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BBC Moral Maze: Test Your Argument

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Abstract. In this paper, we present *Test Your Argument*, part of a suite of argument technology piloted in conjunction with BBC programming. Test Your Argument offers users the opportunity to interact with real arguments taken from the BBC Radio 4 programme *Moral Maze*. Users are guided through different aspects of strengthening and critiquing an argument as well as considering both sides of the issue under discussion. Since December 2017, Test Your Argument has had over 10,000 visitors.

Keywords. Moral Maze, critical thinking, BBC, user engagement

In a world of online argument, fake news and echo-chamber forums, increasing attention is being given to the ways in which we can equip people with the skills required to understand, build and critique complex arguments. *Test Your Argument*¹ is an online tool, piloted in conjunction with BBC programming, designed to guide users through different aspects of strengthening and critiquing an argument as well as considering both sides of the issue under discussion.

Test Your Argument comprises: a backend, which stores argument data, processes user selections and provides feedback and scoring on their choices; and a frontend, developed using standard web technologies (HTML5, CSS and Javascript) to ensure a consistent and visually appealing experience across a range of platforms (Figure 1). Both of these components are hosted on *Taster*, a platform for showcasing new ideas from the BBC and its partners.

The data used in this pilot comes from a special edition of the BBC Radio 4 programme, the *Moral Maze*² on the morality of abortion [3]. The programme was annotated using OVA+ [2], a manual argument annotation tool working with the Argument Interchange Format (AIF) [1] standard. The resulting AIF annotation contains 509 propositions (I-nodes), connected by 197 applications of rules of inference (RA-nodes) and 75 applications of rules of conflict (CA-nodes). Specific patterns within the data were then identified to provide suitable material for each section of Test Your Argument.

The first section, **Strengthen**, focuses on the ways in which an argument can be strengthened and defended against attacks. The user is presented with a central statement from the debate and asked to choose, from a list three further propositions, which one best supports the statement, which one is pre-empting a counterargument, and which one attacks the opposing view.

In the second section, **Critique**, a central statement from the opposing side of the debate is given and the user is asked to consider the different types of evidence that could support this and to consider which of these might be most easily criticised. The

¹<https://www.bbc.co.uk/taster/pilots/moral-maze> or <http://tya.arg.tech>

²<http://www.bbc.co.uk/programmes/b006qk11>

1 2 3 4 Your Score: 7/10

3 Impartiality

Can you create an argument based on good debating points that won't be accused of being biased or based on vested interests?

“Using the 24 week limit as a test for viability is no longer a reliable limit.”

Can you construct an argument to make the case for the unreliability of the 24 week limit in 3 steps? Click the options to put them in order to reach the conclusion in Box 4.

According to The Times of this year, born at 23 weeks, in some hospitals, the survival rate is actually...
Born at 23 weeks, in some hospitals, the survival rate is actually at 70 per cent.
?
Using the 24 week limit as a test for viability is no longer a reliable limit.

Born at 23 weeks, in some hospitals, the survival rate is actually at 70 per cent therefore ___?

Born at 23 weeks, in some hospitals, the survival rate is actually at 70 per cent.
According to The Times of this year, born at 23 weeks, in some hospitals, the survival rate is actually at 70 per cent.
A premature baby at 24 weeks has a pretty good chance of actually living

Figure 1. Moral Maze: Test Your Argument section 3, Impartiality

user is asked to identify which supporting proposition is a factual statement, which is an opinion, and which is based on personal experience.

The third section, **Impartiality**, encourages considering the reasoning on both sides of an issue. The user is asked to create a chain of reasoning supporting first one side of the debate and then the other. In each case they are given three supporting statements that they have to put in the correct order to support the conclusion (see Figure 1).

Within each section, the user is provided with direct links to where the text appears in the Moral Maze audio on the BBC iPlayer platform. Feedback is also given for each decision that they make, with correct decisions highlighted in green and mistakes in red, as well as a running score showing how they are progressing. At the end of the three sections, the user is able to give their own view on the issue and is provided with an aggregate score and the opportunity to share this on social media.

Since its launch in December 2017, Test Your Argument has had over 10,000 visitors, and, of those visitors that provided feedback, 80% said “Yes, the BBC should do more like this”. These figures show a clear demand for tools that help people to consider all aspects of a debate, strengthen their own arguments and see the potential ways in which they may be misled by the argumentative strategies of others.

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References

- [1] C. Chesñevar, S. Modgil, I. Rahwan, C. Reed, G. Simari, M. South, G. Vreeswijk, S. Willmott, et al. Towards an argument interchange format. *The Knowledge Engineering Review*, 21(04):293–316, 2006.
- [2] M. Janier, J. Lawrence, and C. Reed. OVA+: An argument analysis interface. In S. Parsons, N. Oren, C. Reed, and F. Cerutti, editors, *Proceedings of the Fifth International Conference on Computational Models of Argument (COMMA 2014)*, pages 463–464, Pitlochry, 2014. IOS Press.
- [3] M. Pereira-Fariña, K. Budzynska, D. De Franco, R. Duthie, M. Koszowy, J. Lawrence, A. Pease, B. Pluss, C. Reed, M. Snaith, D. Tesfaye, and J. Visser. Real-time, large-scale deployment of argument analytics. under review.