Eerie Fukushima: Exploring the Ghost Town Namie with Google Street View

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Abstract

This paper explores the eerie phenomenon presented by the town of Namie in Fukushima prefecture through a virtual tour with Google Street View. To that end the paper will describe and create a theoretical understanding of the pictorial structure, the theme of the uncanny, and the range of image associations, which encompasses the phenomenon experience that is the virtual exploration of Namie. This approach will allow conclusions as to how the imagery can be taken seriously on a conceptual level when teaching geography and used as a basis for learning processes.

1   Introduction

Two years after the nuclear disaster in Fukushima the exclusion zone around the destroyed power plant still spans around 20 kilometers, and entering the site is prohibited. Since then, the about 21.000 inhabitants of the small town of Namie in the middle of the Fukushima prefecture have been evacuated, leaving the town entirely uninhabited. Tamotsu Baba, mayor of Namie, approached Google in March this year not to let the town and the fate of its inhabitants fall into oblivion.[1] Since then people can take a virtual tour through Namie using Google Street View (GSV). The virtual exploration is unfamiliar. This is in large part due to the fact that coverage by international media generally uses isometric aerial photographs.

As a result of the project, Namie received the epithet *ghost town*. On March 28, 2013 the Fox News headline read "Eerie Google images of Japanese ghost town in Fukushima"[2], CNN headlined "Google Street View maps Fukushima nuclear ghost town"[3] and

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[1] An account of his plea can be read in the official blog entry of the Street View Project in Namie: http://googleblog.blogspot.de/2013/03/imagery-on-google-maps-of-fukushima.html (23/07/13).

[2] http://www.foxnews.com/tech/2013/03/28/eerie-google-images-japanese-ghost-town/#ixzz2Zs6NVPuv (23/07/13).

[3] http://edition.cnn.com/2013/03/28/world/asia/japan-google (23/07/13).

Süddeutsche Zeitung headlined "Exploration of a ghost town"[4]. The attribution of *ghost town* expresses a feeling of unease that the viewer experiences while virtually exploring the town of Namie. The phenomenon experience evokes spine-tingling sensations, thus observing and virtually exploring the town is uncanny.

The paper's aim is to consider two questions: 1.) How does the uncanny appear during the virtual exploration of Namie with Street View? And: 2.) which considerations subsequently arise for dealing with the imagery of the image when teaching geography? The uncanny is understood here as a specifically spatial phenomenon. We are not, however, speaking of an uncanny space existing in itself. According to VIDLER (1992, 53) it has to be assumed that the buildings, squares and streets in Namie do not have any inherently uncanny qualities. To be able to understand how the uncanny takes shape as a specifically spatial phenomenon, this paper approaches it through three theoretic movements. A second step then allows for the formulation of thoughts on dealing with the imagery of the image when teaching geography.

2   Theoretical Approaches

2.1   About Street View as an image

At first, the focus will be on the phenomenon's structure so as to be able to delineate GSV as a specific pictorial form. Taking a closer look at STEPHAN GÜNZEL's considerations on videogames (i.a. 2008, 2009, 2011), specifically on the genre of the first-person shooter (FPS), allows for a theoretic understanding of GSV's image structure, since there are a number of analogies, both in structure and of formal logic, to the FPS genre.

On their mapping tours the Street View cars have taken numerous single frames. Using special image processing algorithms developed by Google, these frames are then merged into complete panoramas and made available to the user (GOOGLE 2013, o.S.).

The term user already implies the Street View function's central structural characteristic: The viewer becomes the explorer, the actor who is in control within the image, using the interface controls to choose direction of movement and view along the path predetermined by Google. Analogous to the interaction in a computer game, here, referring to GÜNZEL (2011, 66), the movement is induced by the viewer (as opposed to the moving image of a film, for example). The spatial depth is achieved through the "intentional directedness of the image" (GÜNZEL 2011, 67) provided by the central perspective view. The vanishing point both determines the direction of view and serves as a means for navigation in the pictorial space, to the effect that all objects in the image are being aligned to it. So it is the interactivity that makes the essential difference between looking at static photographs, movement-images (films), and the virtual exploration with Street View, which can be understood in this sense as an action-image.

