# Informal Logic Information Inf

# **Argumentation Profiles**

# A Tool for Analyzing Argumentative Strategies

### Fabrizio Macagno

Volume 42, Number 1, 2022

Special Issue: Douglas Walton and his Contributions to Argumentation Theory

Numéro spécial : Douglas Walton et ses contributions à la théorie de l'argumentation

URI: https://id.erudit.org/iderudit/1088460ar DOI: https://doi.org/10.22329/il.v42i1.7215

See table of contents

Publisher(s)

Informal Logic

**ISSN** 

0824-2577 (print) 2293-734X (digital)

Explore this journal

#### Cite this article

Macagno, F. (2022). Argumentation Profiles: A Tool for Analyzing Argumentative Strategies.  $Informal\ Logic,\ 42(1),\ 83-138.$  https://doi.org/10.22329/il.v42i1.7215

#### Article abstract

An argumentation profile is defined as a methodological instrument for analyzing argumentative discourse considering distinct and interrelated dimensions: the types of argument used, their quality, and the emotions triggered. Walton's theoretical contributions are developed as a coherent analytical and multifaceted toolbox for capturing these aspects. Argumentation schemes are used to detect and quantify the types of argument. Fallacy analysis and the assessment of the implicit premises retrieved through the schemes allow evaluating arguments. Finally, the frequency of emotive words signals the most common emotions aroused. This method is illustrated through a corpus of argumentative tweets of three politicians.

© Fabrizio Macagno, 2022

This document is protected by copyright law. Use of the services of Érudit (including reproduction) is subject to its terms and conditions, which can be viewed online.

https://apropos.erudit.org/en/users/policy-on-use/



#### This article is disseminated and preserved by Érudit.

Érudit is a non-profit inter-university consortium of the Université de Montréal, Université Laval, and the Université du Québec à Montréal. Its mission is to promote and disseminate research.

# **Argumentation Profiles: A Tool for Analyzing Argumentative Strategies**

#### FABRIZIO MACAGNO

ArgLab, Instituto de Filosofia da Nova Faculdade de Ciências Sociais e Humanas, Universidade Nova de Lisboa Av. de Berna 26C, 1069-061 Lisboa Portugal fabrizio.macagno@fcsh.unl.pt

**Abstract:** An argumentation profile is defined as a methodological instrument for analyzing argumentative discourse considering distinct and interrelated dimensions: the types of argument used, their quality, and the emotions triggered. Walton's theoretical contributions are developed as a coherent analytical and multifaceted toolbox for capturing these aspects. Argumentation schemes are used to detect and quantify the types of argument. Fallacy analysis and the assessment of the implicit premises retrieved through the schemes allow evaluating arguments. Finally, the frequency of emotive words signals the most common emotions aroused. This method is illustrated through a corpus of argumentative tweets of three politicians.

**Résumé:** Un profil d'argumentation est défini comme un instrument methodologique d'analyse du discours argumentatif qui prend en compte des dimensions distinctes et interdépendantes : les types d'arguments utilisés, leur qualité et les émotions déclenchées. Les contributions théoriques de Walton sont développées comme une boîte à outils analytique cohérente et multiforme pour saisir ces aspects. Les schèmes d'argumentation sont utilisés pour identifier et quantifier les types d'arguments. L'analyse des erreurs et l'évaluation des prémisses implicites récupérées par les schèmes permettent d'évaluer les arguments. Enfin, la fréquence des mots émotifs signale les émotions les plus courantes suscitées. Cette méthode est illustrée à travers un corpus de tweets argumentatifs de trois hommes politiques.

**Keywords:** Walton's theory, pragmatics, manipulation, propaganda, discourse analysis, fallacies, argumentation, political discourse

#### 1. Introduction

Douglas Walton's contribution to philosophy and argumentation theory is a mosaic of theories, challenges, and proposals whose common thread can be hard to find in the thousands and thousands of pages he wrote, unless one starts to use and apply his ideas. Walton's program was not focused on a-contextualized constructs, namely the "examples" of the textbooks; rather his efforts were devoted to real-life contexts of dialogue and argument. His challenge was to make philosophy, and in particular what was traditionally called "dialectics" and nowadays "logic," useful for practical purposes. Walton underscored very clearly that a real argument is a complex construct: first and foremost, it is a discourse (a logos using Aristotle's terminology), and thus needs to be studied starting from its goals and more importantly its relationship with its other neglected and essential components, the interlocutors (Walton 1990). An argument, on this perspective, is a unit of argumentation, blurring the artificial divide between product and process (O'Keefe 1977). An argument is essentially a pragmatic notion, defined by its essential purpose, addressing a difference between the parties engaging in a dialogue. The logical dimension of an argument needs to be studied and assessed considering its use in a dialogue, and its effects on what the persons involved hold, accept, or can accept, namely their commitments (Walton and Krabbe 1995). Arguments cannot be studied apart from their uses—and their users. In this framework, logic becomes intertwined with dialogue theory, pragmatics, and rhetoric, and each type of argument or manipulative tactic mirrors this complexity of levels.

Walton's theory provides complementary tools that can be systematically used for different purposes. In this paper, Walton's theories of argumentation schemes, fallacies, emotions, and emotive language are shown to constitute a unified method for analyzing argumentative discourse, and in particular political speech, called "argumentation profile method." Building on two distinct attempts to profiling a speaker's argumentation (Hansen and Walton 2013; Rapanta and Walton 2016), this paper proposes to integrate the analysis of the types of argument, rhetorical strategies (including emotions), and fallacies for outlining and assessing

political argumentation. In a democratic society jeopardized by populist discourses and an information ecosystem polluted by sophistical tactics (often reduced to the naïve notions of fake news and hate speech), the possibility of pinpointing and proving when and to what extent a politician is misleading the audience is crucial. More importantly, in this context the possibility of providing audiences with instruments for unveiling problematic arguments—and understanding when the common ground is manipulated—becomes extremely relevant

The integrated and combined use of different instruments developed in Walton's theoretical proposals will be used for describing quantitatively and qualitatively speakers' argumentative preferences, bringing to light their tendencies to advance specific types of argument, or to rely on certain emotional or eristic strategies. The output is an "argumentation profile," namely a representation of the speaker's standard argumentative behavior. This outline can become extremely relevant in the present political context in which the so-called "populist" leaders are attracting much attention and arousing controversies related to their use of deceitful reasons and language. Drawing the argumentation profiles of these politicians can bring to light their common strategies and the specific tactics that they use for manipulating the popular opinion. To this purpose, the methodological approach proposed will be illustrated through the analysis of the argumentative tweets published by three politicians (Matteo Salvini, Donald Trump, and Jair Bolsonaro) from their taking office (corresponding to the official end of their election campaign). The argumentation profiles of the three politicians will be compared through the most representative examples to show their similarities and differences.

# 2. Why argumentation profiles matter

Manipulative speech is attracting growing attention, especially due to the fast dissemination that it can have through the social media and the internet in general, and its effects on political choices. The terms 'fake news' and 'hate speech' are frequently used for censuring some types of verbal behavior that can be relatively simply detected and condemned. However, these catchy and trendy terms

refer only to naïve tactics that constitute the very tip of the iceberg of manipulation, and certainly do not characterize the problems that can affect political communication. Manipulation is a much more complex phenomenon and a much deeper problem that cannot be prevented through labels and automatic detection. Manipulation lies mostly in what is *not* said, and not only in slurs or blatantly fabricated stories. The attention paid to the prevention of deceptive speech hides the other dimension of manipulation, which is its possibility, namely the vulnerability of the audience. Without the capacity to distinguish between evidence and claim, and between evidence and pseudo-evidence, an audience makes it possible to use different types and levels of sophistical tactics successfully.

#### 2.1. Deceitful communication and the audience

The terms 'fake news' and 'hate speech' are controversial, constantly redefined and specified (Blitz 2018; Davidson et al. 2017; Habgood-Coote 2019; Shu et al. 2017), that are intended to capture some manifestations of a much more complex and troublesome phenomenon, namely the use of media (social media and the traditional ones) to manipulate the public opinion. The risk posed by information manipulation are visible and include some evident and structural phenomena such as influences on election results (Allcott and Gentzkow 2017), the loss of credibility in the media, or the upsetting of the "authenticity balance of the news ecosystem" (Shu et al. 2017, p. 22). Of these two dimensions of information manipulation—centralized detection (and control) and users' judgments of information credibility (Atodiresei et al. 2018)—the former has attracted the efforts of the academic community, which is increasingly pursuing the goal of regulating the quality of the disseminated information.

A growing amount of work developed in information technology and computational linguistics has been recently devoted to fake news and hate speech detection. In both cases, the problem of detection is crucial, and addressable only by considering the epiphenomenon—the explicit expression of false information (Allcott and Gentzkow 2017, p. 213; Shu et al. 2017, p. 23) or hatred through the most visible and prototypical indicators (Aldwairi and

Alwahedi 2018; Jin et al. 2016; Rubin et al. 2015), such as false titles, the relationship between title and body text (Shu et al. 2017), or the use of slurs (Davidson et al. 2017). However, one of the greatest vulnerabilities acknowledged in the automatic detection systems is the lack of correspondence between expression and meaning (Pisarevskaya 2017; Rubin and Lukoianova 2015). In case of "fake news" and hate speech, the detection instruments used in computational linguistics are insufficient for capturing the complexity of the phenomenon. Mere textual indicators can provide mere hints, which are useful for certain purposes such as the identification of texts created and spread by automatic agents such as social bots or cyborgs. However, their effectiveness is limited in contexts such as political discourse, where only the most evident and explicit types of information manipulation are detected and banned, and this type of control is perceived as exceptional and extraordinary (Lerman, Shepherd and Telford 2020).

Manipulative speech is often analyzed without a fundamental dimension thereof, the audience. Misleading speech is a hazard to our society basically because the audience is affected by it, and it jeopardizes democratic life by disregarding the universal conditions for deliberative discourse. On the one hand, this awareness led to careful controls on the spreading of certain types of information, which is at the same time a highly debated and controversial topic. On the other hand, however, the development of the audience's capacities of comprehension, deep understanding, and engaging in accountable dialogues (Michaels et al. 2008)—necessary for detecting and defusing misleading discourse—have attracted much less attention, leading to a lack of educational tools for identifying and proving that a message is deceitful.

In a world characterized by a growing number of fake news reports (such as in Twitter) (Allcott et al. 2019), the audience has remained vulnerable to manipulative speech, confined in a perspective that could be defined as "multiplist" (Kuhn et al. 2000), namely characterized by the acknowledgment of the uncertainty of knowledge and the existence different perspectives, but also by the irrelevant role of critical thinking and more importantly, evidence. A multiplist audience tends to accept viewpoints as matter of personal taste, not engaging in the analysis of the arguments un-

derlying them (Kuhn et al. 2000, p. 325) and instead looking for positions or evidence confirming their own view (Guess et al. 2018; Kuhn et al. 1994; Shu et al. 2017). In this sense, misleading information or arguments are *not* evaluated as weaker than the ones supported by proofs or evidence (Kuhn 2001, 2002; Kuhn et al. 1994).

As various studies have underscored, the majority of the individuals fail to distinguish genuine evidence from pseudo-evidence (Kuhn 1991, pp. 238; 266; Kuhn et al. 1994), and detect the basic components of an argument. The lack of these basic argumentative skills leads to relativism—namely the incapacity to evaluate one's own and the others' view—and extreme vulnerability to manipulative speech. When a reasoner cannot distinguish pseudo-evidence (co-occurrences of events or temporal sequences thereof, or mere descriptions of the view itself) from genuine evidence (data and information bearing on the correctness of a view), he or she cannot differentiate a perspective from the reasons why it can be correct or wrong (Kuhn 1991, p. 94). This condition leads to the impossibility of disconfirming the view that an individual holds, as there is no possibility to find evidence that can counter it (Kuhn, 1991, p. 238)—just like evidence that can confirm it. Only a minority of reasoners manage to evaluate their own views by not only distinguishing evidence and claims, but engaging in the evaluation of the different and alternative claims through the assessment of the supporting and contrasting evidence (and the force thereof) (Kuhn 1991, p. 267; Kuhn et al. 1994).

# 2.2 The role of argumentation and argumentation profiles

Argumentation has been historically developed for the purpose of analyzing and assessing arguments and inventing counterarguments and rebuttals. The analysis of arguments and persuasive strategies, and the identification and assessment of the fallacies in political discourse have been the subject matters of many works in argumentation (van Eemeren and Grootendorst 1992; Fairclough and Fairclough 2012; Perelman and Olbrechts-Tyteca 1969; Walton 2006). However, these analytical tools have been used separately for studying specific and isolated phenomena.

