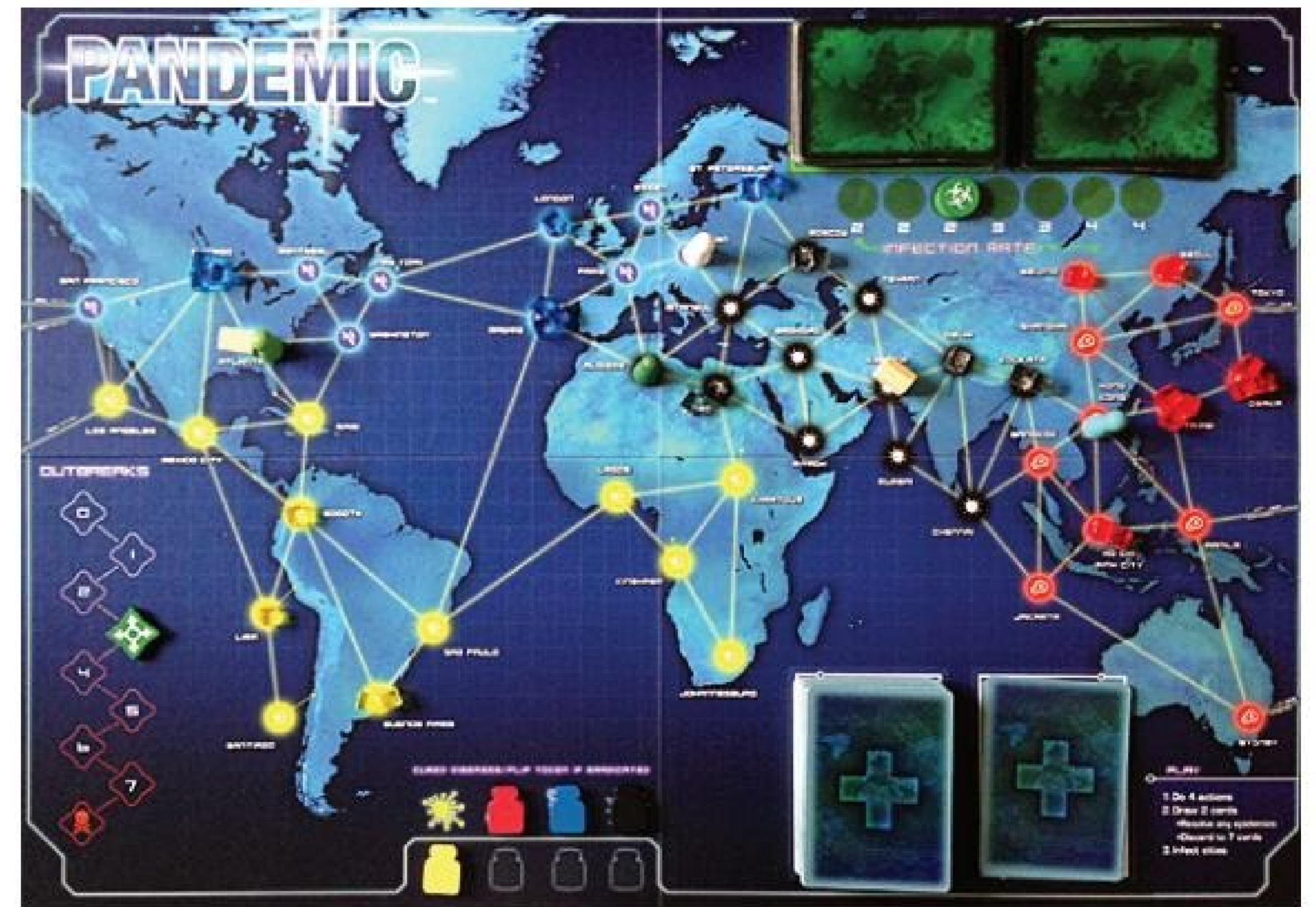
Conclusion

Hong Kong planning tries to reach most of the economic, sustainable goals proposed by UN. But in terms of social improvement, targeting poverty, education and equal rights, there is a gap.

Could it be reflex of the uncertain transition until the complete hand over in 2047?



GAME REFERENCES



PANDEMIC

Reason of choice: Unpredictability of movements from the game.



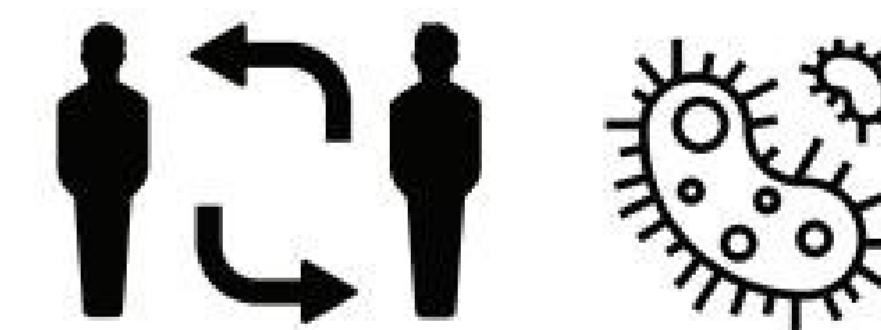
STRATEGY



COOPERATIVE

Objective:

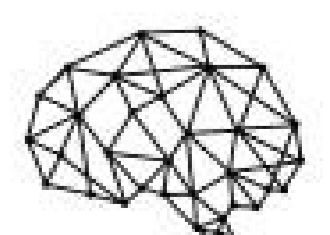
- Reach the cure for the four diseases



PLAYERS X DISEASES

- Each player: 4 actions per turn
- Disease: 3 infected areas per turn
2-4 players / 45 min

