

# Representing without misrepresenting: the ethics of case study writing

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Two of the most fundamental concepts in geography are space and place. Place can be defined as space with meaning attached. But there is an obvious question that emerges almost immediately when we start to consider this concept: whose meaning? Coming from Northern Ireland, this social-constructionist approach to place is something I understand very well. Location here is very much riven through with meaning; often, that meaning is at the very least different, if not contested. Drawing on the writing of Young (2008), Enser (2021) suggests that we follow a social-realism approach to place which combines positivism with constructivism. He quotes Lambert (2014, p.7):

*[Powerful knowledge] is created by specialist communities or disciplines; all knowledge is a human construction, but powerful knowledge is made in accordance with some rigorous and demanding procedures and practices, put in place to test knowledge.*

In this approach, place is interpreted, yes; but it is interpreted through the lens of an external, academically sound set of procedures. It is not a 'meaning' free for all.

When it comes to writing case studies for school geography it is important to provide shared meanings about place that go beyond our subjective experience of it. But how do we ensure our own interpretations are as fair as possible and informed by the external objective truths about a place? How do we find a balance between positivism and social constructivism that social realism calls for? As geographers, we want to be able to generalise, to find patterns in place that we can extract and apply to other places. But, even as we do so, that question still remains: whose meaning of place? Or, more broadly, how can we represent place and people without misrepresenting them?

## Representing Guatemala

I was recently grappling with these questions when researching and writing a new A level case study of Volcán de Fuego, Guatemala. The CCEA (2018) A level specification asks us to 'evaluate how a country prepares for and responds to volcanic activity' through a small-scale case study, and I wanted to update my prior case study. However, I have never been to Guatemala or studied any aspect of the country. All my research was going to be taken, in the first instance, from journalistic sources. I knew that these sources would not necessarily contain robust *disciplinary knowledge*, constructed through the rigours of a geographical approach. My challenge was further

compounded by the fact that the specification asked us to *evaluate* – requiring us to make personal value judgments and come to our own conclusions about the effectiveness of the management of the hazard. When expressing personal opinions on the organisations and people involved, how was I to be fair to them?

What follows is an outline of how I attempted to fairly represent the people and place of Guatemala without misrepresenting them.

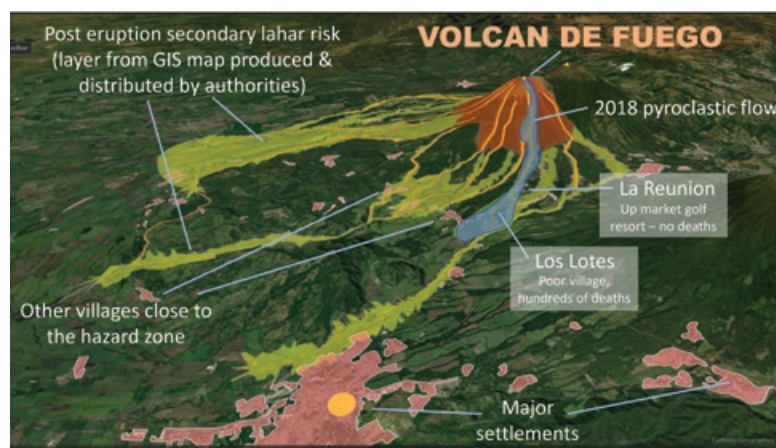
## Be interesting in your evaluations

One of the core skills we want our young geographers to pick up is that of evaluation. Geographers are happy to work with the complexities and grey areas of the real world, as decisions are not always clear cut. We are happy to weigh up evidence and come to reasoned conclusions. Sometimes, evaluations can become quite simplistic: here are a few positive points, here are a few negative ones, therefore 'to a certain extent' overall. I wanted my students to go further than this. I wanted them to get to grips with the subtleties and nuances of the place in question and make value judgements that took strong positions on the management of the volcanic eruption.

An example of where this was possible with Fuego is in Las Lajas, one of the ravines that come off the southern flanks of the volcano (Figure 1). It contained two very different settlements: La Reunión was an up-market golf resort with a luxury hotel; further down the ravine was Los Lotes, a small village marked by poverty and populated by locals who were largely disempowered. When a devastating pyroclastic flow came down this ravine on 3 June 2018 no one died in La Reunión, as they had all evacuated.

*Alistair describes writing an A level case study on Volcán de Fuego, Guatemala, to ensure the people and place were not misrepresented when using secondary sources.*

**Figure 1:** Some of the GIS resources readily available for Volcán de Fuego, allowing us to contextualise this event meaningfully into place.  
**Source:** A Hamill.



However, Los Lotes became the tragic human centre of this eruption, as hundreds of people were engulfed by the flow and lost their lives.