The systematic analysis of the different ways a view can be corroborated or rebutted by evidence, or in contrast be only apparently and fallaciously argued for or against can portray the complexity of manipulative speech and at the same time bring to light different strategies used for presenting an ungrounded claim as an argument. Moreover, a systematic argumentative analysis of political discourse can show how political leaders treat their audiences, distinguishing when they offer the needed evidence and when they resort to manipulation to deceive their hearers. This type of analysis is more complex but can depict more accurately how speakers behave and reason verbally and be used to present to the public what happens under the surface of their discourses.

Speakers, and more specifically political actors communicating publicly, use complex strategies used for leading the interlocutor to accept a viewpoint. Arguments, intended as means for addressing an actual or potential difference (at the level of opinions, factual judgments, decisions, etc.) (Walton 1990), are one of the most important tools, and characterize a fundamental aspect of the orator's style (Hansen and Walton 2013). However, as pointed out above, political discourse is heavily characterized by other tactics that include classical features of rhetorical speech, such as the use of emotions (Macagno and Walton 2019), but also classical instances of sophistical discourse, such as the use of fallacies (Walton 1987) or the redefinition of keywords (Schiappa 2003).

The notion of "argumentation profile" refers to an analytical representation of the strategic argumentative choices of a speaker. A profile is conceived as an outline, a quali-quantitative description of the way a speaker tends to support his viewpoint based on the frequency of the different argumentative strategies at his disposal. The "profile" is thus a descriptive output of the unified use of different tools for analyzing argumentative discourse—which will be referred to as the "argumentation profile method." This concept is thus methodologically distinct from the normative construct called "profile of dialogue" (Walton 1989, pp. 48–49)—an ideal sequence of moves drawn from a type of formal dialogue that is confronted with a sequence from a real dialogue to assess whether a specific move (for example a question) is appropriate to

the dialogue and the stage of the dialogue the participants are engaging in.<sup>1</sup>

The notion of argumentation profile results from the combination of two distinct attempts to capture systematically trends in the production of arguments. On the one hand, Hansen & Walton (2013) analyzed the arguments of the political candidates in the Ontario provincial elections. The different types of argument were coded using argumentation schemes (Walton 1995a) and the relative frequencies of the argument kinds used by each party were compared. On the other hand, Rapanta & Walton (2016) addressed the differences in the production of arguments by students of different cultures, combining the analysis of the types of argument with the fallacies (paralogisms) committed. In the first study, the result was an analysis of the profiles of the candidates at the level of their general strategic choices (more oriented towards criticizing or proposing), but the authors did not consider the manipulative dimension. In the second case, both reasonable and weaker arguments were captured; however, the types of fallacies considered were confined to the uncritical use of argumentation schemes (arguments not backed by the necessary evidence) (Walton 2010a), not including the classical fallacies that instead can reveal deeper levels of manipulation.

Based on these studies, an argumentation profile can be defined as the strategy (consisting in distinct argumentative tools) that a speaker preferentially uses for defending his or her viewpoint or addressing a possible doubt. An argumentation profile can be determined considering two levels: the descriptive (consisting in the quantification of the different tactics used detectable without involving evaluative considerations), and the evaluative (consisting in the quantification of deceptive tactics) (Macagno 2019; Rapanta and Walton 2016).

<sup>&</sup>lt;sup>1</sup> This abstract and unrealistic view of dialogue and profile of dialogue was later modified for describing how presumptions arising from the context and the dialogical setting create expectations on the subsequent moves of a dialogue (Walton 1999b). The profiles of dialogue remained an evaluative method, but not normative in the sense of based on a-priori formal and thus abstract model. Rather, its evaluative dimension rests on the analysis of the sets of the interlocutors' commitments and the conversational setting.

However, to capture these dimensions of the argumentation profile of a speaker, it is necessary to go beyond the analysis of argument types and paralogisms and consider three distinct dimensions: 1) the types of argument, 2) the use of evidence and the fallacies committed (revealing a manipulation of the common ground), 3) the emotive or evaluative language used, and their use to evoke emotions (pathos) or assessments of the speaker (ethos). These three dimensions can capture the complexity of the strategies used for argumentative purpose, and their interrelation is represented in Figure 1 below.

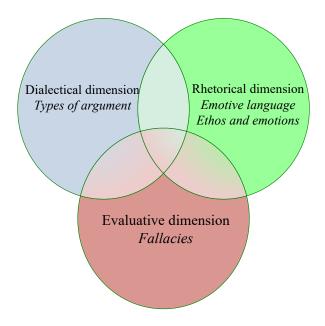


Figure 1: Dimensions of argumentation profiles

The first dimension is referred to as "dialectical" (as opposed to "rhetorical") drawing on the classical meaning of the term, used to refer to the logic of arguments in the broader and proper sense (Macagno and Walton 2014a). The "dialectical dimension" thus concerns the relationship between the speaker, the different types of reasons provided, and the doubt that they are used to address, emphasizing the classical "logical" aspect of argumentation which is distinguished from the "rhetorical" one. This latter term is used

to include the use of *pathos* and the construction of the speaker's role and credibility (*ethos*) to affect the audience's opinion, which are both captured in text through the use of emotive language. Finally, the evaluative dimension is transversal to the other two, and involves the determination of the fallaciousness or acceptability of an argument (Blair and Johnson 1987) considering its relevance (dialogical, topical), its compliance with the common ground (which includes factual information and principles of inference), and its backings (the provision of the necessary evidence).

#### 3. The dimensions of an argument

The object of analysis by the argumentation profile method is argumentative discourse, namely a discourse or dialogue defined by the use of arguments (Walton 2006, p. 4). Therefore, from a theoretical perspective, an argumentation profile is primarily the outline of the strategies that the speaker uses in supporting his or her viewpoint through the use of (explicit or implicit) arguments. The concept of argument, however, needs to be specified. An argument has been traditionally defined as "a reason producing belief regarding something which is in doubt" (Boethius, De Topicis Differentiis, 1180C 6-7), which "must always be more known than the question; for if things which are not known are proved by things which are known and an argument proves something which is in doubt, then what is adduced to provide belief for the question must be more known than the question" (1180C 8-11). This definition is only apparently simple (Walton 1990). In fact, it presupposes four different levels that correspond to four dimensions of dialectics, which are mirrored in both activities of argument analysis and evaluation. These dimensions correspond to the dimensions that an argumentation profile needs to mirror.

### 3.1. The four dimensions of arguments

An argument is primarily a *logical* construct, as it consists of a series of statements (premises) related to a further statement called "conclusion," which transfer the acceptability of the former to the latter based on some principles. Such principles are indemonstra-

ble and commonly accepted rules of inference called *topics* or *maximae propositiones* in the ancient tradition (Hitchcock 1998; Macagno and Walton 2014a; Rigotti 2007; Rigotti and Greco-Morasso 2019), which corresponding to the modern notion of warrant (Hitchcock 2003; Toulmin 1958).

Second, an argument is part of a *dialogue*, and pursues a specific communicative goal, to "do things with words" (Austin 1962, pp. 96–99) in a specific (dialogical) context. In the dialectical tradition, a clear distinction was drawn between the logical dimension (argument) and its pragmatic one, consisting in its expression and role in discourse (argumentation) (Boethius, *De Topicis Differentiis*, 1173D 22-31). In a modern perspective, an argument is not only regarded as a logical and semantic relationship between propositions, but as a complex speech act (van Eemeren and Grootendorst 1984, pp. 40–46) pursuing different communicative goals. Walton clearly explained this dialogical dimension of arguments showing its essential relation with the types of dialogue in which they are used:

Argument is a social and verbal means of trying to resolve, or at least to contend with, a conflict or difference that has arisen or exists between two (or more) parties. An argument necessarily involves a claim that is advanced by at least one of the parties. [...] The claim is very often an opinion, or claim that a view is right, but it need not be. In a negotiation argument, the claim could be to goods or to financial assets. The conflict or difference (stasis) that is the origin of the argument could be of different kinds-it could be a conflict of opinions, an unsolved problem, an unproven hypothesis, or even a situation where both parties are blocked from further actions they are trying to carry out. The different kinds of argument are different ways of trying to resolve these conflicts (Walton 1990, p. 411).

On this perspective, arguments are instruments in a specific conversational context characterized by specific dialogical goals, or rather interactional intentions (Bellack 1968; Bellack et al. 1966; Gumperz 1982, pp. 31–32; Merin 1994, p. 238; Sinclair and Coulthard 1992; Stubbs 1983; Walton 2007a; Widdowson 1979, p. 144). In this sense, arguments become essentially intertwined with

the dialogical goal that a speaker proposes through his or her argument, which Walton captured in the theory of types of dialogue.

Third, an argument, being part of a dialogue and being grounded on accepted inferential rules, depends essentially on the common ground between the interlocutors. This dimension can be defined "pragmatic" in the sense that refers to how an argument (the linguistic expression of a goal-directed reason) is related to the individuals involved (Kecskes 2013, p. 21) and the dialogue in which it occurs (Hamblin 1970, p. 40). The common ground accounts for two interrelated aspects of an argument, its endoxical nature (an argument is grounded on what is commonly accepted, as underscored by Aristotle) and its defeasibility, namely the acceptability of its conclusion until contrary evidence is provided. The first aspect was addressed by Walton through the notions of commitment and dark side commitments (Macagno 2018; Macagno and Walton 2017; Walton and Krabbe 1995), while the second was developed in his theory of evidence and burden of proof (Walton 2002, 2016).

Commitments are dialogical obligations, what a participant to a dialogue holds as true and thus accepts and is disposed to defend in case it is challenged. Commitments are thus the dialectical image of the logical concept of "truth" and the psychological notion of "belief" (Hamblin 1970, 1971; Walton 2010b). An argument is intended to modify what an interlocutor accepts or is committed to (see Hamblin, 1970; Walton & Krabbe, 1995) starting from his or her existing commitments, which can include not only encyclopedic information, but generalizations, definitions and word uses, and values and hierarchies thereof (Macagno and Walton 2017). Such previous commitments of the interlocutor can be drawn from the evidence of previous dialogues or by presumption, namely relying on what is commonly accepted in a given culture (Macagno 2015a).

Commitments are not only the result of explicit dialogical acts; they also represent what is taken for granted by advancing an argument. The implicit or "dark-side" commitments include distinct phenomena that in pragmatics would be classified as "pragmatic presuppositions," namely propositions taken for granted by a

person in performing a speech act (whether an assertion or a different speech act), whose felicity, or conversational acceptability depends on the interlocutor's acceptance of such propositions (Allan 2013; Stalnaker 1974, 2002). In this type of commitments fall the classical "semantic" presuppositions triggered by various grammatical phenomena (such as factives, etc.) and the themefocus articulation of an utterance (Abrusán 2010, 2011; Atlas 1991; Gazdar 1979; Kay 1992; Levinson 1983, chap. 4), but also the needed tacit assumptions (Ennis 1982) necessary for the reasonableness of the argument and some conventional implicatures (such as the ones triggered by "but" or "only") (Ducrot 1972, 1980). Such "hidden," or dark-side commitments are the core of the argumentative strategies and the manipulative tactics. To persuade or convince the audience, a speaker needs to start from what has been already accepted; however, sometimes an unproven, unaccepted or even unacceptable proposition can be presented as commonly accepted, shared, and known (Macagno 2015a, 2018; Macagno and Walton 2014b)—namely it can be used as a darkside commitment. This implicit dimension of arguments draws the line between acceptable arguments and the sophistical ones.

The epistemic dimension concerns the role of evidence. An argument provides a presumptive reason to accept a conclusion, in the sense that the latter can be accepted and be acceptable unless and until contrary and stronger arguments are advanced. Its acceptability depends on the lack of contrary arguments grounded not only on more accepted or acceptable premises, but also on (more) evidence (Walton 1995a, 2001a). Moreover, an argument modifies a status quo, namely the dialectical relation between a participant to a dialogue and a proposition. An argument modifies the attitude of the interlocutor towards a proposition that he or she considers as doubtful or unacceptable, turning it into a commitment. Thus, the speaker needs to fulfil a burden of proof: the reasons provided in favor of its acceptance need to overcome the reasons to doubt or not to accept it. The notion of strength of argument is thus as crucial as the problem of its fallaciousness, as the potentially doubtful premises need to be grounded on sufficient backings (evidence) to provide probative weight on the conclusion (Walton 2002, p. 16; 2016).

