HONG KONG DRONE PORT

non

NON ARCHITECTURE

We can consider "architecture" everything that has already been designed and/or built. That would define a realm of conventional solutions, often repeated in a self-referential system. We imagined a counterpart, a "non architecture". A world of unexplored designs and countless possibilities, that if found, could enlarge and change permanently the boundaries of architecture. A universe of chances and opportunities never challenged by architects before. A limitless field of investigation that includes everything that is not architecture, yet.

Non Architecture Competitions aims to find unconventional and unexplored design solutions in the field of architecture. The second phase of competitions is structured in 9+1 themes: a Research Ecosystem with the purpose of exploring each theme from different perspectives. All competitions have their focus on tackling the big issues of tomorrow, by seeking nontraditional approaches in the architect's work.

Hong Kong Drone Port is one of the Non Architecture "Next Move" competitions.

INTRODUCTION

In this competition we encourage participants to come up with visionary concepts for a drone port - only 3 drawings, absolute freedom of scale or program.

Participants are asked to propose conceptual ideas for new architectural typologies in relation to air mobility, specifically in the city of Hong Kong, through the design of an urban drone port.

As cities become highly populated and technology evolves, it has become likely that air mobility might be part of the transportation modes of the future. In this scenario, drones become part of transportation networks in future cities, by replacing or supplementing existing ones. By imagining a world where the urban airspace is populated by drones and aerial vehicles, drone ports become a necessity - a building to support autonomous air traffic. It is up to the participant to propose how the built environment may adapt to this new reality, as well as the specificities and type of use of the drones.

As designers, what new perspective can we bring to the changes in the cities, new delivery systems and travel experiences resulting from aerial mobility?

Hong Kong Drone Port aims to answer those questions with a particular focus on mobility in high-density cities.

COMPETITION
BRIEF

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MOBILITY IN HIGH-DENSITY CITIES

Droneports serve mostly as nodes for drone operations in a region. But they also provide the necessary infrastructure, flight navigation system, permissions for flight and trained personnel. The buildings must offers a location for the housing, maintenance, fueling and piloting of private or commercial fleets of drones. Landing and recharging pads for drones will become ubiquitous atop urban buildings within a few years.

Densely settled cities face a serious mobility squeeze. Congestion is severe, partly because roads and other forms of transport infrastructure are inadequate and in disrepair, and partly because traffic patterns are complex. Heavy air pollution takes a toll on the health of urban residents. And rapid population growth creates more demand for mobility by the day.

Autonomous vehicles, electric powertrains, vehicle sharing, drones, and other advances are transforming urban mobility. Planning ahead can help cities capture the benefits of the shift, from cleaner air to easier journeys. Technological advances and new transportation services are improving mobility efficiency. These shifts can have profound economic and social effects.

Drones, personal flying vehicles and air taxis may be part of our everyday life in the very near future. They will create new means of mobility and have the potential to transform the ways that people and goods are moved around our cities.

The introduction of these aerial crafts into cities will require the built environment to change dramatically. Drones and other new aerial vehicles will require landing pads, charging points, and drone ports and eventually will lead to new architecture and infrastructure. They could usher in new styles of building, and lead to more sustainable design. Existing buildings will require adaptations: landing pads, solar photovoltaic panels for energy efficiency, charging points for delivery drones, and landscaping to mitigate noise emissions.

Hong Kong is a hight density city, with huge congestion issues and proximity to the Shenzhen City (a global center in technology, research, manufacturing, finance, and transportation). All these factor makes Hong Kong the perfect case study for a future Drone port. This presents as an opportunity to enhance the urban mobility for its citizens, allowing to save them time, enhance the quality of life and improve the environment and green nature of the city.

What will the Hong Kong skyline look like when the city is populated with all the necessary facilities for drones? How can a drone port enhance urban mobility in our high-density cities? How can we integrate physically and functionally a drone port in a highly dense city such as Hong Kong?

Submission can address some of these questions. The scale of intervention and program dimensions are not given, and they can be arranged by the participants to better suit their design.

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NEXT MOVE

Non Architecture and all the supporting organizations collaborated in identifying a range of 30 design issues related to the research theme of Next Move. Within our longlist, we highlighted a few that could be relevant to this competition.

In relation to **Transportation Modes**:
1. Slow mobility: Cycling & Pedestrians,
2. Motorbikes and Scooters,
3. Cars and larger vehicles,
4. Railway transportation & Cable cars,
5. Air mobility: Drones, helicopters, and planes,
6. Space Travel & Satellites,
7. Transportation on water: boats, ferries, and smaller watercrafts.

