The Relevance of Moral Emotional Appeals in Environmental Political Debates

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Abstract: This paper examines the relevance of moral emotional appeals in the mixed dialogue type of public debates between politicians about environmentalism, relying on the concepts of goals and emotional appeals from the informal logical tradition. This paper argues that if argumentative moves are evaluated according to the action-producing dialogue type's collective goal which could be pressing for action on environmentalism, and politicians take on the role of emotional entrepreneurs, then moral emotional appeals by politicians could evoke moral emotions in the audience, thus encouraging them to become more environmentally friendly. The influence of moral emotions on individual sustainable choices is based on empirical research from political and environmental sciences.

Résumé: Cet article examine la pertinence des appels émotionnels moraux dans les débats publics de type dialogue mixte entre politiciens sur l'environnementalisme, en s'appuyant sur les concepts d'objectifs et d'appels émotionnels issus de la tradition de la logique non formelle. Cet article soutient que si les démarches argumentatives sont évaluées en fonction de l'objectif collectif du dialogue productif d'action, qui pourrait inciter à agir en faveur de l'environnementalisme, et si les politiciens assument le rôle d'entrepreneurs émotionnels, alors les appels émotionnels moraux des politiciens pourraient susciter des émotions morales chez le public, l'incitant ainsi à devenir plus respectueux de l'environnement. L'influence des émotions morales sur les choix individuels durables est fondée sur des recherches empiriques en sciences politiques et environnementales.

Keywords: dialogue types, emotional appeal, environmental argumentation, moral emotion, sustainability

1. Introduction

The destruction and protection of the environment have become an important area of research in various disciplines, just like argumentation theorists aimed their attention at environmental argumentation (Lewiński and Üzelgün 2019). The study of environmental argumentation focuses on how people argue about issues such as global warming, plastic pollution, loss of biodiversity, and climate refugees among other topics. The significance of researching this area does not need an elaborate explanation: the climate crisis is one of the greatest and most urgent challenges of the 21st century. Climate change is also an issue that is being debated with tremendous emotional intensity. However, expressing emotions is considered a failure or even manipulation in research areas that have a normative approach to reasonableness in public discourse.

This research analyzes the moral emotional appeals expressed by politicians in public debates about environmental politics. The research question of this paper is the following: *How could moral emotional appeals by politicians contribute to the goals of environmental political debates*?

Section 2 elaborates on the concepts of political moralizing, moral emotions, and emotion regulation by emotional entrepreneurs. The relation between moralizing and environmentalism is clarified to show the pertinence of arguing with moral emotional appeals in political debates about environmentalism. Section 3 details how emotional appeals are viewed in argumentation theory. In section 4, dialogue types from the informal logical tradition are presented. Based on the highly institutionalized context of politics, the multipurposive and polylogical nature of public political arguments, the collective goals of environmental political debates as a mixed dialogue type are specified. This section also reflects on which goals could serve as a basis for the evaluation of such debates. In section 5, empirical evidence from political and environmental sciences is referenced to show the influence of moral emotions on individual sustainable choices. Section 6 provides examples of moral emotional appeals by politicians in an environmental political debate and discusses the relevance and fallaciousness.

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In his book titled *The Place of Emotion in Argument* (1992a), Douglas Walton analyzed emotional appeals and cases when they might not be fallacious. He posed the following questions:

> If emotional appeals can be reasonable kinds of argumentation in some cases, what is meant here by "reasonable"? What goals of dialogue do they contribute to? What is the function of an appeal to emotion in argumentation? What is the positive value?" (Walton 1992a, p. 255)

This research explores the relevance of a subset of emotional appeals – namely moral emotional appeals – in the distinct dialogue type of the environmental political debate. By relying on argumentation theory and empirical research from various disciplines studying environmentalism, this research aims to highlight the benefits of moral emotional appeals in political argumentation, specifically in connection with environmental issues. This research also explores the assessment the argumentative moves in political debates according to the action-producing dialogue type's collective goal (i.e., press for action on urgent issues). Since environmentalism can be considered an inherently moral issue, and politicians can be viewed as emotional entrepreneurs who can prescribe how to act morally and feel about the climate crisis, refraining from the expression of moral emotions could ultimately undermine the successful response.

2. Moralizing and moral emotions in environmentalism

In recent decades, the rhetoric of fear in environmentalism has been accompanied by moralizing messages about environmental issues (Luhmann 1989). Political moralizing about environmentalism connects these issues to people's beliefs about right or wrong (Lakoff 2002; Kahan and Braman 2006; Kahan et al. 2011). Environmentalism is closely linked to sustainability. According to the widely accepted Brundtland report by the World Commission on Environment and Development, sustainability is defined as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (1987, p. 37). Environmentalism includes the socio-ecological dilemma according to which the costs of sustainability are individualized, while the benefits are externalized to society (Hardin 1968; Platt 1973). It is stated that moralizing can be

a strategy for overcoming the conflict between individual short-term and societal long-term interests (Kals and Maes 2002; Markowitz and Shariff 2012; Salomon et al. 2017). Since moralizing includes moral reasoning and the expression of moral emotions, resolving the dilemma can not only be interpreted in the cognitive dimension but in the affective dimension as well.

Moral decisions are decisions between right or wrong, good or bad (Morrow 2017). Moralizing in politics prompts citizens to view policies and elections as moral decisions. Moral conviction regarding a collective cause is a crucial motivator for individuals to engage in collective action (van Zomeren, 2013; van Zomeren, et al. 2011; van Zomeren et al. 2012). Moralizing can also be viewed as a way of discussing politics in which politics is connected to emotions and values.

In political moralizing, moral reasoning is often accompanied by the expression of moral emotions. It is widely researched that moralizing and the emotions connected to it are decisive factors in the formation and changing of political attitudes (Emler 2003; Feinberg and Willer 2013; Mullen and Skitka 2006; Skitka et al. 2005). For centuries, there has been an intense debate about the dichotomy of reason and emotion, as well as the role of emotions in morality. Nowadays, there is abundant empirical evidence to support that emotions occur when people make moral judgments. It seems plausible that there is a circular relationship between emotions and morality. It means that emotions lead to moral beliefs and behaviors for which people can have emotional reactions that prompt other moral judgments (Szabó 2022).

Emotions can become moral emotions when they are tied to feelings of justice and injustice, rightness and wrongness. When people act justly and rightly, positive feelings of the self or others are likely to ensue. When people act unjustly or morally wrong, negative feelings of the self or others will presumably follow. Moral emotions provide the motivational base for doing good and avoiding bad acts. Moral emotions are "linked to the interests or welfare either of society as a whole or at least of persons other than the judge or the agent" (Haidt 2003, p. 853). By expressing moral emotions, people can communicate what acts and behaviors are deemed right or wrong,

thus prescribing behavioral norms (Haidt 2003; Kroll and Egan 2004; Tangney et al. 2007).

