The Role of Inference in Constructing, Communicating and Sustaining Behaviour Change Arguments

Kate Pangbourne, Al Baker-Graham, & Simon Wells

We examine the inferences that the designers of behaviour change interventions aim to produce in their target audience and the mismatch that can occur when such interventions are deployed in public. To do this we discuss intention with practitioners and compare those inferential intentions with evidence of mismatches drawn from social media examples. This enables us to explore the role and complicating factors that social media and digital technologies bring which can cause persuasive public communication to misfire.

Communicating to communities of people with established, perhaps even entrenched behaviours is a tricky and delicate task that has great potential to go wrong. The consequences of poor communication can undermine preparatory work and investment that may have been conducted over years, if not decades, to construct favourable conditions for a major societal shift. Such preparatory work often encompasses harder, legislative and regulatory work, and softer, public information and communication activities. We focus on behaviour change interventions lying generally within the public information and communication sphere: campaigns whose intent is to raise awareness, to counter specific entrenched views, and to lead people towards different choices. Specifically, we examine behaviour change campaigns that aim to increase the uptake of sustainable transportation modes like cycling.

Argumentation has a strong and multifaceted but often underused and unrecognised role within these interventions; it is a key factor in building motivation, and is a powerful method for justifying why a behaviour should change, enabling people to make open, honest, rational, informed, and importantly, sustainable decisions about their behaviours and habits. However, this is predicated on the idea that high quality persuasive arguments are made, that these are directed towards the correct recipients, and that they are communicated in such a way that the targets of these arguments are both reached and receptive.

Our aims are threefold. Firstly, we examine and report on current argumentative practices amongst behaviour change practitioners based upon interviews with real world practitioners who are actively involved in the design of campaigns. Specifically we focus on the inferences and underpinning assumptions that are made during the design phase of an intervention. We report progress in on-going work to identify and analyse the argumentation schemes that are prevalent in behaviour change communications for sustainable transport. This enables us to understand the range of inferences that the designers use and how these are manifested in actual communication. Additionally it is important to identify that the kinds of inferences that the designers aim to induce are actually matched by (1) schemes that are likely to fulfil that intent

and (2) to identify gaps in these argumentative and inferential processes that, if filled, would lead to increased success, and (3) to identify fallacious reasoning and inferential missteps on the part of the recipient. We make the claim that, for behaviour change to be lasting, then it has to be robust in the face of inspection, introspection and critical analysis. It is therefore important not only to use 'plain spoken' arguments but also to avoid coercive and misleading argumentation. Secondly we investigate the arguments that are induced in the recipients of a behaviour change campaign, specifically we focus on the inferences that are drawn by the targets of such campaigns, on the basis of both their prior knowledge and new knowledge communicated by the campaign. It is important that the arguments that the designers believe that they are communicating to their target are the same arguments that the recipients infer from the communication. Thirdly, we study the counter-arguments that are made and identify how, with the rise of social media and interactive digital communication, behaviour change is necessarily moving from the informational posters and television adverts of the past towards interactive, “two way” communication in which any message may be publicly challenged.

This move from ‘broadcast dissemination’ towards interactive, perhaps dialogical, behaviour change mechanisms offers both opportunities and potential traps but is vitally important. For example, in conjunction with mobile digital devices that collect data about a person's’ individual habits, models can be constructed that enable personalised behaviour change interventions. With this approach, the techniques, arguments, and data used can be tested to ensure that they are appropriate to the person towards whom they are targeted, or at least that inappropriate interventions can be modified or adjusted by collecting data about their effects. Such individualised support promises greater effectiveness but there are many challenges to be overcome, not least many questions concerning privacy and collection of personal data. More generally, targeted public communication can occur, in which less specific, but partially differentiated campaigns target groups within a population, identified using segmentation techniques. In both private and public interventions it is increasingly becoming necessary to move towards a dialogical approach, in which the target of an intervention might provide counter arguments. Addressing counter-arguments in a constructive way is important, both to help recipients to explore their own positions more thoroughly but also to provide an opportunity for counter positions to be captured, catalogued, and taken into account in subsequent communications. It is widely recognised that real world persuasion is not a one-shot deal, in which the arguments are laid out and one side publicly capitulates having realised that they were wrong all along. What is more likely to happen is that each side gradually adjusts their positions, perhaps over multiple conversations, responding to their opponents points, and perhaps discovering surprising things about their own assumptions, until, ideally, the positions have altered to the point that the persuasion can be deemed to be successful. The combination of digital technologies and interactive dialogical interfaces will provide a route towards such behaviour change approaches.

In the meantime, global communication mechanisms and, in particular, social media mean that any public communication can become a focus for wider discussion. More specifically, and very importantly, any initially private communication can also, very quickly, become public. Any perceived misstep can easily, immediately, and perhaps fatally, derail a campaign. This can

lead to spectacular instances of miscommunication in which a campaign is responded to by an audience that was not the intended recipient. For example, the UK government run Think! road safety group which aims to raise awareness of more vulnerable road users recently made a spectacular misstep in a campaign to make interactions between cycles and trucks safer. Whilst the message was generally acceptable, that cyclists should not pass vehicles on the inside, the video that was used did not actually demonstrate this behaviour but actually showed a manoeuvre known as a ‘left hook’, in which a vehicle partially overtakes a cycle then turns across the cyclist's path. The accompanying text and overall message meant that cyclists perceived that they were being blamed whilst also being the victims. Within hours of the video’s publication there was widespread condemnation and a great deal of social media discussion which has not been favourable to the Think! Group. Importantly, these conversations and reactions were occurring in public ensuring that the narrative was controlled by those who felt slighted rather than being lead by the THINK! Campaign designers. Likely a result of not engaging with all affected parties, almost any regular cyclist would have recognised the scenario and flagged up the mismatch of messages. Arguably there are a number of different messages that should be conveyed to the different ‘interested parties’: cyclists and pedestrians are vocal groups within transport communication on the subject of safety. However, freight and public transport operators are generally more vocal on the subject of operating costs and regulations that impact on their trade. Yet another discourse is the focus of drivers of private vehicles who tend to be most vocal when the topic intersects with the efficiency, particularly speed, of their journeys. Underestimating the degree to which social media has an immediacy, and post-communicative effect is an important and egregious error. Rather than a single communication that was meant to induce some change in future behaviours, subject perhaps only to a letter-writing campaign, there is now, within hours, the potential for a distributed media storm in which anyone who has an opinion, and importantly, anyone who can make a pithy viral comment, can control the discussion.

To conclude, in behaviour change communication it is not sufficient merely to make the argument. There are important strategic and rhetorical aspects which can seriously affect the resulting communications and these aspects must be accounted for in the design of behaviour change campaigns. Due mainly to the increasingly dominant effects of social media, and because communications occur in public, even if they begin as private communications, the rhetorical aspect, particular with respect to audiences has a great effect on the inferred messages and post-communication discussion can greatly alter the perceived message and remove control of any narrative from those who ostensibly designed it. There is also a real danger that unwanted and even antisocial behaviours actually become more prevalent and more entrenched.