Elsa Hinojal Fernández

centrum Vinoře

atelier Sitta - Chmelová FA ČVUT v Praze zimní semestr 2020

Elsa Hinojal Fernández



Fourth year architecture student, this course I am developing in Prague, city that I fell in love with since my first trip here.

I live and study in Madrid, at the ETSAM faculty of the Polytechnic University. Madrid, the capital of Spain, has a wide range of culture, art and leisure activities.

My hobbies are mainly art, music, painting, nature and travelling.

In this study I saw the possibility of working on the natural park of Vinor and being able to carry out a project that would unify the city and nature, more focused on urbanism.



VINOR DEMOGRAPHY



Vinoř (German: Winor) is a cadastral area, a former village annexed to Prague in 1974.

It is located in the northeast of the capital of Prague, in the northeastern part of the Prague 19 district, along Mladá Boleslavská street, leading towards Brandes nad Labem.

It has an area of 599.92 ha, the population as of January 1, 2019 was 4,071.





Speaks 1980 - present onlike projubitor, (NJ 1980 - tritle - present population, (NJ 1981 - 1981 population (Lik, with reported permanent residence in municipality) ((NJ 2001 - residing population, persons with permanent or long-term residence), (NJ 2011 persons with usual residence





Marriages, divorces, abortions



Vital Statistics and Migration





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VINOR DEMOGRAPHY

More children than elderly people and a clear predominance of adult population, the largest group being between 15 and 64 years old.

Populatio	in at 31.12.				Te	mory:
-	-	2015	2016	2017	2018	2019
Population, total		4,133	4,251	4,373	4,412	4,557
sex	Males	2,017	2,078	2,142	2,179	2,251
	Females	2,116	2,173	2,231	2,233	2,306
age (years)	0-14	891	946	971	987	1,018
	15-64	2,775	2,813	2,904	2,893	2,978
	65 and more	467	492	498	532	561
Average age		36.8	36.9	37.2	37.5	37.6

We can observe how the trend of marriages decreases and how the number of divorces increases considerably in the period studied.

tarriage	es, divorces, abortions Territo					
and the second second	2015	2016	2017	2018	2019	
tarriages	25	20	23	20	19	
ivorces	15	11	7	13	17	
bortions	6	5	- 4	- 4	2	

The birth rate is maintained, although it shows a slight decrease. At the same time, it can be seen that since the population is not very old, there are few deaths. It can also be seen that Vinor's population growth may be due to immigration and emigration because there is a positive balance between the two.

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						unit.
		2015	2016	2017	2018	2019
ve births		58	76	52	53	46
eaths		35	18	30	21	21
-migrants		197	204	233	168	233
ut-migrants		140	144	133	161	113
crease/ decrease	natural	23	58	22	32	25
	net migration	57	60	100	7	120
	total	80	118	122	39	145

VINOR CLIMATOLOGY

Average temperatures and precipitation



Average annual precipitation 558mm. Average minimum daily per year 5,25 °C Minimum temperature: -2 °C Average maximum daily per year 14,08 °C Maximum temperature: 25 °C

Cloudy, sunny and precipitation days



With these data we can see that in Vinor, cloudy or partially cloudy days are predominant. During all the months of the year, it is practically guaranteed that there are 10 days with rain records and only in the summer months there are 6 days with sun.

Precipitation amounts



In the months of November to March snowfalls are registered. We can see that there are almost the same dry and and specifically between SW and W. rainy days on an annual average.

Maximum temperatures



Except in the months of June to September, frosts occur and only days with temperatures above 30 $^\circ$ C are recorded for two or three days a month in that same period.



21 day 20 day 15 days 10 desi 1.000 >12 ● >19 0 >28 >63 km/h >38 >50

Wind speed

The prevailing winds are those from the west component







VINOR RELIEF

The slope distribution can be considered as very gentle in Vinor. The areas where there is some increase is in the forest areas.



Predominance of south-southeast orientation, both in the north and in the central south. In the center predominates the northwest orientation as in the southwest.

The difference in altitude in the Vinor municipality is small (only 255m), and the lowest areas correspond to the southwest area, which coincides with the forest and area of swamps and lakes.





VINOR WATER MANAGEMENT CORINE LAND ECOSYSTEMS

There is a northeast-south facing channel that flows into a lake which is connected to other downstream lakes and that coincides with the forest area.



The four existing landuse classifications are:

•Urban Development•Forests•Land outside the irrigated area•Meadows

The largest extension is the Land outside the irrigated area, followed by the urban area and forests.



It is observed how the urban area is surrounded on the southeast by swamps, the alluvial plain and the different existing forests. The entire road network is concentrated in the built-up area and in the 4 exit roads to the NW, SW, NE and SE. The different meadows and light alluvial meadows are also observed.









VINOR VEGETATION

There are only two categories of potential natural vegetation within the territory: ash trees and black oaks. Ash trees occupy part of the build-up land, being a very small part of the total.

As in the natural vegetation map, there are only two classifications in Vinor: oak groves and acidophilus oaks, these being a small portion existing in the northeast of the territory.





VINORSKY PARK





Carp

Common carp

Mallard





Tench

Grey Heron Carassius





Ash

Horse chestnut



The Vinorsky Park is a nature reserve, consisting of an old castle park. It is located in Vinor and the area is mostly wooded with several springs, which together with the ground water rise and maintain the water level of the ponds.

