

[REDACTED]


“With reference to AT LEAST one seminar, critically reflect on the practice, and potential contribution to society, of geographical research in the 21st century.”

[REDACTED]

In geography, when you are considering or researching anything relating to how humans value and interpret something, it is essential to remember that ultimately, different people from varying places elucidate different meanings from the same things (Hulme, 2009). Even if for many, such things are concluded to have only linear meanings and implications, this does not equate to unified consensus, understanding and agreement. This is something that is relevant to almost everything, even within science, but is not often fully understood in most cases, thus by studying the geography of these patterns of reasoning we can begin to try to use them advantageously. In this essay I will consider how climate change, as both an inclusive term and in parts, in terms of awareness and interpretation to acceptance and response, could benefit greatly from increased understanding of how and why people interpret, act and respond differently to varying climate change aspects. I will do this by evaluating the role that geographical research has had in climate change.

In the modern day, when people from all over the world are becoming increasingly more connected and aware of the scale of the Earth and the different places within it, geographical research has never been more relevant. Geography, to be put quite simply, is a study of the world in which we live (RGS, 2015). Without geography, there would be less connectivity between disciplines and certainly less understanding in how the physical world impacts upon the human one and vice versa. Geography encompasses so many different research topics, which makes it able to be inclusive of niche research, in terms of the importance it holds on its own but also as part of a bigger picture.

For geographical research to truly have relevance and contribute to society, it must have a long term view in its analysis and an appreciation for the indirect routes that relevance can take (Staeheli and Mitchell, 2005). What is meant by this is that despite the importance of




some types of research in having an immediate effect, a long term impact is often more poignant. Geographical research and understanding is so often centred on time, for example because of the importance of a historical perspective or due to looking at how spatial patterns have and are changing, which is part of the reason why long term perspective is so important.

On the other hand, by being such a broad subject area, some would argue that geography is too broad to be actually considered useful. Take for example climate change – although many would agree that climate change falls within the geographical discipline, individual aspects of the topic are researched by many different people, ranging from chemists, to geologists, to historians and psychologists. Hence, this would lead some to believe that although geographers may have an overview of knowledge, they are more lacking in specialist understanding. Thus, for geographical research to have a strong contribution to society it must not just echo in brief what other researchers have said, but instead introduce ideas and consider than patterns that emerge from research. Geographical research must not just simplify one discipline or another, but encompass ideas and concepts from many disciplines and find connections between them to truly bring something new to the table.

In terms of climate change, both specialist knowledge but also a real understanding of the overall problem is essential, which is why geographers in this instance are best placed to research and understand the climate change phenomenon. Furthermore, geographers are always concerned with the links between different disciplines, particularly between the human and the physical, and climate change is a topic which is strongly transcends the traditional discipline boundaries.