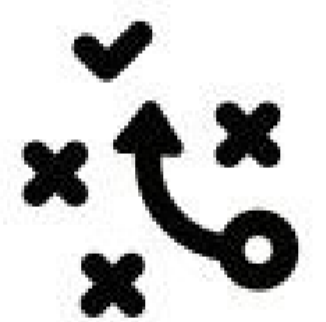
Complexity/ difficulty





TICKET TO RIDE

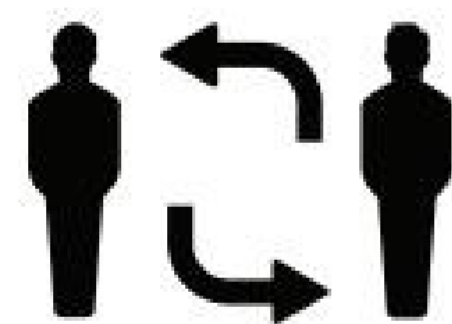
Reason of choice: "Different" targets each game, possibility of choice, trying to reach the max number of points.



STRATEGY

Objective:

- Finish the trains / highest score



PLAYER X PLAYER

- Each player: 1 action per turn
 - Buy cards or exchange cards or buy trains
- 2-5 players / 30-60 min

Complexity/ difficulty



ZOMBICIDE

Reason of choice: Different starting points and arrangements while telling the story.



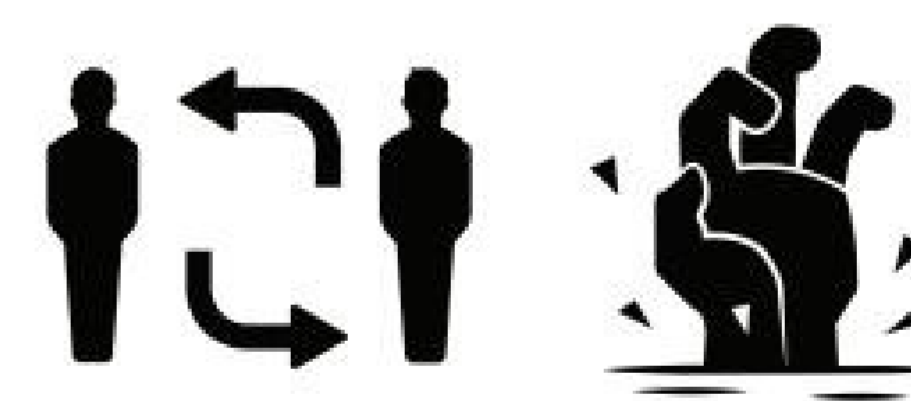
RPG



COOPERATIVE

Objective:

- Reach the special points and exit



PLAYERS X ZOMBIES

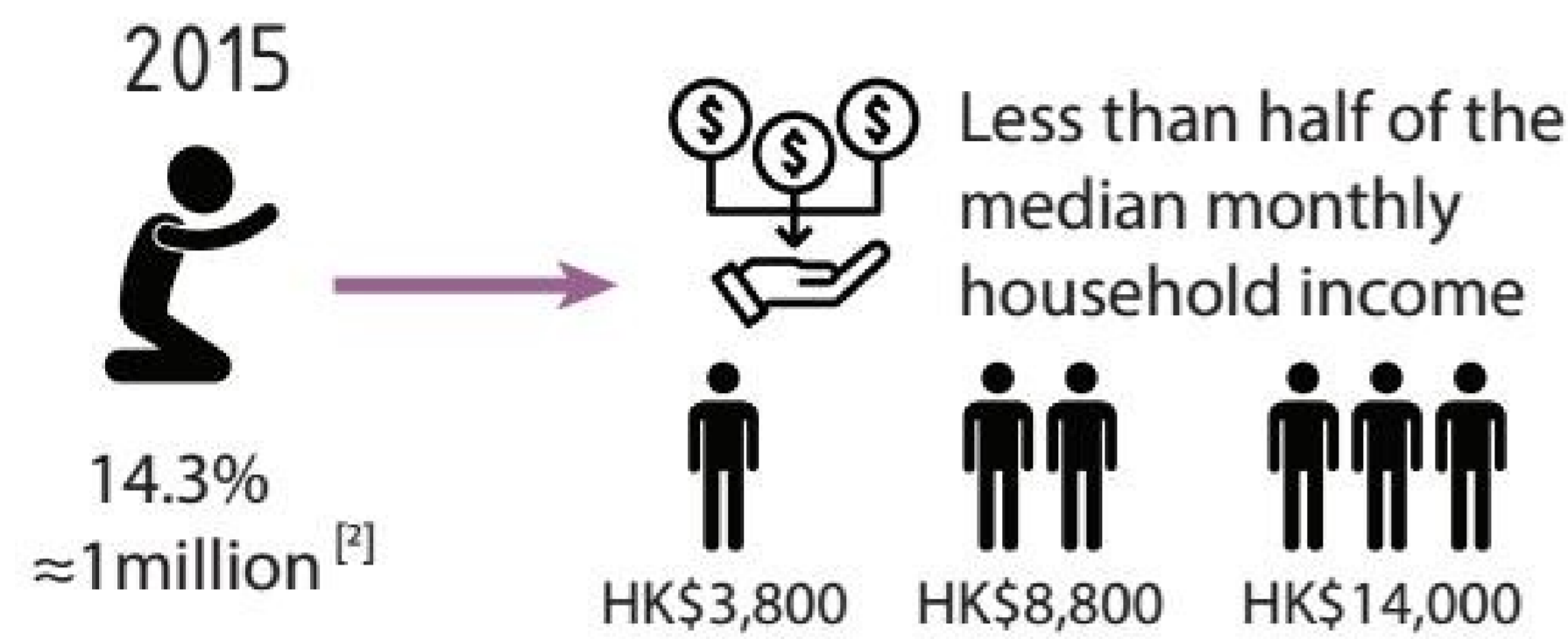
- Each player: 3-4 actions per turn
 - Zombies: Walk and more coming
- 1-6 players / 45-180 min

