

Global warming and the role of language in social transformation

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This paper explores the proposition that the world is shaped by language. It takes as axiomatic the notion, familiar to critical discourse analysis (CDA), that language (discourse) and society are mutually constitutive. It reviews several key notions of CDA, including framing, presupposition, naturalisation and memetic transfer to develop a model of the processes involved. Just as the institutional structures in society have been shaped, over the years, by the discourses that have circulated about them so, it is argued, the future of the planet depends on the successful naturalisation of the 'human agency hypothesis' in the matter of global warming. The paper uses CDA tools to examine a blog which advances the 'anti-human agency' hypothesis, to explore the way such ideas might be spreading around the worldwide web today. Although up to 97% of the world's scientists accept that human industrial activity is responsible for climate change, the fact that protocols such as that of Kyoto (1992) are consistently flouted demonstrates that meaningful social change has yet to result from widespread acceptance of the idea. The opposite hypothesis still finds supporters in the global business community and the U.S. Republican Party. Human agency in climate change, then, can be seen as the ultimate test case for the proposition that language and the social world are mutually constitutive, since the survival of the planet itself is at stake in the conflict between the two hypotheses.

Key words: critical discourse analysis, memes, presupposition, ideology, framing, naturalisation, ecology, global warming, climate change.

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1.i. Introduction

This paper explores the proposition that the social world is shaped by language. It explores an approach to language, Critical Discourse Analysis, which has attempted, over the last forty or so years, to present a systematic account of the processes involved.

It describes the current debate on global warming as one which sees two competing discourses on the topic in conflict for hegemony; on the one hand, the 'human agency hypothesis', which claims that mankind is responsible for the phenomenon, and that dire consequences will follow for the planet if appropriate measures are not taken. On the other, the hypothesis that global warming is due to some other factor/s. The shape of our future world and, arguably, its very survival, will depend on which of these views succeeds in supplanting the other. In the famous words of Gorgias of Lentini, language is a powerful lady.

1.ii. Language

We have on the one hand experience, and on the other hand language, which symbolically represents it (Bloor and Bloor 1995: 108).

Language might be thought of, in cognitive terms, as a reflection of realities that each language group conceptualises using different phonological and graphological elements¹. People use it, in Halliday's phrase, to 'organize their experience' (Halliday and Matthiessen 2004: 310). The specific set of words they learn depends on the language spoken by the speech community they are born into. Halliday suggests that construing our experience, of inner and outer worlds, is one of the basic functions of language, and refers to this as the 'ideational metafunction' (Halliday and Matthiessen 2004: 640). As Resta (1998: 2) notes, language plays a fundamental role in what Berger and Luckmann (1966) first termed the 'social construction of reality'.

Language, then, is partly a means of representation, and such basic notions account for what is going on in sentences like:

1. There is a cat in the garden.

The ideational content of such a phrase is straightforward, though we don't know if the cat is male or female, tabby or tortoise-shell, nor whether the garden is full of roses or cacti. Such information if necessary can easily be added.

They are inadequate, however, in dealing with phrases that describe more complex realities. Phrases that are coloured by the speaker's conscious or unconscious beliefs, views, opinions, ideologies, prejudices, life-experience, and the like. Consider:

2. Jack made a doll's house yesterday.

3. In the beginning God created heaven and earth.

The eight words of (3) are grammatically simple, describing what Halliday calls a 'material process'², someone making something, like Jack in (2). However, the two phrases, though apparently analogous, are quite different on closer examination. A listener might object, hearing (2) that 'it wasn't Jack who made the doll's house, it was Michael'. Or, 'it wasn't a doll's house that Jack made, but a dog's kennel'. Both hearer and listener are in basic agreement about the nature of the material process in question: *someone made something*. In (3), however, an agent of the material process is posited, whose very existence the hearer may be inclined to question. Other differences are that, while speaker and listener in (2) both know what 'a doll's house' is (the 'goal' of the material process), the precise nature of 'heaven' in (3) is uncertain. As for the temporal clauses, while 'yesterday' is straightforward, 'in the beginning' is a notion which modern science has made debatable. Language is used, in (3), to serve precisely the same function as it does in (2). The grammatical formula seems to confer ontological status on its content in both cases. To put it another way, the formal and functional

¹See Pinker 1994: 73-78 for a cognitive account of language.