In relation to **Society & Lifestyle**:
8. Shared Mobility,
9. Public Transport,
10. Autonomous driving,
11. Emergencies and accidents,
12. Travelling for leisure,
13. Travel heritage, historical vehicles and musealization,
14. Daily commutes,
15. Wide-range Transportation of goods,
16. Last Mile Delivery,
17. Traffic, congestions, and walkability,
18. CO_2 emissions & energy consumption.

In relation to Public Space & Road Infrastructure:
19. Road construction and maintenance,
20. Road profile in relation to travelling speed,
21. Climate change & resilient road system,
22. Smart roads and urban installations system,
23. Public Space, pedestrianization and street front,
24. Green-blue streets.

In relation to City Development:
25. Final destinations: Ports, Stations, Hubs of all sorts,
26. Intermediate Stops: Public transport, drop off, and short-term parking,
27. Urban regeneration through mobility nodes,
28. Smart cities, Smart roads & Smart vehicles,
29. Car driven urbanism: Sprawl & Parking Lots,
30. Multimodal travel: multiple transportation modes in one trip.

Projects should take into consideration one or more of these themes. They can also come up with new ones, as long as they are relevant to the topic of the competition. Feel free to pick from this list whatever issue might inspire them and develop it further following their creativity. We advise focusing on one or two topics in particular and make them the core of the design proposal.

If you want to receive more insights on these topics you can subscribe to our newsletter or visit our online journal. You will get articles, essays and references from our editorial team.

AREA OF INTEREST

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BACKGROUND

Hong Kong is one of the most densely populated places in the world. The city has evolved from a fishing village to an entrepôt, a manufacturing Centre, and now a financial Centre, a bustling metropolis of over seven million inhabitants. Hong Kong has also been transformed into a compact high-density city partly by necessity due to limited developable land, and partly by the conscious pursuit of integrated land use-transport-environment planning over the decades.

As a compact high-density city, Hong Kong is efficient and prudent in the use of resources. Yet, there are also side-effects of high-density development needed to be addressed, such as relatively small home spaces, small working spaces, high costs of accommodation, congestion, street canyon effects, urban heat island (UHI) effects, etc.

HONG KONG SKYLINE

The skyline of Hong Kong Island is famed for its unique arrangement, with surrounding mountains and Victoria Harbour complementing the rows of skyscrapers along the shore.

Hong Kong has over 9,000 high-rise buildings, of which over 4,000 are skyscrapers standing taller than 100 m with 480 buildings above 150 m. The total built-up height (combined heights) of these skyscrapers is approximately 333.8 km, making Hong Kong the world's tallest urban agglomeration. Furthermore, reflective of the city's high population densities, Hong Kong has more inhabitants living at the 15th floor or higher, and more buildings of at least 100 m and 150 m height, than any other city in the world.

A forest of towers standing against the mountain is the image that comes to mind to describe the urban landscape developed in the harbour city of Hong Kong in the post-war period. Office and residential towers are, after all, the most common type of architecture, by virtue of the valuable ratio they offer in terms of construction volume to land occupied.

Like other large cities in the world, there are many urban problems in Hong Kong. The extreme characteristics of Hong Kong immediately signal a metropolis whose transport systems have to contend with major constraints. The management of huge volumes of traffic, the need to get a return out of scarce and expensive land, and the weight of excessive centralisation have, over the past three decades, led the Hong Kong government to rethink the accessibility of its space.

TECHNICAL REQUIREMENTS

For the purpose of this competition, we've defined the area of interest to be the Central District in the city of Hong Kong, but the specific location of the intervention should be defined by each participant. The submitted proposal must specify the chosen location for the drone port within the area of interest.

Satellite image

Proposals can consider the exclusive transportation of goods, transportation of passengers, or both, low or high altitude, short or long distance flights, autonomous or not. Is up to the participant to identify what is important to address and to which extent a drone port should cover air mobility. The design of the drone port can consider an individual structure or a network of mobility hubs spread in the city.

Participants are free to propose a building for an urban drone port in the most bold and creative way possible. This is a chance to imagine a futuristic scenario where drones will populate cities in a way that can improve mobility in the cities. Keep in mind that this is an architecture competition for developing a concept for a building typology.

Designers should take into consideration the advances in technology, the exploration of sustainable systems, and the establishment of new urban and architectural methods to enhance mobility in highly desified cities.

It is up to the participants to choose the site (within the city of Hong Kong), materials, colour, esthetic and the type of drone port they want to develop.