Complexity/ difficulty



1. NO POVERTY

The current-term Government of the Hong Kong Special Administrative Region attaches great importance to the poverty issue in Hong Kong, with **poverty alleviation** as one of the **priority policy** areas. [1]



Poverty alleviation



1. To enhance education and training and develop our economy, so as to create employment opportunities
2. To strengthen assistance to families in need
3. To render support to poor elders, single-parent households, households with persons with disabilities and other needy group [4]

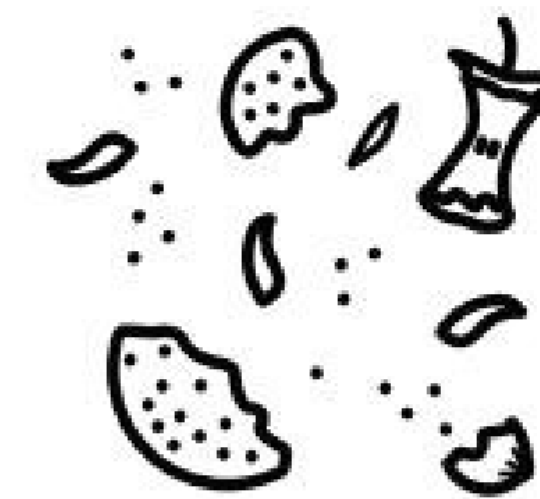
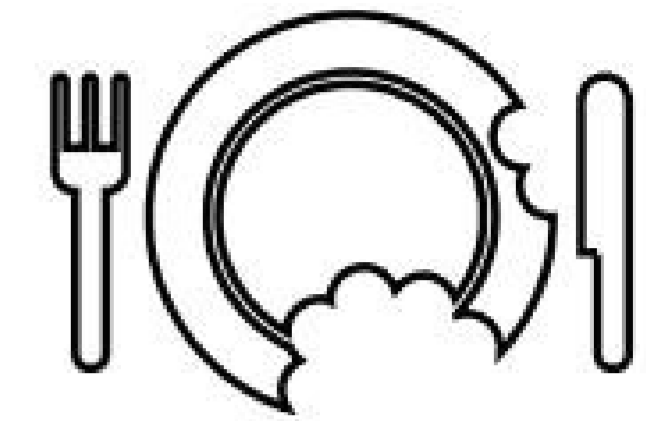
[1] Hong Kong Poverty Situation Report 2015. Introduction, page viii, ES.1 / ES.2

[2] <http://www.scmp.com/news/hong-kong/education-community/article/2095117/how-many-hongkongers-are-really-living-poverty>

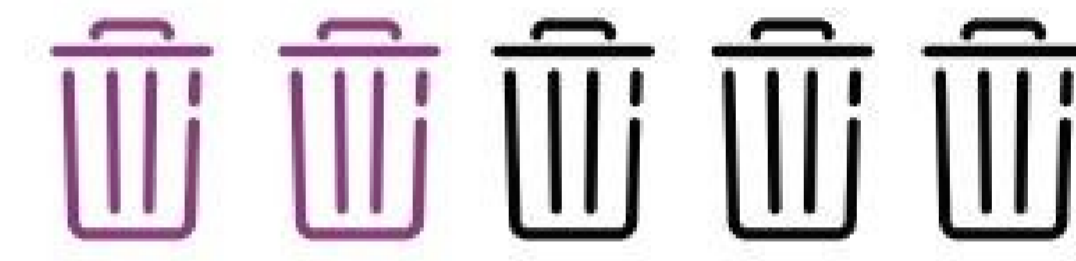
[3] <http://www.scmp.com/news/hong-kong/economy/article/1862580/working-poor-households-increase-alarmingly-despite-hong-kong>

2. ZERO HUNGER

In Hong Kong **hunger** is regularly overlooked because people are not starving. However, **relative deprivation** does exist in Hong Kong: food consumed by lower-income households can be less nutritious and of poorer quality. [4]



Over 1,234,000 tons of food surplus is wasted every year. [5]
3,382 tons wasted / day



36% of the solid waste is food [6]

Food Waste Challenge
Waste management plan 2013- 2022



1. Prevent and reduce food waste at source
2. Donate surplus food for human consumption
3. Recycle to recover energy and nutrients
4. Waste-to-energy treatment of MSW
5. Clean landfilling [7]

[4] <https://www.hongkongfp.com/2016/11/27/hungry-decent-diet-poor-families-hong-kong-cant-afford-eat-well/>

[5] <https://food-co.hk/main/en/home/>

[6] <http://www.foodlinkfoundation.org/fast-facts/hunger-and-poverty-facts.html>

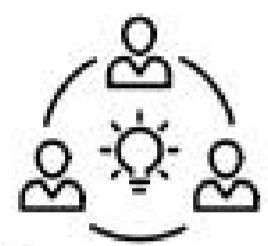
[7] http://www.epd.gov.hk/epd/english/environment/hk/waste/prob_solutions/food_waste_challenge.html

4. QUALITY EDUCATION

Countries with greater levels of innovation see increases in certain educational outcomes. ^[8]

Innovation is the positive use of knowledge.

One of Hong Kong's weaknesses was education, coming in at 73rd out of 127 economies. Expenditure in this area was even worse – at 95th. ^[9]

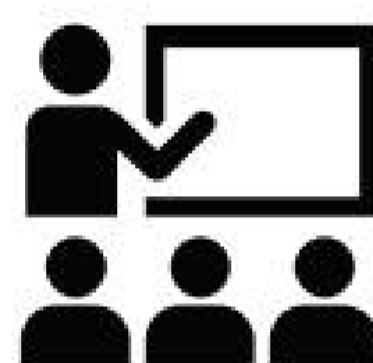


1. Singapore (7th)
2. South Korea (11th)
3. Japan (14th)
4. Hong Kong (16th)



Education
73rd/127
Universities ranking ^[10]
6th/127

Education plan endorsement (2017)



1. Annual subsidy for students
2. Increasing the teacher-to-class ratio
3. Government will work with the education sector to consider further action ^[11]



Advise to the government (2017)

“The biggest issue is not even money, but whether there are proper policies and laws to facilitate long-term growth,” he said.