Despite it being difficult to compile a complete list of moral emotions, Rudolph and colleagues present a quite exhaustive review of emotions that have been discussed in relation to moralizing in the psychological and philosophical literature: "admiration, anger, awe, contempt, disgust, elevation, embarrassment, empathy, envy, gratitude, guilt, indignation, jealousy, pity, pride, regret, remorse, respect, schadenfreude (joy in the misfortune of others), shame, scorn, and sympathy" (Rudolph et al. 2013, p. 70).[1] A fairly useful distinction between the abovementioned emotions pertains to the target and the valence. Moral emotions can be self-directed which are called actor emotions, and other-directed which are referred to as observer emotions. Moral emotions can denote a person's action as either positive or negative – both applying to actor and observer emotions. As an example, one may feel shame about their own actions, or one can perform shaming to make the other person feel negatively. One can interpret the expression of emotions in rhetorical terms as well, specifically with the concepts of *ethos* and *pathos*. On the one hand, the expression of self-directed actor emotions can be effective ethotic moves, thus influencing how the speaker is being perceived by their audience. On the other hand, the expression of other-directed emotions can be understood as a rhetorical tool to elicit feelings in the audience, thus affecting *pathos*.

In the following, brief examples of expressing moral emotions are provided. A politician can express anger about ignorance towards environmental racism, thus suggesting the importance of environmental protection and environmental justice. A politician can also express empathy for people whose livelihoods and homes are being destroyed by the effects of climate change, thus urging further action to protect humanity from the climate catastrophe. A politician can make their opponent feel guilty for neglecting to put adequate emphasis on renewable energy sources in their political program,

[1] The list produced by Rudolph et al. (2013) contains prototypes as well as close relatives and synonyms, rather than highly distinct emotions. Also, some of the listed emotions may occur in non-moral settings too. Present research does not undertake the task of describing and differentiating each of the listed emotions.

therefore presenting their opponent as the immoral choice in terms of striving for sustainable development while also drawing attention to the necessity of renewable energy sources to reach climate neutrality. Real-life examples will be provided in section 6, where I intend to show how moral emotional appeals could be considered relevant in a debate about environmentalism and environmental policies.

Emotion regulation (Maor and Gross 2015) in politics describes the processes between two groups: the emotional entrepreneurs and their clients. The emotional entrepreneur is the initiating party who continually and in various forms makes emotional proposals toward their audiences. Emotional entrepreneurs are people who have the opportunity to speak publicly to broader audiences, e.g., politicians and journalists. Thus, emotional entrepreneurs can influence the mental states, affective attitudes, behavioral tendencies, and acts of emotional expressions of their audiences. Politicians regularly speak publicly either in front of large audiences or through media outlets, and they persistently attempt to regulate the accepted or desired emotions of the public. As public figures and political leaders, by expressing certain emotions, they can evoke those emotions in their audiences. Also, when political leaders morally praise or devalue certain people and their behaviors, they prescribe attitudinal norms for their audiences (Brandt et al. 2017). Emotion regulation can happen in a strong mode when the emotional entrepreneur explicitly states the emotions that should be felt by their audiences (e.g., we should be proud, shame on you), or in a weak mode (e.g., a decent person would be ashamed right now) (Szabó et al. 2022).

3. Emotional appeals in argumentation theory

While in the rhetorical tradition, emotions have a meaningful role in persuasion, argumentation theory has traditionally assigned a very different role to them. Emotions or "the passions" tend to be contrasted with impartial reasons, hence the former are commonly distrusted in reasoned argumentation. This tendency resulted in emotional appeals being labeled as inherently illogical and categorically logically fallacious (Carozza 2007; Groarke 2010). Despite this dominant treatment, some researchers extensively discuss emotional

arguments and emotions in arguments, most importantly Michael Gilbert, Aaron Ben-Ze'ev, Christian Plantin, and Linda Carozza as well as the pragma-dialectical and informal logical traditions.

Michael Gilbert (1994; 1997) developed his multi-modal argumentation model which included the emotional mode. In his approach, emotions can be present in argumentation as reasons, emotional grounds as well as means of expressing arguments. He concluded that even though one mode can be emphasized which means that a single mode can give an argument its strength, argumentation never occurs in a single mode. This is especially true in public political debates when politicians as professional communicators simultaneously discuss multiple issues and are out to achieve multiple goals. Aaron Ben-Ze'ev (1995) states that emotions can be considered arguments when they present as reasons for a claim or action. For him, emotional arguments are rational insofar as they are functional, associated and coinciding with a given context (1996, p. 193), while also being effective and persuasive. Christian Plantin's (1998) approach of recognizing emotional sentences as verbal expressions of emotions can be contrasted with psychological accounts, such as that of Ben-Ze'ev. The similarities and differences between the abovementioned theories are extensively covered by Linda Carozza (2007) who also discusses the two emotional appeals (*argumentum ad misericordiam* and *argumentum ad baculum*) from the informal logical tradition. She highlights that these two emotional appeals are peculiar as they represent the listener's emotional response and not the emotional expression of the speaker. This distinction will also prove to be important when discussing the expression of moral emotions and moral emotional appeals. Furthermore, Carozza (2022, p. 580) argues for the need to "mainstream" emotional arguments and not only consider them based on critical-logical models.

In pragma-dialectics, the general norms for sound argumentative discourse can be found in the ten rules for critical discussion (van Eemeren and Grootendorst 1984). By adhering to these rules, arguers can maximize their chance of conducting a successful critical discussion. Fallacies can be tied to the violations of these rules. Emotional appeals are deemed fallacious when the arguer breaks the Freedom rule. The Freedom rule describes that arguers cannot prevent each other from asking questions or stating critical objections.

For example, when an arguer commits the fallacy of *argumentum ad baculum*, they can prevent their opponent from engaging in argumentation, thus breaking the Freedom rule. The general norms for sound argumentative discourse are formulated independently of argumentative activity types. However, whether a rule has been violated in a certain case, depends on the context of the argumentative activity type in which the argumentative discourse takes place. In conclusion, according to the theory of pragma-dialectics, the context-dependency of fallacies is twofold: the particular argumentative activity type influences the identification of fallacies, and the reconstruction of the argumentative discourse preceding the evaluation is sensitive to the activity type (van Eemeren et al. 2010).

In the informal logical tradition, emotional appeals can either be fallacious or have a legitimate place in argument (Walton 1992a). A fallacy is an "underlying systematic error or failure in reasoning used to carry out goals of dialogue appropriate for the given case" (Walton 1992a, p. 158). The problem with appealing to emotions is twofold: they tend to be weak or irrelevant arguments. Despite their weakness, emotional appeals can be very powerful since they can evoke different emotions in the opponent as well as the audience, thus persuading them without presenting strong arguments. The irrelevance as well as the fallaciousness of emotional appeals means that they do not contribute to the goals of the dialogue. However, emotional appeals can steer the line of argument in a favorable direction, and they can open new and valuable lines of argument by prompting critical questions. Thus, in certain dialogues, emotional appeals are not only allowed, but they can be relevant indeed, and contribute to the goals of the dialogue. This will be further discussed in section 4.