²For this and other instances of Hallidayan terminology, see Bloor and Bloor 1995.

similarities in the two statements mask the fact that a fundamental difference between things that are *realis* and things that are *irrealis* is being blurred, and the confusion can only be resolved by the critical faculties of the hearer.

Halliday's notion of language as a system of ideational descriptions, then, is straightforward as long as representation does not involve implicit ideologies or belief systems. Where such factors are involved, a more complex account is required.

1.iii. Critical discourse analysis

Such perspectives are at the heart of the project of Critical Discourse Analysis (CDA), a linguistic movement which began in the 1980s among a group of researchers at the University of East Anglia including Gunther Kress, Tony Trew, Robert Hodge and Roger Fowler, whose work was carried forward by, amongst others, Norman Fairclough, Teun van Dijk and Ruth Wodak. How the world is represented, these writers suggest, is not a politically neutral action; rather, representation involves the '*conscious or unconscious beliefs, views, opinions, ideologies, prejudices and life-experience*' of the speaker. Language is viewed as a site of negotiation and struggle.

For language in this social sense, the term 'discourse' is frequently used in CDA (Fairclough 1995: 7). In general terms, discourses are language with 'cultural, political and historical meanings' (Wahome 2011). Fairclough (1999: 154-5) explains the relationship between language as text, language as discourse and the social structures they affect as follows:

it is that relationship to orders of discourse that mediates the connection between detailed semiotic/linguistic features of texts and interactions, and social and cultural structures and processes

It is axiomatic then, for CDA, that discourses are 'socially constitutive as well as socially conditioned' (Verdoolaege 2008: 43; see also Resta 1998: 6). This means that discourses are part of processes of social struggle, in which power relationships are inevitably involved (Fairclough 1989: 163). The relationship among these three factors can be represented as follows (figure one):

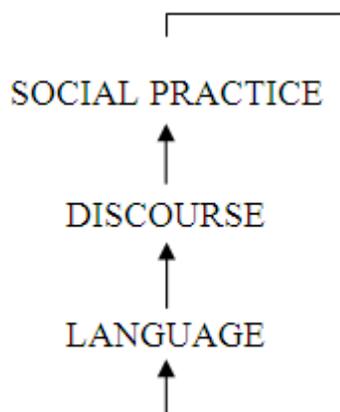


Fig. 1 Language/discourse/social practice

Victorious discourses, then, shape the world. The institutional structures in society have been shaped, over the years, by the discourses that have circulated about them. In Britain, for example, in the sphere of public health, post-war sentiment and public debate led, in 1948, to the foundation of the National Health Service. In America, believers in the role of private capital fought a fierce battle of words against the notion that the state should provide health care for tax-payers. This controversy shaped Obama's recent healthcare reforms.

One of the forefathers of CDA was the English novelist, George Orwell, who, in his major works, denounced language manipulation by totalitarian regimes. However, in his essay *Politics and the English Language*, he showed that linguistic manipulation is also found in western democracies:

Political language has to consist largely of euphemism, question-begging and sheer cloudy vagueness. Defenseless villages are bombarded from the air, the inhabitants driven out into the countryside, the cattle machine-gunned, the huts set on fire with incendiary bullets: this is called pacification. Millions of peasants are robbed of their farms and sent trudging along the roads with no more than they can carry: this is called transfer of population or rectification of frontiers. People are imprisoned for years without trial, or shot in the back of the neck or sent to die of scurvy in Arctic lumber camps: this is called elimination of unreliable elements. Such phraseology is needed if one wants to name things without calling up mental pictures of them³.