“Innovation and technology is not a numbers game. It's about nurturing talent and ensuring people have a sustainable career path.”

^[8] <http://www.scmp.com/news/hong-kong/economy/article/2098538/hong-kong-slips-new-low-innovation-rankings>

^[9] <http://www.scmp.com/comment/insight-opinion/article/1905900/if-innovation-embedded-our-education-system-everyone-will>

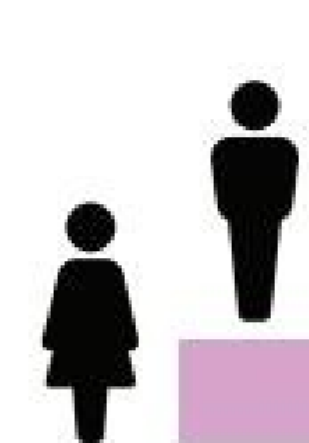
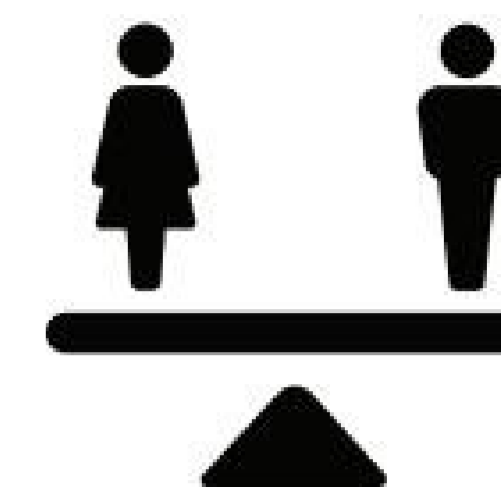
^[10] <https://www.globalinnovationindex.org/gii-2017-report#>

^[11] http://www.news.gov.hk/en/categories/school_work/html/2017/07/20177055_152914-shtml

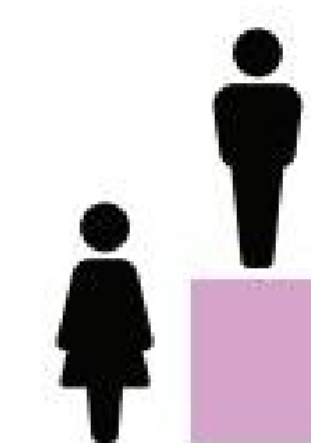
5. GENDER EQUALITY

Hong Kong prides itself on being a fair and equal society.

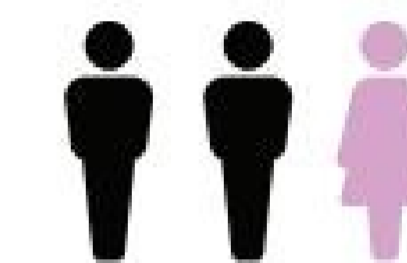
The pay **gap between men and women** living below the poverty line **has widened** in the past 15 years, with women earning only 60 per cent of what men do on average. ^[1]



2001
HK\$2,500

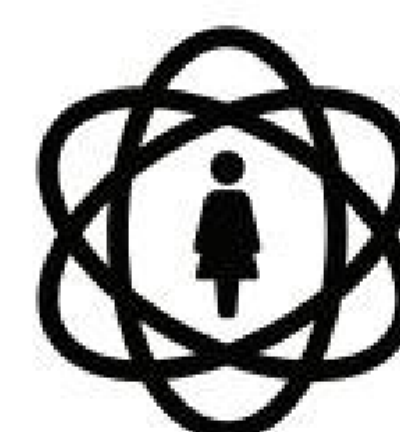


2015
HK\$4,300



working less
than 17h/week

Overview of achievements and challenges in promoting gender equality and women's empowerment (2004-2009)



1. Enabling environment
2. Empowering women
3. Public education. ^[2]



Advise to the government

1. Invest in childcare support
2. Legislate family-friendly practices (e.g. paternity leave)
3. More gender-sensitive policymaking
4. Increase awareness of gendered effects of policies ^[4]

^[1] <http://www.scmp.com/comment/insight-opinion/article/2021508/when-it-comes-equality-sexes-hong-kong-has-way-go>

^[2] <http://www.scmp.com/news/hong-kong/education-community/article/2026796/hong-kongs-young-women-still-facing-gender>