It is now important to distinguish the expressions of moral emotions from moral emotional appeals. They both have in common that in public debates between politicians, they are expressed alongside what would be considered reasonable arguments. As detailed in section 2, moral emotions can be directed at the self (actor emotions) and at others (observer emotions). An expression of a moral emotion can be considered a moral emotional *appeal* when the arguer intends to evoke a moral emotion in the other active argumentative party. This is because the essence of emotional appeals in argumentation

theory goes back to evoking emotions in the opponent. Thus, when the arguer articulates feeling shame, it is not considered a moral emotional appeal, even though it could arouse different feelings in all argumentative parties, active and passive as well. However, when the arguer evokes shame in their opponent, is referred to as a moral emotional appeal in this paper.

4. The characterization of environmental political debates: from dialogue types to public political polylogues

In the informal logical tradition, dialogue types are differentiated. With the help of these dialogue types, everyday argumentative situations can be described and evaluated. One of the most extensive – yet still not complete, according to Walton – typologies contains 12 dialogue types (some are subtypes of others), characterized by the initial situation, the individual goals of participants, the collective goal of dialogue, and the benefits (1992b). In later works (Walton 1995; 1998; 2008; Walton and Krabbe 1995), Walton and colleagues restructure the typology with a smaller number of types, as well as leaving out the benefits.

The normativity of the dialogue types entails different standards for each type of argumentative situation, making the evaluation of arguments context-dependent. It is thus argued that "the usefulness of the concept of dialogue types […] lies in its capacity to account systematically for the difficulties related to the identification of fallacies in different contexts" (van Eemeren et al. 2010, p. 118). According to the informal logical approach, a fallacy is understood as an argument that does not contribute to the goal of the dialogue type in which it is delivered. If the goals of a certain argumentative setting can be more accurately established, then the relevant moves and the fallacies can also be identified.

The theory of dialogue types has been extensively discussed by other argumentation scholars (Tindale 1997, van Eemeren et al. 2010). Researchers have articulated criticism regarding the varying number, and more importantly, the conflation of the normative and descriptive functions. This problem is acknowledged even by Walton and Krabbe themselves who add that real-life argumentative

situations are commonly mixtures of different dialogue types that makes the characterization as well as the evaluation more complex.[2]

Thus, if one would like to judge the reasonableness or fallaciousness of argumentative moves in a specific context, one needs to reflect on the following points. First, one has to provide a detailed and specific description of the real-life argumentative situation, including its goals. Second, one has to decide which dialogue type's standards to base the evaluation on: which dialogue type's individual or collective goals matter. Third, one has to examine how the argumentative moves could contribute to the chosen goal(s). To reflect on all of these points, I will describe political debates according to the dialogue type theory, then specify the characteristics of public debates about environmental politics taking the institutionalized context of politics as well as the polylogical and multi-purpose nature of public political debates into account. Then I will argue that the action-producing dialogue type's collective goal is also beneficial for the evaluation of arguments in the examined argumentative setting.

In many of Walton's works as well as publications with Krabbe (Walton 1987; 1989a; 1989b; 1992b; 1995; 1998; 2008; Walton and Krabbe 1995), the rhetorical/forensic debate or – as it is later called – debate (without a prefix) is mentioned. It is important to examine this dialogue type as its characteristics are similar to those of a political debate. The initial situation is a forensic or adversarial contest, the method is verbal victory, the participant's goal is to persuade a third party, the goal of the dialogue is to air the strongest arguments for both sides, and the benefit is spreading information. Participants can win the debate by a majority vote or by the judgment of the referee. The debate can effectively bring out the arguments for and against a position, however, the argument that can convince the audience or the referee – thus contributing to the participant's goal of persuading the third party and winning the debate – can be fallacious in a dialectical sense.

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[2] "It would be nice if the answer were clear-cut and if each logic system had a tag on it, saying whether it is to be taken descriptively or normatively. But that is not the way things have worked out. All serious logic systems seem to have descriptive and normative uses, but to different extents. The point is that descriptive accuracy and normative content are both important and, moreover, interdependent." (Walton and Krabbe 1995, p. 175).

While it could be argued that a political debate is similar to a rhetorical/forensic debate, Walton makes two relevant remarks. First, the (rhetorical/forensic) debate is already a mixture involving both the persuasion and the eristic types of dialogue (Walton 1998, p. 223). Second, he notes that a political debate is best described as a mixture of different dialogue types (Walton 1992a; 1995; 1998). He characterizes a political debate in a democratic system of government as a mixture of the following types: information-seeking, action-producing, eristic (contentious), critical discussion, and negotiation (1992a, p. 81). The presence of the information-seeking dialogue type entails that the goal is to ask questions and provide information about relevant issues. The action-producing dialogue type's goal is to press for action on urgent issues. The eristic dialogue type lends itself to adversarial exchanges. According to the type of critical discussion,[3] arguments and rebuttals are proposed and questioned. The type of negotiation means that political debates are also conflicts between interests.

Even though political debates are mixed, hence hard to describe and assess, institutionally speaking they possess explicit rules and sustain rich normative practices (Goodwin 2007, p. 78). Due to the highly institutionalized context of politics and political debates, participants are presumably more aware of the goals of arguers and the goals of the argumentative situation compared to various everyday encounters.

Walton's dialogues are predominantly two-person encounters, but in politics, politicians as arguers primarily attempt to persuade the voters and not each other. While this is reflected in the description of the political debate (Walton 1992a; 1995; 1998), Walton does not explicitly discuss the polylogical aspect of such argumentative settings. Nonetheless, the role of the general public (i.e., the voting citizens) cannot be neglected. Despite their varying role in the different argumentative situations, they are always part of the argument as the arguers' justification is ultimately directed to them. This

[3] The dialogue type of critical discussion is a subtype of persuasion dialogue. The naming implies that Walton recognizes the similarities between his dialogue type and pragma-dialectic's ideal model of critical discussion where the goal is to resolve the conflict of opinion by critically testing the standpoints (Tindale 1997).

consideration opens the door for the theory of argumentative polylogues. Polylogues are multi-party argumentative situations in which arguers advance more than two standpoints (Lewiński and Aakhus 2014). A public political debate about environmentalism is not a textbook polylogue in case there are only two active arguers (i.e., the politicians) representing two positions and contributing to the exchange of arguments. However, these types of debates are polylogical in the sense that the general public as a passive argumentative party has an auxiliary role. Also, the general public is made up of people with different standpoints, commitments, and goals. Therefore, there will always be someone in disagreement with the arguer whom politicians can attempt to persuade. The following characterization of environmental political debates will take the polylogical aspects into account at every step of the way.