The use of such techniques has been found in critical studies of the discourse of globalisation:

Workers get 'dehired', 'selected out', 'transitioned' 'surplussed', 'excessed', 'rightsized', 'uninstalled', or 'managed down'; or, they become the objects of 'workforce adjustments', 'headcount reductions', 'negative employee retention' or 'a volume-related production schedule adjustment'. (de Beaugrande⁴)⁵

Orwell's phrase, 'to name things without calling up mental pictures of them', is only half an explanation. Rather, CDA authors would claim, such labels are applied to a range of social phenomena by those whose (economic/political) power enables them to choose how they will be referred to in public discourse. The terms in Beaugrande's list have a technical, pseudo-scientific sound, making the process of throwing people out of work seem a depersonalised business, dictated by the objective requirements of the firm. On the other hand, terms like 'unemployed, on the dole, given the sack, laid off, made redundant, jobless, out of work' and so on, feature the suffering of the individual worker. In terms of smoothing the path for multinational corporations to behave as they wish towards their workforce, the former set of terms is preferable.

1.iv. Some techniques of CDA: framing, presupposition, naturalisation and memetics

³ See webliography

⁴ See webliography

⁵ Examples of such 'doublespeak' are abundant on the web, e.g.: "There are companies whose business is helping other companies fire their workers (...) These companies provide "termination and outplacement consulting" for corporations involved in "reduction activities." <http://dt.org/html/Doublespeak.html>, last visit 12/03/2014

1.iv.i. Frames

Frames are cognitive structures which enable individuals to confer meaning on their experience, and were first systematically explored by Goffman in his book *Frame Analysis* (1974). He introduces the concept as follows:

When an individual in our western society recognizes a particular event, he tends, whatever else he does, to [...] employ one or more frameworks or schemata of interpretation which is seen as rendering what would otherwise be a meaningless aspect of the scene into something that is meaningful(1974: 21)

Example: the man held out his hand. The car stopped. Whether we interpret 'the man', in this sentence, as a policeman, or a hitch-hiker, is unimportant. The point is that signs - in this case, linguistic signs - trigger interpretative schemata that enable us to form hypotheses about what, in Goffman's phrase, 'is going on' (1974: 46).

This concept has great importance for CDA. As Edwards (2005: 15), says, framing means to organize information in such a way that a particular interpretation or meaning is favoured. For example, George Lakoff has argued that Republicans use framing to enlist covert support for their policies. After a discussion of the 'progressive worldview', which is based on 'a nurturant parent family' and the contrasting 'conservative worldview, the strict father model', he says:

Project this onto the nation and you see that to the right wing, the good citizens are the disciplined ones - those who have already become wealthy or at least self-reliant - and those who are on the way. Social programs, meanwhile, "spoil" people by giving them things they haven't earned and keeping them dependent⁶.

Many people, of whatever political persuasion, probably accept the notion that it is possible to 'spoil' children by heaping too many good things on them. The Republican frame therefore appeals to listeners' experiences of parenthood, subtly influencing them to accept right-wing policies of removing social support structures.

1.iv.ii. Presupposition, access

As Renkama (2004: 136) explains, presupposition refers to the implicit content of a proposition. If someone says they have given up smoking, it is presupposed that they used to smoke. Chilton (2004: 187), discussing a statement of G.W.Bush's: 'this world he [God] created is of moral design', comments that the statement presupposes that God created the world and also the fact that he exists.

In CDA, presupposition can refer to an attempt to pass things off by verbal sleight of hand, using language that presents things as matters-of-fact which are really debatable (see Van Dijk 2003: 100, Götzsche 2009: 176, Fairclough 1989: 153-4, Fairclough and Wodak 1997: 258, Benwell and Stokoe 2006: 114). British Prime Minister Tony Blair did this many times in his remarks on the Iraqi crisis. For example:

⁶See webliography

6. Saddam Hussein is continuing in his efforts to develop weapons of mass destruction⁷.

This represents a state of affairs as continuing, when we know, with the benefit of hindsight, that it never began. One of the difficulties with presuppositions, in fact, is that they are hard to contest in real time. As Chilton (2004: 64) says

it takes effort to retrieve, formulate and challenge a presupposition – the effort being both cognitive, and, since a face-threatening act is involved, also social.