^[3] http://www.lwb.gov.hk/UNCEDAW/documents/UNESCAP_E.pdf

^[4] <http://www.cuhk.edu.hk/hkiaps/grc/pdf/EU-panel1-Mr.WKLam.pdf>

10. REDUCED INEQUALITIES

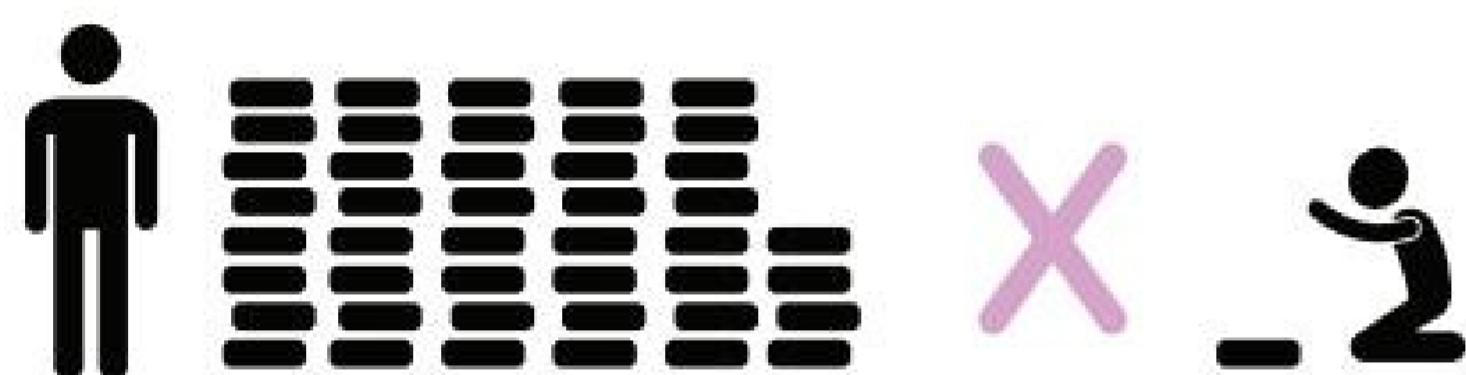
"It shows **government's policies were not able to cut inequality greatly**," the group said. "Hong Kong's wealth in general has increased dramatically, but **low-income families** and individuals **could not benefit** from it." [5]



50 wealthiest people in HK
HK\$1890 billion



HK government savings [6]
HK\$1380 billion



Richest household now earning about 44 times what the poorest family scrapes together [6]

Policies suggestion to reduce inequalities



SoCo urged the incoming administration of Carrie Lam Cheng Yuet-ngor to tackle the problem by introducing rent allowance, reviewing the minimum wage policy and setting poverty reduction targets.

Chua Hoi-wai, head of the Hong Kong Council of Social Service, called on the government to reconsider a universal pension scheme.[7]

[5] <http://www.businessinsider.com/hong-kong-wealth-gap-problem-2017-6>

[6] Forbes. 2016. List of Hong Kong Billionaires. (<http://www.forbes.com/hong-kong-billionaires/list/>) (Accessed: 22 August 2016)

[7] The Hong Kong Monetary Authority. 2016. Abridged Balance Sheet of the Exchange Fund. (http://gia.info.gov.hk/general/201607/29/P2016072600339_238824_1_1469502409315.pdf)

12. RESPONSIBLE CONSUMPTION AND PRODUCTION

Hong Kong is also one of the **top cities** in Asia in terms of its **per capita Ecological Footprint** – a measure of how many natural resources we use in our daily lives. [8] the difference between our per capita Ecological Footprint and our available biocapacity – ranks first in Asia. [9]

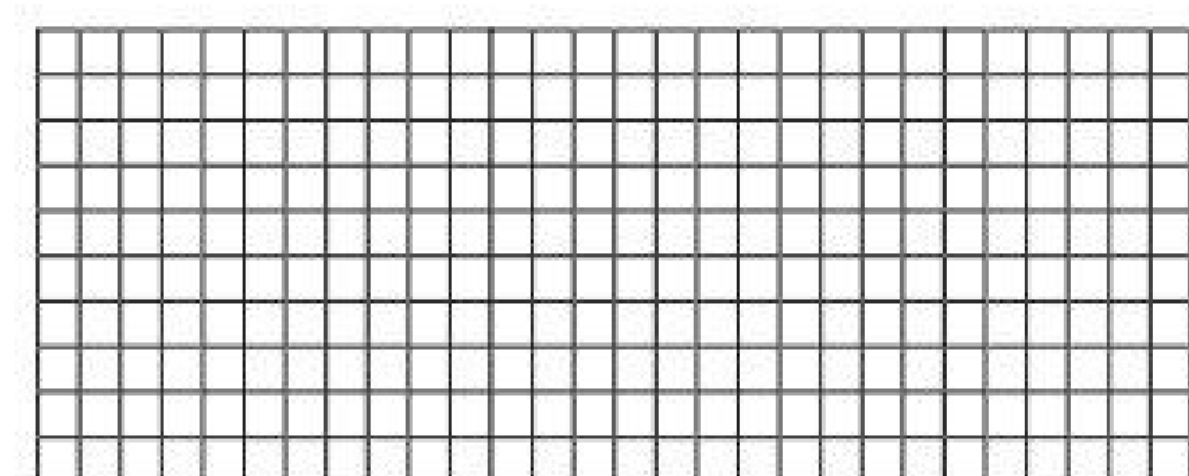


5.4 global hectare / person



15th

largest in the world



consumption
540x

■ capability of Hong Kong
X



Advise to the government (2014)