The necessity of active navigation inevitably presupposes a user operating the interface, and it is not until the moment of navigating that he provides the image with spatiality. The possibility of navigation in the first-person perspective indicates an 'ego', a point to which

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4   http://www.sueddeutsche.de/digital/google-street-view-zeigt-region-um-fukushima-streifzug-
     durch-eine-geisterstadt-1.1635395 (23/07/13).

all objects appearing in the image relate to. Each movement through Namie, each look the user gives those objects through the interface, imply first person. Using the words of LACAN (2001 in: GÜNZEL 2009, 341), this first person is "the one ego, [.] [which] formally belongs to this image". Therefore, it is not an empirical but a structural ego that is "irreducible" since it makes the pictorial object what it is (GÜNZEL 2009, 341). It is ultimately true that every image points to an ego, which makes the pictorial object appear on the image carrier in the first place. In the interaction experience described here, however, the ego as a point of view overlaps with the observer, the explorer.[5] This ego is hence implicitly included in the image and can only be experienced in isolated moments, e. g. in the moment of 'being seen' (see figure 1).

Fig. 1:
'Being seen' (GOOGLE 2013, Street View picture)

The other person's regard indicates the formal ego, making it perceptible only for an ephemeral moment as a few clicks later the other person looks away again. Unless the user navigates to this particular place in virtual Namie, the ego in this form will stay hidden from them, or possibly reveal itself at another location. Until now, in this paper Street View has been understood as an image resulting from the primary view. Yet, aside from the primary view, Street View's map view is also an essential feature.

Formally, GSV's map view is part of the image. While "contrary to the central perspective mode [.] the topographical view is [...] no pictorial object creating an impression of spatiality" (GÜNZEL 2009, 344), it is to be understood as "a diagrammatic illustration of knowledge of the spatial conditions" (GÜNZEL 2009, 344). The topographical 'top view' is ascribed an "integral component of the interaction with the pictorial object", since the two are inextricably bound to GSV's experience of the image (GÜNZEL 2009, 344). The application's entire action space is constituted *between* the two views (GÜNZEL 2009, 344). This space between the views only becomes existent for the user in the moment of interaction, and only then is it possible to describe the experience, i.e. the spatiality witnessed in the image interaction. (GÜNZEL 2009, 345).

As opposed to videogames, using the map does not happen only in a simulation, but within the context of an actually existing place (GÜNZEL 2008, 128). This has crucial implications for understanding the virtual exploration of Namie. For although it does exist as a real place, the user can only virtually experience it through Street View. There are two reasons for that: On the one hand, any virtual explorer is faced with digitally merged panoramic

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[5]   Presumably, this overlap would even be greater if GSV allowed for more freedom of movement.

images of Namie from March 2013. On the other hand, ever since Namie has been declared an exclusion zone, it is de facto impossible for people without special permission to experience Namie as a real place. Thus, while a real counterpart to the virtual Namie does (or did) exist, the only thing accessible today is a simulated ghost town. Therefore, it is not possible to speak of the virtual exploration of a real place anymore, but rather the simulation of a ghost town.

2.2   The theme of the uncanny

The paper will now address the question of how the visual tour with Google Street View through Namie can seem uncanny. According to HERMANN SCHMITZ (1981), the uncanny is an atmosphere that spreads. Fear is the "atmospherically encompassing and undivided entirety of the uncanny" (SCHMITZ 1981, 293). Fear is accompanied by the physical reactions of cringing, shuddering or shivering. An uncanny situation facilitates a fascination, a reaction denoting an experience that is characterized by a mixture of horror and curiosity (FUCHS 2011, 170). Along with the tendency to flee there is an expectant suspense, and the antagonism of repulsion and attraction creates a thrill that culminates in anxious, lustful shuddering (SCHMITZ 1981, 293f. in FUCHS 2011, 171).

In the following, however, we are not going to illuminate the uncanny exclusively in the sense of SCHMITZ, since his approach "stays subject to the prism of inwardness as far as spatial experience of a physical subject and its emotions is concerned" (GÜNZEL 2011, 63). Thus, we are not speaking of the uncanny as something that is dependent on a subject or on its subjective emotions because that would mean ignoring the medial properties of the image (GÜNZEL 2011, 67).

In a broader sense, the paper understands the theme of the uncanny as a socio-cultural construct. The specific question posed is to what extent can the uncanny be understood as a social construct. The answer can be unfolded in three interlocked dimensions:

The uncanny as a heterotopia

In his essay "Of Other Spaces", FOUCAULT refers to heterotopia as "counter-sites, (...) effectively enacted utopia in which (...) all the other real sites that can be found within the culture, are simultaneously represented, contested, and inverted." (FOUCAULT 1992, 39).