Not only that, but since presuppositions such as that in (6) may be contained in a political speech, it is not certain who among its intended hearers might be in a position to challenge it. The speaker may be in a context where neither debate nor question-and-answers follow the speech. Arguably, the intended audience for a speech on the Iraqi crisis was the British public, who Blair hoped to win over to his favoured military policy. They have no means of challenging such presuppositions.

This raises the question of access to public debate, which has also been given attention in CDA studies. Though freedom of speech is taken for granted in western democracies, in practise very few social actors have the power to disseminate their views, influence public opinion and affect the shape of human society. As Myles (2010: 75) notes,

Journalism [...] functions in a field which is structured by class inequality and especially so in relation to economic resources and access to the media.

Such access is an effect of economic/political power. As Fairclough (1995: 52) puts it, the favoured interpretations of events in media representations, are those of 'the power-holders in our society'. Social actors who enjoy it tend to come from the business community; multinational corporations, bankers and prominent businessmen, or from the fields of politics (Hart 2010: 123), media and entertainment. The mass media is the main channel by which public opinion is influenced (Thornborrow 1999: 56), and will broadcast or publish anything likely to make news. The winner of a reality programme, who enjoys a brief moment of fame, will also have temporary access to public debate. However, any influence on serious issues that such a person might have will be a drop in the ocean. The social world is really shaped by the capitalist/consumerist discourse that pours in a daily stream from all media in the form of advertisements and infotainment (O'Toole 2011: 188, Fairclough 1989: 35), positioning the audience as consumers in a world to which no alternatives are permitted (Castells 2009: 118)⁸.

⁷Daily Telegraph. See webliography.

⁸That there is no further development beyond the globalised liberal marketplace is the theme of Fukuyama's 1992 book *The End of History and the Last Man*. He speaks, for example, of the 'continuing convergence in the types of institutions governing most advanced societies', and of the 'homogenization of mankind [...] as a result of economic development' (p. 338). See also Castells 1996: 92–3.

1.iv.iii Memetics

Memetics originated in the work of naturalist Richard Dawkins, who compared the propagation of ideas throughout a society to the spread of genes, which 'replicate and sometimes mutate' (Chilton 2011: 182) in the human body. 'Memes' are the basic units of knowledge in a culture, which are transmitted from mind to mind, and from one society to another (Mazar 2010: 568). Dawkins suggested the possibility that they might have a role to play in manipulative mind control by powerful social actors. That the great mass of 'ordinary' humans are herded by the powerful few into forms of social organisation that suit the latter is almost axiomatic, as we have seen, for CDA. However, Chilton (2011: 182) points out a crucial difficulty in this area. Dawkins' notion of memetic transfer relates to impersonal processes. The ideas propagate themselves blindly, with no reference to human will or agency, just like processes of genetic transfer of information. They are even compared, in the case of religious ideas, to viruses which attack and infect systems of thought (Levinson 1999: 64). This vision contrasts with the notion of thought control deliberately exercised by powerful social actors. Despite this limitation, the notion that the process of naturalisation of propositions which were once debatable might occur in some such fashion is persuasive, and Chilton himself explored its role in the spreading of anti-semitic sentiment in a study of Hitler's *Mein Kampf* (2005).

1.iv.iii Naturalisation

Once a particular discourse becomes especially familiar, it is said, in CDA, to be 'naturalised'. This means that it becomes part of the zeitgeist, it becomes uncontroversial, it occasions no public debate (Sunderland and Litosseliti 2002: 19, Ellis 2007: 42). This is the final outcome of the process of discursive strife which I have been outlining in this summary of CDA (see Fairclough 1989: 90-93). Today's globalised political/economic world, in which the invisible bosses of powerful multi-national corporations rule their vast empire of consumers, can be seen as the last stage in a debate with dialectical marxism, whose representative, Soviet Russia, was the losing side in the cold war. Whatever strife remains will occur in the context of an all-embracing model of social, political and economic organization whose fundamental tenets are those of the capitalist system: the right to produce, to make profits, and to consume. These assumptions are now widely thought of as 'common sense', which Fairclough (1989: 92) identifies as itself an 'effect of power'.

