

Argument-Checking: A Critical Pedagogy Approach to Digital Literacy

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Information overload in the digital era

The digital revolution has brought about profound changes. These changes not only concern the technologies and artefacts but extend to the way in which we form and perceive ourselves as well as our relationships with others and the surrounding world. We have entered the so-called 'zettabyte era', with an incredible amount of information being shared, and at an incredible speed. Two different aspects of the 'information overload' stand out. First, the quantity of information:

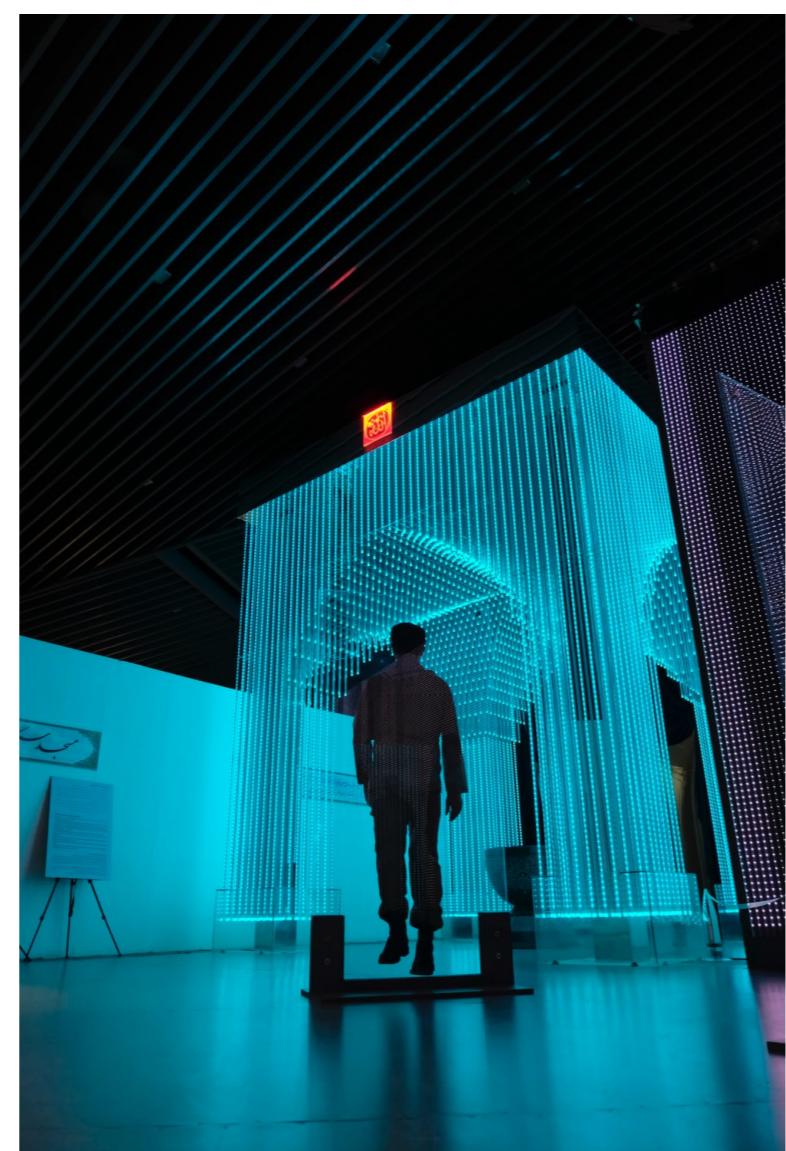


there is simply too much, and this imposes limits on our time and capacity for selecting and assessing it. Second, the quality of information: it is unclear what is true and who is a reliable source.