Namie can be denoted as a heterotopia of the uncanny because the place is a reservoir for the uncanny that is hidden in the usual places of society. It is a reservoir for man's exposure, his rootlessness, for the impossibility of controlling life, for the inescapability of death.

Namie thus becomes a place reflecting social relations in a special way, in particular the boundaries of material safety and the repression of the latently present endangerment in the "reassuring familiarity of being in this world" (HEIDEGGER), by negating and reversing these same conditions: From one moment to the next, Namie becomes a place outside of all places, a "counter-site" or an "abutment", an "effectively enacted utopia" (FOUCAULT) that lays bare the places' logic within their culture.

The Google Street View interface of Namie 'simply' acts as a medial display of this place. Namie, as a heterotopia of the uncanny, is staged and exhibited, and at the same time, the medium itself becomes the setting for the uncanny (cf. BINOTTI 2013, 17) and can thus be experienced as a medium by the user.

The concept of the uncanny

FREUD undertakes a differentiated examination of the meaning of the uncanny (in German '*das Unheimliche*') derived from German etymology to show that the characteristic quality of it is already inherent in the word.

First of all, *unheimlich* can be understood as the opposite of '*vertraut*' ('familiar'). But in the word *unheimlich* there is also the word '*heimlich*' which, apart from 'familiar', can have the meaning of 'hidden'/'concealed' (cf. FREUD 1919, 138ff). According to FREUD, "heimlich is a word the meaning of which develops in the direction of ambivalence, until it finally coincides with its opposite, unheimlich" (FREUD 1919, 145). The uncanny thus encompasses what is familiar as well as its opposite – what is foreign – making its structure paradoxical. FREUD dismantles this contradiction by declaring it the very nature of the uncanny. As a consequence, *das Unheimliche* constitutes the transition from confidant to stranger, the shift from what is strange to what is familiar.

WEIß (1996) introduces a second aspect of the uncanny. "In this sense, the uncanny also represents the radically foreign; it is radically different than anything I have ever encountered in the world" (WYSS 1980, 100 zit. in WEIß 1996, 82). It seems to be familiar but it cannot become familiar. In death, in the form of the dead body, in our fear of solitude, in darkness or silence we encounter something "that, in a radical way, cannot be symbolized" (WEIß 1996, 82). WEIß (1996, 83) assumes the region of the uncanny to be in a transient area that cannot be attributed to either life or death.

The uncanny as an emblem

In the following we will therefore consider the question of which historical-cultural signatures of the uncanny are discernible in the Google Street View projection of Namie. Which qualities can be discovered here that in the course of history have been attributed to places of uncanny experience.

The invasion of the uncanny into familiarity:

Navigating through Namie we find evidence pointing to a sudden change of the circumstances, a shift from familiarity to the uncanny. Virtually moving through deserted Namie we find hints of the situation before the catastrophe, of the lively place and vibrant day-to-day life. Restaurant signs, vending machines still filled with food and a bicycle parking lot conveyed the impression of a strong presence of everyday-life, at the same time highlighting its absence. It is a simultaneous communication of past life and current death. The places seem familiar, but there is nobody to fill them with life. The images effectively force the viewer to take into account and see both mutually exclusive aspects.

Moment of repetition of the similar:

The technical requirements of the Google interface prompt the user to move about in the same and stereotypical way over and over. Predetermined paths restrict movement and only allow for a certain range of motion. In practice, the user can move from one viewpoint to the next by mouse click, whereby the distance between each point is predefined. This routine can be continued indefinitely. An escape from this infinite loop is not possible; the user is practically trapped in restricted space and doomed to endless repetition.

The theme of the window and curtain:

Looking through the windows in Namie one sees only screens, blinds and curtains. The view into the interior is denied. This projection screen or shield keeps the interior's emptiness at an agreeable distance (cf. BINOTTI 2013, 43). The screens protect us from that emptiness and simultaneously indicate that there is something behind them, a possibly frightening reality beyond the familiar reality outside.

In some locations the curtains can be pushed aside; as a result, the sticky reality breaks open and the gap – the absence of human life on the inside – becomes visible, as is the case when we are virtually walking through a school.