A public debate between politicians about environmentalism is similar to a political debate as previously characterized (Walton 1992a, p. 81). In an environmental political debate, the characteristics of the following dialogue types can be identified: information-seeking, eristic, persuasion (critical discussion), and action-producing. However, I would argue that the dialogue type of negotiation does not characterize public political debates because politicians rarely negotiate in front of their voters, although they often do so behind the scenes.

The information-seeking aspect of an environmental political debate is that the goal is to give and get information about environmental policies. Since not every solution for each environmental issue is detailed extensively in a party's political program, a public debate is a great opportunity for politicians to provide information to their opponents as well as the voters. It is also a valuable opportunity for voters to get informed about environmental policies. Thus, taking the polylogical aspect into account, the exchange of information as a goal pertains to the passive participants as well.

The eristic characteristic of an environmental debate comes to the fore when politicians attempt to make their opponents look bad or immoral in the eyes of the voters. The individual goal of politicians is to hit each other out, but the collective goal is to bring the deeper, ideological differences between the participants to light, and explore what those ideological differences mean for their environmental

policies (e.g., a politician with a conservative ideology might be less likely to support the idea of helping the lower classes in terms of energy poverty). The collective goal can be interpreted in a way that the debate can shed light on the ideological differences between the active and the passive participants as well, hence influencing the behavior of the participants.

The persuasion dialogue characteristic of an environmental political debate means that the goal of the participants is to win the elections by winning the debate. Thus, the individual goal of the arguers is directed at the passive participants and not each other. The collective goal is to clarify or resolve a conflict of opinion. It is highly unlikely that the politicians would arrive at a resolution of opinion publicly about environmental issues. This would go against the logic of the political sphere. However, to clarify and test the strengths and weaknesses of the standpoints is a goal that also takes the passive participants into account.

The action-producing aspect of an environmental political debate means that politicians seek a change in people's attitudes when deliberating about and deciding on certain policies. It can be argued that political leaders publicly debating environmental policies implies that environmentalism and sustainable development are highly important to discuss, and discussing these issues is a way of pressing for action with regards to environmentalism and sustainable development (while also promoting themselves).

As the detailed characterization of public debates between politicians about environmentalism shows, the participants have multiple goals. Still, which goal(s) should be the basis for the assessment of argumentative moves? Which dialogue type's individual or collective goals should or could matter? If argumentative moves could be assessed according to more than one goal, could one of the goals be established as the primary one, thus creating a hierarchy of goals? The traditional problem with emotional appeals is that they are said to not contribute to the collective goals of the persuasion dialogue or critical discussion (i.e., the resolution of the difference of opinion). They are said to only contribute to the individual goals of the arguers (i.e., persuade the other party). However, Walton states that only the collective goals or the dialogue goals matter in the evaluation of arguments (Walton and Krabbe 1995). In addition, he proposes

political debates to be assessed based on the dialogue type of the critical discussion (Walton 1998, pp. 224-225). Nonetheless, this paper argues that one could gain valuable insights into the complexity of public political arguments if one also considers the relevance of argumentative moves from the point of view of the action-producing dialogue type and its collective goal (i.e., press for action on urgent issues). This argument is based on the institutional context of politics as well as the multi-purposive and polylogical nature of political debates.

At this point, it is important to note that one of the essential ways politics function is through collective action. To achieve equality, fairness, justice, etc., people engage in collective action. Dima Mohammed, who specifically focuses on public political arguments, emphasizes political accountability and "the way argumentation is used in the service of socio-political processes" (2015, p. 233). She proposes the following:

> the goals of arguers that can be considered relevant for the examination of public political arguments are only those goals that are derived from the commitments incurred on arguers on the basis of their engagement in argumentation in a certain socio-political context (2015, p. 232).

Or, as Jean Goodwin put it, "the collective purpose, goal or aim of a given type of dialogue is to realize a recognizably valuable state of affairs shared by the participants – that is, a social good" (2007, p. 71). By choosing to participate in a debate about environmental policies, politicians can be held accountable for contributing to the goal of pressing for action with regards to environmentalism. Politicians agree to participate in such a debate because they want to communicate about the importance of environmental protection. Moreover, compared to political debates about other than environmental issues, participants may have more common ground – the urgency and morality of protecting the environment. Thus, pressing for action with regards to environmentalism could be considered as a collective institutional goal in a public debate about environmental policies.

It is important to note that moves made by the arguers in public debates about environmental policies could contribute to multiple goals at the same time. This is partly because there are multiple

disagreements between the participants and multiple issues at stake at the same time: who should people vote for, what are the best ways of protecting the environment, etc. Voting for the candidate who best represents the voters and adopting a more sustainable lifestyle can be considered two urgent actions in an action-producing political debate. While being directed at the active participant, moral emotional appeals can have an influence on the passive participants as well. Moral emotional appeals can serve the individual goals of politicians by morally degrading the political opponent, hence winning the debate. In the meantime, moral emotional appeals could prompt environmental action as well (for this, the empirical evidence will be provided in section 5). Thus, even though they are said to not contribute to the collective goal of the persuasion dialogue (or critical discussion, i.e., the resolution of the difference of opinion about environmental issues and policies), this paper argues that they could contribute to the collective goal of the action-producing dialogue type.

One might also ask which collective goal is more important for the evaluation, that of the critical discussion or the action-producing dialogue. Thus, could there be a primary goal to which arguments should contribute? What happens if arguments might not contribute to the primary but only the secondary goal? This paper argues that no strict hierarchy of goals can be established meaning that reaching one goal is not contingent on reaching the other goal. One cannot say that only if an argument contributes to the primary goal can it be assessed as relevant. It can happen that in one specific argumentative setting, one argumentative move could contribute to one goal but not the other. Still, one could gain valuable insight into the relevance of arguments in political argumentation if one considers how argumentative moves could press for action on urgent issues.

One substantial question still remains: how do we know that a certain argumentative move actually contributes to the goal(s) of an argumentative activity? This objection was raised by Goodwin (2007) who stated that functionalist accounts of argumentation – such as the informal logical and the pragma-dialectical traditions – lack empirical proof concerning how an argumentative activity reaches its goal(s). Thus, according to Goodwin, one cannot assess arguments based on their contribution to the dialogue's goal(s) in which it was delivered as there are no major body of empirical

studies to support the claim. Steven W. Patterson (2011) took it upon himself to defend the functionalist approaches. He argues that these accounts are theoretical, hence the point of their models "in the first place is to provide the empirical researcher with something to confirm or disconfirm" (Patterson 2011, p. 23). Or, as Goodwin herself defended the theory of dialogue types, "adopting a model enables him [the researcher] to make a more sophisticated critique of the activity" (2007, p. 80). Similarly to Patterson's defense about argumentation not always being successful in its function (2011, p. 22), this paper does not argue that every moral emotional appeal actually contributes to the goal of the action-producing dialogue, but their potential to do so could be empirically investigated.