In the field of ecology, the discourse that mankind should continue to use oil-based technology to meet its energy needs is not a naturalised one; there is still vigorous debate on the topic. In recognition of the growing power of the green lobby, oil companies today pay lip service to ecological principles, branding themselves as environmentally friendly (Vasta 2005). However, alternative sources of energy are discouraged in mainstream discourse. The very term 'alternative', used for wind, solar and hydro energy *presupposes* – and also helps to *naturalise* – the notion that the standard energy sources are oil-based ones.

2. The question of global warming

The world can currently be divided into two broad camps, on a vital issue for the future of the world. On the one hand are those who believe that the climate has changed over recent years, that the planet's temperature is heating up, and that this is due to human activity, in particular to uncontrolled levels of CO₂ emissions in industrial societies. In 2010, for instance, a report was published by the National Research Council, the research body of the U.S. National Academy of Sciences, which claims:

A strong, credible body of scientific evidence shows that climate change is occurring, is caused largely by human activities, and poses significant risks for a broad range of human and natural systems⁹

This view enjoys the support of the global scientific community. NASA's website, for example, carries the claim that 97% of world scientists agree that 'climate-warming trends over the past century are very likely due to human activities'¹⁰. On the other side are those who deny the basic hypothesis, find alternative causal explanations, suggest conspiracy theories, and so on.

Because the overwhelming majority of scientists worldwide accept the proposition, it might be thought that the hypothesis would be universally accepted, that it might, in CDA terms, have become 'naturalised', and appear as common sense. However, the latter opinion has supporters in certain influential sectors of the economy, especially the fuel and manufacturing industries, and among their political spokesmen. When an unseasonable cold spell hit the U.S.A. in January 2014, for example, Texas senator Ted Cruz joked: "It's cold. Al Gore told me this wouldn't happen."¹¹ The joke aligns democrat Gore, a prominent environmentalist, with the human agency hypothesis, and republicans – Cruz's natural electoral supporters – with denial. If the hypothesis should ever become 'naturalised', there would be serious repercussions for the business interests that represent the Republican party's traditional allies. To become greener would involve them in unacceptable expenditure increases in order to meet environmental targets. There is, therefore, an economic motive driving climate change denial¹².

The next section critically examines some discourse on the question of global warming, from a website that rejects the human agency hypothesis.

3. Data: Roy Spencer's global warming blog¹³

We have already discussed, and rejected, the notion that ideas, beliefs and opinions can be imposed on a global scale, in top-down fashion, by powerful social actors motivated by the vested interests of a capitalist system. Even in an Orwellian world such as that of the novel *1984*, though officially approved 'truths' were disseminated by a state-controlled mass media, rebellious thoughts that differed from the party line could not be eliminated altogether.

In such a world, the mass media are controlled by the political centre. Arguably, though, the most potent medium by which ideas are currently propagated in today's real world is via the worldwide web. The spread of ideas by means of internet forums such as youtube, twitter, facebook and blogging seems in keeping with the Dawkinsian notion of memetic transfer. Ideas are posted, for example, on a blog, by anyone with a computer and an internet connection. They are read around the world by an audience which the writer has no knowledge of, and passed on (e.g. by 're-tweeting') to other readers of which s/he has no knowledge. They may receive anonymous comments, which will form part of an informal debate on the issues discussed, and will have their weight in the invisible

⁹Climate Change at the Academies. See webliography.

¹⁰Global Climate Change. See webliography.

