



# DANCE WITH BEE

The oasis of bio-diversity in the city

Country/City	China
University/School	Harbin Institute of Technology
Academic year	2019-2020
Title of the project	Dance With Bee---The Oasis of Bio-diversity in the City
Authors	Wang Pengtao,Zhang Yuecong



## TECHNICAL DOSSIER

Title of the project	Dance with Bee
Autheors	Wang Pengtao,Zhang Yuecong
Title of the course	Research Design Studio
Academic year	2019,2020
Teaching Staff	Zhu Xun,Zhao Wei
Department/Section/Program of belonging	Landscape Department
University/School	Harbin Institute of Technology



### Project Statement

With the continuous development of cities, the global climate change is brought about, species diversity in cities is reduced sharply, and habitats are seriously destroyed. We identify our protected species, the bee, by going back to the beginning of the ecological cycle. Through the establishment of a 250-meter living circle and a 250-meter gene exchange circle for bees, a suitable environment is created for bees in the city. On the one hand, it promotes the inner ecological cycle of the city and increases biodiversity; on the other hand, it builds a bridge for the biological gene exchange inside and outside the city through bees.



# CLIMATE CHANGE AGAIN

11th International Biennial Landscape Barcelona

Barcelona September 2020

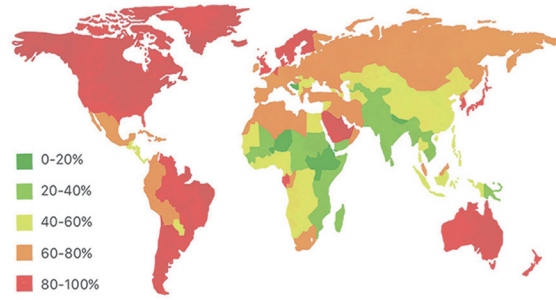
SCHOOL PRIZE



## Global urbanization process

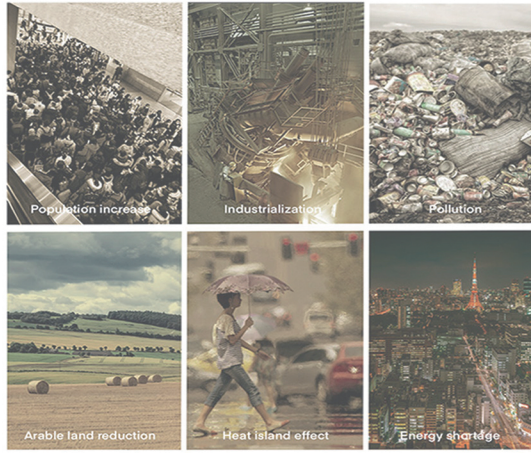
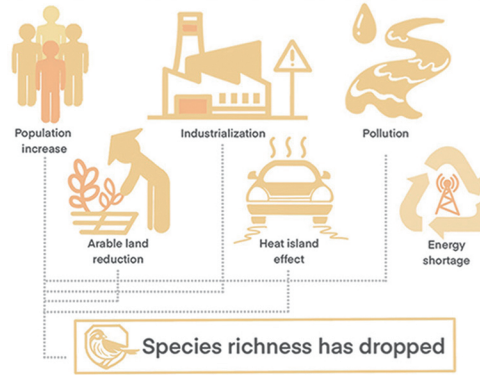


The increasing urbanization rate is a problem faced by the whole world. It means that people gradually give up living with nature and turn into the jungle of reinforced concrete.