The obvious and powerful question to ask is: why did so many people die in Los Lotes but not at La Reunión? To grapple with a question like this is to delve deeply into not just the hazard itself, but the vulnerability of the people in these two settlements, which reflect the differing socio-economic, political and ethnic status of the groups involved. Thus the class would be able to go beyond the bland ‘positives/negatives/certain extent’ approach to evaluation and the learning would be interesting. The evaluative statement I created for this element of the case study was: ‘The impacts of the eruption revealed that the risk to the locals was more a function of societal vulnerability than simply of the hazards themselves’. This gave us much to explore together, incorporating what Young (2008) refers to as the ‘intellectual power’ that powerful geographical knowledge ‘gives to those who have access to it ... [providing] learners with a language for engaging in political, moral and other kinds of debates.’

## Be fair

Even as I was writing this strong statement, it was important to recognise the cautions of the social-realist approach. My personal value judgements needed to be grounded in evidence; all the more so as I was referring to real people in real places, some of whom put themselves at great personal risk to try to help the vulnerable people in the villages closest to the volcano. There was an ethical dimension to what I was trying to write and I had a moral imperative to be fair.

**Figure 2:** An example of the fact-checking process in operation. This first-hand knowledge from a volcanologist who works with the people involved is invaluable.

**The live monitoring that existed was limited**

Prior to the 2018 eruption, the **Guatemalan officials still only had a single seismometer on the volcano**. In addition, **one thermal IR camera** had been installed at Le Reunion by the University of Bristol/UCL in collaboration with the local monitoring agency **INSIVUMEH**. At the time of the eruption, **however only four temporary volcanologists were available** to monitor all the volcanoes in Guatemala, which is fewer than one expert per volcano. This monitoring system was limited compared to those on

**Fact checking**

**Matthew Watson**  
Incorrect. One volcanologist (Gustavo Chigna) had been at INSIVUMEH for nearly 30 years. Three others were hired in 2015. The key point is that they were on temporary (rolling) contracts with no holidays/pensions.

For example, the village of **Los Lotes**, 9 km from the summit, received little or no communication about the eruption, and hundreds died as a result. However, the luxury hotel and golf course at **La Reunion**, further up the valley and only 7 km from the summit, was evacuated two hours before the large pyroclastic flows arrived, and there were no casualties there. In **El Rodeo**, only 4 km from the summit on the western flanks of the volcano, the community **there feels very neglected by the government**. The community here is made up of resettled refugees from the civil war (1960-1996) and were moved to this land by the government because it was cheap. Road access is very poor, and transport is predominantly by foot. These people feel at very high risk from future eruptions.

**Emma Liu**  
10:07 18 Nov

This is also an important point relating to trust. I also hear similar opinions voiced when I have spoken to communities, and that they may not trust an evacuation order released by a government authority. Many would prefer to trust either their own judgement, or that of a village elder, over emergency managers. However, there is a generally trust relationship between local scientists and the population. This is a problematic situation.

**Figure 3:** An example of the ‘value judgement’ checking process in operation.

## Assembling the case study

How then do I balance those needs to be interesting yet be fair? How do I try to represent without misrepresenting? I will finish this article by giving four suggestions.

### 1. Go to primary sources for fact checking

I mentioned that case study research often begins with articles by journalists. While these are great places to start, ultimately, they are secondary sources, mediated through a journalistic discipline, not a geographical one. As I researched, I came across references to some volcanologists who were working at Volcán de Fuego. Finding them on Twitter was easy and I reached out to them for help. I found them incredibly willing to share their knowledge and assist me. To be able to speak directly to people with first-hand experience was invaluable. I also asked Dr Emma Liu from UCL and Professor Matthew Watson from Bristol University if they would proof-read my draft case study. Although I was nervous while waiting for feedback, the process was very helpful. Figure 2 shows one example of this fact checking in action, where Professor Watson was able to correct information I had taken from a news article. The social-realist approach says that objective truth and accuracy matter, and having this fine-grained checking process was very useful.

### 2. Be open to critique on your value judgements

I needed more than just fact checking. Developing interesting evaluative statements meant that I could be straying into the territory of making strong value judgements. Opinions are different from facts; they are personal assessments based on experience, evidence and so on. But, as someone so far removed from the nation and people of Guatemala, how could I possibly hope to have confidence that my value judgements would be fair? The easy thing to do would be to make bland evaluative statements; the blander I am, the less likely I am to misrepresent. But I wanted to push my students to go further with the evaluative skills – to be interesting. And this is where the input from Dr Liu and Professor Watson was so useful. Figure 3 shows an example of that.

The social-realist approach recognises that knowledge may be contested; that opinions will vary; but that the construction of such knowledge must still lie within the accepted rules of the discipline. Having the volcanologists provide their insights validated the more subjective aspects of the case study.

### 3. Engage in ‘world building’ around the case study

To avoid the danger of the ‘single story’ of Guatemala, I engaged in some ‘world building’ with my students. This also helped to add a powerful knowledge component to the points made in the case study. As Enser (2021, p. 96) states, ‘if we want to create a powerful curriculum, that (moving beyond using a place as a case study of a single phenomenon) is exactly what we need to do.’