¹¹Mother Jones. See webliography

¹²On December 23rd 2013, the Scientific American published an article claiming that, between 2003 and 2010, 140 foundations had contributed \$558 million to climate denial organisations, and that oil company Exxon had been heavily involved in funding such organisations in the period from 2003-2007:

¹³Roy Spencer, phd. See webliography.

discursive processes that ultimately shape opinions and views around the planet. Castell's words (2009: 69) capture this random, 'mimetic' function of internet posts:

any post on the Internet, regardless of the intention of the author, becomes a bottle drifting in the ocean of global communication, a message susceptible to being received and reprocessed in unexpected ways.

Roy Spencer's *Climate Change blog* is one such bottle on the ocean of global communication. His bio page gives details of a background in scientific research including a career with NASA, and explicitly proclaims his independence from groups of vested interest:

He has never been asked by any oil company to perform any kind of service. Not even Exxon-Mobil¹⁴.

Spencer's is a dissenting voice on climate change. Here is the first part of his discussion of global warming¹⁵:

"Global warming" refers to the global-average temperature increase that has been observed over the last one hundred years or more. But to many politicians and the public, the term carries the implication that mankind is responsible for that warming. This website describes evidence from my group's government-funded research that suggests global warming is mostly natural, and that the climate system is quite insensitive to humanity's greenhouse gas emissions and aerosol pollution.

Believe it or not, very little research has ever been funded to search for natural mechanisms of warming...it has simply been assumed that global warming is manmade. This assumption is rather easy for scientists since we do not have enough accurate global data for a long enough period of time to see whether there are natural warming mechanisms at work.

The three central CDA mechanisms discussed above were framing, presupposition and naturalisation, and the analysis that follows will use these analytical tools.

The text frames the issue as part of a *scientific debate*. Thus, it uses scientific language like the noun phrases 'global-average temperature increase'(1), 'government-funded research'(4), 'greenhouse gas emissions'(5), 'accurate global data' (9), etc. It uses terms from the lexicon of science such as 'evidence', 'research', 'system', 'funds', 'mechanisms', 'assumption', 'scientists', 'data', etc. Such a frame suggests that what is proposed is not simply the writer's opinion; rather, factual or truth status is claimed for the views set out. To the extent that scientific discourse is authoritative, and scientists generally regarded in society as reliable sources of information, this is a persuasive frame.

The writer frames himself as a 'whistle-blower', as someone whose credentials, outlined above, mark him out as a member of the scientific community with relevant experience of the way research is carried out in this sector. His 'believe it or not' (7) positions himself as one speaking directly to Joe Public, critically commenting on the curiously 'unscientific' behaviour of his colleagues. Criticism of his colleagues, however, is mitigated by the excuse he provides, the unavailability of scientific data (9-10). Since his argument is constructed in scientific terms, he cannot afford to go too far in discrediting the

¹⁴About. <http://www.drroyspencer.com/about/> last visit 21/03/2014.

¹⁵Global Warming. <http://www.drroyspencer.com/>, last visit 21/03/2014.

processes of science.

The writer claims that his website will demonstrate two things:

- a) that global warming is mostly natural (4-5), and
- b) that the climate system is quite insensitive to humanity's greenhouse gas emissions and aerosol pollution (5-6).

The first claim is hedged, by the use of the adjective 'mostly', which allows for the possibility of partial human responsibility for global warming.

There are several important presuppositions. Firstly, the presupposition that *Nature is benignant and nurturing*. This allows the author to advance an implicit argument along the following lines:

SINCE Global warming is not a man-made but a natural phenomenon

[And SINCE (presupposition) Nature is benignant and nurturing]

THEREFORE we should not worry about global warming

Spencer's position on global warming, stated elsewhere on his site, is that fluctuations such as the current temperature increases have happened before in history, and that most probably the current increase will eventually be balanced by nature itself.

Secondly, the presupposition in lines 7-8:

very little research has ever been funded to search for natural mechanisms of warming

This presupposes that, had there been such funded research, it would have uncovered the results Spencer expects.

Thirdly, the text presupposes that there are only two alternatives; either global warming is a natural phenomenon or it is man-made. Other solutions are not envisaged. It might be suggested, however, that man's contribution to the phenomenon – which the writer implicitly acknowledges, thanks to the hedging just described – might represent the last straw, which has tipped the system towards catastrophe.