The proposal can be set on an existing plot, replacing or repurpusing an existing building, or even consider only the public space. It is up to the participant to define if the building should host multiple functions or should it be a monofunctional building. The design should facilitate and optimize the transport of goods or passengers using remotely piloted aircraft systems in urban areas.

The proportions and program division of the designed building is up to the participants to be defined.

RULES

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PRESENTATION REQUIREMENTS

PRESENTATION
IMAGE

.JPEG
A4, 300 DPI
(2480 x 3508 px)
MAX. 5 MB

CODE_Title of the
project_Presentation

CONCEPT
IMAGE

.JPEG
A4, 300 DPI
(2480 x 3508 px)
MAX. 5 MB

CODE_Title of the
project_Concept

FUNCTIONAL
IMAGE

.JPEG
A4, 300 DPI
(2480 x 3508 px)
MAX. 5 MB

CODE_Title of the
project_Functional

TEXT
DOCUMENT

.DOC
Title + subtitle
5 keywords
200-word
description
↓ TEMPLATE

CODE_Title of the
project_Text

TEAM
DOCUMENT

.DOC
Team member
info

↓ TEMPLATE

CODE_Title of the
project_Team

CODE_Title.zip

This competition is an opportunity to address critical issues of tomorrow by creating innovative and unconventional ideas today. Designers are asked to answer the questions posed by the brief with absolute creative freedom.

Scale of intervention, program dimensions, and specific location are not given, and they can be arranged by the participants to better suit their design.

Non Architecture is also unconventional in its submission requirements. The participants are asked to submit **1 ZIP folder, named with the registration code and the title of the project (CODE_Title)**, containing:

01. A presentation image (.JPEG) showing the qualities of your design, in one catchy and representative impression. File name: "CODE_Title of the project_Presentation".

02. A concept image (.JPEG) one image to highlight the main approach of the project. File name: "CODE_Title of the project_Concept".

03. A functional image (.JPEG) showing a specific functional peculiar aspect of the project. File name: "CODE_Title of the project_Functional".

04. A text document in Word (.DOC), that clearly states
/ the title and subtitle of the project (maximum of 10 words)
/ 5 keywords, at least 1 from the given list (page 5-6), that better explain your project,
/ a short project description (maximum of 200 words, must be written in English).
File name: "CODE_Title of the project_Text"
USE THIS TEMPLATE

05. A team document in Word (.DOC) with the team's info in the following format:
/ Name + Surname of each team member (separated clearly),
/ Nationality (multiple options can be added),
/ Institution/company (company or university attended, to be included just in case you want it to be visible once your project is published).
There is no need to create a team name.
One team should consist of 1-4 people.
File name: "CODE_Title of the project_Team"
USE THIS TEMPLATE

The **CODE** refers to the **5-digit number** you receive during the registration process (same as the order munber, in a format of #12345), it is going to serve as your registration code for the competition.

An example of naming the files correctly:
CODE: #56789
Title of the project: NonA Drone
01. Presentation Image: 56789_NonA Drone_Presentation
02. Concept Image: 56789_NonA Drone_Concept
03. Functional Image: 56789_NonA Drone_Functional
04. Text Document: 56789_NonA Drone_Text
05. Team Dosument: 56789_NonA Drone_Team
ZIP folder: 56789_NonA Drone
Please, do not use the # in the file names.
/ You need to come up with your own project title and replace "NonA Drone" in the example.

THE EVALUATION OF THE PROJECTS IS ANONYMOUS, so do not include your name, your registration code, or any other reference to you in the images. After being evaluated by the jury, the projects will be reconnected to their authors through the submission code. Additional details on the team members and on the projects will be required during the submission procedure.

IMAGE REQUIREMENTS:

/ A4, portrait (vertical), 300 dpi (equals 2480 x 3508 px),
/ High Quality (for example, in Photoshop JPEG output quality: 8, or 80-85 in Gimp is recommended),
/ 5 MB maximum file size.
If the submitted images don't respect these criteria, may lead to the disqualification of the team.

FORMATTING REQUIREMENTS:

/ The Presentation, Concept and Functional Images should display ONE SINGLE VISUALIZATION each (ex. one drawing or one rendering). We recommend not to create a layout of several images.

/ There is no need to entirely fill the A4 size image or to add a frame.

/ The images do not demand for any kind of specific technique of representation, as long as they respect the given guidelines. They can be technical drawings, diagrams, collages, pictures, renders, models, paintings, hand drawings, etc. Be creative!