A critical pedagogy approach

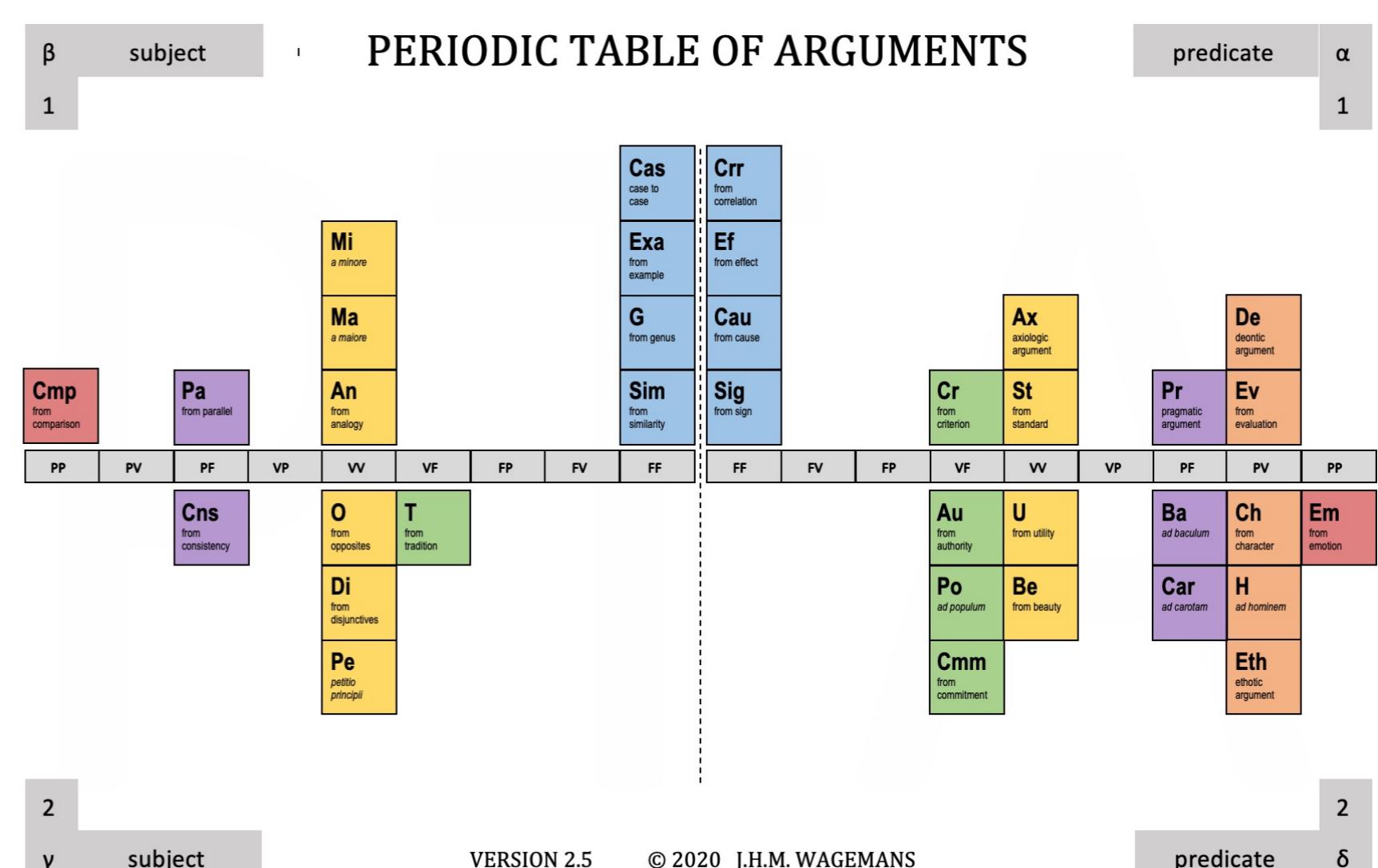
Critical pedagogy promotes a specific approach to education, and notably one in which we strive to empower students, citizens and, in our case, users and producers of online contents. We aim to do so by awakening their critical consciousness, and also by providing them with tools that they can put to use: argument-checking as a form of digital literacy.

The screenshot shows the MMGA Annotations website. At the top, there's a navigation bar with links for Home, Media, BEMA foundation, About us, Partners, Annotations, and Join Us. Below the navigation, there's a section titled 'Annotations' with a sub-section 'Annotations'. It includes a brief description of what annotations are and a formal definition. There's also a section for 'KRINO' with a video player showing two people in a discussion.



Argument-checking as a form of digital literacy

Our approach focuses on how the communication flow contributes to the information overload, namely how arguments are used in online settings. In providing tools for analyzing and evaluating these arguments, we go beyond fact-checking, which we consider a valuable but limited way of fighting mis-, dis-, and mal-information. While adherence to reality -- the facts -- is clearly vital for these purposes, there is more than just facts in online information: facts are often embedded in argumentative discourse, true facts can be used to support bad conclusions, many actions are not based on facts only, but also on values, and how we present facts is as important as the facts themselves.



From theory to practice

Specifically, by teaching argument-checking in online contexts, we aim to: (i) Increase the literacy of individuals (as online users) to defend themselves against the negative effects of dis- and misinformation; (ii) Empower individuals (as online agents) to intervene and block in appropriate ways episodes of dis- and misinformation, of trolling, or other; (iii) Teach individuals (as online content producers) to share and disseminate information online that is of high enough quality. We want to build a sustainable community of people that can impact the overall quality of online information and communication and we are in the process of designing KRINO, a glass-box AI engine that can assist humans in a semi-automated process of argument evaluation.

More info, research papers, and updates

Please see the [Argument-Checking](#) pages of the Research Group [Language and Cognition in Argumentation \(LANCAR\)](#) based at the Amsterdam Center for Language and Communication (ACLC) at the University of Amsterdam, The Netherlands.

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