CHAPTER 15

(Re-) Capturing the Fungus Rock

Trevor Borg

Introduction

The Fungus Rock: Għerq Sinjur project represents a continuation of my ongoing research practice that delves deep into the fabric of place. Unlike the accessible places investigated through previous projects, that have always entailed a direct embodied sensorial experience, the fungus islet is strictly out of bounds (Figure 1). It has been like that for almost 300 years, well protected by law and now officially a designated nature reserve. Lanfranco (1960) attributes the legendary status of the so called 'fungus', which he describes as a 'relic of history' and 'awe-inspiring', mainly to the fact that it still survives in its original place. Also known as the General's Rock, this small rocky projection is a stone's throw away from the western coast of Gozo, however, its official ecological status and geological morphology make it practically unreachable.

The first decision that had to be made concerned the method(s) of capturing the islet's fabric in great detail, as close as being physically there. The decision fell squarely on the use of photogrammetry, defined by Colwell (1997) as a technology based on remote sensing and capturing of detailed information about objects and the environment through the recording and interpretation of digital images (cited in Ebert, 2015 pp. 50-51). A drone camera was used to enable the acquisition of highly detailed visual information of the islet's surface and sides, without the need to set foot on it. The forensic style, image capturing process, allowed for highly accurate topographic mapping of the islet's outermost composition, including the rock formation and the flora that thrives on its garigue-like surface and around its weathered sides. The captured imagery, initially in the form of aerial video footage, was then translated into a spatial model by means of photogrammetry software and point cloud mapping. The computer-generated model, based on real world data, was then simplified in terms of polygons, three-dimensionally printed and incorporated into a sculptural piece.

Figure 1: Fungus Rock, Gozo

Photo-Phenomenology

On my various data collection fieldtrips, I follow a contoured map embedded in the ground in search of directions (Borg, 2022). The specific research methodology I opt for, generally favours a phenomenological vein that entails being physically on site. In the context of this research project, the lack of a physically accessible site initially presented itself as a major obstacle, as I always start my investigation of place on foot, one step after another. Walking constitutes an integral part of my place-oriented research practice, however, this basic approach to place was not possible this time around. Such a hurdle, at the very beginning of the project, inevitably became one of the principal research questions: Is a direct investigation of place possible without ever being on site?

Mapping the terrain is what I do to collect different types of data that feed my artistic practice. My ongoing research considers phenomenology as a point of departure, echoing the words of Merleau-Ponty (2012 p. 330), that 'it is through my body that I go toward the world'; movement in place allows for direct embodied experience, tactility and discovery through sensorial possibilities. In the context of this project, the movement is not carried out by the body, but by a remotely controlled camera that goes round the object (under investigation) multiple times.

The object consists of a lump of limestone, standing firmly like a prominent barge moored close to the shore. It fits neatly Foucault's (1967) criteria for a heterotopia, however, as I shall explain, it might also share parallels with a utopia. Foucault (1967) tells us that

the heterotopia might constitute a sacred or forbidden place, it has a specific function, it is capable of connecting multiple places (real and imaginary) and is often connected to slices of time. The little island under investigation encapsulates all of these aspects and, notwithstanding its very restricted footprint, like a heavily loaded palimpsest it packs layers upon layers of fabric waiting to be unpacked. Furthermore, Foucault (1967) argues that heterotopias 'always presuppose a system of opening and closing that both isolates them and makes them penetrable'; unlike public places they are not freely accessible 'their role is to create a space that is other, another real space'.

So what makes the Fungus Rock both a utopia and a heterotopia? I have already mentioned that the islet may only be accessed via drone, following the necessary permits from the authorities entrusted with its safeguarding. Foucault (1967) maintains that between the utopia and the heterotopia 'there might be a sort of mixed, joint experience' which could take the form of a mirror. The mirror, or for the sake of this study I shall refer to it as the 'mirror-image', has always played an important part in the realm of lens-based media. The drone footage and photographs utilize a highly specialized form of image capturing, whereby the image is captured on a sophisticated sensor that mirrors what is in front of the lens. The technological approach used to capture the Fungus Rock resonates with Foucault's mirror that acts as a portal connecting the heterotopia with the utopia.