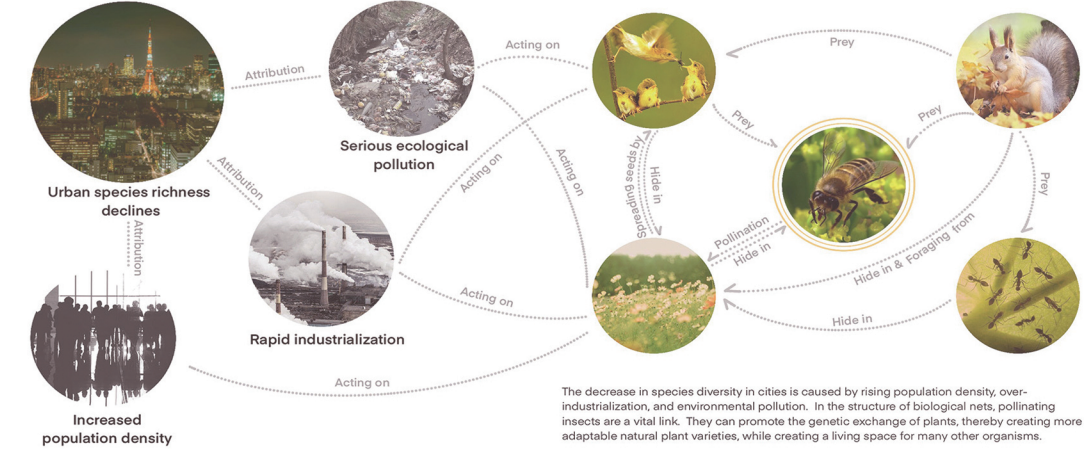


## The impact of urbanization on the ecological environment

### The urbanization process is extremely fast



## How pollinating insects affect species diversity

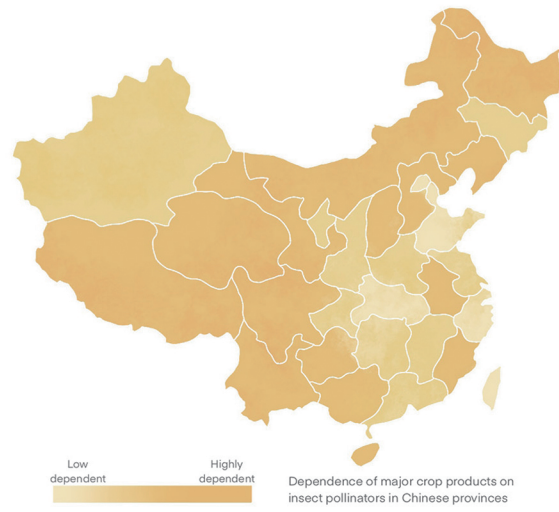
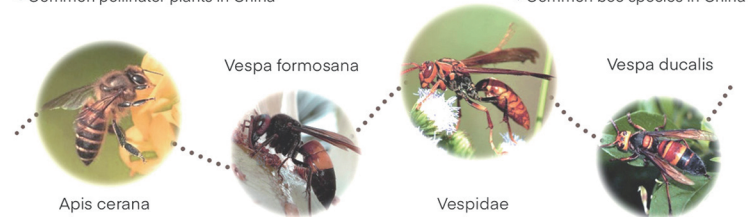


## The current status of nectar plants and bees in China



Common pollinator plants in China

Common bee species in China

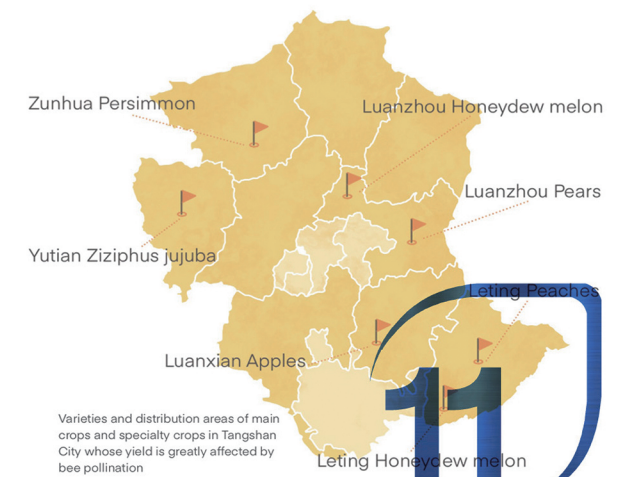
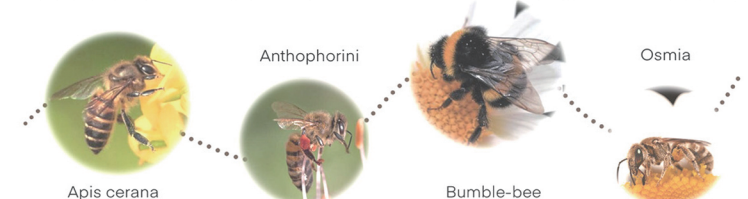


