

# **CZECH TECHNICAL UNIVERSITY, FACULTY OF ARCHITECTURE, PRAGUE, CZECH REPUBLIC**

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DEPARTMENT 15120

SCHOOL YEAR 2019/2020 SUMMER TERM

TITLE OF MASTER'S PROJECT: **SCIENCE WITHOUT BORDERS**

LOCATION: NORTH SEA / BRENT OIL FIELD

## **1.0 Introduction**

Vladyslav Alekseyenko speculates in his work about the future of oil rigs; that is after all extraction of the valuable juice has stopped. Oil rigs rank amongst the biggest structures ever created by humans. Their construction consumed enormous resources. Platforms vary in size, often exceeding one hectare. A small urban block can easily fit in. Vladyslav thematized his chosen rig with a variety of sciences at the very commencements of his project. From now then on, he followed his preferred trajectory without any wavering. Any possible discourse about alternatives was glossed over. I would have preferred him to investigate a wider scope of possibilities, but Vladyslav's rational personality, influenced by the situation in his home country, is not a fertile ground ready for speculations or ambiguities.

## **2.0 Analysis**

The author gives us a lean but sufficient diet a general account of background conditions. The aspects of the chosen site are briefly analysed and objects assessed in regard to their possible future or resurrection. When the structures are considered to be unusable, they are simply removed. This wouldn't be so simple in practice, and some structures or parts of could be repurposed. What follows is Vladyslav's choice of scientific disciplines that would be thrown into this melting pot encompasses some clear candidates and curiously also psychology, perhaps in anticipation of some unpredictable behaviour amongst inhabitants of this scientific satellite.

Vladyslav analysed requirements of research labs and arrived at the conclusion that they could be accommodated within on shore prefabricated units. The units would be then shipped to the rig. Those units /capsules would then form various clusters according to the functional requirements.

As an important and inevitable part of the research is sustainability, various aspects including energy generation, water supply, as well as food production are briefly discussed.

### **3.0 Architecture**

This ponderous juggernaut offers, once cleared, a whole gamut of possibilities. Whilst it is not exactly *carte blanche*, the fact that it is lacking any architectural context could trigger wild formal explorations. However, Vladyslav is not prone to vapid posturing and superficial appliques of photostopic hallucinations. He is firmly on the ground, which does not imply superficiality. Outwardly, the buildings appear to be conventional, unsurprising – unmitigated tyranny of modularity. This manifests itself in overtly formal arrangements with no clear indication of how this system could be changed and manoeuvred by rig's inhabitants.

My reservation is, that he is a bit too subordinate to the proposed construction system and technology. I expected a better recognition of the roles of water and horizon, i.e. consideration of the unique quality of light and its abilities to create a unique ambience. These are the real assets of the site which could permeate the entire building. The interiors appear too austere, predictable, almost generic. Don't scientists like to have a bit of fun? Perhaps, rather than appliqueing such austere visual order that comes from prefabricated units, Vladyslav could subvert it a little with some parasitic, 3 D printed objects of varying functions that would colonize the complex inside and outside, not unlike barnacles growing on submerged parts. As the architecture is more or less predictable, perhaps even derivative, there was an opportunity to reveal the purpose of the new structure in a more adventurous form, rather than use the half sphere, a well-known observatory cliché.

One question still looms: Even this complex would age and be one day ready for the replacement. In this context I believe, that a principle known as C2C (cradle to cradle) could have been included whilst contemplating strategies for changing the function of the original rig. At the same token: What would be the escape route if the science does not work?

### **4.0 Graphics**

The work is competently and clearly presented. The perspectives unfortunately lack the necessary pulling power. Very little is made from proximity of water and of the unique location. Inclusion of the graphic scale is helpful but does not replace the indication of the sizes of individual rooms (in square metres).

### **5.0 Conclusion**

This theme definitely stands out amongst a rather predictable and mundane crop of diploma projects produced by the Faculty of Architecture.

I thoroughly enjoyed the journey through this project, along with the entire process of Vladyslav's searching, I applaud to Vladyslav's courage to venture into a realm of the unknown. To my knowledge there is no project at our faculty which preoccupied itself with a topic like this. To supervise Vladyslav's work was exciting, albeit due interrupting circumstances, a demanding journey. I recommend this project, without any reservations, for defence in front of the jury.

Suggested mark: B – Very good

A handwritten signature in black ink, appearing to read 'V. Sitta', with a long horizontal flourish extending to the right.

Vladimir Sitta, Prague 21<sup>st</sup> June 2020