Political Agenda:
Designing a Cognitive Game for Political Perspective Taking

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ABSTRACT

Engaged citizenship requires understanding why different ideologies lead to different policy positions. However, we know little about political perspective taking. How might we use games to teach citizens political perspective taking? This paper describes a design research project to develop a cognitive game for political perspective taking. Study 1 describes a political perspective taking measure created through expert and novice task analysis. Study 2 surveyed 187 undergraduate students and found relatively poor political perspective taking ability. Study 3 tests an educational game for political perspective taking and found that the game was engaging but did not promote learning. Study 4 describes a technical exploration testing the feasibility of a cognitive game with intelligent tutoring for scaffolding complex reasoning on political perspectives. This work argues games can teach political perspective taking using: (a) moral foundations theory, (b) fantasy environments that ask players to predict policy positions, and (c) embedded intelligent tutors.

KEYWORDS

Civic Education, Cognitive Games, Design Research, Educational Games, Intelligent Tutoring, Moral Reasoning, Political Perspective Taking, Serious Games

INTRODUCTION

In a democracy, overcoming societal challenges such as climate change, inequality, and education requires an alert and knowledgeable citizenry. Researchers, educators and practitioners have recognized the need for a *new civics* that provides citizens with the abilities to effectively participate in the democratic process (CIRCLE, 2003) and for learning technologies that help them become effective citizens. One ability citizens must develop is *political perspective taking*, that is, the ability to reason about the ideological values of themselves and others. However, cognitive, political, and learning sciences research provides little guidance about developing learners' political perspective taking abilities. How might educational games help students learn such a complex and ill-defined skill?

BACKGROUND

Policy Arguments

Civic reasoning centers on *policy argumentation* (Dunn, 1990; Fischer, 2007; Manzer, 1984; Stone, 2001; cited in National Research Council, 2012), "practical arguments that offer reasons for taking specific policy actions" (National Research Council, 2012, p. 55, citing Ball, 1995).

Policy arguments require citizens to connect and compare different actions, which are in turn supported or opposed by different ideological values (Lebacq, 1986; Sandel, 2010). For example, a policy of taxing the rich and redistributing this income to the poor will be supported or opposed depending on one's ideological values: some may argue that this policy infringes upon one's *liberty* to own the fruits of our labor, while others argue that justice demands some income distribution to ensure equality of opportunity and a more broader sharing of benefits, while still others argue, often on religious grounds that justice demands preferential consideration for the poor.

Skilled argumentation thus requires citizens to confront complex ideological questions and tradeoffs. Citizens who cannot reason about ideologies are at a distinct disadvantage in articulating the values behind their own arguments (which are essential to creating persuasive arguments, Lakoff, 2002), and will have little success understanding how their audience will respond to their arguments or the legitimate basis upon which their opponents will criticize their positions.

The authors' experience teaching undergrads finds that students often lack basic fluency in political ideologies needed to develop principled and persuasive political messages. For example, students often seem to rely either on gut intuition, e.g., "I *feel* like income inequality is wrong, but does that mean I should give my money away?" or oversimplify issues into partisan positions, e.g., "Well, I'm a Democrat, and the author is a Republican and clearly biased." We believe this may in part come from lack of practice in engaging in argumentation skills that is necessary for civics.

This project considers how we might use a cognitive game to improve citizens' ideological reasoning about policy issues, including: how might we assess ideological reasoning, what challenges do learners face in reasoning about ideologies, if any, and how we might develop web-based educational games to improve ideological reasoning.

Political Perspective Taking

The complexity and diversity of approaches that different disciplines have taken with respect to understanding political perspective taking presents an additional challenge. Political science has done a great deal of work on polarization (Layman, Carsey, & Horowitz, 2006; Abramowitz & Saunders, 2008) although much of this work focuses on distinctions between Democrats and Republicans—parties that are composed of heterogeneous, conflicting ideological groups and that do not provide categories sufficiently nuanced for political perspective taking. Political philosophy has spent thousands of years on questions of ideology and justice, producing theories such as Bentham's utilitarianism, Novack's liberty, Kant's categorical imperative, Rawl's difference principle, and so on (Sandel, 2010). More recent work in moral psychology has explored the social, psychological, and evolutionary basis of our moral intuitions upon which we base our political judgments (Haidt, 2012).

Proposed civic education standards (CIRCLE, 2003; Gould 2011) recognize perspective taking as an important skill. The Civic Mission of Schools (CIRCLE, 2003) identifies four common traits of competent citizenship, three of which include perspective taking, specifically, that competent and engaged citizens are: *informed and thoughtful*, including "... a willingness to enter into dialogue with others about different points of view and to understand diverse perspectives..."; *participate in their communities* including "... pursu[ing] an array of cultural, social, political, and religious interests and beliefs"; and possess *moral and civic virtues,* that is, "they are concerned for the rights and welfare of others, socially responsible, willing to listen to alternative perspectives... [and] strike a reasonable balance between their own interests and the common good" (Gould 2011; p. 11).

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