'The mirror is, after all, a utopia since it is a placeless place. In the mirror, I see myself there where I am not, in an unreal, virtual space that opens up behind the surface; I am over there, there where I am not, a sort of shadow that gives my own visibility to myself, that enables me to see myself there where I am absent: such is the utopia of the mirror.' (Foucault, 1967)

There exists an ambiguous yet evident correlation between the mirror-image described by Foucault and my strategy to setting foot on the little island, virtually rather than physically. The deserted rock emerges in the form of a utopia, as opposed to the rest of the Maltese islands it remains completely untainted by contemporary development. Moreover, its heterotopic properties allow us to connect the present with the past, and to compare contemporary Malta with how we imagine it had been in times gone by. The sea separates and at the same time connects the main island and its little sister, and although the gap in between is quite narrow, they embody very distinct temporalities. In Massey's (2005 p.67) words, the smaller island harbours its specificities which are also in part the result of the connections and disconnections (and the combination of both) it has with the rest of the Maltese islands.

In Marg Augé's (2008) terminology the Fungus Rock might also be described as a 'non-place', given that it has always been a transitory place (or space); a place that could only be accessed in order to gain access to something else. The islet lacks human presence and except for the smoothening of part of its sidewalls, it is completely missing any form of human intervention (Refer to Notes 1). The Fungus Rock has a history and is encircled by myths in contrast with the typical 'non-place', however 'it does not contain any organic society' (Augé, 2008 p.90). It can only been accessed temporarily for very specific reasons and it has been segregated for ages. We might want to call it a quasi or atypical non-place since it does not tick all the boxes depicted by Marc Augé. One thing is sure, the size of the islet does not limit what it might become; on the contrary, the lack of physical space available on its restricted surface, opens up many opportunities for it to become an 'other place', in both real and imaginary terms.

Jutting out of the sea like an imposing mythical creature the tilted rock contributes in no small way to the dramatic surroundings in Dwejra Bay (Figure 2). The islet, situated only a few metres away from where the impressive Azure Window once stood, might also have been part of a cave that had been eaten away by the waves over thousands of years (Lanfranco, 2017) (Refer to Notes 2). In ancient times the roof of this 'hypothetical cave' could have quite easily been connected to the shore, probably later eroding into a fragile arch before totally breaking off from the mainland. Now, where the feet cannot trespass the drone will. Data meticulously captured by the drone while flying along a predetermined path constitutes what Mitchell (2002) defines as 'textual systems'. The acquired data of the islet's landscape was then interpreted by a computer application and translated into a spatial model that almost allows us to view all the cracks and crevices.

It is virtually impossible to collect such data through any other means other than by physically landing on the islet, to be able to observe and directly experience the 'vastly-diminutive' landscape up there. As Bachelard (1994 p. 215) asserts, restricted space accumulates size – 'it is vast in its way'. This 'vastness' can be attested by the richness of the visual data captured in the span of a few hours through the lens of the drone camera as it followed a pre-established virtual grid. Initially, the data consisted of two-dimensional full-colour images, laid out on a flat plane that lacks any spatial or geometrical structure. Merleau-Ponty (2012, p.318) argues that we might learn more about the object from colour rather than its geometrical properties as it is through colour and light that the nuances of the landscape and what we perceive as contours may emerge. Through photogrammetry software the contours of the rock are identified and traced out to establish its unity; a process that allows for a virtual being-there as 'our picture of the world can only be composed in part with being' (Merleau-Ponty, 2012 p. 287). The drone camera mediates

the gap between the 'here' and 'there'; it makes dasein, as defined by Heidegger virtually possible. The next step in the process entailed extracting still images from the footage captured by the drone, to start giving it a three-dimensional form and transforming it into a tangible object.

Figure 2: Fungus Rock, aerial view

An Islet for an Islet

Hundreds of photographs were used to generate a detailed point cloud spatial model of the Fungus Rock consisting of huge amounts of data across the X, Y, Z axis (Figure 3). It is necessary to combine photogrammetry with point cloud as the latter translates two-dimensional images into points plotted in space required to establish correct spatial dimensions, contours and other physical attributes as per original object. A point cloud system allows us to see the object in three-dimensions, rotating and flipping it to explore all its topographical attributes. The resulting point cloud model was then converted into a polygon mesh which had to be simplified, in terms of polygons, in preparation for three-dimensional printing (Figure 4).