The four dimensions of an argument can be represented as four vectors in the following Figure 2.

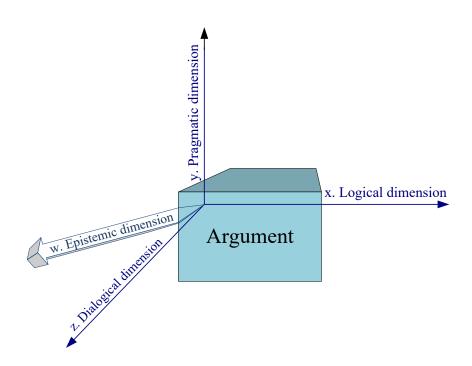


Figure 2: The dimensions of argument

These dimensions can be used for assessing an argument.

# 3.2. Argument evaluation: The dialectics and pragmatics of fallacies

The logical tradition has drawn a clear distinction between good and bad arguments, where the latter are detected through two criteria: soundness, namely the truth of the premises, and validity, namely the compliance with logical axioms—generally the deductive ones (Reed and Walton 2003). However, an argument is not only a logical construct—and deductive axioms are not the only ones characterizing arguments. Moreover, truth can be established

only in very few cases of arguments exchanged in real-life contexts. More commonly, arguments are based on premises that represent the commitments of the interlocutor—directly based on evidence, or indirectly based on what is commonly accepted. In this framework, validity and soundness are not sufficient for analyzing the quality of an argument—nor are they necessary. Arguments can be deceptive for pragmatic or dialogical reason, and the backing or the lack of backing of a premise can be hardly captured using the dichotomy between "true" and "false." Finally, dichotomy between good or bad arguments fails to acknowledge the fact that between these two extremes there are arguments that are weak or inadequate to the conclusion defended.

The notion of argument shown in Figure 2 above outlines dimensions that were not considered in the classical view of fallacies. The crucial dimension that Walton brought to light is the dialogical one (z), which he captured considering the predefined "rules" of a dialogue (Walton 1995b, p. 271). This normative approach can work very well in formal dialectical models, but can be highly problematic in conversational settings where several factors define the mutual expectations of the participants (Levinson 1992, 2012). Walton was aware of this limitation when he underscored how the pragmatic notion of "collective goal" of a dialogue—and relevance thereto—establishes the intent to deceive underlying the fallacies (Walton 1995b, pp. 184-85). Building on this suggestion, it is possible to translate the predefined specific standards into broader and more flexible ones, grounded on the notions of dialogical relevance, common ground, and evidential burden. Together with the "logical" dimension accounted for by the classical approaches, Walton's theory can be used for outlining a four-dimensional evaluation of an argument.

In argument evaluation, the dialogical dimension (z) concerns the relevance of an argument to the dialogue (Walton 2010a). When an argument is used in a context to pursue a goal different from the one shared by the interlocutors (for example, attacking instead of finding a solution), the argument is only an apparent reason (Walton 1995b, 2008). Let us consider the case of personal attacks (*ad hominem* arguments). When used in a discussion about the acceptability of a statement or a proposal, these arguments

only apparently pursue the goal agreed upon by the interlocutors. In fact, they are used for a different purpose—ending the discussion, or excluding the interlocutor from it, or triggering a negative value judgment on him or her. Thus, in these cases *ad hominem* arguments are fallacious because they are irrelevant (Macagno 2013).

The pragmatic dimension (y) captures the compliance with the common ground, namely the use of implicit commitments accepted by the interlocutors. An argument is grounded on implicit, dark-side commitments, which, however, need to be actually shared by the audience—as resulting from previous dialogues or the belonging to a specific culture (Manor 1982; Walton 1981). For example, the assertion that "I do not want to visit the cemetery, as it is filled with losers" pragmatically presupposes that there are (many) losers buried in the cemetery (pp). The "act of presupposing" pp has a threefold effect: 1) it commits the speaker to pp, 2) it denies the audience the chance to correct pp (Manor 1975, p. 144; 1976), and 3) it commits the interlocutor to pp (Walton 1981). Thus, when the speaker presupposes a content that is not shared nor acceptable by the audience, he or she "entraps" the interlocutors in a commitment that is not the result of previous actual or cultural dialogues (Sbisà 1999; Walton 1999a), and forces them to either accept it, or fulfil the burden of disproving it (Macagno and Walton 2017). Thus, when a speaker takes for granted an unshared proposition that is not accommodable (as it conflicts with the implicit commitments of the interlocutors, see Macagno, 2018), he or she is manipulating the common ground (Walton and Macagno 2010). For analytical purposes, the content that is taken for granted as accepted needs to be first detected and reconstructed, based on a) the presupposition triggers analyzed in the pragmatic literature (Abrusán 2011; Levinson 1983, chap. 4), and b) the specified rules of inference (argumentative relations) that are left unexpressed in an argument (Anscombre and Ducrot 1983) and are necessary for the discourse coherence (Moeschler 2010; Rocci 2005). Then, these implicit commitments need to be compared with the available information concerning the common ground of the audience.

By considering the epistemic dimension (w), it is possible to distinguish arguments presumptively acceptable from the ones that cannot fulfil their burden of proof—even though they do not manipulate the common ground. This criterion captures the acceptability of the factual premises that the critical questions are intended to assess (Rapanta and Walton 2016; Walton 2010a). The principle underlying this criterion is that when a factual premise is potentially doubtful, it needs to be backed by adequate evidence (Kuhn 1993, 2010, p. 817). The lack of backings or the use of inadequate or wrong evidence is commonly considered as a sign of poor argumentative skills (Erduran et al. 2004; Kuhn 2010; McNeill and Krajcik 2008), as the argument, even though not necessarily fallacious, is incomplete (not fulfilling the critical questions), and cannot be presumptively accepted in ordinary contexts (Walton 2010a).

In this perspective, classical fallacies are a fundamental instrument for argument evaluation, but not sufficient. More importantly, they incoherently mirror distinct dimensions of an argument, each identifying the cause of the deceit in the weakness of one of the four axes, considered independently of the others. For example, an *ad hominem* fallacy consists in an attack to the person and not to the conclusion or the argument of the interlocutor. However, a personal attack can be mischievous not only for reasons of dialogical relevance (axis z) (Walton 1998a), but also because it is ungrounded or based on unaccepted premises. Fallacies need to be considered as epiphenomena of breaches on different axes, which can be brought to light by analyzing the critical questions associated to argumentation schemes. Through the critical questions, it is possible to assess all the dimensions of an argument (Rapanta and Walton 2016; Walton 2015; Walton and Godden 2005).

This four-dimensional analysis leads to a scalar evaluation, instead of a binary opposition between "good" and "bad" or "sound" and "fallacious" reasons. Arguments can be evaluated along a continuum ranging from presumptively acceptable to clearly unacceptable and manipulative (as unsound or invalid), which encompasses the different degrees to which a reason can appear stronger or better than it is (Walton 2010a). The "pragmatic" view of fallacies involves in the evaluation not only voluntary violations of the

unwritten rules of a dialogue used for deceptive purposes, but also different types of flaws, blunders, and errors—and omission of evidence (Walton 1995b, pp. 264–66).

#### 4. Argumentation profiles: Types of argument

The notion of argument mentioned above brings to light a fundamental relationship between its logical and its dialogical dimension. This articulation is crucial for understanding the notion of argumentation scheme, and more importantly for using them as an analytical tool.

# 4.1. The goals of arguments: Types of dialogue and dialogue moves

In the literature in pragmatics, the focus has been generally placed on the individual intentions that are traditionally captured by speech acts (van Eemeren and Grootendorst 1984). However, to identify what an argument is for, it is necessary to also consider the other dimension of a dialogue, the interlocutor. The dialogue is thus the expression of a joint intention of the participants, which can be a priori (such as in formal models of dialogue or in specifically regulated dialogues) or negotiated, generated, and modified during the communicative process (Kecskes 2010, 2013, p. 50). The theory of types of dialogue (Walton 1989, 1990, 1998b; Walton and Krabbe 1995) classifies these joint dialogical intentions in six categories (persuasion, negotiation, inquiry, deliberation, information seeking, and eristic), later developed to seven (adding the discovery dialogue) (Walton 2010c). The types of dialogue are represented in Table 1 Table 1: Types of below (adapted from Walton & Krabbe 1995, p.66):

Түре	INITIAL SITUATION	Main Goal	PARTICIPANTS' AIMS	SIDE BENEFITS
1. Persuasion Dialogue	Conflicting points of view.	Resolving conflicts by verbal means.	Persuading the other(s).	<ul> <li>Develop and reveal positions.</li> <li>Build up confidence.</li> <li>Influence onlookers.</li> <li>Add to prestige.</li> </ul>
2. Negotiation	Conflict of interests & need for cooperation.	Making a deal.	Getting the best out of it for oneself.	Reach an agreement. Build up confidence. Reveal positions. Influence onlookers. Add to prestige.
3. Inquiry	General ignorance knowledge a reaching ar agreement.		Finding a "proof" or destroying one.	Add to prestige.     Gain experience.     Raise funds.
4. Deliberation	Need for action.	Reaching a decision.	Influencing the outcome.	Reach an agreement.     Develop and reveal positions.     Add to prestige.     Express preferences.
5. Discovery	hypothesis for		Find and defend a suitable hypothesis.	Develop and reveal positions.     Gain experience.     Reach an agreement.
6. Information- seeking	Personal ignorance. knowledge and showing, or hiding		Gaining, passing on, showing, or hiding personal knowledge.	Reach an agreement.     Develop and reveal positions.
7. Eristic	Conflict and antagonism.	Reaching a (provisional) accommodation in a relationship.	Striking the other party and winning in the eyes of onlookers.	Reach an agreement. Develop and reveal positions. Gain experience and amusement. Add to prestige. Vent emotions.

Table 1: Types of dialogue

The types of dialogue were conceived for representing formal dialogues, in which the joint dialogical intention preceded and governed the individual moves. Under a formal approach, the type of predetermined intention does not mirror actual dialogues, in which participants do not only pursue multiple dialogical goals within the same dialogue (Walton et al. 2016), but often challenge, impose, and negotiate the type of dialogue they want to engage in. For example, personal attacks (characterizing eristic dialogues) can be irrelevantly advanced for turning a persuasion dialogue into a quarrel, or the other expression of *ad hominem* arguments, victimization, can be used for interpreting the interlocutor's persuasive attempt as eristic. Therefore, instead of identifying Walton's types of dialogue with the activities that more clearly exemplify them (formal systems), it can be useful to look at them in pragmatic terms as a tentative to classify the joint communicative inten-

tions (in the sense of communicative purposes) that the interlocutors can hold to pursue in their interaction. The theory of dialogue types can be better regarded as a theory of dialogue *moves* types (corresponding to discourse segments, see Grosz & Sidner, 1986, p. 178) that the participants perform to co-construct their dialogue (Macagno and Bigi 2017, 2020). The situational and institutional context clearly constraints the type of moves that can be expected to occur: an educational dialogue (Rapanta and Christodoulou 2019) shows different types and frequencies of moves than a medical interview or a legal discussion. However, dialogue moves are the building blocks that can be adapted to distinct activities and contexts.

Considering the context and the type of argumentative activity considered in this paper (political argumentation on social media), it is possible to outline the moves that can ideally characterize it. Political discourse is defined as a "realm of action," primarily characterized by decision-making, where solutions to present or future problems are defended and attacked (Fairclough and Fairclough 2011, p. 244). Thus, when a politician acts in his or her institutional role, the primary presumed goal is to justify and argue for and against decisions of different kind before an audience constituted by all the citizens. This primary goal, which defines the specific dialogical activity, is pursued primarily through deliberation moves, but also by persuasion (when the acceptability of a value judgment is disputed) or information sharing moves whose acceptability can be the object of explanations or inquiry. Eristic moves can be used exceptionally; however, these types of moves are characteristic of antagonistic scenarios, such as direct confrontations in election campaigns. Overall, this type of activity can prototypically lead to the following types of moves (Figure 3).

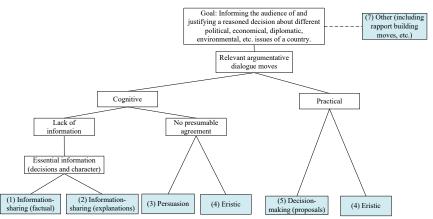


Figure 3: Types of moves in political institutional tweets

Even though this typology does not exhaust the complexity of the moves in political institutional online argumentation, it can provide a guidance for interpreting the arguments occurring in it. In a sense, it is a tool for the argument analysis.