## The current status of nectar plants and bees in Tangshan



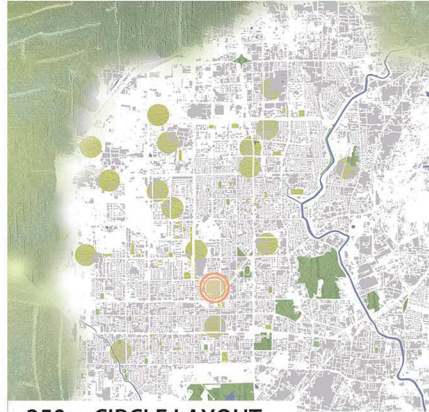
Common pollinator plants in Hebei Province

Common bee species in Hebei



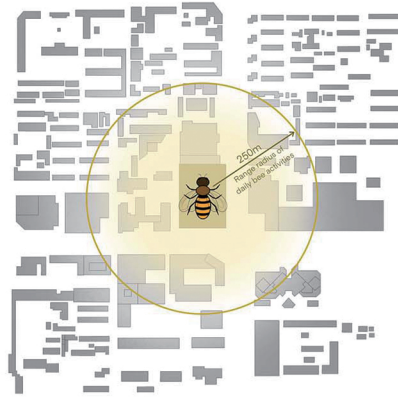


LOCATION



250m CIRCLE LAYOUT

LIVING CIRCLE ANALYSIS



HISTORY



PRESENT

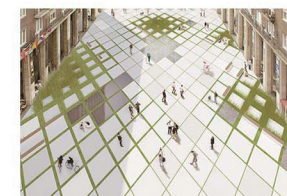


OLD COMMUNITY

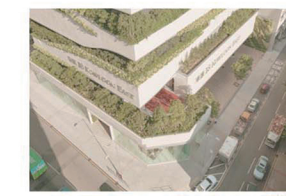
NEW COMMUNITY



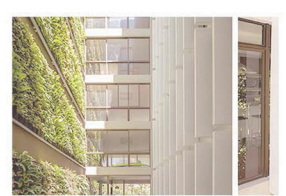
CORE HABITATA



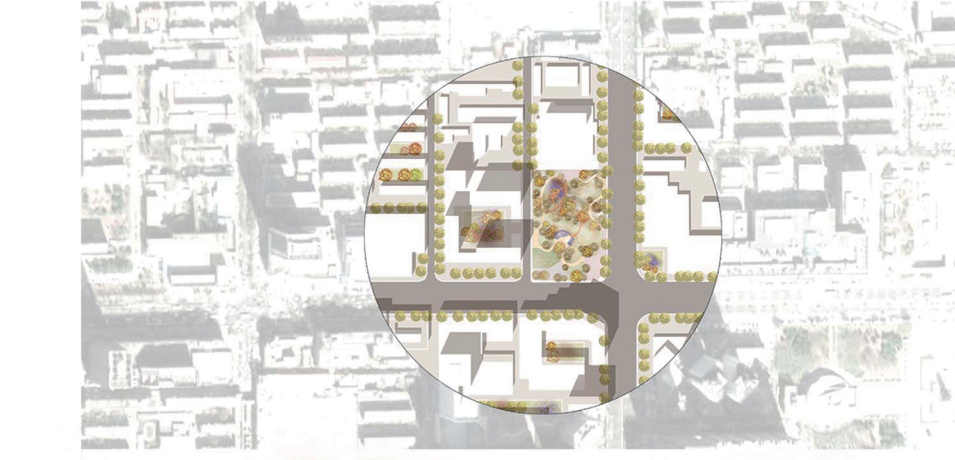
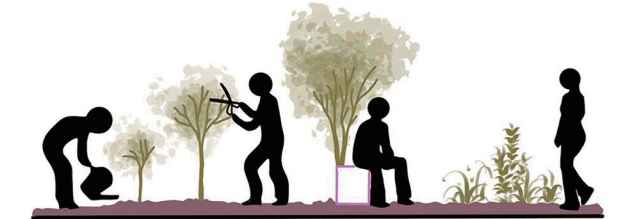
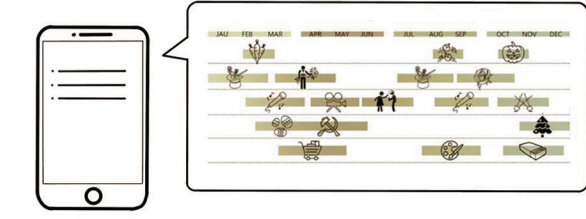
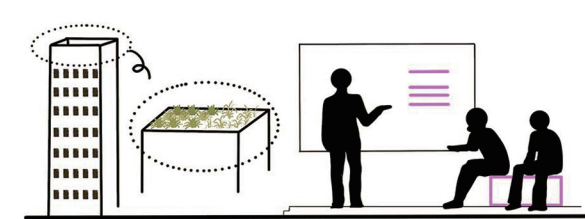
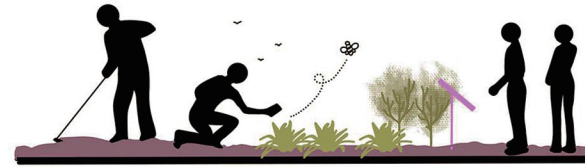
COMMERCIAL DISTRICT