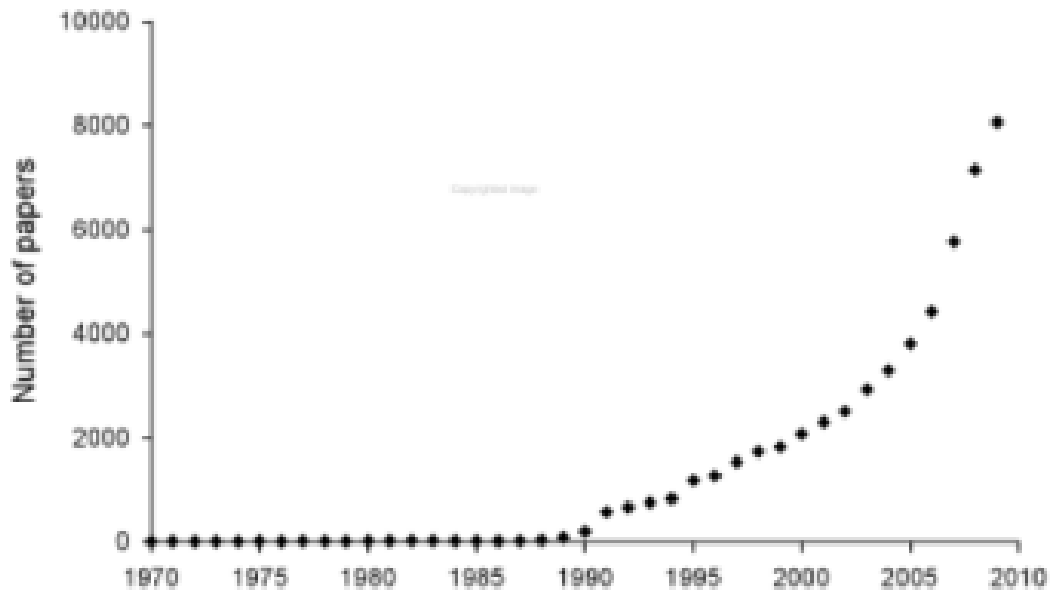
First, I will discuss the history of climate change research. This is important for a number of reasons, the simplest being that by understanding the history of a topic, geographers can provide themselves with a better perspective and understanding of the climate change discourse in the modern day. Furthermore, by understanding the path that discourse and action has taken in the past, we can try to replicate or prevent such events from happening in the future. For climate change in particular, having a historical perspective can be very



beneficial, due to the many various ways that climate change has been understood in the past, as this effects how people view climate change now.

Originally, climate change was seen purely as a scientific phenomenon. Scientists have long studied how the climate changes, and it has been well acknowledged that even without human interaction, the climate does change. Thus, the fact that the climate is changing is not the issue being discussed, despite sceptics often stating phrases such as “I do not believe in climate change” (implying human-induced climate change). From as recently as the early 19th century, scientists – particularly the ‘grandfathers’ of climate science: Fourier (1766-1830), Tyndall (1820-1893) and Arrhenius (1859-1927) – have discovered connections between atmospheric CO₂ levels and industrial activities (Mason, 2013; Hecht and Tirpak, 1995). Since then, numerous other studies have further researched the human-induced climate change theory, and now nearly all scientists agree that the recent warming of the Earth was due directly to increased greenhouse gases in the atmosphere, caused by humans (Doran and Zimmerman, 2009; Oreskes, 2004). However, despite the majority of scientists acknowledging and publishing papers in proof of human-made climate change throughout the 20th century, this was not reflected in either the climate change policy that was (not) produced and implemented and also in the view of the public on climate change. The essential framing of climate change as a global policy debate was not even prevalent until the 1980s, years after the problem was presented as an issue for policy makers (Gupta, 2010). This echoes one of the biggest problems that climate change faces in the modern world, and it’s that people (scientists, politicians and the general public are all included in this, but to varying degrees) are not open to changing their ways. We, as a race, have historically always believed that climate is out of our hands and out of our control. Hence why, despite when we are presented with evidence that suggests otherwise, we are so set in our beliefs that we cannot accept evidence for a contrasting belief.

Climate change really is a 21st century phenomenon. Figure 1 shows a dramatic explosion in the amount of papers being published where climate change is titled or mentioned in the abstract of the paper. Although these papers comment on varying aspects of climate change, hardly any dispute that climate is human-induced. However, this does not translate into the views that people still continue to hold.



seminar series on 'Cultural Theory and Climate Change' really focused on human behaviour and why it is that we will believe certain things and not others, and how our predetermined cultures have a huge impact on how we accept and interpret new, and repeated, information. I found both seminars to be extremely interesting and also enlightening, before this time I had not truly considered the aspects of human behaviour in climate change, and the importance of it was greater than I was expecting. Before considering cultural theory within climate change specifically, I wish to consider other aspects of climate change interpretation and misconception.

