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Examiner: Prof.ir. DE van Gameren

# Power Struggle

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# Project Abstract

The project collects past, present, and future stories of energy in, around, and through Gibraltar: fuel economies in the age of Franco; the refueling of middle eastern tankers; the transition from diesel to LNG fuel sources; the additional load of bedroom bit-coin miners, to industrial scale server farms; the interception of fuel tankers bound of middle eastern war zones; the design of new power stations; the laying of new power cables between Europe and north Africa; new forms of decentralized energy sources and the impact of energy migrants crossing the Mediterranean.

The stories speak both of the internal and local logics of Gibraltar, and of its role within international networks: the alliances, arrangements, and compromises it makes to 'keep the power switched on' and remain a feasible territory; the economical and infrastructural side-effects of energy networks that pass around and through the straits and the peninsula.

The project describes how these networks manifest themselves in infrastructure, buildings, and spaces: cables, landing stations, and maintenance rooms; docks, re-fueling stations, and dormitories; LNG trading routes, power stations, control rooms; data networks, underground storage tunnels, bedrooms.

It does so in order to tell new stories about Gibraltar; not as a provincial culde-sac out of time, but as a node and a conduit in one of the key Geo-strategic locations in the Mediterranean. This is a location of increasing importance in the decades of climate emergency, as Europe turns towards north Africa for new sources of energy, as climate migrants line the Mediterranean coastline, as shipping and trade transforms.

## Individual Position

The British overseas territory of Gibraltar currently holds the status of "Tailored Decolonization". This implying that the government is in constant negotiation and trial with the United Kingdom. This places Gibraltar in an interesting position, where they posses the stability and support of a nation as strong as Britain, but are not held to the bureaucratic structures that exist with in the complexities of British political system. Hence Gibraltar finds its self in a unique position of agility, where it can adapt and change laws and regulations in a much more hastily fashion, unlike its original colonizer

This potential of rapid legal flexibility has lead to the birth of many new economies. Gibraltar holds the current status as the number one bunkering station in the Mediterranean, only as a result of its low fuel taxes. Additionally the current rise in online gambling business was in response to the capped tax conditions that the government deployed, intending to attract the likes of offshore banking. The legal systems in Gibraltar have been very welcoming to new technologies and its fluid adaption to cryptocurrency has been one of the most inviting to investors worldwide.

So how does a nation with no natural resources stay afloat? It strategically manipulates a dependence from others in order to make its self a necessity on both a local and global scale.

The individual position of this project is one that is grounded in an investigation of Gibraltars constructed dependencies, using them as a case study for similar conditions found globally. The reliance on these negotiations and economical adaptation has created an agile political and economical infrastructural model, making it both attractive and cautious to outside investment.

# Structure, Method, and Format

In the case of energy, it is a theme that can be woven into almost any topic of discussion. It is the life force of all forms of economical production and evolution.

While energy is something that can be investigated broadly speaking, from high-tech scientific solutions to quantitative mathematical calculations based on efficiency, its heterogeneity allows for multiple forms of access. The project does not combat or wrestle with the topic of energy specifically, but rather uses it as an entry point into additional situations that hold influence to its effect. In electing to use the channel of speculation, the project picks upon a series of anecdotes that in one way or another link bank to the energy situation in Gibraltar. The primary intention of the study is to view the topic of energy in a different light, posing new questions that relate to Gibraltar specifically, whilst also entering into a global debate.

The intended method will make use of traditional and evolving architectural tools, in an attempt to trace the impacts and spatial consequences resulting in the conversation around energy. Cartographic exploration will be used to grater understand local and global fuel supply networks, while three dimensional model scanning techniques will be adopted to understand the cave networks in detail, posing calculated efficient solutions to maximize data framing and storage.

Expanding on the schizophrenic nature of the project, the format will take on multiple different forms of architectural representation. Using traditional and more contemporary mixed media, the final exhibit will display the findings in models, cartographic studies, a short documentary and three dimensional photogrammetry. The intended format also allows new anecdotes to arise during the project and give lead to new fields of research.