The model was three-dimensionally printed using Fused Deposition Modelling (FDM) that works by extruding and heating the thermoplastic and depositing it gradually in layers. While the model represents a highly accurate scale rendition of the fungus islet, it also makes for an 'other place' independent of the place of origin. Merleau-Ponty (2004 p.71) argues that a painting of a landscape, or in this case a sculpture, 'does not imitate the world but is a world of its own'. This claim takes us back to Foucault's heterotopia as the

'new' islet becomes an 'other place' (in between); yet it still connects us with the 'original' islet. We can encounter the Fungus Rock through the FDM model which allows for a total viewing, from all sides and angles, of the rocky protrusion out at sea. At the same time, it offers a different experience because it is not the 'original' islet; it can never replicate the so called 'original' but it may offer a different yet similar kind of exploration and overall encounter. The three-dimensional model might not share many characteristics with the Fungus Rock, as hardness, weight and colour, but as Heidegger (2008 p. 124) argues, object matter 'still remains what it is'. Furthermore, Heidegger points out that '(r)ising-up-within-itself the work opens up a world and keeps it abidingly in force' (original italics). Therefore, it can be argued that the FDM model is not a 'true' replica of the Fungus Rock but a relatively different islet, separate and disconnected from the place of origin. At the same time, the fabricated model still keeps us grounded in the place of origin and through it we may encounter aspects pertaining to the islet in the sea. Casey (2002) argues that a representation of place does not offer a transparent view onto its own subject matter; place cannot be replicated but transmuted or 're-implaced'.

Figure 3: Photographs generated from drone footage

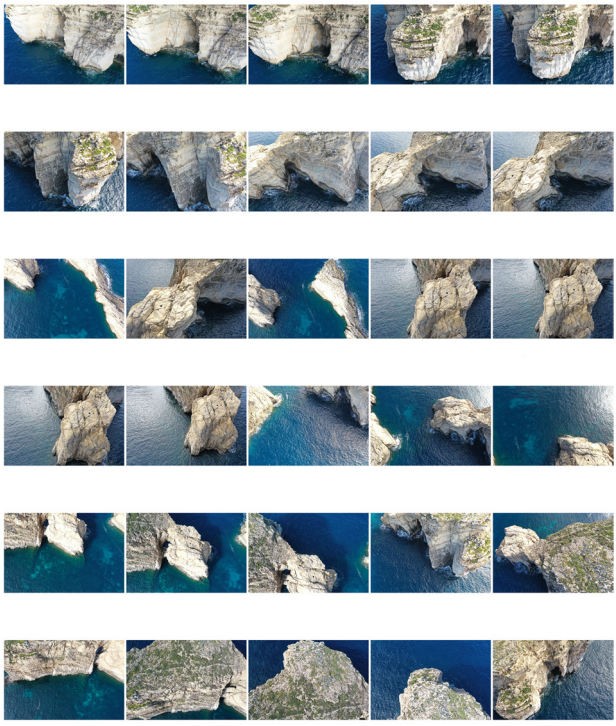
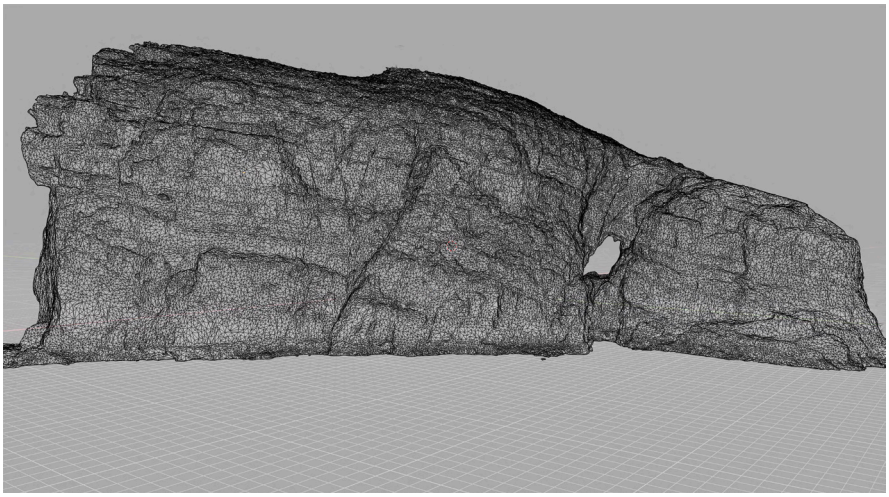


Figure 4: Fungus Rock - 3D mesh following point cloud model generated from photographs



The principal aim of this practice-based project is not to accurately replicate the Fungus Rock but to create a scale rendition that can be incorporated into a work of art with the intention of eliciting multiple questions. The point cloud model captures the topographical attributes of the islet and reterritorializes them into space and time. Moreover, the spatial model acquires further heterotopic characteristics since it is linked to a slice of time spanning the duration of the flight path covered by the drone. Baudrillard (1994 p. 11) tells us that 'everywhere we live in a universe that is similar to the original – things are doubled by their own scenario', hence the question, can we ever go back to the original place? Morton (2010 p. 55) maintains that the idea of 'authentic place' is a Western myth, a deception.