/ We highly recommend you to not add text to the images, please use the Text Document for further explanation. The projects should be explanatory enough through the graphic material.

/ It is compulsory to use the provided Word templates to create your Text Document and Team Document.

/ In case the Text Document and Team Document are submitted in any other format than a Word file (.DOC), its content is might be excluded from publishing.

/ The language of the submission is ENGLISH, any text written in a different language will not be taken into account during the evaluation.

EVERY SUBMISSION THAT DOESN'T RESPECT THE PRESENTATION REQUIREMENTS, MIGHT GET DISQUALIFIED FROM THE COMPETITION.

ELIGIBILITY

Non Architecture Competitions are open to all human beings, from every age and cultural background, working in groups or individually.
Teams can be formed by a maximum number of 4 people.
The registration fee is paid per team, regardless of how many members form it. Personal information of all the team members can be uploaded during the submission procedure of the final drawing.

PRIZES

Non Architecture Competitions will award two winners, one selected by each jury, and a total of 6 honourable mentions.

WINNER (2 PRIZES)
/ 1.000 euros worth in gift cards from one of the major online shops chosen by the winner
/ publication in the Non Architecture Competitions books and website
/ reviews in digital magazines and several architecture blogs

HONOURABLE MENTIONS (6 PRIZES)
/ publication in the Non Architecture Competitions books and website
/ reviews in digital magazines and several architecture blogs

NON ARCHITECTURE EDITORIAL PICK (MINIMUM 6 PRIZES)
/ publication in the Non Architecture Competitions books and website

FINALISTS (UP TO 36 PRIZES)
/ publication in the Non Architecture Journal

SPECIAL PRIZE
The organization might establish additional special prizes and awards during the competition development and in the evaluation phase.

Note: The appearance on the involved architectural platforms are subject to the agenda and availability of the external platforms.

CALENDAR AND PRICING

23 - 31 January   Special registration period (40€).
01 - 28 February   Early registration period (55€).
01 - 15 March   Regular registration period (70€).
16 - 31 March   Late registration period (85€).
01 - 08 April   Final registration period (100€).
09 - 15 April   Last Minute registration period (115€).

05 April   Submission opens on our website.
15 April   Submission closes.
11:59 PM
09 - 13 May   Winners announcement.

The timing always refers to Central European Time (CET). To avoid confusion, please check the countdown on the competition page.

JURY

The jury will be formed by the following members:

Irene Luque Martin
Senior Urban Designer at MLA+
Liam Young
Speculative Architect and Film Director
Anastasia Prosina
Space Architect, Founder & CEO, Stellar Amenities
Daniel Buening
CEO & Co-Founder nFRONTIER
Lorenzo Boddi
Partner at BIG

REGISTRATION

The registration fee is per team, regardless of how many members are on the team.

If a team wants to submit more than one proposal to the competition they will have to register each proposal separately and pay an additional fee for each proposal they wish to submit.

For a project to be accepted the team must be properly registered to the competition. All registrations will be done through the Non Architecture website (nonarchitecture.eu), where you have to create an account, log in and choose your payment option.

All the payments will be organized through our Paypal profile, in order to provide the safest procedure to all the participants. Payments will be available for Paypal accounts and credit cards. In case you do not have a Paypal account, the credit card payment will be automatically made available.

After completing the payment, you will receive a first email from Paypal which confirms the transaction. Non Architecture will later accept your payment and provide you with a registration code. THE REGISTRATION CODE WILL BE THE FIVE DIGITS CODE INDICATED AS "ORDER NUMBER", which will be sent to you once your payment is accepted. Before a confirmation email from Non Architecture arrives, your payment will be kept on hold and you will be able to cancel your purchase any time you want without any consequences.

After your Non Architecture confirmation is sent, you can't cancel your payment anymore and it is not possible to get a refund of the registration fee.

In case Paypal is not available in your country, contact us at info@nonarchitecture.eu

SUBMISSION

3 x .JPEG 2 x .DOC	→	upload to WeTransfer & "get transfer link"	→	Non Architecture website: submission form
ZIP folder				

Submissions must be done through the Non Architecture website (nonarchitecture.eu), before the submission period ends, the deadline is indicated in the calendar.

The submission surface opens 2 weeks before the submission deadline. It is going to be placed on the Non Architecture website, on the corresponding competition page.