Figure 1: Graph taken from Aspinall (2012) which shows the number of papers published with 'climate change' used in the abstract or as a key word, according to citations on the ISI Web of Science. Data is from 1970 – 2009 and uses a log scale.

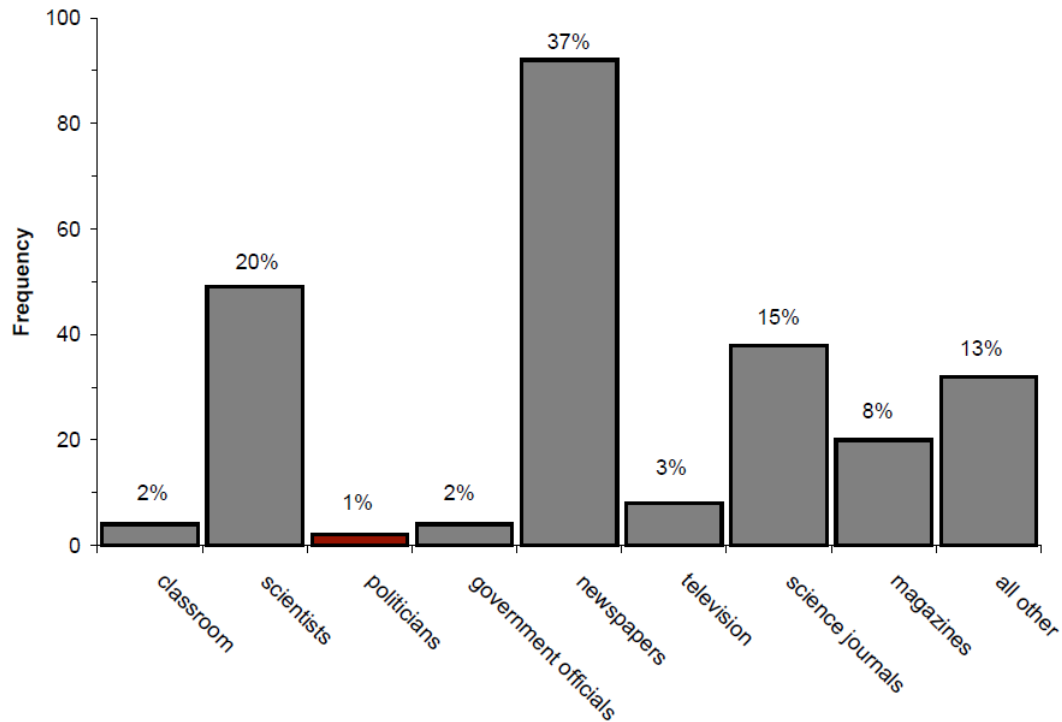
Increasingly, climate change is now seen as much more of a social issue than it is a physical one. However, one group of people in particular that has been slow to pick up on this is politicians, which is reflected in the lack of climate change policy until recently (Sarewitz, 2004). Moreover, even the climate policy that we have in place now is too science based to really tackle the core issues of the climate change debate. For example, the Kyoto Protocol in 1997 set out clear points and principles of what we need to do to stop the detrimental

effects of human-induced climate change, however actual emissions targets of countries were not introduced for a number of years, for example the UK government only brought in its first emissions targets in 2000 (DETR, 2000). Furthermore, altering the embedded perceptions of climate change was recognised in its importance at the Kyoto Protocol and subsequent meetings, but this was not considered to be a policy issue and its importance still is not included within climate change policy today. Even in the most recent climate change meetings, setting and hitting emissions targets is the primary issue. Whilst it is the increased emissions in the atmosphere that are causing climate change, if we successfully want to address this issue more needs to be done to solve the routes of the problem, which all revolve around human behaviour. An additional problem is that climate change does not travel well between different scales, which partly contributes to why it can be struggle to move global issues such as climate change from the global, to the national and to the personal level (Hulme, 2008).