#### 4.2. Types of argument expressed through argumentation schemes

Argumentation schemes are stereotypical patterns of argument, representing the most generic types of argument as a combination of one or more factual premises, a generalization (a warrant), and a conclusion. The premises are forms of premises, namely propositions that include variables that need to be specified in each argument. The generalization works as a rule of inference, providing for the reason why a type of conclusion (representing, for example, a state of affairs) follows from a type of premise (representing, for example, a cause of such a state of affairs).

Argumentation schemes are associated with a set of critical questions, which mirror the acceptability conditions of an argument at different levels, including the acceptability of the factual premises and the relationship between the latter and the rule of inference. Should these questions be not fulfilled, the argument cannot be considered as acceptable—or even reasonable—and cannot be used to provide a presumptive reason for accepting the conclusion. Thus, an argumentation scheme presents in its structure the dialectical nature of argumentation, where reasons are

advanced to modify the interlocutors' commitments, and result in specific burdens of questioning or providing evidence (Godden and Walton 2006).

An example of an argumentation scheme is the argument from practical reasoning represented below, a type of argument that characterizes political discussions (Macagno and Walton 2018; Walton et al. 2008, p. 96):

GOAL PREMISE	The goal of agent $A$ is to bring about $G$ .
ALTERNATIVES PREMISE	A reasonably considers the given information that bringing about at least one of $[B_0, B_1,, B_n]$ is necessary/sufficient to bring about $G$ .
SELECTION PREMISE	A has selected one member $B_i$ as the most acceptable necessary/sufficient condition for $G$ .
CONDITIONAL PREMISE	If the goal of A is to bring about G, and $B_i$ is the most acceptable necessary/sufficient condition for $G$ , then $A$ should bring about action $B_i$ .
CONCLUSION	Therefore, $A$ should bring about action $B_i$ .

The scheme can be evaluated through the following critical questions:

CQ <sub>1</sub> :	Are there alternative means of realizing $G$ , other than $[B_0, B_1,, B_n]$ ? [Alternative Means Question]
CQ <sub>2</sub> :	Is $B_i$ an acceptable (or the best) alternative? [Acceptable/Best Option Question]
CQ <sub>3</sub> :	Is it possible for agent $A$ to do $B_i$ ? [Possibility Question]
CQ4:	Are there negative side effects of $A$ 's bringing about $B_i$ that ought to be considered? [Negative Side Effects Question]
CQ₅:	Does A have the goals other than $G$ , which have the potential to conflict with $A$ 's realizing $G$ ? [Conflicting Goals Question]

CQ<sub>1</sub>, CQ<sub>2</sub>, and CQ<sub>3</sub> represent the defeasibility condition of the factual premises, namely the exhaustiveness of the alternatives,

their assessment, and their feasibility. CQ<sub>4</sub> and CQ<sub>5</sub> address the reasonableness of the conditional (warrant).

In the literature, more than 60 schemes have been analyzed (for an outline, see Walton et al., 2008). However, most of them are combination of different more basic schemes, which can be summarized in the following dichotomic tree (Figure 4) (Macagno 2015b; Macagno and Walton 2015)<sup>2</sup>.

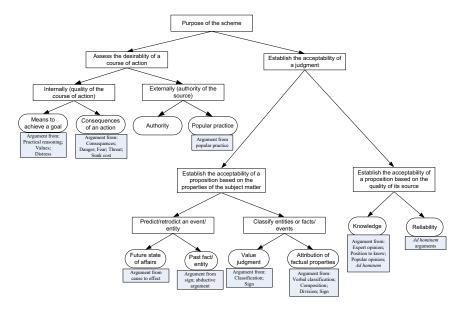


Figure 4: Pragmatic classification of argumentation schemes

This "tree" of schemes can be explained by considering the dialogical (pragmatic) nature of an argument. Some schemes have prototypical goals, namely they can be used for pursuing a specific dialogue move. For example, an argument from consequences pursued a specific type of dialogue move, namely making a deci-

<sup>&</sup>lt;sup>2</sup> To these categories, two other schemes—the argument from analogy and the argument from example—need to be added, which convey implicitly the other schemes. The former presupposes a semantic (material) relation captured by the aforementioned schemes through a comparison between two heterogeneous entities or states of affairs, while the latter through an illustration, or a more specific instance of the entity or state of affairs represented in the conclusion (Macagno 2017; Macagno and Walton 2017).

sion or negotiating. This goal is not directly and primarily pursued by other schemes: for instance, an argument from cause to effect can be used for analyzing a phenomenon (inquiry), but not directly for suggesting a course of action. Some schemes can be used for pursuing all types of dialogue moves: the "external arguments" (from authority or testimony) can be used for supporting any kind of conclusion, aimed at any kind of dialogical goal. The relationship between the dialogical goal of the conclusion and the categories of the schemes allows identifying the possible candidates, which can be narrowed down further by considering the semantic dimension of a scheme.

The round-edge boxes indicate the type of material relation between the premises and the conclusion—whether it is causal, definitional, authoritative, etc. This dimension represents the means to achieve the sought-after goal. Thus, a proposal for a decision can be supported by an argument from consequences if the speaker intends to emphasize possible benefits or trigger negative emotions related to a specific course of action ("if we do not do this, we will lose everything"). In contrast, a deliberative conclusion can be grounded on a practical argument when the speaker intends to assess the alternatives and compare them critically.

Argumentation schemes and dialogue moves are the backbone of argumentative analysis, constituting the dialectical dimension of argumentation. This element needs to be combined with the other two dimensions, namely the rhetorical and the evaluative one.

# 5. Argumentation profiles—Evaluation

As mentioned in the previous section, fallacies can be considered as manifestations of argument weaknesses at different levels. The different dimensions of evaluation mirror a continuum of argument quality ranging from clear cases of voluntary manipulation to presumptively acceptable arguments. This continuum is represented in the following Figure 5:

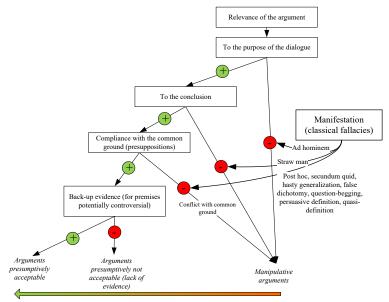


Figure 5: Acceptability of arguments

Manipulative arguments are distinguished not only from presumptively acceptable arguments, but also from weak arguments. The latter are described as argument lacking the necessary evidence for supporting the conclusion. For this reason, they are not necessarily conceived as instruments for misleading the audience, even though they cannot fulfil the burden of proof and thus, in an ordinary context in which information is available, they cannot be used for supporting a conclusion (Walton 1995b, 2016). Manipulative arguments consist in a deliberate (provable) modification of what the audience (the interlocutor) accepts, which can be manifested in three different dimensions: 1) the purpose of the dialogue (turning a deliberation or an assessment of an opinion into a quarrel, see Macagno, 2013) (axe z); 2) the explicit commitments of the interlocutor (or another party) (misquoting or misreporting, see Macagno & Walton, 2017) (assessed at the logical level of incompatibilities and at the pragmatic level of quotations); and 3) the common ground (taking for granted that a proposition that is not accepted by everyone in the audience or even acceptable is in fact part of their commitments) (axe y).

The problem at an operational level consists in capturing the different types of violations. To this purpose, two instruments can be extremely effective, namely the detection of the "classical" fallacies, and the use of critical questions. The first instrument has been developed accurately by Walton in his immense toolkit of argumentation theory, in which each fallacy is accurately identified, and its possible uses illustrated and evaluated. As shown above, fallacies capture different types of voluntary manipulation, detecting when an argument is used irrelevantly to the context of dialogue, to the conclusion of an argument, or in breach of the common knowledge.

One limitation of this instrument is the number of possible fallacies. However, the likelihood that a fallacy is committed is constrained by the type of conversational setting. Following Walton's account, some arguments are considered as fallacious in some dialogical contexts, while not in others (Walton 1995b). Similarly, some fallacies are more effective in some contexts, while easily detected and defused in others. For this reason, the fallacy toolbox can be simplified by reducing the fallacies to the ones that are more likely to be found. For example, considering written arguments in the specific context of political communication, it is possible to identify the most generic and common types of fallacies (Rapanta and Walton 2016; Walton 2007b) (Table 2). These fallacies are classified according to three categories of manipulative arguments, which are labelled "manipulation strategy" (arguments irrelevant to the dialogue goal or to the conclusion, and arguments with unaccepted presuppositions).

Manipulation strategy	Fallacy	Example
1. Dialogical irrelevance (manipulating the goal of the dialogue) (axe z)	Ad hominem arguments fallacious- ly used to rebut a viewpoint or a proposal in a context of dialogue that is not eristic, or in which the authority of the speaker is not the ground of the attacked argument.	a. "Don't let the <u>fake</u> <u>media</u> tell you that I have changed my position."
2. Topical irrelevance (attacking or using a view-	Straw man (a modification of the viewpoint or a claim of the interlocutor for attacking it more easily).	b. "Remember when the failing @nytimes <u>apologized</u> to its subscribers, right after

		4114: 1		
point that is not the one ad-		the election, because their coverage was so		
vanced) (axes $x$ and $y$ )		wrong. Now worse!" <sup>3</sup>		
3. Presupposi-	False dichotomy (contrary or alternative options or states of affairs presupposed as contradicto- ry)	c. "Somebody with aptitude and conviction should buy the FAKE NEWS and failing @nytimes and either run it correctly or let it fold with dignity!"		
tions in conflict with the <i>common ground</i> (axes x and y)  3.1. Facts	Secundum quid (presupposing that the premise includes the qualifica- tions necessary for drawing the conclusion)	d. "The threat from radical Islamic terrorism is very real, just look at what is happening in Europe and the Middle-East. Courts must act fast!"		
	Question begging epithets (the use of a word presupposes unproven or unaccepted judgments or states of affairs)	e. "Don't let the fake media tell you that I have changed my position." (Presuppos- ing that there are fake media).		
3.2. Logical rules or premises	Post hoc ergo propter hoc (a temporal or spatial coincidence or succession presupposed as a cause-effect relation)	f. "The weak illegal immigration policies of the Obama Admin. <u>allowed</u> bad MS 13 gangs to form in cities across U.S. We are removing them fast!"		
	Hasty generalization (from specific events to a universal generalization)	g. "The Fake News media is officially out of control. They will do or say anything in order to get attention - never been a time like this!"		
3.3. Word meaning or connotation	Persuasive definition (implicit modification of the meaning of words)	h. "If our healthcare plan is approved, you will see <u>real healthcare</u> and premiums will start tumbling down. ObamaCare is in a death spiral!"		

<sup>&</sup>lt;sup>3</sup> Borchers, C. (2017). No, the New York Times did not apologize because its Trump coverage was 'so wrong'. *The Washington Post*, 29 March 2017 (retrieved from https://www.washingtonpost.com/news/the-fix/wp/2017/03/29/no-the-new-york-times-did-not-apologize-because-its-trump-coverage-was-so-wrong/ on 4 September 2020).

	Quasi-definition (takes for granted unshared or not commonly accept- ed inferences from the use of a word)	i. "We must stop being politically correct and get down to the business of security for our people. If we don't get smart it will only get worse" (politically correct is not normal- ly considered as cause of negligence or disinterest in protection)
--	---	--

Table 2: Categories of manipulation and fallacies

In this type of classification, it is possible to notice a probative difference between the first and the second and third "manipulation strategy." While in case of straw man and the different strategies of common ground manipulation, it is possible to prove that a quote or paraphrase does not correspond to the original speech, or that a proposition is not commonly accepted (for example, considering whether the analyst considers the contrary as acceptable), the evaluation of ad hominem arguments can be more complex. Ad hominem arguments can be reasonable in specific contexts (quarrels, attacks to a questionable authority, etc.). However, considering that political communication is not principally a quarrel, and that attacks on improper authorities need to be grounded on evidence (to satisfy the burden of disproof, see Walton, 1997), the lack of evidence and the high frequency of this type of argument is an indicator of manipulative intentions. For example, in case a) the attack is grounded on a generalization (some media publish fake news ordinarily) which is neither based on evidence nor accepted.