Submission process:
1. Create your ZIP file, containing 3 JPEG images and 2 DOC files.
2. Upload it to wetransfer.com and choose the option "Get transfer link". Make sure that you save your link for future use.
3. Go to nonarchitecture.eu and fill the submission form, there you need to include the WeTransfer link you created.

By filling the form, your submission is finalized. You are going to receive **one confirmation email** when you finalize your submission on the website.

No submissions will be accepted by e-mail or any other medium.

The submission page will be automatically closed after the submission date and time are reached, not allowing any modifications.

We suggest uploading your project 24 hours in advance to make sure that everything works out correctly. This way you have time to solve any issues that might come up along the submission process.

EVALUATION

The core values of the competition are:
/ Innovation – In terms of program management, technology and originality of the formal solution proposed.
/ Communication – Clarity, appeal and experimentation in the presentation of the proposal.
/ Relevance – The degree to which the proposal is related or useful to the proposed theme.

These values will lead the selection of the finalists' projects and they will be used by the jury as a guideline in their decision.

Remember that this is a competition of ideas, an opportunity to experiment and explore the limits of architecture representation. The jury reserves the right to award any proposal that fails at any of the parameters mentioned in these rules, as long as it justifies the breach of the rule in favour of the value of the proposal.

The voting system to choose the winning projects is as follows:

1. The Non Architecture competitions team, following the main values of the competition, will make an initial selection of 50 finalist projects in response to the above mentioned criteria. The amount of pre-selected projects can slightly vary according to the judgment of the pre-selection team.
2. The members of the jury will study the pre-selected projects privately and give an evaluation for each one of them. Votes will be compared and revised to reach a common agreement on the selection of winners and honourable mentions.

In order to guarantee the authenticity of the awarding process, the prize's selection cannot be appealed.

INTELLECTUAL PROPERTY

All the materials submitted to the competition will become part of Non Architecture Competitions' files. Non Architecture will have full rights to publish and promote this material, always making proper mention of their authors. The material might also be used for the platform's merchandising and exhibition purposes. For any other purpose, the authors of the projects will keep full rights over their design and will be asked to grant permission.
By submitting a proposal you are giving Non Architecture the right to use the received material in both printed and

online publications. Non Architecture Competitions will also have the right to slightly modify any of the mentioned materials in order to better adapt it to the different formats and layouts that different publications might have.

ADDITIONAL NOTES

1. Non Architecture reserves the right to make any changes to this document (dates, deadlines, requirements, etc.) as long as the changes benefit the majority of the competition participants. Any modifications will be announced on the Non Architecture Competitions Facebook page, Instagram account and weekly newsletter. It is the responsibility of each team to check the above mentioned sources on a regular basis to follow and incorporate if any changes are made.

2. The purpose of this competition is an intellectual exercise and will not be built. To produce a relevant collective research, a minimum amount of 50 registrations has to be submitted. If the registrations are less than 50 by the day of the deadline, Non Architecture reserves the right to proceed with the evaluation and publication, without awarding the monetary prize. In this eventuality, all the registration fees will be reimbursed to the participants.

3. No one has hired Non Architecture to organize this contest. The only purpose of this initiative is to raise questions that could lead to the progress of architecture

practice and engage a community of enthusiastic and creative designers in the creation of what could be a new way to represent architecture. The idea and program of this competition have been fully developed by the Non Architecture Team to serve solely as an academic exercise.

4. Non Architecture Competitions is not held responsible for a breach of contract regarding the publications.

5. Participants are expected to submit original work. Copying somebody else's work or using copyrighted photos, images, architectural/art pieces is strictly prohibited and will result in recalling all prizes and removal from the website, social media and the publication.

6. Non Architecture Competitions reserve the right to contact every registered participant through e-mail to provide information specifically connected to the competition they are registered to.

CONTACTS

For additional info please check the FAQ on our website: www.nonarchitecture.eu/faq

During the competition, all participants are permitted to ask questions which help them better understand the project description and/or any other aspect of the competition. Any questions that are not resolved in this document must be made through the Non Architecture Facebook page. This ensures that all participants have access to the same amount of information.

THE NON ARCHITECTURE TEAM AND ALL THE COMPETITION PARTNERS WISH YOU THE BEST LUCK, CONFIDENT THAT YOU WILL APPROACH THE CONTEST WITH ALL YOUR CREATIVITY AND INNOVATIVE MIND.

INFO@NONARCHITECTURE.EU
WWW.NONARCHITECTURE.EU

CURATOR

non | architecture

RESEARCH PARTNERS

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DOM publishers

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ARCH-VIZZ

ACT OF MAPPING

ARCHI BOOM

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