Cultural theory, as discussed in [REDACTED] lectures, tries to understand why it is that there is such a misalignment between the scientific research and belief, and how this subsequently effects how people behave in terms of climate change (Jones, 2011). People in general, are more worried about things that can be seen, and things that impact us directly. For many people, it does not feel as if climate change has directly impacted them, other than hearing about it often in the media (Kahan, 2010). Hence the proverb 'out of sight, out of mind'. Often climate change is seen as being a problem for someone else, as it does tend to be less developed countries that are more at risk for number of reasons, such as already having more extreme weather events but also due to their general lack of good governance and mitigation (Mirza, 2001).

Another aspect to consider is that most of the general public do not regularly or ever read research papers or specialist books, unless they are already in some way involved in the subject area. However, the majority of people in the developed world look at social media and a large proportion read newspapers and online news articles. The problem here lies with the fact that journalists are more concerned with writing what people want to read about, rather than writing the exact truth. This in turn, ends up being an endless cycle of knowledge – journalists will look at what stories are selling well by looking at popular news

articles, and this results in the same old, most interesting, most opinionated and most headline catching articles being regurgitated. See Figure 2 below which shows that the most common resource that journalists look at for finding information on climate change is




newspapers.

Another interesting point brought up in the seminar series, involves how climate change knowledge flows from one person (or group of people) to another. [REDACTED] discussed how risk, control and similarity all play large roles in how information moves and is interpreted by different people across places. A religious person would be much more likely to be agreeable with the view of another religious person, and this is not just because they have a similar cultural predisposition. You are more likely to agree with someone else's view if you already know beforehand that you agree with their other views (Kahan *et al.* 2011).

Whereas if it was someone that said religious person distrusted who provided the same view, they would be less likely to agree with them as emphatically or at all. Furthermore, Hulme discussed how humans are very stubborn creatures. We do not like change, and when it comes to something as unstable as climate change, as long as someone else does not believe it, that gives others a reason to not believe in it either.

Figure 2: Graph taken from Wilson (2000) which shows the primary resources used by a sample (two hundred and forty-nine) of American journalists when seeking information on climate change.



Cultural theory begins to explain the cultural predisposition that someone will have. It certainly varies between places and scales, which is part of the reason it has been so difficult to move the issues of climate change into the public eye. Cultural theory, originally developed by Mary Douglas, was developed as a way to group people to understand how culture and values will impact how these groups react and interpret something such as climate change (Douglas and Wildasky, 1982). Four typologies were found, namely:

- Egalitarians – reject social stratification and value shared commitments
- Individualists – value a free society with few group constraints
- Fatalists – not part of collective groups but still feel constrained by the actions of others
- Hierarchs – value clearly defined roles and strict societal ordering (Jones, 2011).

It is of course possible, and likely, that most people will demonstrate traits from more than one typology. However, the majority of people are still likely to find their views sit mostly within one category. Cultural theory can have a contribution to climate change and society because it can help to understand why a group may react in a certain way. Furthermore, when studied effectively it can even help predict how people will respond to a new piece of work or idea. For example, it has been demonstrated that so far, there has been a distinctive and consistent relationship between the attitudes of these groups across a wide variety of environmental issues, not just climate change (Ellis and Thompson, 1997).

To conclude, ultimately, if something does not have a ‘contribution to society in the 21st century’, does this make it irrelevant? Just because something – geographical research or otherwise – is deemed to not be particularly useful or to have a direct impact on society, does not make it unimportant and not relevant. Simply not being able to pinpoint the direct consequences of something, does not mean to say that it did not indirectly impact society in some way, *even if* it is not possible to find these links. In the end, it is essential to remember that society is a *group of individuals*. If only one person is affected by something, this is still a contribution to society, albeit a small one. Furthermore, relevance and contribution to society are by no means mutually exclusive; something may have a huge contribution to

society but not be relevant to a large group of people. Relevance and contribution are not predetermined, but instead something that is enacted by humans.

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