The second instrument for the assessment of arguments is the use of critical questions, which is complementary to the fallacy toolbox. Argumentation schemes are associated with critical questions, which mirror the defeasibility conditions of an argument according to the different dimensions of an argument. First, critical questions capture the logical relationship between the premises and the conclusion, detecting the cases in which the conclusion is not supported by the premises, or is too strong considering the type of logical relation used. Second, critical questions highlight the dialogical conditions of use, thus guiding the recognition of the

arguments that are irrelevant to the dialogue goal (fallacious uses of ad hominem, expert opinion, consequences...). Finally, some schemes include the evidence question, which is specifically aimed at capturing arguments poorly backed by evidence.

Critical questions can be a partial guide to the detection of some fallacies. However, these two instruments do not fully overlap. Critical questions detect arguments unbacked or poorly backed by evidence, which would pass through the fallacy sieve. However, they do not pinpoint all the uses of unaccepted information that is taken for granted in an argument, which are instead finely distinguished by the different fallacies.

# 6. Argumentation profiles: Emotive words and the use of emotions

Table 2 includes some common strategies of manipulation of words meaning and use. These deceptive strategies are characterized by two aspects: they result in a use or meaning that is in conflict with the common ground, and they are aimed at a specific argumentative goal. The most evident and effective argumentative function of a word use can be represented through Stevenson's notion of "dynamic use" of an ethical term (Stevenson 1937, 1938, 1944; Walton 2001b). Ethical terms (which include also pejoratives or laudatory words) are used argumentatively to trigger a specific value judgment on a state of affairs (e.g., a "pro-life" law is commonly regarded positively, as life is something that needs to be protected) and thus affect the audience's decisionmaking (e.g. "pro-life" laws should be approved of) (Walton, 1992; see also Macagno, 2014). This tendency to affect the interlocutor's attitude towards a state of affairs was labeled by Stevenson as "emotive meaning," as the value judgment is the necessary condition of the emotions that the use of an ethical term can arouse (Macagno and Walton 2014b).. For example, by labeling a politician as "weak" or "corrupt," the speaker is not merely describing an individual, but inviting a value judgment that can result in an emotion (contempt or anger) and suggest an implicit practical conclusion (you should not vote for him/her). While this strategy is not necessarily fallacious—on the contrary, it is a common tactic in argumentation—the improper use of emotive words can be highly deceptive.

By combining the detection of ethical terms with the analysis of the fallacies associated to their use it is possible to bring to light the cases in which language is not merely used persuasively, but deceptively. The literature in argumentation theory identified specific fallacies related to language use: persuasive definitions and quasi-definitions, which are aimed at distorting the common ground related to the word meaning and its associated commonplaces, and the fallacy of question begging, in which a state of affairs that has not been proved nor accepted is taken for granted (Bentham 1824; Macagno and Walton 2014b; Walton 1994). Thus, the use of emotive words is not an indicator of fallaciousness. However, when emotive words are persuasively defined, or quasi-defined, or used "begging the question" of their possible use, they become manipulative tactics.

The strict relationship between ethical terms and emotions can reveal another dimension of argumentative discourse, namely the pathos-related features of its "rhetorical" dimension. The frequency of the emotive words used by a speaker (revealed through the tools of the corpus linguistics, see Kilgarriff et al., 2014), can reveal the emotive strategy used—for example the types of emotions that he or she seeks to trigger more often. In particular, the frequency of the use of pejoratives or derogatory words, eliciting emotions such as contempt, fear, or anger, can be analyzed in conjunction with the types of argument used in the same moves in which the emotive word occurs (for example, *ad hominem*), and the fallacies therein committed, unveiling specific strategies of attack or for diverting attention (Macagno 2019).

From a procedural perspective, to detect an emotive word it is necessary to ascertain first its argumentative function. Two distinct tests can be used to this purpose: 1) determining the role of a word for justifying an explicit or implicit value judgment or decision (its use as a premise for supporting an explicit or implicit value judgment); and 2) the absence of other reasons in support of such an evaluative conclusion. Thus, when a practical or evaluative conclusion is only justified by the use of an "ethical" term, the latter can be classified as emotive.

The assessment of the use of emotive words involves the detection of the possible fallacies associated with it. First, the word use by the speaker is compared with the dictionary definitions thereof. In case there is a discrepancy, the conditions for the classification of the word use as a *persuasive definition* are evaluated (Macagno and Walton 2010, 2014b): 1) word meaning different from common use, 2) absence of an explicit redefinition, and 3) denotation part of the common ground. For example, if the speaker refers to a policy as the "true healthcare," he is referring to a state of affairs that is commonly accepted (a policy concerning healthcare). However, the meaning of "healthcare" is implicitly redefined, associating the "true" meaning thereof only to practices corresponding specifically to the policy referred to, without providing evidence (Halldén 1960; Van Rees 2009).

In case the word meaning is commonly accepted, but it is used to refer to a state of affairs not accepted and presupposed as such (Abrusán 2010, 2011; Atlas 1991; Gazdar 1979; Kay 1992; Levinson 1983), the case can be classified as a question begging epithet. Using a recent example, when Trump claimed "Why should I go to that cemetery [an American Cemetery in France with more than 1800 US marines buried]? It's filled with losers" (Goldberg 2020),<sup>4</sup> he is presupposing that at least some of the individuals buried are losers (or that the victims of WW2 are losers). Considering the scandal that followed, he was using an epithet to take for granted a qualification that was not neither accepted nor proven.

Finally, in case the aforementioned tests are negative, the possibility of a quasi-definition can be evaluated by taking into account the probative function of the word and the evaluative inference that it is used to trigger. In case the type of evaluative conclusion is not commonly supported by the word use (and the evaluative inference or stereotype is not part of the common ground, see Jeshion, 2013), the word can be considered as quasi-defined. To support a case of quasi-definition, it is possible to use the tools of the corpus linguistics, which provide the best dictionary examples

<sup>&</sup>lt;sup>4</sup> A similar question-begging example in the same article: "We're not going to support that loser's funeral."

of a word use in a reference corpus together with their collocations. If the word is normally used to trigger conclusions incompatible with the one supported or implied in the text, the word use should be classified as a quasi-definition.

#### 7. Illustration of the method

The different instruments that Walton developed in his theory have been organized in the previous sections in a toolkit for the analysis of argumentative texts. The theory of dialogue types has been shown to be instrumental to the detection of the types of argument, which are classified and assessed through argumentation schemes (the "dialectical" component presented in Figure 1). The pragmatic approach to fallacies that Walton defended provides useful heuristic tools for capturing a fundamental extreme of the continuum between acceptable and manipulative arguments, and at the same time shows the different dimensions that can be manipulated (the "evaluative" component). Finally, Walton's theory of ethical argumentation, emotions, and emotive language (Walton 1992, 2009) underlies the third element of a profile, namely the use of emotive words (the "rhetorical" component).

The sections above showed the passage from a theoretical view of argument to its translation into an analytical method. Its actual use—involving the detection of the different argumentative dimensions—and the benefits that can result therefrom can be understood through its illustration. To this purpose, this section will present the analysis of the argumentative communication on Twitter of three political leaders commonly defined as "populists" (Rachman 2018), namely the Italian former minister for Internal Affairs, Matteo Salvini, the US president, Donald Trump, and the Brazilian president, Jair Messias Bolsonaro.

The argumentative differences and similarities between the three leaders can be brought to light by "dissecting" their typical tweets according to the three aforementioned variables. The analyzed tweets of the three leaders are representative of their messages published through their Twitter institutional profiles (identifying the user through his official political office) along a temporal timeframe of 180 days from the date on which each politician took office.

#### 7.1. Outlining the argumentation profiles of the politicians

The analysis of the tweets of the three politicians resulted in the argumentation profiles that can be represented quantitatively and compared with each other. The tables below outline the different dimensions of the argumentation profiles of the three politicians, significantly different from each other. The first dimension is the one capturing the types of argument used (Table 3).

						A	rgumei	ıts						Total
	Ad hominem	Victimization	Practical reasoning	Consequences	Values	Commitment	Sign	Popular opinion	Sources	Cause-effect	Best explanation	Analogy	Classification	
SALVINI Count	463	163	208	247	344	115	147	60	37	29	12	10	3	1838
% within SPEAKER	25.2 %	8.9 %	11.3 %	13.4 %	18.7 %	6.3 %	8.0 %	3.3 %	2.0 %	1.6 %	0.7 %	0.5 %	0.2 %	100.0%
TRUMP Count	151	27	99	132	59	28	68	13	38	7	27	11	0	660
% within SPEAKER	22.9 %	4.1 %	15.0 %	20.0 %	8.9 %	4.2 %	10.3 %	2.0 %	5.8 %	1.1 %	4.1 %	1.7 %	0 %	100.0%
BOLSONARO Count	111	19	144	181	103	52	68	16	20	7	6	7	0	724
% within SPEAKER	15.3 %	2.6 %	17.7 %	25.8 %	14.2 %	7.2 %	9.4 %	2.2 %	2.8 %	1.0 %	0.8 %	1.0 %	0 %	100.0%

Table 3: Types of argument

The proportion of the typical arguments shows different strategies: while the most frequent argument used by Salvini is the *ad hominem*, Bolsonaro grounds his conclusions frequently on arguments from consequences and practical arguments, and Trump combines *ad hominem* arguments with arguments from consequences.

The assessment dimension brings to light the manipulative intentions of the three leaders. In the table below, the arguments are considered in combination with the fallacies detected (Table 4):

	Salvini		Tru	ımp	Bolsonaro		
Arguments	No.	Freq.	No.	Freq.	No.	Freq.	
Arguments associated with							
at least one fallacy	1502	82%	509	76%	505	68%	
Non-fallacious arguments							
failing to provide the							
necessary evidence	33	2%	15	2%	13	2%	
Non-fallacious arguments							
and not failing to provide							
the necessary evidence	388	16%	148	22%	219	30%	
TOTAL	1823		672		737		

Table 4: Quality of argument

Overall, the level of argumentation is extremely problematic. The non-fallacious uses of arguments by the three leaders is much lower than the arguments flawed by manipulative strategies. In Salvini's tweet, a non fallacious argument is almost an exception (on average, fallacious arguments amount to more than 88% of his arguments, compared to 78% of Trump and 63% of Bolsonaro). The distribution of the fallacies is represented in detail in the following Table 5 (Macagno, 2022).

		Fallacies									Total
		Straw man	False dichotomy	Ignoring qualifications	Hasty generalization	Post hoc	Question- begging	Persuasive definition	Quasi-definition	Slippery Slope	
	Count	187	125	281	128	211	479	152	122	18	1703
SALVINI	% within SPEAKER	11%	7.3%	16.5%	7.5%	12.4%	28.1%	8.9%	7.2%	1.1%	100%
	Count	28	27	88	31	94	237	11	8	14	538
TRUMP	% within SPEAKER	5.2%	5%	16.4%	5.8%	17.5%	44.1%	2%	1.5%	2.6%	100%
BOLSONARO	Count	6	30	89	48	60	142	20	14	13	422
	% within SPEAKER	1.3%	6.7%	20%	10.8%	13.5%	31.8%	4.3%	3.1%	2.9%	100%

Table 5: Types of fallacies committed

The last dimension is the use of emotive words, and more importantly the emotions they are used to trigger through the value judgments that the ethical words lead to (Ben-Ze'ev 2000) (Table 6).

	Salvini		Tru	ımp	Bolsonaro		
Types of emotion	No.	Freq.	No.	Freq.	No.	Freq.	
Admiration (gratitude)	5	0.8%	19	3.5%	7	6.7%	
Anger	123	20.3%	28	9.7%	14	13.5%	
Contempt	189	31.2%	149	51.6%	49	47.1%	
Ridicule	135	22.3%	22	7.6%	7	6.7%	
Indignation	75	12.4%	5	1.7%	5	4.8%	
Fear	63	10.4%	49	17.0%	17	16.3%	
Pity	16	2.6%	26	9.0%	5	4.8%	
Other	0	0%	7	2.4%	0	0%	
TOTAL	606		497		104		

Table 6: Types of emotions triggered

Again, the three leaders show an extremely aggressive character, dominated by the emotion of contempt (often manifested by ridiculing the opponent). Anger and indignation characterize Salvini's rhetoric, while Trump and Bolsonaro use frequently emotive words arousing fear.

The argumentation profiles shape specific preferences in the choice of argumentative strategies that can be illustrated through a qualitative analysis of the examples that illustrate the typical argumentation of each politician.