5. The influence of moral emotions on environmentalist attitudes

It has been stated that moral appeals about environmental issues tend to be more successful than non-moral appeals (Holland 1976; Feinberg and Willer 2013). Moreover, it could be political suicide for environmentalist movements if they ignore the toolkit of political moralizing (Antal 2020, p. 92). The reason moralizing in environmentalism is crucial is that even if people accept the truth of climate change and understand the threat of climate catastrophe, they will not moralize their own behavior without moralizing messages (Reser and Swim 2011; Salomon et al. 2017). Interpreting environmental issues as moral decisions can change people's attitudes about climate protection (Feinberg, and Willer 2013), persuade them to change their own behavior (Stern 2000; van Zomeren et al. 2012; Whitmarsh 2009) and support environmental policies (Nilsson et al. 2004; Poortinga et al. 2004).

It is not only moral reasoning that has a powerful effect on people's attitudes. In general, moral emotions are one of the core factors that influence human behavior (Schwartz 1977). In the prediction of environmentally dangerous behavior, the affective dimension has a similarly strong influence as the cognitive dimension. Moral emotions can motivate people to change their own actions, and these emotions are one of the most reliable predictors of a sustainable lifestyle (Kals and Maes 2002). People's decision-making processes and sustainable behavioral intentions are not only based on cognitions

relating to responsibility and justice (de Miranda Coelho et al. 2016). Emotions and specifically moral emotions can explain why people make sustainable choices or ignore environmentalism (Kaiser et al. 1999). By evoking certain emotions, routines and even climate change denial can be changed (Bowden et al. 2019).

The potential of various moral emotions to motivate pro-environmental behavior has been established in a long line of studies.[4] Liang et al. (2019) showed that positive emotions, such as pride and gratitude, encourage green purchasing and pollution avoidance. Harth et al. (2013) demonstrated that pride in past environmental achievements supported future environmental action. Pearce et al. (2021) found that empathy can also motivate pro-environmental action. Another positive emotion, namely hope, proved to be an important emotion motivating environmental engagement among young people (Ojala 2012). Research on the effects of negative emotions is even more prevalent, specifically that of guilt. Antonetti and Maklan (2013) showed that guilt influenced people's environmental efficacy beliefs and ethical consumer choices. Kaiser discussed that "anticipated guilt feelings significantly and uniquely contributed to an overall explanatory power of people's intention to act conservationally" (2006, p. 71). Mallett (2012) discussed how eco-guilt and eco-shame are likely to predict eco-friendly behavioral intentions as well as actual behavior. Rees et al. (2015) demonstrated similar results as a consequence of a guilty conscience (as well as shame). Anger can also motivate to act against polluting acts (Liang et al. 2019) and punish environmental sinners (Harth et al. 2013). Empirical results concerning fear, however, are less definite and more complex. Kals and Maes (2002) discuss that although fear might seem like a great motivator to act sustainably, it is much less influential than expected. The explanation is that "little ecological fear is confounded with a denial of ecological problems, whereas highly expressed fear evokes the psychological mechanism of rejection in order to avoid panic" (2002, p. 108).

[4] Rees et al. highlight that "even though the emotions may differ with regard to the context in which they are experienced – as a member of a group versus as an individual –, much research has conceptualized the respective emotions (e.g., individual-level shame and group-based shame) as functioning in a similar fashion" (2015, p. 441).

The situations described in the previously referenced empirical studies are different as do not analyze the expression of moral emotional appeals by politicians in public debates about environmental policies. Most of the studies, however, detail that the participants did not encounter moral appeals in a strong mode (e.g., you should feel guilty), but in a weak mode, similar to how moral emotional appeals by politicians could affect the passive participants. Notably, multiple studies used manipulated newspaper articles expressing moral emotions and inquired into the emotions felt by the participants as well as their environmental behavioral intentions. As discussed in section 2, journalists can be emotional entrepreneurs just like politicians. When politicians express moral emotional appeals in public debates about environmental policies, the passive participants indirectly encounter those moral appeals. However, politicians being emotional entrepreneurs can still conduct emotion regulation, i.e., transfer their emotional states to the audiences.

6. Climate Election 2022

The following examples representing moral emotional appeals are from a debate held between two politicians who wanted to run against Hungary's current Prime Minister in the 2022 elections: Klára Dobrev (KD) and Péter Márki-Zay (PMZ). KD was the candidate for the coalition between the Democratic Coalition and the Hungarian Liberal Party. PMZ was an independent. The two candidates had multiple public debates, but I will focus on a debate that was entirely about environmentalism titled *Climate Election 2022*.[5] The debate was organized by Greenpeace and hvg.hu (a leading online news media outlet that is generally critical of the government). The debate was held on October 15, 2021, without a live audience, but the footage was uploaded to YouTube. Within the topic of environmentalism, candidates discussed the construction of a new nuclear power plant and renewable energy sources, public transportation and the problem of CO_2 emission by cars, energy awareness, energy poverty, etc. Candidates also discussed their role and obligations as

[5] Link to full debate:
https://www.youtube.com/watch?v=PnqwNUWOvrU&list=WL&index=50

politicians in the fight against climate change, and what they wished for Hungary's future.

The debate was moderated by a journalist from the abovementioned news media outlet. He opened the debate by pointing out that "this discussion was organized by Greenpeace and hvg so that the environment could get the attention for which the government has not deemed it worthy for 12 years." (HVG Videó, 2021, 0:38) This sentence refers to the fact that the current Prime Minister has been in power for that long, and the governing right-wing coalition is often criticized for the lack of environmental policies that would support sustainable development. Still, the organizers and the invited politicians though that a debate specifically about environmental issues was worthy.

6.1 Pride and guilt

In the first excerpt from the debate, candidates discuss what their political parties have done for the environment. KD expresses pride over the fact that her party was deemed the most environmentally friendly by Greenpeace. PMZ refutes her claim and states that KD's party did not vote for the highest emission reductions. KD rejects this attack and urges people to look the public data up.

> KD: As a member of the European Parliament, I am very proud that the representatives of the Democratic Coalition have the greenest credentials, also approved by Greenpeace.
>
> Moderator: If I have the right information, that data is from a period closing with 2019, therefore this record also needs to be kept.
>
> PMZ: I apologize, but I would like to deliver a message. LMP [Hungary's Green Party] says that, in some important questions such as the EU agricultural policy and the newest climate law, the Democratic Coalition did not vote for the 65 or the 55 but the 40% emission reduction. They asked me to deliver this message.
>
> KD: But Peter, this is not true. The representatives of the Democratic Coalition voted for the 65% emission reduction in every case. You can

look it up because these are public data.[6] (HVG Videó, 2021, 2:51-3:50)

In this excerpt, KD's states that she feels proud for her party's accomplishments. PMZ's response can be understood as an attempt to make KD stop feeling pride and start feeling guilt instead for inaccurately stating her party's environmental achievements. Pride can be present in times of self-approval, while the emotions of guilt (and shame) arise when people morally transgress (Lewis 1971; Tangney et al. 2007). In this instance, it is important to distinguish the expression of a moral emotion from an emotional appeal. KD's expression of pride is just an expression of moral emotion and not a moral emotional appeal in the argumentation theoretical sense, as it is not a direct attempt to make the political opponent feel a certain emotion. However, that does not mean that this argumentative move cannot evoke certain emotions in the active or the passive participants of the debate. Both politicians argue that reducing emissions is something to be proud of, while neglecting to do just that is something to feel guilty about. As emotional entrepreneurs, they could regulate the emotions felt be the passive participants in relation to the environmental issue at hand. If pride and guilt could be transferred to the passive participants which would potentially prompt them to beware of their emissions, then one could say that the argumentative move could contribute to the collective goal of the action-producing dialogue type, i.e., pressing for action with regards to environmentalism.