Spencer's assertion that many people think that the term 'global warming' includes the notion of human responsibility (3), is a perfect description of the phenomenon of naturalisation. It does not seem, in fact, thanks to the efforts of environmental pressure groups, scientific research, government initiatives, international climate conferences, TV programmes and other forms of mass media coverage of the topic, that human responsibility for global warming appears to be generally accepted as 'common sense'. Science has a long tradition of exposing 'common sense' positions as mistaken, which helps explain Spencer's argumentative frame. The problem, of course, is that he is setting himself against the overwhelming majority of his colleagues and their research findings. This involves him in a double-bind, since he cannot claim the authority of science as backing for his own favoured hypothesis and simultaneously reject it for the hypotheses of other scientists.

Spencer mixes scientific argument with a more popular approach in his blog. The following

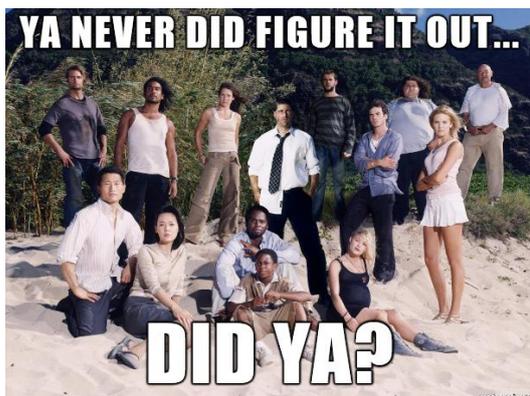
post explores a current issue, the mysterious disappearance of an airliner over the Indian Ocean¹⁶:

Did global warming take down Flight 370? March 20th, 2014

Sure, why not? I can't believe this explanation wasn't near the top of the list from the beginning.

If CNN can entertain the possibility that an errant black hole did it, why not global warming?

Look at all the evidence we had from the TV series Lost...but there never was a good explanation for what happened to that flight, right?



How might global warming be involved? Well, let's see. There are those mysterious megacryometeors (falls of giant pieces of ice, even out of a blue sky), which Jesus Martinez-Frias, a planetary geologist at the Center for Astrobiology in Madrid, Spain, tried to tell me are due to climate change. Maybe one of those smacked the plane.

Or, what about a rogue jet stream, disrupted by global warming, suddenly arising and causing so much tail wind that the jet loses lift and drops out of the sky?

C'mon folks, lets' use our imaginations! Surely we can do better than black holes!

This text uses a much more popular frame, 'dumbed down' and even 'anti-scientific'. The frame is conditioned by the presence of the photograph, from a popular American television series, which was based on the mysterious disappearance of a passenger aeroplane. There is no logical connection between the disappearances of either aircraft and the global warming debate. By making one, the writer frames the debate itself as part of popular, mass media discourse. He refers to a suggestion discussed on CNN, that 'black holes' were responsible for the disappearance (3,12), a patently absurd claim, as is the author's ironic suggestion that climate change could have been responsible (2-3). Black holes are mysterious objects operating at a vast distance from the Earth. There is no conceivable way they could have affected the missing plane. By analogy, the writer frames climate change as similarly remote, and just as unlikely to have anything to do with human events. The idea, then, is subtly conveyed that climate change is something distant from the human sphere, as unlikely to be affected by human activity as are black holes themselves.

The pro global warming scientists are mocked and associated with this absurd scenario. The idea that a megacryometeor could have been responsible for the plane's disappearance (9) is

¹⁶Did global warming take down flight 370? See webliography.

extremely improbable; by association, Spencer hints that the notion that the phenomenon of chunks of ice falling from the sky is due to global warming (7-8) is equally unlikely. The text presupposes that the suggestion, that global warming was responsible for the disappearance of the plane, originated in the same scientific community whose research Spencer aims to discredit. In point of fact, no source is given for the suggestion in the text's title (1).