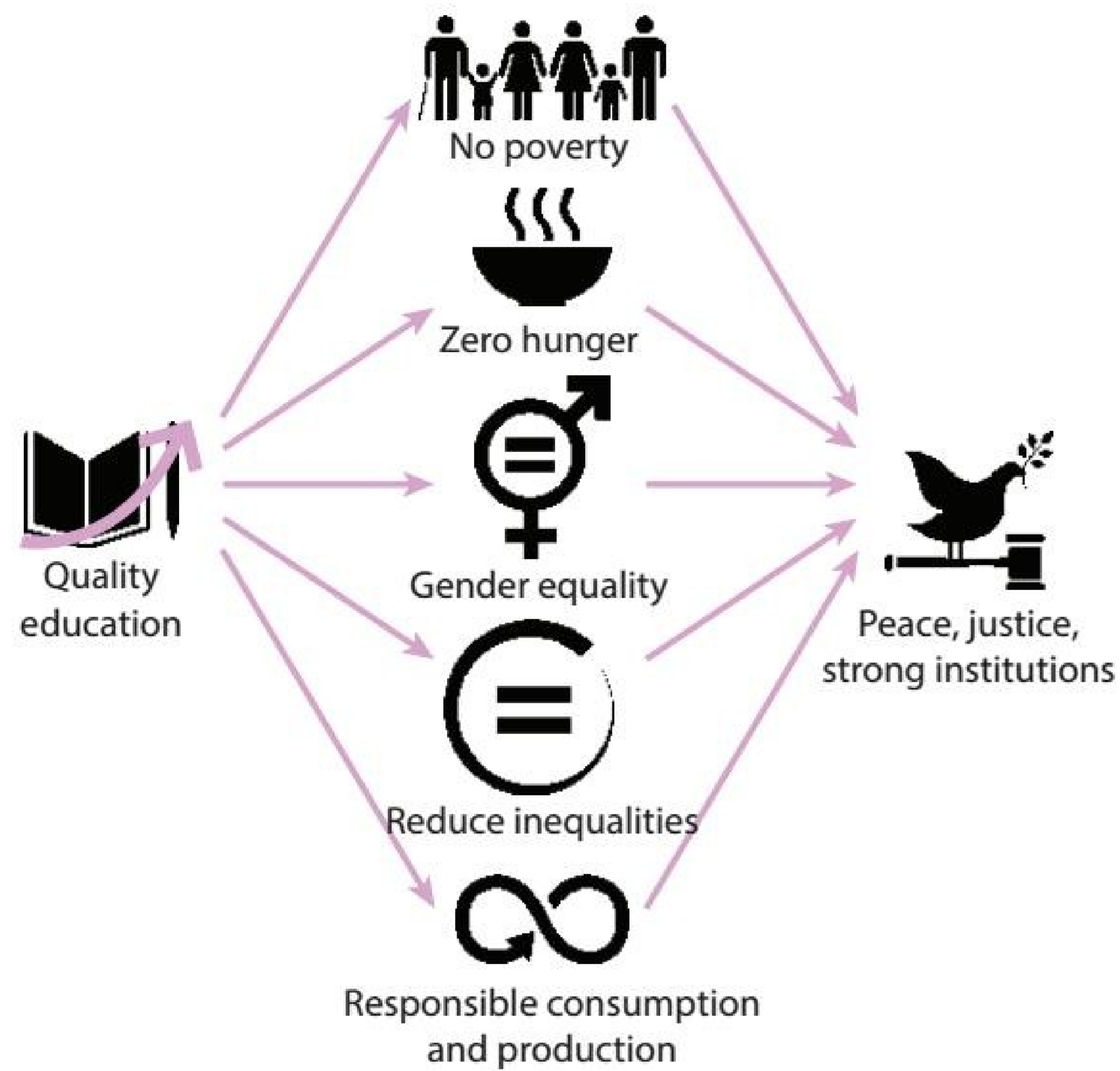
1. Rising awareness, measuring and announcing Hong Kong's Ecological Footprint by the Hong Kong Government on a regular basis
2. Set SMART goals and objectives to reduce Hong Kong's Ecological Footprint
3. Government should discuss and work with various stakeholders and sectors in Hong Kong to make use of policy and investment shift to drive down Hong Kong's Ecological Footprint in long term [10]

[8] <https://www.wwf.org.hk/en/news/featuredstories/?11940/>

[9] <https://www.wwf.org.hk/en/?12300>

[10] https://www.afcd.gov.hk/english/conservation/Con_hkbsap/bsap_links_to_resources/files/Final_Report_Sustainable_Use_EF_ES_FG.pdf

THE OPPORTUNITY HK2030+ DIDN'T MAKE CLEAR / DIDN'T REALISE



By investing in quality education, is possible to help reach the other goals that didn't have emphasis in the HK2030+ and still were primary concerns according to the UN sustainable goals for 2030.



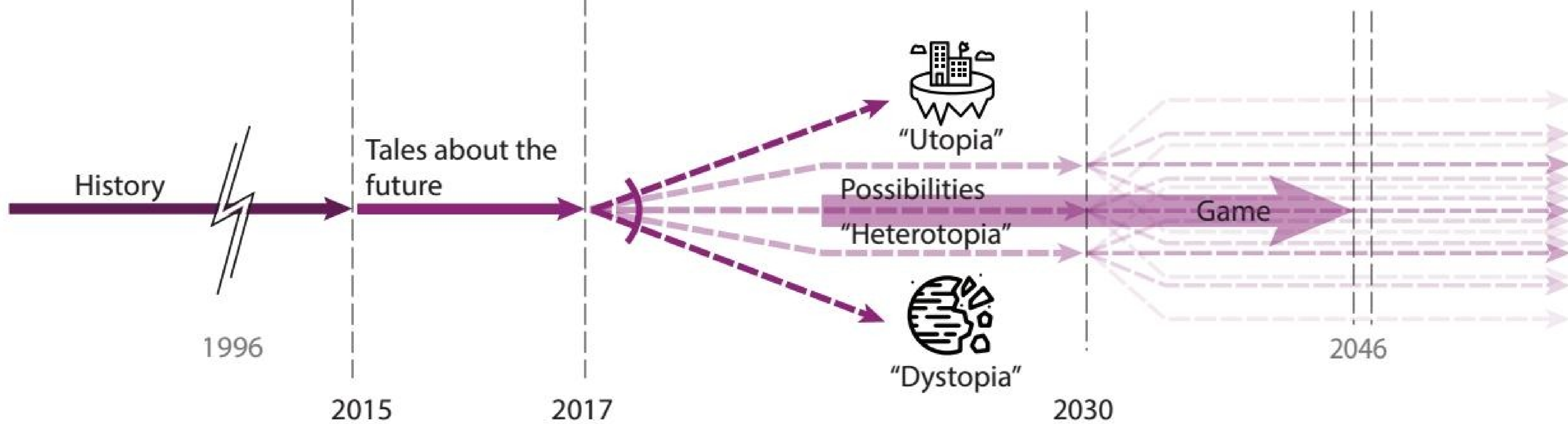
According to the studies, actually the government has some plans to each of the categories mentioned before but they are not priorities according to the HK 2030+.