As previously discussed, one would need empirical evidence to support the claim that this moral emotional appeal actually contributes to said goal, but the aim here is to provide a theoretical framework for future empirical investigation. Moreover, there may be other argumentative moves that could also or better contribute to the abovementioned goal.

6.2 Guilt

In the second excerpt, KD highlights that environmentalism has always been important to her party, and they – as well as other

[6] All translations are the author's own.

opposition parties – have provided information about their environmental policies to Greenpeace. She remarks that PMZ did not do the same because environmentalism was not important to him.

> KD: During the summer, Greenpeace asked all the Prime Minister candidates – including Viktor Orbán instead of whom a secretary of state responded – about environmental policies. I have responded and so have Gergely Karácsony and András Fekete-Győr [other runner-up candidates], but Peter, you have not responded. It was not important back then.
>
> PMZ: I haven't responded because it was unimportant, but because I did not have the time. Regardless, I apologize, I feel sad. But I am lucky because the politicians supporting me are the ones who will be responsible for the green issues in the future government.
>
> KD: Since it has always been important to me, I felt it was important to respond. (HVG Videó, 2021, 6:06-6:42)

KD communicates that PMZ should feel bad for his and his party's lack of environmental initiatives and attention given to environmental policies. She attempts to evoke the emotion of guilt in her opponent. Guilt is the negative emotion one feels in relation to a specific behavior (Lewis 1971; Tangney et al. 2007).[7] Notably, PMZ communicates his regret over his actions, and accepts the feeling of guilt. Opponents agreeing in a public political debate is quite rare which strengthens the connection between guilt and ignoring environmentalism. Thus, both active participants' arguments establish that one should feel guilty for not giving proper attention to environmental issues. Similarly to the previous excerpt, them being emotional entrepreneurs means that they can conduct emotion regulation which is, in this case, evoking guilt in the passive participants. If the feeling of guilt prompts the viewers to pay more attention to environmentalism, then this moral emotional appeal could contribute to the goal of the action-producing dialogue type, i.e., pressing for the urgent issue of environmental protection.

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[7] The negative moral emotions of shame and guilt are notoriously hard to differentiate. The dominant understanding supported by empirical research is that guilt is related to behavior, while shame is related to the self (Lewis 1971; Tangney et al. 2007).

6.3 Shame

In the third excerpt, opponents argue about giving free energy to people in lower social classes. PMZ argues against it because he believes that providing a certain amount of free energy will not teach energy awareness to people. KD argues in favor of a minimal amount of free energy provided for the less fortunate so that they can live in dignity, even those who struggle to pay their electricity bills. She remarks that environmentalism cannot be discussed without including the problem of poverty. She calls her opponent insensitive for disregarding the struggles of low-income families and their inability to afford the rising energy prices.

> PMZ: I do not support the populist free energy because I know what it entails.
>
> KD: I have to get into this. Peter, you simply cannot be so insensitive. Truly, for many millions of people, life in Hungary is simply unaffordable. I will tell you why we have to provide a minimal consumption for free. […] I am saying that we cannot talk about the climate catastrophe and green Hungary without talking about the fact that the costs cannot be paid by everyday people. And that is not populism. […] You cannot say that electricity and heating are purely products on the market. There is a minimal consumption in the 21st century that is needed for people's dignity. (HVG Videó, 2021, 24:37-26:09)

KD attempts to evoke the moral emotion of shame in her opponent as she states that PMZ is insensitive for his views and policy preferences, specifically his denial of the connection between environmentalism and poverty. Shame is the negative emotion about one's global self (Lewis 1971). The conflict of opinion between the opponents can be partly traced back to their ideological differences. This moral emotional appeal could be considered relevant as arguers are exploring what their ideological differences mean for their environmental policies, as well as discussing the implications of free energy for energy awareness. However, this moral emotional appeal does not contribute to the goal of the action-producing dialogue type but to the eristic dialogue type, i.e., bring the deeper, ideological

differences between the participants to light, and explore what those ideological differences mean for their environmental policies.

7. Conclusion

The protection of the environment is not only one of our greatest challenges, but it can be considered an inherently moral issue. Since sustainable choices are not always economically rational, people need to keep the welfare of other living beings and that of future generations in mind. By acknowledging the moral aspect of environmentalism and sustainability, a variety of argumentative techniques and strategies can be effective when attempting to make people adopt more sustainable lifestyles. Notably, research has shown that knowledge is not enough to be concerned about the environment (Kellstedt et al. 2008), emotions and specifically moral emotions have a meaningful role to play.

This paper attempted to show that moral emotional appeals could be considered relevant as they could contribute to certain collective goals of environmental political debates, i.e. pressing for action on urgent issues, such as the protection of the environment. This paper argued that if the promotion of environmentalism and sustainability can be considered as one goal of environmental political debates, and politicians take on the role of emotional entrepreneurs, then moral emotional appeals by politicians could evoke moral emotions in the audience, thus encouraging them to become more environmentally friendly. With excerpts from the Hungarian primary election when politicians debated about environmental issues, the research explicated the various forms of moral emotional appeals. By these excerpts, it can be concluded that moral emotional appeals could not contribute to the same dialogue goals in the same way. As moral emotional appeals have both a moral and an emotional component, they could be very effective in politically mobilizing people. Politicians have the opportunity to make themselves look moral and present the opponent as the amoral or immoral choice in the elections, thus contributing to reaching their individual goals of winning the debate and winning the elections. However, as previously

established, the relevance of argumentative moves is based on their potential contribution to the collective goal(s) of an argumentative situation. Similarly to Walton's conclusion in *The place of emotion in argument* (1992a), each moral emotional appeal needs to analyzed distinctively in order to show its relevance in the given argumentative situation.