Moment of displacement:

The uncanny can also be found in the positioning of objects (cf. BINOTTI 2013, 31). An object appears at a different location than what we are used to, e.g. a ship in the countryside or a car out in a field. With the displacement of the object, the familiar place itself becomes an unknown, i.e. an uncanny place; a place that is immediately unrecognizable.

A displacement also occurs when an object finds itself suddenly uncontrolled, starts to grow and appears before our eyes in such a size that deviates from normality, like the plants that are in the process of reclaiming their habitat.

The ambiguity of the situation:

The threat is invisible, it "can only be sensed through an ambiguity on the surface" (FUCHS 2011, 169). In Namie we are not dealing with the classic blurred structures of the perceptual field like twilight, fog, or darkness through which we have a presentiment of the threat. With the exception of the transitions when clicking from one image to the next, the photos of the town are in fact sharp, bright and clear. Even so, it is possible to sense the threat through this clear surface. Today, the threat does not gradually sneak up on us anymore; it emerges abruptly, an invisible factor lurking in a setting that is familiar on the surface, and strikes suddenly. The mere sense of the threat's presence turns into certainty when we encounter people with Geiger counters wearing protective suits and masks.

Blurring the line between imagination and reality:

The images of Namie present us with something real that we had hitherto assumed to be fantastic of nature. As long as we come in contact with the deserted region by name alone, we are creating the associated images with our imagination. Once we virtually enter Namie, these fantasies will be confronted with actual photos of that place. The lines between imagination, virtuality and reality begin to blur.

Additionally, the lines between Namie's virtuality and the user's reality sitting in front of the computer will blur: The images show us a delimited area that is real.

However, we know that the danger of radiation is much greater than these lines suggest, e.g. on account of the fact that there are nuclear power plants in our close proximity, or due to the pollution of rivers and oceans, which makes radiation a danger for us as well.

The theme of the doppelganger:

Fig. 2:
'Google Street View car in the mirror' (Google 2013, Street View picture)

Here we are dealing with a doubling of the observer position: the user's position and the Google Street View position. The former uses the latter as a matrix for personal observation and is subordinated; all of a sudden, however, the question is: who is actually observing whom? Who watches whom here and who is being watched, and is any of this being recorded?

On top of that, we are dealing with two views that usually are mutually exclusive: The car in the mirror results in a *re-entry* of the observation's blind spot. The eye itself, watching and scanning, enters what is watched.

Encounter with the evil that has special powers:

The Google Street View car is two-faced. While the mayor of Namie asked Google to keep the town's memory alive, for many critics GSV is the personification of evil which is able to observe and spy on us through technical means.

Encounter with death:

As opposed to ghosts, who are generally believed to be physically dead but spiritually active, the undead are fantastic creatures that are deceased but remain in a physical and mental state between life and death, returning to the living to deliver a final message or take revenge for an outstanding score. The GSV car can be considered a theme for the un-dead. Many users are wondering if it is radio-controlled or if there are people (with souls) sitting behind the wheel, exposing themselves to the physical dangers. The destroyed cemetery suggests the desecration of graves as well as the resurrection of the dead who take revenge. The ruins of the buildings are un-dead too. They reflect the destruction, decomposition, and decay of the sick human body (cf. BINOTTI 2013, 66).

2.3   The range of image associations

The next step is to describe the pre-reflexive contexts which the experience of the image is a part of. ARTHUR ENGELBERT (2011, 7) starts from the premise that "by using visual information it is possible to find clues as to how the most diverse pictorial events from different visual media are interconnected in an open picture system". Of particular relevance at this point is the idea that pictures are not isolated entities but exist in a fluid picture flow. This flow is not to be understood as an accurate imaginary picture storage that

can be accessed directly in a particular context. It is rather always *imagery* (WAGNER 2013, 37), an imaginary range of image associations that is composed of many different pictures viewed in many different contexts.

To understand the experience phenomenon it is therefore interesting to know the nature of the picture flow and which recurring themes can be found in the various types of pictures; the initial approach then is to outline the collective visual memory which represents the context for the virtual exploration of Namie. Within the scope of this paper this can only be partially illuminated. Hereafter, the photograph is our medium of choice.