PAST
lessons and memories

PRESENT

FUTURE
scenarios, experimentation, parallel realities, imagination, stories to tell





21 locations
4 different vocations
-housing
- economic centers
-'ecology' (parks, reservoir, green areas)
- potencial



Cheung Sha Wan
Mong Kok
Sha Tin
Tai Koo
Ma On Shan



Causeway Bay
Tung Chung
Central
Kwun Tong
Disneyland



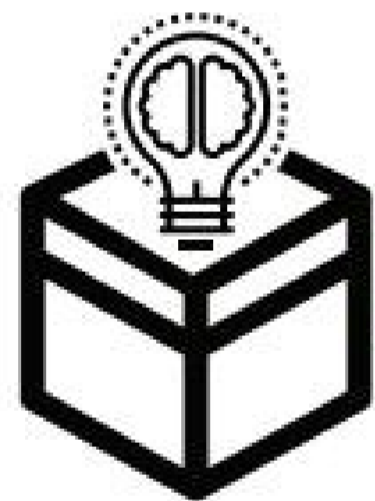
Tin Shui Wai
Tai O
Lamma
Chai Wan
Tai Po
Kau Sai Chau



Sheung Shui
Yuen Long
Tsing Yi
Chung Hau
Tuen Mun

Incubator/
Education

Symbolyzes:
- Opportunity
- Growth
- Potential
- Conscience



Unlock possible
expansions



Prevent possible
events



Stabilize possible
problems

SPECIAL THANKS

To the tutor for trusting this project.

Daniel Tong, Juliana Kazue Sumita and Karina Zanon for reviewing the project and giving ideas and references.

Joshua Kung for helping set the final model.

Kenneth Yim for the consultancy of how the game could possibly work.

To friends and family for the support along the way.

ICONOGRAPHY

All the icons used in this project were downloaded from The Noun Project and used or modified under creative commons. The name of the creators are listed bellow. For more information access <https://thenounproject.com/>

AA	Ioana Bitin	Viktor Fedjuk (Tim P)
Aaron K. Kim	ImageCatalog	Yair Cohen
Adnen Kadri	Imogen Oh	Yo! Baba
Adrien Coquet	Jayati Bandyopadhyay	Yu luck
Alberto Gongora	Jeff	
Alexander Smith	Jens Täarning	
Alfa Design	Jey	
Alejandro Santander	Joel McKinney	
Aleksandr Vector	John Melven	
Alexey Voropaev	Ken Murray	
Alice Noir	Kick	
Alvaro Cabrera	Kidiladon	
Anbileru Adaleru	Lalitha	
Andrejs Kirma	Lesha Petrick	
Art Shop	Logan	
Artem Kovyazin	Luke Anthony Firth	
Arthur Shlain	Made by Made	
Astonish	Magicon	
Attilio Baghino	Manohara	
Ben Davis	Marco Livolsi	
Becris	María Villamil	
Bestdesignmarket	Mark Jayvee Pabilonia	
Bezier Master	Marta Ambrosetti	
Bob Holzer	Maxim Basinski	
Brandon Shields	Maxim Kulikov	
Brennan Novak	Mello	
Catylina_Icon	Myladkings	
Chameleon Design	noah	
Chinnaking	Pedro Santos	
Cono Studio Milano	Pictohaven	
Corpus Delicti	Ralf Schmitzer	
Creative Mania	Ramesha	
Delwar Hossain	Roberto Chiaveri	
Dima Lagunov	Robiul Alam	
Edward Boatman	Roselin Christina.S	
Eliricon	Royyan Razka	
Elizabeth Lopez	sai aditya	
Erik Kazuo Takara	Sam Martin	
Eucalyp	Scott Lewis	
Gan Khoon Lay	Sergey Demushkin	
Genius Icons	Sergey Patutin	
Gimhani Perera	Setyo Ari Wibowo	
Gregor Cresnar	shashank singh	
Grégory Montigny	Shaurya	
Gonzalo Bravo	Shmidt Sergey	
H Alberto Gongora	Siraj C	
Hopkins	Symbolon	
I cons	Tawny Whatmore	
Icon Depot	Thomas Miller	
Icon Fair	Trident	
iconsphere	UNiCORN	
IconMark	Vectors Market	

BIBLIOGRAPHY / REFERENCES

Graham, S. (2016). Vertical noir. *City*, 20(3), 389-406.

Gutierrez, L., Portefaix, V., & Manzini, E. (2005). *HK lab2= 香港實驗室*. Hong Kong : New York: Map Book ; Distributed Art.

Calvino, I., & Weaver, W. (1997). *Invisible cities*. London: Vintage.

Laughlin, C., & Throop, C. (2001). Imagination and Reality: On the Relations Between Myth, Consciousness, and the Quantum Sea. *Zygon*, 36(4), 709-736.

Park, C., Watkins, S. Craig, & Downing, John D. H. (2004). Orientalism in United States Cyberpunk Cinema from "Blade Runner" to "The Matrix", ProQuest Dissertations and Theses.