There are some limitations to the present research. First, the research did not observe people's reactions to politicians as emotional entrepreneurs expressing moral emotions in a debate setting. However, it is important to note that, although "emotions generally motivate some sort of action as a response to an eliciting event, the action is often not taken, but the emotion puts the person into a motivational and cognitive state in which there is an increased tendency to engage in certain goal-related actions" (Haidt 2003, p. 854). Even though people might be reluctant to change their behavior as a consequence of direct moral appeals, emotional entrepreneurs debating with moral emotions could indirectly induce the moral transformation. Future empirical research could investigate how specific moral emotional appeals actually evoke emotions in the audience and prompt them to carry an action out. Second, one might question the honesty of politicians discussing environmentalism and expressing moral emotions about various environmental issues. Certainly, politicians' honesty can affect them being successful emotional entrepreneurs, but the motivation behind the arguments does not necessarily bear on the arguments potentially contributing to the goals of the dialogue. As Walton remarks whether an argumentative move is fallacious or not lies in "the text of discourse of an exchange in dialogue, not in the motives or intentions of the arguer" (1991, p. 220).

Acknowledgements: This research was funded by the Hungarian National Scientific Research Foundation, grant number K-144625.

References

Antal, Attila. 2020. Az ökológiai és klímaválság univerzális bináris kódja [The universal binary code of the ecological and climate crisis]. *Replika* 114(1): 87–93.

Antonetti, Paolo and Stan Maklan. 2013. Moral emotions and self-regulation: an investigation in the case of ethical consumption. In *E - European Advances in Consumer Research,* Vol. 10, eds. Gert Cornelissen, Elena Reutskaja, and Ana Valenzuela, 133–134. Duluth, MN: Association for Consumer Research.

Ben-Ze'ev, Aaron. 1995. Emotions and argumentation. *Informal Logic* 17(2): 189–200.

Ben-Ze'ev, Aaron. 1996. Typical emotions. In *The Philosophy of Psychology*, eds. William O'Donohue and Richard F. Kitchener, 227–242. London: Sage.

Bowden, Vanessa, Daniel Nyberg and Cristopher Wright. 2019. Planning for the past: Local temporality and the construction of denial in climate change adaptation. *Global Environmental Change* 57: n. pag.

Brandt, Mark J., Jarret T. Crawford and Daryl R. Van Tongeren. 2017. Worldview conflict in daily life. *Social Psychological and Personality Science* 10(1): 35–43.

Carozza, Linda. 2007. Dissent in the midst of emotional territory. *In Dissensus and the Search for Common Ground*, eds. Hans V. Hansen et. al., 1-13. Windsor: OSSA.

Carozza, Linda. 2022. Amenable argumentation approach: Accommodating emotional arguments. *Informal Logic* 42(3), 563–582.

Eemeren van, Frans H., and Rob Grootendorst. 1984. *Speech Acts in Argumentative Discussions: A Theoretical Model for the Analysis of Discussions Directed towards Solving Conflicts of Opinion*. Berlin, Boston: Mouton de Gruyter.

Eemeren van, Frans H. van, Peter Houtlosser, Constanza Ihnen and Marcin Lewiński. 2010. Contextual Considerations in the Evaluation of Argumentation. In *Dialectics, Dialogue and Argumentation. An Examination of Douglas Walton's Theories of Reasoning and Argument*, eds. Chris Reed and Cristopher W. Tindale, 115–132. College Publications.

Eemeren van, Frans H., A. Francisca Snoeck Henkemans. 2017. Argumentation: Analysis and Evaluation. 2nd edition. New York: Routledge.

Emler, Nicholas. 2003. Morality and political orientation: An analysis of their relationship. *European Review of Social Psychology* 13(1): 259–291.

Feinberg, Matthew and Robb Willer. 2013. The moral roots of environmental attitudes. *Psychological Science* 24(1): 56–62.

Gilbert, Michael. A. 1994. Multi-modal argumentation. *Philosophy of the Social Sciences* 24(2): 159–177.

Gilbert, Michael. A. 1997. *Coalescent Argumentation*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.

Goodwin, Jean. 2007. Argument Has No Function. *Informal Logic* 27(1): 69–90.

Groarke, Leo. 2010. Emotional Arguments: Ancient And Contemporary Views. *International Society for the Study of Argumentation (ISSA) Conference 2010.* https://scholar.uwindsor.ca/philosophypub/35

Haidt, Jonathan. 2003. The moral emotions. In *Handbook of affective sciences*, eds. Richard J. Davidson, Klaus R. Scherer and H. Hill Goldsmith, 852–870. New York: Oxford University Press.

Hardin, Garrett. 1968. The tragedy of the commons. *Science* 162(3859): 1243–1248.

Harth, Nicole Syringa et al. 2013. Guilt, anger, and pride about in-group environmental behaviour: Different emotions predict distinct intentions. *Journal of Environmental Psychology* 34: 18–26.

Holland, Michael F. 1976. Effects of moral maturity and essay structure on moral persuasion. *Journal of Personality* 44(3): 449–466.

HVG Videó. (2021, October 13). *Dobrev Klára és Márki-Zay Péter vitája (teljes) [The debate between Klára Dobrev and Péter Márki-Zay (full)]* [Video]. YouTube. https://www.youtube.com/watch?v=PnqwNUWOvrU

Kahan, Dan M. and Donald Braman. 2006. Cultural cognition and public policy. *Yale Law & Policy Review* 24(1): 149-72.

Kahan, Dan M., Hank Jenkins-Smith and Donald Braman. 2011. Cultural cognition of scientific consensus. *Journal of Risk Research* 14(2): 147–174.

Kaiser, Florian G. 2006. A moral extension of the theory of planned behavior: Norms and anticipated feelings of regret in conservationism. *Personality and Individual Differences* 41(1): 71–81.

Kaiser, Florian G., Michael Ranney, Terry Hartig and Peter A. Bowler. 1999. Ecological behavior, environmental attitude, and feelings of responsibility for the environment. *European Psychologist* 4(2): 59–74.

Kals, Elisabeth and Jürgen Maes. 2002. Sustainable development and emotions. In *Psychology of sustainable development*, eds. Peter Schmuck and Wesley P. Schultz, 97–122. Boston: Springer.

Kellstedt, Paul M., Sammy Zahran and Arnold Vedlitz. 2008. Personal efficacy, the information environment, and attitudes toward global warming and climate change in the United States. *Risk Analysis* 28(1): 113–126.

Kroll, Jerome and Elizabeth Egan. 2004. Psychiatry, moral worry, and the moral emotions. *Journal of Psychiatric Practice* 10(6): 352–360.

Lakoff, George. 2002. *Moral politics: How liberals and conservatives think*. 2nd edition. Chicago: Chicago University Press.

Lewis, Helen Block. 1971. *Shame and guilt in neurosis*. New York: International Universities Press.

Lewiński, Marcin, and Mark Aakhus. 2014. Argumentative Polylogues in a Dialectical Framework: A Methodological Inquiry. *Argumentation* 28(2): 161–185.

Lewiński, Marcin and Mehmet Ali Üzelgün. 2019. Environmental argumentation. *Journal of Argumentation in Context* 8(1): 1–11.

Liang, Dapeng et al. 2019. Pollution avoidance and green purchase: The role of moral emotions. *Journal of Cleaner Production* 210: 1301–1310.

Luhmann, Niklas. 1989. *Ecological communication*. Chicago: The University of Chicago Press.