# 7.2. Illustrating the profiles: Salvini

Salvini's argumentation on Twitter is characterized by the following distinguishing features: 1) high use of *ad hominem* and victimization arguments; 2) high number of fallacies, and in particular straw man and quasi-definitions; 3) use of emotive words aimed at ridiculing the interlocutor or a third party or triggering indignation and anger. The following examples illustrate these distinctive argumentative features.

### Example 1

(Salvini replies to Iantorno, a left-wing politician, who commented on a claim made by Salvini)

"Stop having migrants walking around." Iantorno (Pd): "Words similar to Hitler's." That's crazy! Shame on you. I do not give up; the insults of the left wing are medals for me.<sup>5</sup>

In this tweet, Salvini uses an *ad hominem* argument to attack the viewpoint of a left-wing politician, accusing the opponent of a shameful act (thus, taking for granted that his comment is against the accepted values, see Ben-Ze'ev, 2000, p. 525) and labeling his interpretation as "crazy." The attack is thus associated with a deceitful pretense to defend the public values and decency, which leads to the mimicked emotion of "rightful indignation" (Aquinas, *Summa Theologiae*, I-II, q. 46, a1) and leading to assess the speaker not as aggressive and abusive, but "righteously indignant," namely pursuing and defending a "shared" ideal of justice.

The *ad hominem* is clearly fallacious at the level of dialogical relevance (Walton 1998a), as the goal of the attacked politician was drawing a grounded comparison between two quotes ("[s]top having migrants walking around in the Italian cities" and Hitler's "[t]he Jews must go way from Europe") (Caso 2018). Salvini is ignoring the interlocutor's argument, and takes it as a direct attack, unduly qualifying it as an "insult" (question begging epithet, attributed taking for granted a condition—to be a remark (ungrounded) and abusive—that is contradicted by the original quote. Thus, Salvini is using a straw man: Iantorno's words are misquoted by omitting the reasons on which the claim is based, so that it appears as an abusive remark.

The last manipulative move is the hasty generalization. The specific comment of the politician (unrelated to his belonging to a specific party) is distorted, qualified, and then presented as an unwarranted illustration of a presupposed generalized behavior of the left-wing parties ("the insults of the left wing"). This generalization is neither accepted nor proven. The word "insult" has another crucial argumentative effect: victimization. By using this "loaded word," Salvini has become the victim suffering from an

<sup>&</sup>lt;sup>5</sup> "Basta migranti a spasso". Iantorno (Pd): "Parole simili a quelle di HITLER". Roba da matti! Si vergogni. Io non mollo, gli insulti della sinistra sono medaglie. (Tweet of 7 June 2018

https://twitter.com/matteosalvinimi/status/1004667002022187008)

injustice, which presupposes that the agent (the left wing) is the villain. This scenario can trigger the emotion of pity (suffering from an injustice) or anger (desire to restore justice) (Ben-Ze'ev 2000, chap. 13).

Salvini often relies on arguments from consequences; however, the negative judgment on the effects of a policy or course of action are frequently manipulated through unaccepted (or unacceptable) presuppositions. A typical example is the following.

# Example 2

For too long too many people have profited hugely from the business of the illegal immigrants. With the #DecretoSalvini [a legislative decree proposed by Salvini], for the pro-immigration "fake good people" the party is over. Left-wing politicians are upset and protest? Well. We have just started to fix the disaster that their administrations have caused to the Country.

Salvini uses an argument from consequences, a type of reason commonly used in political discourse and based on a warrant of the kind "If action X is/is not carried out, good/bad consequences will occur." However, the perception of the consequences of the policy (the legislative decree proposed by Salvini) is manipulated through several tactics. First, the syntactic structure of the first statement (having "for too long" as a focus) (Atlas 1991; Hajičová 1984; Strawson 1971) presupposes that 1) there is a business of illegal immigration, and 2) there are people who have profited hugely from it; and 3) the number of these people is higher than acceptable. These presuppositions are not supported by evidence, nor can they be considered as commonly shared (there is no shared information about 2 and 3).

A complex linguistic strategy is then used for justifying the acceptability of the decree: Salvini takes for granted that there is a category of people commonly known as "pro-immigration 'fake

<sup>&</sup>lt;sup>6</sup> Troppi si sono arricchiti per troppo tempo con business dei clandestini. Con il #DecretoSalvini per i "finti buoni" dell'accoglienza la pacchia è finita. A sinistra si agitano e protestano? Bene. Abbiamo solo cominciato a rimediare al disastro causato al Paese dai loro governi. (Tweet of 28 November 2018, https://twitter.com/matteosalvinimi/status/1067686420628811776)

good people'," which is highly evaluative (a disparaging epithet leading to contempt), but its use is not supported by evidence or common ground. Salvini is implicitly defining a new concept (a persuasive definition) and using it in an ambiguous way to mean either 1) there are hypocrites who support immigration; or 2) everyone who supports immigration is a hypocrite. In both cases, the referent is neither commonly accepted nor justified. The other presupposition is that such a category of people was enjoying a favorable condition (referred to metaphorically as "party," which is again unshared (question-begging).

The last extremely problematic move can be found in the last statement, in which Salvini takes for granted that the left-wing previous administrations have caused "disasters" (an emotive word triggering fear), which is clearly unshared and unwarranted (especially considering that the minister is addressing the whole Italian population and not only his own supporters).

The following third example shows another distinguishing linguistic strategy committed by Salvini, namely the use of the "quasi-definition."

# Example 3

According to the British newspaper "*The Independent*," Italy is becoming fascist... How strange, in the last few months these foreign "big journals" have all become experts in Italian politics.<sup>7</sup>

The reported view of the British newspaper is reported without the reasons in support thereof, and as usually in Salvini's argumentation, the speaker is attacked instead of the argument. Here, the attack strategy consists in ridiculing and disparaging the source of the news through the strategy of quasi-definition. The evaluation triggered by the stereotypes commonly associated to a word use (in this case "international journals," commonly suggesting posi-

<sup>&</sup>lt;sup>7</sup> Secondo il quotidiano britannico "The Independent" l'Italia starebbe diventando fascista... Che strano, da qualche mese questi "giornaloni" stranieri sono diventati tutti esperti di politica italiana. (Tweet of 22 October 2018, https://twitter.com/matteosalvinimi/status/1054289934893441024)

tive evaluations based on their credibility) is modified through the use of a suffix (the Italian "-one," translated in English as "big"). The journals have become "big journals," where in Italian the augmentative suffix adds to the word a negative trait that triggers contempt (Lo Duca 2004, p. 211). Thus, the "big journals" are evaluated as journals that are considered as big without reasons. The quasi-definition allows Salvini to attack the journals without any reason, taking for granted that they are contemptible. The hyperbolic description of their alleged quality "experts" is associated with hasty generalization, through which the speaker takes for granted that most of the international journals have advanced questionable claims on Italian politics.

The last example illustrates the use of one of the most important keywords used by Salvini, "commonsense:"

## Example 4

The time of the Brussels bureaucrats is over. Values, pride, peoples', and countries' freedom: in May, the commonsense revolutions will arrive in all Europe. We are ready.<sup>8</sup>

In this case, Salvini is at the same time attacking the EU and arguing in favor of the parties supporting "sovranist" views. Thus, the second argument from values is associated with an *ad hominem* that is expressed through the question-begging epithet "bureaucrats" (commonly associated with a negative evaluation of the referent). Salvini is presupposing that all or most of the politicians governing the EU are concerned with procedural correctness at the expense of people's needs (definition of "bureaucrat") (unwarranted generalization, which is thus fallacious).

Moreover, the sovranist view is described as "commonsense," a term that is commonly defined as "sound judgment in practical matters," or "the capacity to assess and distinguish what is reason-

<sup>&</sup>lt;sup>8</sup> È finito il tempo dei burocrati di Bruxelles. Valori, orgoglio, libertà dei popoli e delle nazioni: a maggio la rivoluzione del buonsenso arriverà in tutta Europa. Noi siamo pronti. (Tweet of 9 October 2018,

https://twitter.com/matteosalvinimi/status/1049711686704406528?ref\_src=twsr c%5Etfw)

able from what is unreasonable, what is appropriate from what is not, and behave in a just, wise, and balanced way" (La Repubblica Italian Dictionary, 2018). The term "commonsense" is persuasively defined to refer to those who embrace the sovranist views, characterized by "values, pride, peoples' and countries' freedom." All these latter terms are persuasively defined, as the "freedom of peoples" or countries has never been disputed by the opposing parties, unless a very specific and unshared definition of "freedom" (and "pride") is used.

# 7.3. Illustrating the profiles: Trump

Trump's argumentation on Twitter is characterized by three crucial features: *ad hominem* attacks, arguments from consequences commonly associated with the emotion of fear, and question-begging epithets. Two leading topics characterize his tweets: the attacks against the critics and opponents, and the national pride and identity—often expressed as anti-immigration policies. The following tweet is a clear example of the first topic:

### Example 5

FAKE NEWS media, which makes up stories and "sources," is far more effective than the discredited Democrats - but they are fading fast! 9

Trump is conducting a twofold attack, one against the media publishing information or opinions grounded on external reports (the sources) against the president, and one aimed at the opposing party. These *ad hominem* are unwarranted and based only on the use of question-begging epithets ("fake news;" "discredited;" "make up") and a persuasive definition ("source"), which is implicitly triggered by the use of quotes, dissociating the common use of the word (the real sources) from the ones used by the "fake news" media (the false sources). The emotion of contempt is triggered by terms related to the semantic area of "failure."

\_

<sup>&</sup>lt;sup>9</sup> Tweet of 16 February 2017, available in *The Tweets of President Donald J. Trump: The Most Liked and Retweeted Tweets from the Inauguration through the Impeachment Trial* 2020 (Forefront Books)

A similar strategy is pursued in the following excerpt, in which the attack on the media is combined with a practical argument.

## Example 6

The failing @nytimes has disgraced the media world. Gotten me wrong for two solid years. Change libel laws?<sup>10</sup>

Again, the emotive language used ("failing;" "disgraced") associated with a specific news company is intended to trigger contempt by showing its lack of praiseworthiness (Ben-Ze'ev 2000, p. 390). The first epithet conveys an unshared presupposition (the media company is failing), while the second a claim that is unsupported by evidence—or justified by a (disputable) reason (they have gotten Trump wrong) that is only partially related to the conclusion (a newspaper can commit mistakes without disgracing the media world—ignoring qualifications). The practical reasoning (i.e., the best way to solve the problem of the newspaper is to change libel laws) is taking for granted a premise (NY Times is publishing false information that harms others' reputation) that is not shared.

In the following tweet, the typical use of argument from consequences associated with fear appeal is illustrated.

# Example 7

If the ban were announced with a one-week notice, the "bad" would rush into our country during that week. A lot of bad "dudes" out there!<sup>11</sup>

Trump is using here an argument from consequences—associated with a fear appeal. The consequence of the policy debated is described using emotive words ("bad;" "rush;" "bad dudes"), which trigger the fear of an imminent and noticeable danger. The gener-

<sup>&</sup>lt;sup>10</sup> Tweet of 30 March 2017, available in (Conway 2017)

<sup>&</sup>lt;sup>11</sup> Tweet of 31 January 2017, available in *The Tweets of President Donald J. Trump: The Most Liked and Retweeted Tweets from the Inauguration through the Impeachment Trial* 2020 (Forefront Books)

alization that in Mexico there are a lot of bad people—and more importantly that they would rush in the country—is not supported by any evidence.

Trump uses frequently the argument from consequences together with a false dilemma, such as in the following message.

#### Example 8

....the wall is not built, which it will be, the drug situation will NEVER be fixed the way it should be! #BuildTheWall<sup>12</sup>

The need to build the wall is supported by the consequences of the failure to do it (namely the impossibility to fix the drug situation). This outcome, associated with fear, is not supported by any evidence, just like the consequence of the wall on drug dealing. However, the false dichotomy "either the wall fixing the drug problem, or the drug problem" and the emotions connected therewith lead the audience to a fast decision.

#### 7.4. Illustrating the profiles: Bolsonaro

The argumentation profile of Bolsonaro is characterized by three distinctive types of argument: practical arguments, *ad hominem* attacks, and arguments from value. The most frequent fallacies are the question-begging, *secundum quid*, and hasty generalization. Contempt and fear are the emotions that the emotive words used are normally intended to trigger. The following is a typical tweet illustrating these features:

# Example 9

In the previous governments, these expenses [related to the international press office] exceeded hundreds of millions of reais. This was one of the many sources of the questionable actions of the groups that were in power, a good part of whose members have

<sup>&</sup>lt;sup>12</sup> Tweet of 24 April 2017, available in (Estepa 2017).