Architecture, film and the future
http://www.tboake.com/443_irobot_f07.html

Martin, Gabriel J. Lonely Planet
Photographer shares stunning pictures of Hong Kong inspired by Ghost in the Shell anime.
<https://www.lonelyplanet.com/news/2016/12/08/photographer-stunning-pictures-hong-kong-ghost-shell/>

Chow, Vivienne. Quartz
"Ghost in the Shell" is a poem to Hong Kong as it faces the 20th anniversary of its handover to China
<https://qz.com/950919/ghost-in-the-shell-is-a-poem-to-hong-kong-as-it-faces-the-20th-anniversary-of-its-handover-to-china/>

Zhu, Ray. Medium.
Case Study: Hong Kong's Influence on Blade Runner, Ghost in the Shell, and Cyberpunk Cinema
<https://medium.com/@rayzhu/bridging-the-gap-sci-fi-cinema-and-depictions-of-hong-kong-sar-b15800678c29>

BLADE RUNNER
<https://theredlist.com/wiki-2-17-513-863-823-1226-view-fantasy-sci-fi-6-profile-1982-bblade-runner-b-1.html>

Newitz, Annalee.
Economic study suggests we're heading for a Blade Runner future
<https://io9.gizmodo.com/economic-study-suggests-were-heading-for-a-blade-runne-1524219449>

Ghost in the Shell Comparison
<http://www.atlasofwonders.com/2017/03/ghost-in-shell-filming-locations.html>

<https://coconuts.co/hongkong/features/discover-8-secret-hong-kong-locations-ghost-shell-filmed/>

<https://randomwire.com/recreating-ghost-in-hong-kong/>

<http://www.uncubemagazine.com/blog/15928129>

<http://socks-studio.com/2015/02/04/map-office-hong-kong-is-land-2014/>

http://pacificrim.wikia.com/wiki/Hong_Kong

<https://s2795913.wordpress.com/2014/09/20/assessment-two-a-comparison-between-blade-runner-and-the-real-world/>

<http://hongkongandmacaufilmstuff.blogspot.hk/2014/06/contagion-matt-damon-2011-tung-choi.html>

<http://www.bladerunner2049movie.com/gallery/>

<http://www.arpajournal.net/paper-time-machine/>

<http://www.unhcr.org/figures-at-a-glance.html>

<http://www.arpajournal.net/paper-time-machine/>

<http://www.worldbank.org/en/topic/poverty/lac-equity-lab1/income-inequality>

<https://www.linklaters.com/en/about-us/responsibility/sustainable-goals/decent-work-and-economic-growth>

<http://www.foodlinkfoundation.org/fast-facts/hunger-and-poverty-facts.html>

<http://socks-studio.com/2013/12/02/urban-snapshots-by-evan-hecox/>

<https://www.artstation.com/artwork/BQn2l>

https://www.povertyrelief.gov.hk/pdf/poverty_report_2015_e.pdf

<http://www.foodlinkfoundation.org/fast-facts/hunger-and-poverty-facts.html>

<http://www.scmp.com/magazines/hk-magazine/article/2037410/pressure-points-how-stressed-out-hong-kong>

<http://www.ejinsight.com/20151009-what-is-wrong-with-our-education-system/>

http://www.chinadaily.com.cn/hkedition/2017-02/20/content_28259293.htm

<http://chinawaterrisk.org/resources/analysis-reviews/8-things-you-should-know-about-hong-kong-water/>

http://www.energyland.emsd.gov.hk/en/energy/energy_use/energy_scene.html

<https://www.theguardian.com/global-development/2016/mar/14/forced-labour-common-among-hong-kongs-domestic-helpers-study-finds>

http://www.hk2030plus.hk/about_b.htm

<http://www.scmp.com/news/hong-kong/economy/article/2097715/what-hope-poorest-hong-kong-wealth-gap-hits-record-high>

<https://www.mansionglobal.com/articles/62243-hong-kong-ranked-world-s-top-luxury-market-in-2016>

http://bec.org.hk/ccfb/en-us/hong_kong_context_affected.html

<http://www.scmp.com/news/hong-kong/health-environment/article/2058023/under-sea-species-flourish-hong-kong-waters-study>

https://www.afcd.gov.hk/english/conservation/Con_hkbsap/con_hkbsap.html

Hong Kong Poverty Situation Report 2015. Introduction, page viii, ES.1 / ES.2

<http://www.scmp.com/news/hong-kong/education-community/article/2095117/how-many-hongkongers-are-really-living-poverty>

<http://www.scmp.com/news/hong-kong/economy/article/1862580/working-poor-households-increase-alarmingly-despite-hong-kong>

<https://www.hongkongfp.com/2016/11/27/hungry-decent-diet-poor-families-hong-kong-cant-afford-eat-well/>

<https://food-co.hk/main/en/home/>

<http://www.foodlinkfoundation.org/fast-facts/hunger-and-poverty-facts.html>

http://www.epd.gov.hk/epd/english/environmentinhk/waste/prob_solutions/food_waste_challenge.html

<http://www.scmp.com/news/hong-kong/economy/article/2098538/hong-kong-slips-new-low-innovation-rankings>

<http://www.scmp.com/comment/insight-opinion/article/1905900/if-innovation-embedded-our-education-system-everyone-will>

<https://www.globalinnovationindex.org/gii-2017-report#>

http://www.news.gov.hk/en/categories/school_work/html/2017/07/20177055_152914.shtml

<http://www.scmp.com/comment/insight-opinion/article/2021508/when-it-comes-equality-sexes-hong-kong-has-way-go>

<http://www.scmp.com/news/hong-kong/education-community/article/2026796/hong-kongs-young-women-still-facing-gender>

http://www.lwb.gov.hk/UNCEDAW/documents/UNESCAP_E.pdf

<http://www.cuhk.edu.hk/hkiaps/grc/pdf/EU-panel1-Mr.WKLam.pdf>

<http://www.businessinsider.com/hong-kong-wealth-gap-problem-2017-6>

Forbes. 2016. List of Hong Kong Billionaires. (<http://www.forbes.com/hong-kong-billionaires/list/>) (Accessed: 22 August 2016)

[7] The Hong Kong Monetary Authority. 2016. Abridged Balance Sheet of the Exchange Fund. (http://gia.info.gov.hk/general/201607/29/P2016072600339_238824_1_1469502409315.pdf)

<https://www.wwf.org.hk/en/news/featuredstories/?11940/>

<https://www.wwf.org.hk/en/?12300>

https://www.afcd.gov.hk/english/conservation/Con_hkbsap/bsap_links_to_resources/files/Final_Report_Sustainable_Use_EF_ES_FG.pdf