These ponds produce water retention in the landscape constituting a very important element in ecological landscaping creating habitats for many species. Among them are the common carp, tench, crucian carp but also pike or trios can be found.

In these areas you can find common species of water birds like the Grey Heron, the Mallard, the Black Coot, the Mountain Wagtail, the Pico-Picapinos and the Common Swan.

Formerly the bottom of the valley in the Vinorsky Park, was formed by meadows. Its drainage system was neglected, the meadows were flooded and stopped being cut, forming a typical alluvial plain forest, where the subway water flows slowly.

The humid central part is perhaps the most valuable. Here you can find groups of highly threatened amphibians such as the newt, the green frog, the lizard, the collared snake and the common toad itself.

The route of the nature trail passes through two small protected areas, PR Vinorsky Nature Reserve and PP Bažantnice Natural Monument in Satalice, its protection being established by Law No. 114/1992 on the protection of nature and landscape.

The main representatives of the tree layer are summer oak, winter oak, ash, milky maple, linden heart and hornbeam. In the wetland area of Vinorsky Park, the sticky alder and the white willow. You can also find the black and redcurrant Sin.

In the past, certain non-native species were introduced including acacias, horse chestnut and Norway spruce. In the southern part of the park, in the years 2005-2006, the elder and the ash tree were eliminated and the original meadow was restored.

During the visit to Vinor the first perception I had was that there was no clear center as such. As a foreigner, finding the Vinorsky park was a complicated task, the park does not have a main entrance to guide visitors.

The area of the park is quite large and has a wide range of local fauna and flora, which together with the existing ponds provide different habitats for new species.

Taking into account the potential attraction of the park and the population growth experienced in recent years, as well as the birth of children, makes me propose a nature interpretation center next to one of the lakes.

This center is proposed as a functional center where education activities on the park are combined with recreational activities aimed at children. In the surroundings of the center there will be installed zones of games and swings that also will be an attraction to foment the life and meeting in the surroundings of the park.





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COMMON CONCEPT

ŠIRŠÍ VZTAHY

Centrum Vinoře navazuje na městské prostory a zeleň, tak aby vytvořilo uzavřený okruh ve městě. Cesta je rozdělená na městskou a krajinou. Městská je tvořena novými a stávajícími budovami v Mladoboleslavské ulici a na Starém náměsti. Krajinnou tvoří parky, okolí rybníků a lze propojit s cestami do krajiny v okolí Vlnoře.





Mladoboleslavská ulice





CENTRUM

V současné době je centrum Vinoře tvořeno Starým náměstím a obchody okolo Mladoboleslavské ulice. Náměsti bez vybavenosti brání vzniku živého prostoru, naopak hlavní ulici chybi dostatek volného místa pro centrální prostor. Naším cílem je vytvořit centrum, které propojí veřejný prostor s obchodní vybavenosti a podpoří tak život ve městě.



Návrh



The center is planned in two levels, the upper level being located in a cantilevered position in the closest part of the lake, with a total vision of the lake. The selected exterior enclosure, glass allows a total vision in the 360 degrees, as well as a total integration with nature, not only in the shared vertical spaces but in the whole perimeter of the building. This also guarantees natural lighting in the interior.

The first floor has a cafeteria and bookstore, along with a circular terrace that looks out over the open air, where you can find native vegetation of the area. In addition, there is also the elevator that communicates with the upper floor in which there are multifunctional spaces that allow variable exhibitions depending on the theme, as well as a stationary part of interpretation for the Vinor environment. On the terrace there are also explanatory panels.

For times of more stable weather conditions, exhibitions are set up around the pond, to make it more interactive with the environment.



The proposal is an approach to the Vinorsky Park through a nature interpretation

The location of the plot allows a direct connection with the main street, the Old Na-

For the access to the center several paths are defined, whose slope allows access to handicapped people, ensuring accessibility to everyone. Some of these paths leave from the visitors' parking lot and also connect with the children's play área, near the

The location for this center has been planned generating a total connection with the pond, thus defining a contour of the building that follows the shape of the lake. Originating organic forms and creating a new atmosphere without boundaries between the





CC' Level(m) 50 00 Distance (m) BB'



AΑ΄

243 242



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CONSTRUCTIVE DETAILS





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o

inuous reinforced concrete slab Timber formwork Stainless steel profiles Curved tempered glass panels Curved HEB 300 metal profile

Metal pillars of 300 mm in diameter

Stiffening gussets

The nature interpretation center is planned to be built with continuous reinforced concrete slabs.

The reinforced concrete slabs are supported on wooden beams of 0.50 m edge and 0.4 m width and variable length to cover the entire slab.

For the execution of the slab, timber formwork will be used, which will finally be visible on the ceilings of the two floors. Between the large wooden beams, there will be wooden ribs every 2 m of separation.

On the perimeter of the slab, a curved HEB-300 metal profile is used, on which the large wooden beams rest.

To transmit the loads to the ground, circular metal pillars of 300 mm in diameter are used, supported on an anchorage plate to the lower slab and their corresponding stiffening gussets.

The exterior cladding of the building will be built with curved tempered glass panels, formed by two panels, 2 cm thick each, anchored to the slabs with stainless steel profiles.

2.5m

1m

Joist 0,5 x 0,15 x 8m	Beam 0,5×0,4×variablem		
RAN			





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