Mutually inspired by soviet dystopian literature[6] and dystopian film, the exclusion zone around the former nuclear power plant of Chernobyl presented an equally appealing, mystical place marked by death. The topicality of this mystification can nowadays be identified in various locations. On the internet there are travel reports and photo series of so-called 'urban explorers' who explore the exclusion zone illegally and present their pictures in blogs[7] (see figure 3). In the photos presented here there are many recurring themes of the town's decay, life and death or the reclaiming of the area by nature.

Fig. 3:   Pripyat, urban exploring (all pictures taken from http://englishrussia.com/)

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[6] The science-fiction novel 'Roadside Picnic' by Russian authors ARKADI and BORIS STRUGATSKY that was made into the film 'Stalker' in 1979 is mentioned quite often in this context.

[7] A concise example of this is the blog *English Russia* (http://englishrussia.com/?s=chernobyl&submit=Search) (10.11.13).

Due to the radiation level still being dangerously high in some places, certain parts of the area are being watched by security forces and cannot be entered without registration on a guided tour, which only helps to increase the zone's mystification. A variety of the pictures presented in the blogs can also be found on the Google Maps view of Pripyat. For although the town cannot be explored with Street View, the corresponding Google Maps view is illustrated with photos uploaded by users.

The photo series presented in those blogs deal with life before and after the 'incident'. They address various aspects like time standing still, decontamination efforts, general issues of local life conditions or even scientific excursions for the benefit of describing and mapping flora and fauna. Nature reclaiming the region, like in Namie, is a recurring topic here as well, and can be found in many pictures and accompanying texts.

These examples show that the way similar themes in different formats are being presented and used is an expression of a specific contemporary approach. The themes recurring again and again suggest that there is a certain notion of the characteristics of the respective places, and one that will be consolidated through continuous reproduction. The examples shown here make reference to the tension between life and death; human and nature; visibility and invisibility, as well as the impossibility of controlling nuclear energy. In the process, the respective places were shown as inhospitable and uncanny but also as mystical and scenic. The virtual exploration of Namie is placed into the *imagery* briefly outlined here, and cannot be understood on its own terms but only ever in the context of the imagery or as part thereof.

3   Thoughts on Dealing with the Imagery of the Image when Teaching Geography

Below we will present three central ideas based on HENRI LEFEBVRES' (SCHMID 2005) theory The Production of Space, as to how the image itself and the connection of image and space can be taken seriously when teaching geography.

1. Understanding the conception of the image

Every pictorial form (photo, film, computer game, GSV etc.) is characterized by a particular image structure, perception and utilization. Even teaching geography is about opening up the image structure (e.g. perspective, vanishing point, ego, point of sight) and about the connection between image structure, perception and utilization. Rephrased as a question: How is the image conceived from a technical and from a formal standpoint?

2. Understanding the perception of the image

Perceiving an image is a process we are not actively involved in. That is why it is an erroneous idea to assume that seeing is constituted through interpretation. The perceiver depends on what he perceives; seeing simply happens. At the same time this perception cannot be thought of as detached from the conception of the image, from the inter-relation between stereogram, representation and interaction – even if it is impossible to formalize this correlation any further. Phrased as a question: How does the encounter of image and viewer take shape?

3. Understanding the experience of the image

Experiencing an image is a physical experience. Also important for this experience are the emblematic traditions and the range of image associations. The esthetic experience – experiencing the image – is about the inter-relation between observer and the observed, about the question of what appears between the two. Phrased as a question: Which traditional emblems can be identified in the image? Or: Which range of image associations does the image fit into?

The interplay of conceiving, perceiving and living the image creates space that continuously changes in the process. The meaning of the image from the standpoint of geography didactics, which includes spatial meaning, can be comprehended when we see the meaning of the image in its imagery in the context of the creation of space; space that we consider a social product. An important issue thereby is the fact that, within the creation of space, contradictions between the highlighted aspects can arise; contradictions that will be revealed through the different approaches.

In these moments it will be possible to detect genuine geographical questions as a starting point for educational processes, which might remain hidden when using a conventional understanding of images.

- To what extent does the image fit my ideas of the place, and to what extent does it not? Where do my ideas of the place originate? What are the differences between our ideas? Does the image entail additional image productions (keywords "global images", "counter images")?

- To what extent is it possible to identify connections between medial display and the physical material place? What changes can be observed? Which experiences does the image present; which experiences does the place present?

- To what extent does the experience of the image impact my/our spatial behavior? (Position on nuclear energy, dark tourism, 'on-site' behavior etc.)

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