# Outcomes and Deliverables

The project aims to explore a series of situations specific to Gibraltar. In spatializing them and repositioning them together, an attempt is made to tell a new untold story about Gibraltar. Gibraltar is hence used as an index and access point into different conversations that apply to multiple global examples of similar conditions. The final outcome of the project will take the form of a mixed media display that presents the different methods of investigation and their findings. The exhibition will present the overlapping stories and situations in various architectural representational techniques, the model, the drawing, the map, the detail and film.

## Deliverables:

- —A short film (30-40min) compilation of the findings will presented in a documentary style format.
- —A book publication that re-represents the findings in a more static linear fashion.
- —A cartographic investigation of global energy and supply networks. (Fossil Fuels/LNG/Cryptocurrency)
- —A model of the caves inside the rock, showing potential expansion of caves.
- —An analysis of fuel storage relative to time.
- —A series of found and printed policy documents that have had crucial effect of Gibraltars economical buoyancy.

# Work Plan

Calendar week 29–33					
	Research and investigation into photogrammetry and 3D cave scanning.  Model experimentation and energy mapping				
Calendar week 29–34					
Friday, August 23	Summer assignment due				
Calendar week 35, course week 1.0					
Monday, August 26 –Friday, August 29	Compulsory kick-off workshop				
Calendar week 36, course week 1.1					
Friday, 6 September	Presentation of collective work and individual pin-ups with Hugo Corbett, Salomon Frausto, Michiel Riedijk, and Pablo De Sola Montiel				
	Draaibook of Final Project Deliverables				
Calendar week 37, course week 1.2					
Friday, September 13	Collective Presentation #1: On Position with Hugo Corbett, Salomon Frausto, Michiel Riedijk, and international guest critics				
	Collective work				
Calendar week 38, course week 1.3					
Tuesday, September 17 Thursday, September 19	Submission of updated collective drawings Discussion on collective work and individual desk crits with Hugo Corbett				
	Collective drawings				
Calendar week 39, course week 1.4					
Thursday, September 26 Thursday, September 26–	Discussion on collective work and individual desk crits with Hugo Corbett Excursion to Porto				
Monday, September 30	Individual Drawings/model				
Calendar week 40, course week 1.5					
Friday, October 4	Individual desk crits with Michiel Riedijk				
	Full drawing set for discussion of 6 situations.				

Calendar week 41, course week 1.6			
Tuesday, October 8	Submission for comments of collective materials for Collective Presentation #2: On		
	Argumentation and Narrative		
Thursday, October 10	Discussion on collective work and individual desk crits with Hugo Corbett		
	Collective/Individual work		
Calendar week 42, course week 1.7			
Monday, October 14	Pencils down, submission of final collective materials for Collective Presentation #2 On Argumentation and Narrative		
Friday, October 18	Collective Presentation #2: On Argumentation and Narrative		
mady, establish to	with Hugo Corbett, Salomon Frausto, Michiel Riedijk, and international guest critics		
	Collective Work		
Calendar week 43, course week 1.8			
Thursday, October 24	Discussion on collective work and individual desk crits with Hugo Corbett		
	Finalised Drawings and print tests		
Calendar week 44, course week 1.9			
Monday, October 28	Pencils down, submission to graphic designer of final collective drawings, images, and texfor publication		
Friday, November 1	Individual desk crits with Michiel Riedijk		
	Model and drawing process.		
Calendar week 45, course week 1.10			
Monday, November 5:	Submission of final draft indvidual drawings and images for publication		
Wednesday, November 6	Pencils down, submission of final publication texts for copy-editing		
Thursday, November 7	Discussion on collective work and individual desk crits with Hugo Corbett		
	Finalising texts.		
Calendar week 46, course week 2.1			
Monday, November 12	Discussion on collective work and individual desk crits with Hugo Corbett Presentation of draft proposal for thesis exhibition and event		
Wednesday, November 13	resentation of draft proposal for thesis exhibition and event		
rroundoudy, iroveniber 15	Collective work		
	Collective work		