Mallett, Robyn K. 2012. Eco-Guilt Motivates Eco-Friendly Behavior. *Ecopsychology* 4(3): 223–231.

Maor, Moshe and James J. Gross. 2015. Emotion regulation by emotional entrepreneurs: Implications for political science and international relations. *Paper presented at The 73rd annual MPSA conference*, Chicago, April 16–19.

Marietta, Morgan. 2008. From my cold, dead hands: Democratic consequences of sacred rhetoric. *The Journal of Politics* 703: 767–79.

Markowitz, Ezra. M. and Azim F. Shariff. 2012. Climate change and moral judgement. *Nature Climate Change* 2: 243–247.

Miranda Coelho de, Jorge Arthur Peçanha, Valdiney Veloso Gouveia, Gustavo Henrique Silvade Souza, Taciano Lemos Milfont and Bruna Nogueira Romariz Barros. 2016. Emotions toward water consumption: Conservation and wastage. *Revista Latinoamericana de Psicología* 48(2): 117–126.

Mohammed, Dima. 2015. Goals in Argumentation: A Proposal for the Analysis and Evaluation of Public Political Arguments. *Argumentation* 30(3): 221–245.

Morrow, David R. 2017. *Moral reasoning: A text and reader on ethics and contemporary moral issues*. Oxford, New York: Oxford University Press.

Mullen, Elizabeth and Linda J. Skitka. 2006. Exploring the psychological underpinnings of the moral mandate effect: Motivated reasoning, group differentiation, or anger? *Journal of Personality and Social Psychology 90*(4): 629–643.

Nilsson, Andreas, Chris von Borgstede and Anders Biel. 2004. Willingness to accept climate change strategies: The effect of values and norms. *Journal of Environmental Psychology* 24(3): 267–277.

Ojala, Marija. 2012. Hope and climate change: the importance of hope for environmental engagement among young people. *Environmental Education Research* 18(5): 625–642.

Patterson, Steven W. 2011. Functionalism, Normativity and the Concept of Argumentation. *Informal Logic* 30(1): 1–26.

Pearce, Hayley et al. 2021. Motivating children to become green kids: The role of victim framing, moral emotions, and responsibility on children's pro-environmental behavioral intent. *Environmental Communication* 15(7): 969–985.

Plantin, Christian. 1998. Arguing Emotions. *International Society for the Study of Argumentation (ISSA) Conference 1998*. URL accessed 9, October 2023. https://rozenbergquarterly.com/issa-proceedings-1998-arguing-emotions/

Platt, John. 1973. Social traps. *American Psychologist* 28: 641–651.

Poortinga, Wouter, Linda Steg and Charles Vlek. 2004. Values, environmental concern, and environmental behavior: A study into household energy use. *Environment and Behavior* 36(1): 70–93.

Rees, Jonas H. et al. 2015. Guilty conscience: motivating pro-environmental behavior by inducing negative moral emotions. *Climate Change* 130: 439–452.

Reser, Joseph P. and Janet K. Swim. 2011. Adapting to and coping with the threat and impacts of climate change. *American Psychologist* 66(4): 277–289.

Rudolph, Udo, Katrin Schulz and Nadine Tscharaktschiew. 2013. Moral emotions: An analysis guided by Heider's naive action analysis. *International Journal of Advances in Psychology* 2(2): 69–92.

Salomon, Erika, Jesse L. Preston and Melanie B. Tannenbaum. 2017. Climate change helplessness and the (de)moralization of individual energy behavior. *Journal of Experimental Psychology: Applied 23*(1): 15–28.

Schwartz, Shalom H. 1977. Normative influence on altruism. In *Advances in experimental social psychology*, Vol 10., ed. Leonard Berkowitz, 221–279. New York: Academic.

Skitka, Linda J., Cristopher W. Bauman and Edward G. Sargis. 2005. Moral conviction: Another contributor to attitude strength or something more? *Journal of Personality and Social Psychology* 88(6): 895–917.

Stern, Paul C. 2000. Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues* 56(3): 407–424.

Szabó, Gabriella. 2022. Introduction: moral emotions and their management in election campaigns. In *Managing moral emotions in politics: Lessons from Hungary's 2022 general election campaigns*, ed. Gabriella Szabó. Switzerland: Palgrave Macmillan.

Tangney, June Price, Jeff Stuewig and Debra J. Mashek. 2007. Moral emotions and moral behavior. *Annual Review of Psychology* 58: 345–372.

Tindale, Cristopher W. 1997. Fallacies, blunders, and dialogue shifts: Walton's contributions to the fallacy debate. *Argumentation* 11: 341–354.

United Nations. 1987. *Report of the World Commission on Environment and Development: Our Common Future*. URL accessed 24 April 2022 https://www.are.admin.ch/are/en/home/media/publications/sustainable-development/brundtland-report.html

Walton, Douglas. 1987. *Informal fallacies: Towards a theory of argument criticisms*. Amsterdam, Philadelphia: John Benjamin's Publishing Company.

Walton, Douglas. 1989a. *Informal logic: A handbook for critical argumentation.* Cambridge: Cambridge University Press.

Walton, Douglas. 1989b. *Question-reply argumentation*. Connecticut: Greenwood Press.

Walton, Douglas. 1991. *Begging the question: Circular reasoning as a tactic of argumentation*. New York: Greenwood Press.

Walton, Douglas. 1992a. *The place of emotion in argument*. Pennsylvania: The Pennsylvania State University Press.

Walton, Douglas. 1992b. *Plausible argument in everyday conversation*. Albany: State University of New York Press.

Walton, Douglas. 1995. *A pragmatic theory of fallacy.* Tuscaloosa: The University of Alabama Press.

Walton, Douglas. 1998. *The new dialectic: Conversational contexts of argument*. Toronto: University of Toronto Press.

Walton, Douglas. 2008. *Informal logic: A pragmatic approach*. 2nd edition. Cambridge: Cambridge University Press.

Walton, Douglas, and Erik C. W. Krabbe. 1995. *Commitment in dialogue*: *Basic concepts of interpersonal reasoning.* Albany: State University of New York Press.

Whitmarsh, Lorraine. 2009. Behavioral responses to climate change: Asymmetry of intentions and impacts. *Journal of Environmental Psychology* 29(1): 13–23.

Zomeren van, Martjn. 2013. Four core social-psychological motivations to undertake collective action. *Social and Personality Psychology Compass 7*(6): 378–388.

Zomeren van, Martijn, Tom Postmes and Russell Spears. 2012. On conviction's collective consequences: Integrating moral conviction with the social identity model of collective action. *British Journal of Social Psychology* 51(1): 52–71.

Zomeren van, Martijn, Tom Postmes, Russell Spears and Karim Bettache. 2011. Can moral convictions motivate the advantaged to challenge social inequality? Extending the social identity model of collective action. *Group Processes & Intergroup Relations 14*(5): 735–753.