<sup>©</sup> Fabrizio Macagno. Informal Logic, Vol. 42, No. 1 (2022), pp. 83-138.

been convicted. An irresponsibility that damages the real needs of the Brazilians and the state!<sup>13</sup>

The implicit argument related to the justification of the decision to terminate the contracts with the international press office is justified by an argument from values, which is grounded on the "real needs" of the Brazilians (if something favors or is not against the "real needs" of the people, it is good). The argument relies on the meaning (and reference) of "needs," a quasi-defined word used to distinguish the "false" needs (pursued by the previous governments) from the "real" ones, which are not identified. A hasty generalization is used to extend the performance of "questionable actions" to all the groups of the previous governments (the proven crimes were attributed only to the individuals convicted), which is used to attack the political opponents belonging to such parties.

Another typical strategy consists in the attacks on the sources of information detrimental to the speaker.<sup>14</sup>

# Example 10

It is incredible what they do to try to destroy us from the inside out creating continuously false narratives. We move on and are sorry for the lack of credibility of who should inform, and for some reason do exactly the opposite every day.

The *ad hominem* attack against the press is not grounded on evidence; rather, the term "false narratives" (a question-begging epithet) is allegedly extended to refer to a constant and frequent behavior of the media. This hasty generalization is continued in

<sup>&</sup>lt;sup>13</sup> Nos governos anteriores, esses gastos ultrapassavam centenas de milhões. Era mais uma das muitas fontes de ações escusas dos grupos que estavam no poder, cuja boa parte dos membros está presa. Uma irresponsabilidade em detrimento das reais demandas dos brasileiros e do Estado! (Tweet from 23 January 2019, https://twitter.com/jairbolsonaro/status/1088048698578423808)

<sup>&</sup>lt;sup>14</sup> É inacreditável o que fazem para tentar nos destruir de dentro para fora insistentemente criando falsas narrativas. Seguimos adiante e lamentando a perda de credibilidade de quem deveria informar, e por algum motivo, faz exatamente o oposto diariamente (Tweet of 1 February 2019, https://twitter.com/jairbolsonaro/status/1091376839224889345)

the next statement, in which the speaker claims that the media companies engage in disseminating false information every day. These fallacies are combined with a *post hoc*—the "false narratives" are explained as attempts to destroy the party in charge—and the unwarranted presupposition concerning the "lack of credibility" of the press. Bolsonaro is thus developing a conspiracy theory in which he and his party are the victims of a hidden power that involves the media.

Bolsonaro frequently combines practical reasoning arguments with arguments from values for justifying the purpose of the proposed action. A typical example is the following.

#### Example 11

The ideological indoctrination in the teaching institutions trains political militants, and not citizens with good sense and who are ready for the job market. We need to break this backbone for the safe future of Brazil.<sup>15</sup>

The practical reasoning (we need to change the education system) is based on the negative value judgment on the teaching institutions. In turn, this judgment is grounded on hasty generalizations (trains...), question-begging epithets advancing unshared presuppositions (political militants; ideological indoctrination), and a false dichotomy between the outcomes of the educational system and the "citizens with good sense," a term persuasively defined to include those who do not support the left-wing parties. The educational system is also opposed fallaciously to the "safety" of Brazil, another persuasively defined term (referring to the contrary of ideological indoctrination, or good-sense citizens). A similar strategy is pursued in the following tweet:

<sup>&</sup>lt;sup>15</sup> A doutrinação ideológica nas instituições de ensino forma militantes políticos e não cidadãos com bom senso e preparados para o mercado de trabalho. É preciso quebrar essa espinha para o futuro saudável do Brasil. (Tweet of 6 February 2019, https://twitter.com/jairbolsonaro/status/1093079897151586304)

### Example 12

Investing in Brazil and not in other countries for developing questionable alliances for keeping the power! One of the great differences of our government. To rule the country for the Brazilians, and not for the São Paulo Forum [a conference of socialist political parties and other organizations from Latin America]. <sup>16</sup>

The practical reasoning is grounded on two false dilemmas: the investments in Brazil are shown as excluding investments in other countries, while his government, described as governing for the Brazilian, is opposed to the other left-wing governments, who instead are claimed to govern for their own interests. In both cases, this opposition is not supported by evidence nor necessarily shared (especially by the supporters of the left-wing party that are part of the citizens governed by the president). The dichotomies are used for attacking the left-wing party, relying on value judgments triggered by unshared and ungrounded presuppositions. For example, the investments in other countries are presupposed to be made "for developing *questionable* alliances" and such alliances were aimed only at "keeping the power." The generalized and unproven behavior is described through question-begging epithets, which lead to contempt.

#### 8. Discussion and conclusions

Walton's theory of argumentation hinges on the pragmatic notion of argument. Arguments are seen as instruments for pursuing different dialogical goals and their logic cannot be severed from it. This paper intended to show the unity of Walton's project, presenting the pragmatic view of argument as a combination of analytical dimensions and categories. The identification of argument types through argumentations schemes helps reconstruct the implicit premises defended in the text and bring to light different ways a viewpoint is argued for or against. The analysis of fallacies was

<sup>&</sup>lt;sup>16</sup> Investimento no Brasil e não em outros países para formarem alianças espúrias a fim de se manterem no poder! Um dos grandes diferenciais de nosso governo. Governar para o Brasileiro e não para o Foro de SP! (Tweet of 25 February 2019, https://twitter.com/jairbolsonaro/status/1100150931147157504)

shown to capture in a systematic way the unshared presuppositions, used by the speaker for including ungrounded and unproven propositions in the interlocutors' commitments. The analysis of emotive words unveils the emotive strategies used by the speaker, which can be correlated to the corresponding linguistic fallacies.

From a practical perspective, this method consists of a set of instruments for analyzing texts and discourses. In particular, it allows describing the argumentation used according to three distinct variables: 1) the types of argument, 2) the quality of arguments, and 3) the emotive language used (and the emotions thus triggered). Argumentation schemes allow the measurement of the first variable, while fallacies and critical questions can be used for sifting manipulative or weak arguments. Finally, by detecting the emotive words used (manually or through computational linguistic tools), it is possible to outline the types of emotions that a speaker tends to evoke through his or her arguments (Ben-Ze'ev 2000).

These three variables together provide a global overview on the argumentation profile of a speaker. This profile can be used for descriptive purposes—such as showing the different dimensions of a speech or the hidden strategies of a typical message—or for quali-quantitative ones—such as outlining the proportion of each strategy compared to the others (Macagno 2019), comparing different speakers, or assessing the frequency of the distinct strategies against a benchmark.

# Acknowledgments

I would like to thank the Fundação para a Ciência e a Tecnologia for the research grants PTDC/FER-FIL/28278/2017, EXPL/FER-FIL/0276/2021 and UIDB/00183/2020.

#### References

Abrusán, Márta. 2010. Triggering verbal presuppositions. In *Semantics and linguistic theory*, eds. Nan Li and David Lutz. Ithaca, NY: CLC Publications.

Abrusán, Márta. 2011. Predicting the presuppositions of soft triggers. *Linguistics and Philosophy* 34(6): 491–535.

- Aldwairi, Monther and Ali Alwahedi. 2018. Detecting fake news in social media networks. *Procedia Computer Science* 141: 215–22.
- Allan, Keith. 2013. What is common ground? In *Perspectives in pragmatics, philosophy & psychology. Volume 2*, eds. Alessandro Capone, Franco Lo Piparo and Marco Carapezza. Cham, Switzerland: Springer.
- Allcott, Hunt and Matthew Gentzkow. 2017. Social media and fake news in the 2016 election. *Journal of Economic Perspectives* 31(2): 211–236.
- Allcott, Hunt, Matthew Gentzkow and Chuan Yu. 2019. Trends in the diffusion of misinformation on social media. *Research and Politics* 6(2): Advance Online Publication.
- Anscombre, Jean-Claude and Oswald Ducrot. 1983. *L'argumentation dans la langue*. Bruxelles, Belgium: Pierre Mardaga.
- Aquinas, St. Thomas. 2003. *On evil*. Oxford, UK: Oxford University Press.
- Atlas, Jay David. 1991. Topic/comment, presupposition, logical form and focus stress implicatures: The case of focal particles only and also. *Journal of Semantics* 8(1–2): 127–147.
- Atodiresei, Costel-Sergiu, Alexandru Tănăselea and Adrian Iftene. 2018. Identifying fake news and fake users on Twitter. *Procedia Computer Science* 126(1): 451–461.
- Austin, John Langshaw. 1962. *How to do things with words*. Oxford, UK: Oxford University Press.
- Bellack, Arno. 1968. Methods of determining criteria for the evaluation of comprehensive schools. In *Methods for observing classroom behavior of teachers and students*. New York, NY: Teachers College Press.
- Bellack, Arno, Herbert Kliebard, Ronald Hyman and Jr. Frank Smith. 1966. *The language of the classroom*. New York, NY: Teachers College Press.
- Ben-Ze'ev, Aaron. 2000. *The subtlety of emotions*. Cambridge, MA: MIT Press.
- Bentham, Jeremy. 1824. *The book of fallacies*. London, UK: John and H.L. Hunt.
- Blair, Anthony and Ralph Johnson. 1987. Argumentation as dialectical. *Argumentation*. 1(1): 41–56.
- Blitz, Marc Jonathan. 2018. Lies, line drawing, and deep fake news. *Oklahoma Law Review* 71(1): 59–116.
  - "Buonsenso." *La Repubblica online dictionary*. 2018. Retrieved September 10, 2020. URL:
  - https://dizionari.repubblica.it/Italiano/B/buonsenso.html

- Caso, Emanuele. 2018. "Salvini: 'Basta Migranti a Spasso'. Iantorno (Pd): 'Parole Simili a Quelle Di Hitler.'" *Como Zero*, 6 June 2018. Retrieved September 6, 2020. URL:
  - https://comozero.it/politica/salvini-basta-a-migranti-a-spasso-iantorno-pd-parole-simili-a-hitler-ebrei/.
- Conway, Madeline. 2017. "In Twitter Attack on New York Times, Trump Floats Changing Libel Laws." *Politico*, 30 March 2017. Retrieved September 9, 2020. URL:
  - https://www.politico.com/story/2017/03/donald-trump-new-york-times-libel-laws-236694.
- Davidson, Thomas, Dana Warmsley, Michael Macy and Ingmar Weber. 2017. Automated hate speech detection and the problem of offensive language. *Proceedings for the Eleventh International. AAAI Conference on web and social media, Montréal, Québec, Canada, May 15–18.* Palo Alto, CA: The AAAI Press.
- Lo Duca, Mario. 2004. Nomi di agente. In *La formazione delle parole in italiano*, eds. Maria Grossmann and Franz Rainer. Tübingen, Germany: Niemeyer.
- Ducrot, Oswald. 1972. Dire et ne pas dire. Paris, France: Hermann.
- Ducrot, Oswald. 1980. Les mots du discours. Paris, France: Minuit.
- Eemeren, F. H. van, and Rob Grootendorst. 1984. Speech acts in argumentative discussions: A theoretical model for the analysis of discussions directed towards solving conflicts of opinion. Dordrecht, Netherlands: Floris Publications.
- Eemeren, F. H. van, and Rob Grootendorst. 1992. Argumentation, communication, and fallacies: A pragma-dialectical perspective. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Ennis, Robert H. 1982. Identifying implicit assumptions. *Synthese* 51(1): 61–86.
- Erduran, Sibel, Shirley Simon and Jonathan Osborne. 2004. TAPping into argumentation: Developments in the application of Toulmin's Argument Pattern for studying science discourse. *Science Education* 88(6): 915–933.
- Estepa, Jessica. 2017. "President Trump Finishes His Twitter Thought Three Hours Later." *USA Today*, 24 April 2017. Retrieved September 5, 2020. URL:
  - https://eu.usatoday.com/story/news/politics/onpolitics/2017/04/24/pre sident-trump-finishes-his-twitter-thought-three-hours-later/100841944/.