4.i. Conclusion

Spencer's blog uses different methods to advance his thesis: on the one hand, he uses a scientific frame, ostensibly to make a contribution to a global debate. His intended readership in this sense are the scientific community and readers with sufficient scientific knowledge to follow his arguments. On the other, he spreads his message more widely, at a different level, using simple language and popular cultural references.

The critical analysis of his blog was not intended to disprove Spencer's arguments or discredit his position. Rather, it was intended to take a sample of the 'anti-human agency' hypothesis, to explore the way such ideas might be spreading around the worldwide web today. A web-site with such content is interpreted as an agent of mimetic transfer, as a carrier of ideas and knowledge, which may influence readers, or may not, according to processes which have yet to be fully accounted for. In Fairclough's terminology, such a website is part of a discourse on the topic, struggling against a proposition which, it claims, has already become naturalised.

Whether or not there is truth in Spencer's claim, that the human influence hypothesis has become naturalised, it is certainly true that those who deny the reality of such influence have not given up the battle. Although Spencer distances himself from the suspicion of being the beneficiary of oil company patronage, we have seen that the business community is willing to finance climate denial research. Again, although the strength of the ecological lobby is visible at times of international summits, which produce protocols and global agreements to limit CO₂ emissions, the fact that such protocols are consistently flouted demonstrates that 'common sense' has yet to produce meaningful social change¹⁷.

'Common sense' means, as we have seen, that which is regarded as true by the common people. In the case of global warming, their views are supported by 97% of the world's scientists. It is hard to avoid the conclusion that social practice in this area is not dictated by the views of the people, nor of the scientific community, but by the - numerically tiny - proportion of powerful social actors who control the world's business and financial interests.

That would seem to be a conclusion that contradicts the premises with which this paper began, i.e. that language shapes society, as competing discourses triumph over each other, at various stages of the process of naturalisation. This can be accounted for in two ways. Either it is not true that the human influence hypothesis has become naturalised, or special interest groups are behaving in ways which conflict with the dictates of common sense, not for the first time in human history. Critical discourse analysis might have a role to play in just such cases.

¹⁷The Kyoto Protocol, for example, the United Nations project on emission reduction, was adopted on 11 December 1997, and entered into force on 16th February 2005 (https://unfccc.int/kyoto_protocol/items/2830.php, last visit 25/03/2014). This UN initiative on climate change was dealt a body blow when the U.S., ironically described by President G.W. Bush as 'the world's biggest polluter', refused to ratify it. In 2011, Canada too withdrew from the treaty (<http://www.theguardian.com/environment/2011/dec/13/canada-pulls-out-kyoto-protocol>, last visit 25/03/2014).

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Итальянская унификация. Рикасоли и административная централизация

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В этой статье предлагается рассмотреть позицию, что мир разделен по языку. Существует такое аксиоматическое понятие, как критический дискурсивный анализ, доказывающий то, что связь языка (общения) и общества является взаимообразующей. В нем рассматриваются несколько ключевых понятий, в том числе обрамление, предпосылки, натурализации и миметической передачи разработки модели процессов. Поскольку общественные институты формировались на протяжении многих лет при помощи языка и текстов, которые распространялись в пределах этого социального института, считается, что будущее планеты зависит от успешной адаптации гипотез в области глобального потепления. Газета использует критико-дискурсивный анализ и его инструменты для того чтобы изучить раздел посвященный антигуманным гипотезам, что бы изучить, каким способом идеи распространяются по миру. Хотя, почти 76 ученых согласны с тем что чел ответственен за изменение в климате. Хотя, до 97% мировых ученых признают, что в основном деятельность человека является основной причиной изменения климата. Этот факт подтверждают протоколы из Киото (1992). Противоположная гипотеза все еще находит сторонников в мировом бизнес-сообществе и Республиканской партии США. Агентство, изучающее изменение климата может рассматриваться предположения, что язык и социальный мир взаимно учредительны, так как на карту поставлено выживание самой планеты.

Ключевые слова: критический анализ дискурса, мемы, предположение, идеология, кадрирование, натурализация, экология, глобальное потепление, изменение климата