OFFICIAL BLOCK

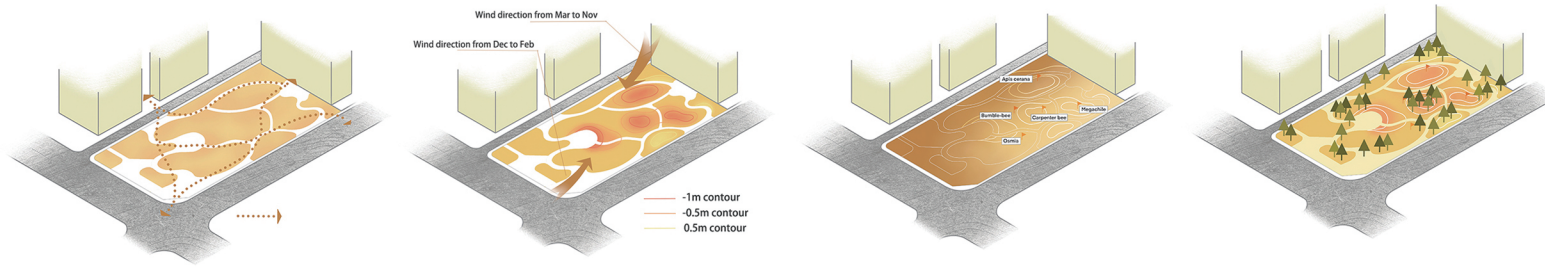


FUTURE STRATIGE





# DESIGN STRATEGY



Determine the road network within the site according to the flow of people in the surrounding neighborhoods

Determine the terrain of the site according to the wind direction

Set different bee habitats based on site thermal radiation

Plant trees to provide rest space for people and living space for bees

# CULTURAL CONCEPT



Combining venue design with traditional local theatre forms.—The Tangshan Shadow Play