Calendar week 47, course week 2.2				
Monday, November 18	Pencils down, submission of all final collective work for E2			
Thursday, November 21	Pencils down, submission of all materials for Collective Presentation #3: On Actualization and Materialization			
Friday, November 22	Collective Presentation #3 On Actualization and Materialization			
,,	with Hugo Corbett, Salomon Frausto, Michiel Riedijk, and international guest critics			
	Final touches collective video. All hands on deck collective work.			
Calendar week 48, course week 2.3	3			
Monday, November 25	Individual desk crits with Hugo Corbett			
Friday, November 29	Pencils down, submission of final project dossier to examiner			
	Complete Dossier and required supporting imagery			
Calendar week 49, course week 2.4	4			
Wednesday, December 4	Pencils down, submission of all individual work for E2			
Thursday, December 5	E2 (go/no go presentation)			
Friday, December 6	E2 (go/no go presentation)			
	Comments: reposition argument related to Hypothesis. Materialise the architetcure.			
Calendar week 50, course week 2.5				
Monday, December 9	Presentation of proposal for exhibition panels and models/artifacts			
	Individual desk crits with Hugo Corbett based on E2 comments			
Tuesday, December 10	Post-production of individual project based on E2 comments			
Wednesday, December 11 Thursday, December 12	Post-production of individual project based on E2 comments			
Friday, December 13	Post-production of individual project based on E2 comments Pencils down, submission of all final individual drawings for publication			
Calendar week 51, course week 2.6				
Monday, December 17	Pencils down, submision of draaiboek for final event			
	Pencils down, submission of final exhibition design			
	Post-production of individual project based on E2 comments			
Friday, December 20	Collective Presentation #4: On Comments from E2			
Friday, December 20	with Hugo Corbett, Salomon Frausto, and Michiel Riedijk E2 Retakes			
Calendar week 52				
Monday, December 22	Submission of collective panels and banners for exhibition			
Tuesday, December 23	Post-production of individual project based on E2 comments			
Friday, December 26	Post-production of individual project based on E2 comments			

Calendar week 1				
Calendar week T				
Monday, December 29 Tuesday, December 30	Pencils down, submission of final collective E3 video script for copy editing Post-production of individual project based on E2 comments			
Wednesday, December 31 Friday, January 2	Post-production of individual project based on E2 comments Submission of individual E3 video script for comments			
Calendar week 2, course week 2.7				
Monday, January 6	Pencils down, send all collective panels and banners for exhibition to print			
Thursday, January 9 Friday, January 10	Pencils down, submission of individual E3 video scripts for copy editing . Dress rehearsal for public final event and presentations with Hugo Corbett, Salomo Frausto, and Michiel Riedijk			
Calendar week 3, course week 2.8				
Monday, January 13	Pencils down, send all individual panels for exhibition to print			
Monday, January 13– Thursday, January 16	Film workshop			
Friday, January 16 Friday, January 17	Pencils down, submission of final project books to printer			
Triady, Junidary 17	Dress rehearsal for E3 with Hugo Corbett, Salomon Frausto, and Michiel Riedijk			
Calendar week 4, course week 2.9				
Monday, January 21	Pencils down, submission of all final models and artifacts for exhibition			
Monday, January 21–	Film workshop			
Thursday, January 23 Tuesday, January 22	Exhibition build-up			
Wednesday, January 23				
Thursday, January 24	Exhibition installation			
Friday, January 25	Final dress rehearsal for public final event and presentations and submission of all required final materials to the TU Delft Repository and to examiners.			
	Exhibition opening			
Saturday, January 26	Pencils down, submission of E3 videos for upload to Vimeo			
Calendar week 5, course week 2.10				
Monday, January 27	Second dress rehearsal for E3			
Wednesday, January 29	Final preparations for public final event and presentations			
Thursday, January 30 Public final event and presentations, concluded by book launch Friday, January 31 E3 with thesis examiner and graduation ceremony				