The title of the work, 'Fungus Rock: Għerq Sinjur' (2022), draws on the etymology of the Maltese words 'għerq sinjur', literally meaning 'rich root', referring to the fallacious properties that in the past were attributed to the pseudo-fungus (root) growing on the islet. The title of the piece plays on the homophonic characteristics of 'għerq' and 'qerq', where the latter loosely translates into 'deception'. The sound of these two words is aimed at provoking further layers of meaning that one may ascribe to the interpretation of the work. It is beyond the scope of the sculpture and this chapter to infer specific meanings or encourage particular conjectures as to what the sculpture might be trying to communicate. The aim is to provoke and incite questions by using the work and the stories surrounding the islet as a point of departure, or according to Bourriaud, 'to bring precarity to mind' (2016 p. 43).

Figure 5: Fungus Rock - Għerq Sinjur (2022)

Trevor Borg, mixed media sculpture

The FDM islet is enclosed inside a clear acrylic box supported by a white wooden base reminiscent of museum showcases (Figure 5). The choice of colours was based on achieving maximum contrast and to prevent the model from reflecting the controlled light directed towards it. The acrylic box sits on four 16mm steel rebars, that violently penetrate the base of the showcase to engulf the fragile islet inside. The rebars were treated to encourage rust and corrosion which immediately began to accumulate at the base of the showcase staining the pristine whiteness more and more with each passing day, as the sculpture continues to accumulate time. In large part, the chosen materials resonate with the work's thematic and the context in which the work is located. The viewers are invited to appropriate the materials entwined in the sculpture and reconstitute them into a work of their own, refashioning, interpreting and composing new meanings from the elements given to them (Rancière, 2011 p. 13). The work is not meant to illustrate facts; it is meant to problematise the factual and to imagine what that might become.

Morton (2010) implies that art has the ability to speak, it can make us question reality, it deals with shame, abjection, loss, reality and un-reality among other things. Fungus Rock: Q/erq Sinjur was exhibited at Teatru Astra in Rabat, Gozo in 2022, as part of a national conference and exhibition focusing on the island's identity. The space in the theatre's upper gallery became an extension of the work as visitors could walk around the sculpture to

view the islet from all sides and angles. Programmable lighting was used to illuminate the work in a controlled manner, designed to direct the gaze of the viewers towards the sculpture and the space around it. The interplay of shadows on the walls generated an uncanny spatiality, adding more depth around the freestanding piece by introducing further 'ecosemiotics' (Kull cited in Barry & Welstead, 2017 p.4). Art in collaboration with other fields can be a catalyst in speaking the unspeakable, in revealing the concealed and in showing us how to look at things differently, more critically. One of the functions of art is to make us realise how our modes of thinking are contaminated by an anthropocentric assumption that 'only in relation to human beings that anything else acquires value' (Clark, 2019 p. 14). Fungus Rock: Q/erq Sinjur is an attempt at problematising deeply ingrained anthropomorphic thinking by taking us to a place where we are 'not supposed' to be and imagining what this place might become if we are ever allowed to be there.

This project is an attestion of a fruitful collaboration between art and science and the important contribution one field makes to the other and vice versa. Photogrammetry and point cloud systems open up endless creative possibilities in the realm of digital arts which could be incorporated into a wide array of art practices from sculpture, three-dimensional animation and game design to video art, industrial design and virtual/augmented/mixed reality and much more. Photogrammetry can be a powerful tool for artists but 'to get answers from aerial photographs, questions must be asked of them', and there is a wide range of questions to be asked ranging from the scientific to the artistic and beyond (Ebert, 2007 p. 50). One of the principal outcomes of this project is precisely that of asking questions and to encourage the viewers to ask questions about the work and what it might mean. Land mapping, in the context of place-oriented practice, has a lot to gain from an artistic and scientific entwining wherein photogrammetry definitely emerges as a key prospect. Systematic aerial photography, combined with creative methodologies pertaining to place-oriented practice, allow for artistic research opportunities and novel approaches to image making to continue to unfold.

Notes

1. The Knights of the Order of St John had smoothened part of the islet's sidewalls to make it less accessible from the sea. The islet could only be reached from an outcrop atop the shore via a hanging basket.
2. The Azure Window, a 28-metre tall natural arch in Dwejra Bay in Gozo, succumbed to a storm in March 2017.

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