These are two brief illustrative examples.

### **The influence of climate on secondary lahars**

To help deepen the students' perceptions of Guatemala, I wanted to give them a broader understanding of the physical and human geography of the country; for example, the climate zone. Given its tropical location, the rainfall totals in Guatemala are quite high and there is always a significant risk of secondary lahars which can cascade down any of the many ravines on the sides of the volcano. I taught the climate zone before the main case study, making connections back to topics including the general atmospheric circulation and biomes which students had studied the previous year. This activated their prior knowledge and allowed them to better grasp the significance of the key ideas. Students read the following phrasing in the case study information:

*Additionally there were ongoing secondary lahars, triggered by rainfall – 33 lahars were reported between 6 and 30 June 2018. These ongoing activities forced the rescue teams to suddenly evacuate the danger zones when the warnings came in, hampering the rescue and recovery attempts.*

It was then easy for me to connect this information back to the points we had made earlier so students could better appreciate the challenges these conditions would bring.

### **The impact of the civil war on societal vulnerability**

Another short section from the case study also needed world building:

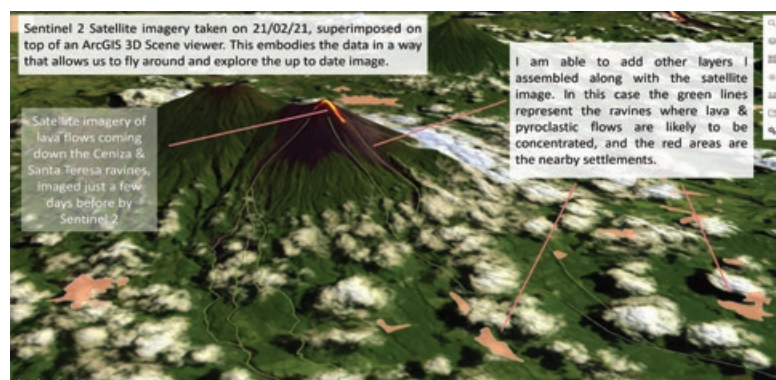
*These villages were populated by poorer locals, many relocated here due to the civil war. Many of these people felt they were moved here by the authorities because the land was cheaper – not because it was safe.*

In my teaching I covered some aspects of the 1960–96 civil war in Guatemala, especially how it resulted in mass internal migrations and the ethnic component of it, as 83 % of the estimated 200,000 killed during the war were thought to be Mayan farmers. Understanding this was important not only because of its own awful, sad gravity, but also to help students to understand why these people who lived in the vulnerable locations were so disenfranchised, and why they felt that they had no option but to leave.

### **4. Use GIS to embed the story in location**

Another benefit of a contemporary case study is having access to up-to-date digital resources to

supplement students' spatial awareness of the place. As well as having access to numerous hazard map layers, I was able to produce supplementary GIS resources that the students could use for virtual visits to the case study sites, to get a sense of scale and location. It also allowed me to show students how the authorities used GIS following the eruption to identify and communicate the locations of the potential hazard risks from secondary lahars. GIS was also used to access information on volcanic activity since 2018. Volcán de Fuego had another period of elevated activity during February and March 2021, and I was able to use ArcGIS to obtain contemporary satellite imagery from Sentinel 2 as it passed over Guatemala and add this information to a 3D scene layer. Students could then explore near-real-time images of lava flows coming down from the summit (Figure 4).



### **Final reflections**

I found the process of writing the Volcán de Fuego case study very satisfying, although it was time-consuming and certainly not something I could do every year. With the new spirit of collaboration in the teaching profession as a result of the pandemic, perhaps this type of activity could be shared by the geography teacher community?

As for my students, they were fully engaged in the case study as we examined it. There is no doubt that was in large part because of how compelling the story of this place is; but, as I had been very open with them in the weeks as I prepared it about what I was doing, I think that drew them in too. More than that, though, as many of these young people move on to university next year, the process served as a model of how to conduct research that went beyond pulling a fact or two from Wikipedia or BBC News. I trust it will stand them in good stead in the development of their evaluative and critical thinking skills as geographers. And modelling the process was as key to that as delivering the case study was. | TG

**Figure 4:** Recent satellite imagery from Sentinel 2 incorporated with other layers about the area around Volcán de Fuego. **Source:** A Hamill.

### **References**

All websites last accessed 27/04/2021

- CCEA (2018) *A Level Geography Specification*. Available at <https://ccea.org.uk/post-16/gce/subjects/gce-geography-2018>
- Enser, M. (2021) *Powerful Geography – a curriculum with purpose in practice*. Crown House Publishing: Carmarthen: Wales.
- Lambert, D. (2014) 'Curriculum thinking, "capabilities" and the place of geographic knowledge in schools', *Journal of Educational Research on Social Studies* 81, pp. 1-11.
- Young, M. (2007) *Bringing Knowledge Back In From Social Constructivism to Social Realism in the Sociology of Education*. Routledge: London.

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