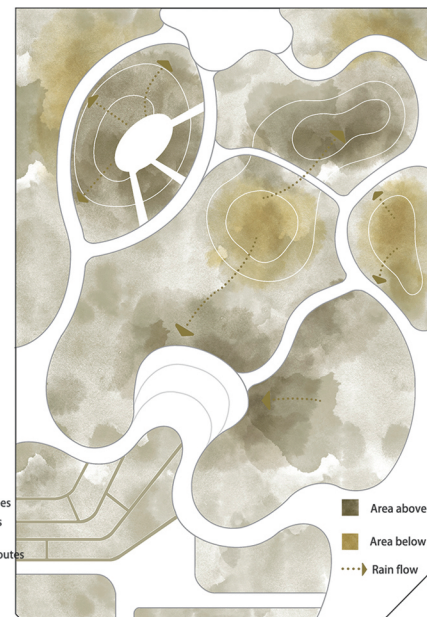
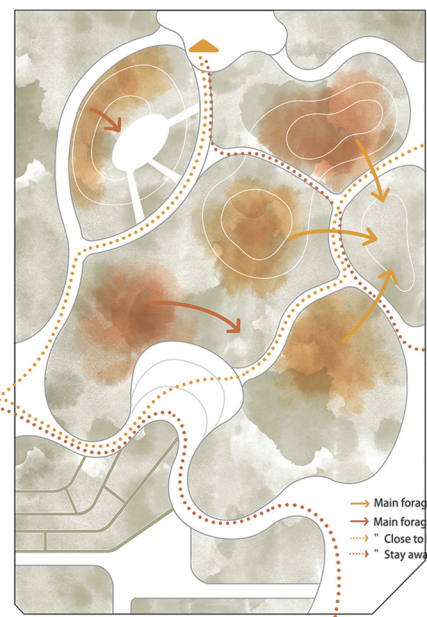
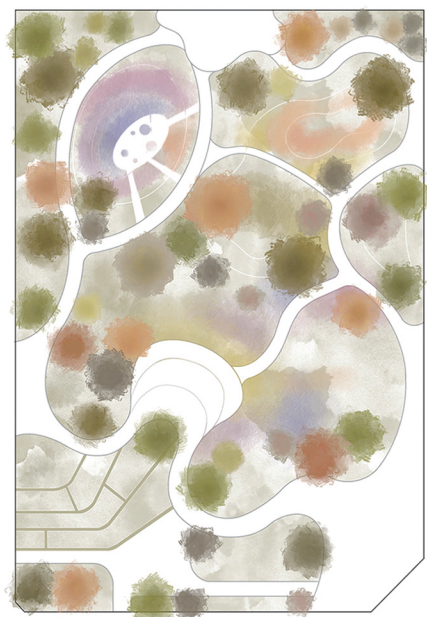
The beginning of the story is usually bland but appealing



As the story progresses, the protagonist will walk into a wonderful world and overcome difficulties

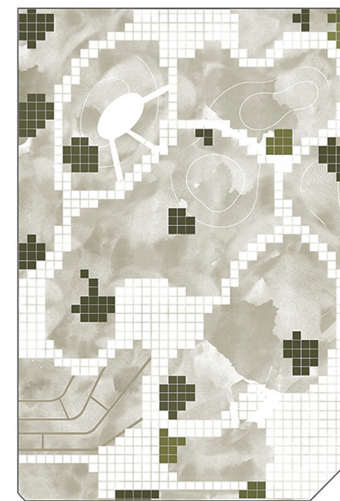


In the end, when he looks back at his life, he can truly and objectively look at the things he has experienced before.

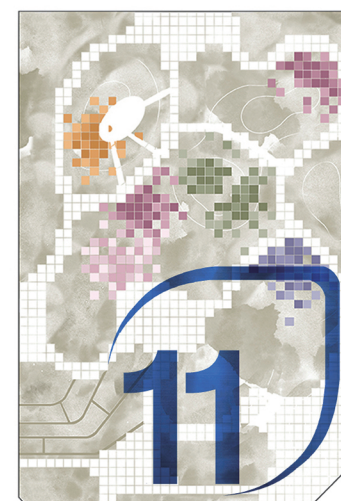
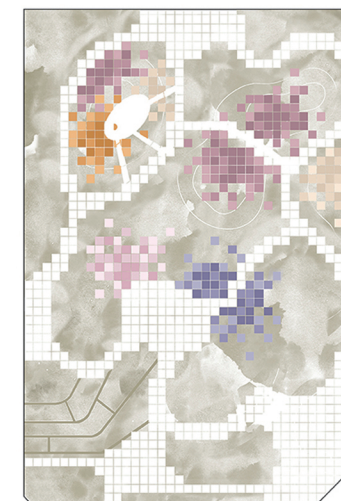


→ Main foraging routes of solitary bees  
 → Main foraging routes of social bees  
 → "Close to bee" walking route  
 → "Stay away from bee" walking routes  
 ■ Area above 0 contour  
 ■ Area below 0 contour  
 - - - Rain flow

# ARBOR SEASONAL CHANGES OF THE TREE



# ARBOR SEASONAL CHANGES OF THE FLOWER



1 Entrance square    5 Small square    1 Megachile Bee stage    5 Apis Cerana stage  
 2 Stone bench    6 Wooden corridor    2 Rose curtain    6 Bomble Bee stage  
 3 Stone steps    7 Rock mountain    3 Osmia Bee stage    7 Local vegetable  
 4 Board walk    8 Agriculture garden    4 Rafer Bee stage