- Fairclough, Isabela and Norman Fairclough. 2011. Practical reasoning in political discourse: The UK government's response to the economic crisis in the 2008 Pre-Budget Report. *Discourse & Society* 22(3): 243–268.
- Fairclough, Isabella and Norman Fairclough. 2012. *Political discourse analysis: A method for advanced students*. London, UK: Routledge.
- Gazdar, Gerald. 1979. Pragmatics: Presupposition, implicature, and logical form. New York, NY: Academic Press.
- Godden, David and Douglas Walton. 2006. Argument from expert opinion as legal evidence: Critical questions and admissibility criteria of expert testimony in the American legal dystem. *Ratio Juris* 19(3):261–286.
- Goldberg, J. 2020. Trump: Americans who died in war are 'losers' and 'suckers.' *The Atlantic*, 3 September 2020. Retrieved 5 September, 2020. URL:
- https://www.theatlantic.com/politics/archive/2020/09/trump-americans-who-died-at-war-are-losers-and-suckers/615997/
- Grosz, Barbara and Candace Sidner. 1986. Attention, intentions, and the structure of discourse. *Computation and Linguistics* 12(3): 175–204.
- Guess, Andrew, Brendan Nyhan and Jason Reifler. 2018. Selective exposure to misinformation: Evidence from the consumption of fake news during the 2016 US presidential campaign. *European Research Council* 9(3): 4.
- Gumperz, John. 1982. *Discourse strategies*. Cambridge, UK: Cambridge University Press.
- Habgood-Coote, Joshua. 2019. Stop talking about fake news! *Inquiry*. 62 (9–10): 1033–1065.
- Hajičová, Eva. 1984. Presupposition and allegation revisited. *Journal of Pragmatics* 8(2): 155–167.
- Halldén, Sören. 1960. *True love, true humour and true religion: A semantic study*. Lund, Sweden: Gleerlup.
- Hamblin, Charles Leonard. 1970. Fallacies. London, UK: Methuen.
- Hamblin, Charles Leonard. 1971. Mathematical models of dialogue. *Theoria* 37(2): 130–55.
- Hansen, Hans and Douglas Walton. 2013. Argument kinds and argument roles in the Ontario provincial election. *Journal of Argumentation in Context* 2(2): 226–258.
- Hitchcock, David. 1998. Does the traditional treatment of enthymemes rest on a mistake? *Argumentation* 12(1): 15–37.

- Hitchcock, David. 2003. Toulmin's warrants. In *Anyone who has a view: Theoretical contributions to the study of argumentation*, eds. Frans van Eemeren, Anthony Blair, Charles Willard and Francisca Snoeck-Henkemans. Dordrecht, Netherlands: Springer Netherlands.
- Jeshion, Robin. 2013. Slurs and stereotypes. *Analytic Philosophy* 54(3): 314–329.
- Jin, Zhiwei, Juan Cao, Yongdong Zhang and Jiebo Luo. 2016. News verification by exploiting conflicting social viewpoints in microblogs. *AAAI'16 Proceedings from the Thirtieth AAAI Conference on Artificial Intelligence*. Palo Alto, CA: AAAI Press.
- Kay, Paul. 1992. The inheritance of presuppositions. *Linguistics and Philosophy* 15(4): 333–379.
- Kecskes, Istvan. 2010. The paradox of communication: Socio-cognitive approach to pragmatics. *Pragmatics and Society*. 1(1): 50–73.
- Keeskes, Istvan. 2013. *Intercultural pragmatics*. Oxford, UK: Oxford University Press.
- Kilgarriff, Adam, Vít Baisa, Jan Bušta, Miloš Jakubíček, Vojtěch Kovář et al. 2014. The sketch engine: Ten years on. *Lexicography*. 1(1): 7–36.
- Kuhn, Deanna. 1991. *The skills of argument*. New York, NY: Cambridge University Press.
- Kuhn, Deanna. 1993. Science as argument: Implications for teaching and learning scientific thinking. *Sci. Educ.* 77(3):319–337.
- Kuhn, Deanna. 2001. How do people know? *Psychological Science* 12(1): 1–8.
- Kuhn, Deanna. 2002. What is scientific thinking and how does it develop? In *The Wiley-Blackwell handbook of childhood cognitive development. Second edition*, ed. Usha Goswami. Oxford, UK: Blackwell Publishers Ltd.
- Kuhn, Deanna. 2010. Teaching and learning science as argument. *Sci. Educ.* 94(5):810–824.
- Kuhn, Deanna, Richard Cheney and Michael Weinstock. 2000. The development of epistemological understanding. *Cogn. Dev.* 15(3):309–328.
- Kuhn, Deanna, Michael Weinstock and Robin Flaton. 1994. How well do jurors reason? Competence dimensions of individual variation in a juror reasoning task. *Psychol. Sci.* 5(5):289–296.

- Lerman, Rachel, Katie Shepherd and Taylor Telford. 2020. Twitter penalizes Donald Trump Jr. for posting hydroxychloroquine misinformation amid coronavirus pandemic. *The Washington Post*, 29 July. Retrieved 10 August, 2020. URL:
- https://www.washingtonpost.com/nation/2020/07/28/trump-coronavirus-misinformation-twitter/
- Levinson, Stephen. 1983. *Pragmatics*. Cambridge, UK: Cambridge University Press.
- Levinson, Stephen. 1992. Activity types and language. In *Talk at work: Interaction in institutional settings*, eds. Paul Drew and John Heritage. Cambridge, UK: Cambridge University Press.
- Levinson, Stephen. 2012. Action formation and ascription. In *The handbook of conversation analysis*, eds. Jack Sidnell and Tanya Stivers. Chichester, UK: John Wiley & Sons, Ltd.
- Macagno, Fabrizio. 2013. Strategies of character attack. *Argumentation*. 27(4): 369–401.
- Macagno, Fabrizio. 2014. Manipulating emotions. Value-based reasoning and emotive language. *Argumentation & Advocacy*. 51(2): 103–122.
- Macagno, Fabrizio. 2015a. Presupposition as argumentative reasoning. In *Interdisciplinary studies in pragmatics, culture and society*, eds. Alessandro Capone and Jacob Mey. Cham, Switzerland: Springer.
- Macagno, Fabrizio. 2015b. A means-end classification of argumentation schemes. In *Reflections on theoretical issues in argumentation theory*, eds. Frans van Eemeren and Bart Garssen. Cham, Switzerland: Springer.
- Macagno, Fabrizio. 2017. The logical and pragmatic structure of arguments from analogy. *Logique and Analyse* 240: 465–490.
- Macagno, Fabrizio. 2018. A dialectical approach to presupposition. *Intercultural Pragmatics* 15(2): 291–313.
- Macagno, Fabrizio. 2019. Analizzare l'argomentazione sui social media. Il caso dei tweet di Salvini. *Sistemi Intelligenti* (3): 601–632.
- Macagno, Fabrizio. 2022. Argumentation profiles and the manipulation of common ground. The arguments of populist leaders on Twitter. *Journal of Pragmatics* 191: 67-82.
- Macagno, Fabrizio and Sarah Bigi. 2017. Analyzing the pragmatic structure of dialogues. *Discourse Studies* 19(2): 148–168.
- Macagno, Fabrizio and Sarah Bigi. 2020. Analyzing dialogue moves in chronic care communication—Dialogical intentions and customization of recommendations for the assessment of medical deliberation. *Journal of Argumentation in Context* 9(2): 167–198.

- Macagno, Fabrizio and Douglas Walton. 2010. What we hide in words: Emotive words and persuasive definitions. *Journal of Pragmatics*. 42(7): 1997–2013.
- Macagno, Fabrizio and Douglas Walton. 2014a. Argumentation schemes and topical relations. In *Language, reason and education*, eds. Giovanni Gobber and Andrea Rocci. Bern, Switzerland: Peter Lang.
- Macagno, Fabrizio and Douglas Walton. 2014b. *Emotive language in argumentation*. New York, NY: Cambridge University Press.
- Macagno, Fabrizio and Douglas Walton. 2015. Classifying the patterns of natural arguments. *Philososphy & Rhetoric* 48(1): 26–53.
- Macagno, Fabrizio and Douglas Walton. 2017. *Interpreting straw man argumentation. The pragmatics of quotation and reporting*. Amsterdam, Netherlands: Springer.
- Macagno, Fabrizio and Douglas Walton. 2018. Practical reasoning arguments: A modular approach. *Argumentation* 32(4): 519–547.
- Macagno, Fabrizio and Douglas Walton. 2019. Emotive meaning in political argumentation. *Informal Logic* 39(3):229–261.
- Manor, Ruth. 1975. Propositional commitment and presuppositions. *American Philosophical Quarterly*. 12(2): 141–149.
- Manor, Ruth. 1976. An analysis of speech. *Theory and Linguistics* 3(1–3)
- Manor, Ruth. 1982. Pragmatics and the logic of questions and assertions. *Philosophica*. 29(3):45–96.
- McNeill, Katherine and Joseph Krajcik. 2008. Inquiry and scientific explanations: Helping students use evidence and reasoning. In *Science as inquiry in the secondary setting*, eds. Julie Luft, Randy Bell and Julie Gess-Newsome. Arlington, VA: National Science Teachers Association Press.
- Merin, Arthur. 1994. Algebra of elementary social acts. In *Foundations of speech act theory*, ed. Savas Tsohatzidis. London, UK: Routledge.
- Michaels, Sarah, Catherine O'Connor, Lauren B. Resnick, Catherine Connor and Lauren B. Resnick. 2008. Deliberative Discourse Idealized and Realized: Accountable Talk in the Classroom and in Civic Life. *Studies in Philososphy Education* 27(4): 283–97.
- Moeschler, Jacques. 2010. Is pragmatics of discourse possible? In *Perspectives on language, use and pragmatics. A volume in memory of Sorin Stati*, ed. Alessandro Capone. Munich, Germany: Lincom Europa.
- O'Keefe, Daniel. 1977. Two concepts of argument. *Journal of the American Forensic Association*. 13(1): 121–28.

- Perelman, Chaïm and Lucie Olbrechts-Tyteca. 1969. *The New Rhetoric:* A treatise on argumentation. Notre Dame, IN: University of Notre Dame Press.
- Pisarevskaya, D. 2017. Rhetorical structure theory as a feature for deception detection in news reports in the Russian language. 23rd International Conference on Computational Linguistics and Intellectual Technologies "Dialogue". Moscow, Russia: HSE University Press.
- Rachman, G. 2018. Sex, violence and the rise of populism. *The Financial Times*, 1 October 2018. Retrieved September 5, 2020. URL: <a href="https://www.ft.com/content/dfcfc632-c552-11e8-8670-c5353379f7c2">https://www.ft.com/content/dfcfc632-c552-11e8-8670-c5353379f7c2</a>
- Rapanta, Chrysi and Andri Christodoulou. 2019. Walton's types of argumentation dialogues as classroom discourse sequences. *Learning Culture and Social Interation*. Advance Online Publication.
- Rapanta, Chrysi and Douglas Walton. 2016. Identifying paralogisms in two ethnically different contexts at university level/Identificación de paralogismos en dos contextos universitarios diferenciados étnicamente. *Infanc. y Aprendiz: Journal for the Study of Education and Development* 39(1): 119–149.
- Reed, Christopher and Douglas Walton. 2003. Applications of Argumentation Schemes. *Argumentation Its Appl. Proc. 4th OSSA Conf.* Windsor, Ontario: OSSA.
- Rees, Agnes van. 2009. Dissociation in argumentative discussions: A pragma-dialectical perspective. Amsterdam, Netherlands: Springer.
- Rigotti, Eddo. 2007. Relevance of context-bound loci to topical potential in the argumentation stage. *Argumentation* 20(4): 519–40.
- Rigotti, Eddo and Sara Greco-Morasso. 2019. *Inference in argumentation: A topics-based approach to argument schemes*. Amsterdam, Netherlands: Springer.
- Rocci, Andrea. 2005. Are manipulative texts coherent? Manipulation, presuppositions, and (in-) congruity. In *Manipulation and ideologies in the twentieth century*, eds. Louis de Saussure and Peter Schulz. Amsterdam, Netherlands-Philadelphia, PA: John Benjamins Publishing.
- Rubin, Victoria, Niall Conroy and Yimin Chen. 2015. Towards news verification: Deception detection methods for news discourse. *In Proceedings for the 48th Hawaii International Conference on System Sciences*. Washington, DC: IEEE Computer Society.
- Rubin, Victoria and Tatiana Lukoianova. 2015. Truth and deception at the rhetorical structure level. *Journal of the American Society for Information Science and Technology* 66(5): 905–917.

- Sbisà, Marina. 1999. Ideology and the persuasive use of presupposition. Lang. Ideol. Sel. Pap. from 6th Int. Pragmat. Conf. 1: 492–509.
- Schiappa, Edward. 2003. *Defining reality. Definitions and the politics of meaning*. Carbondale and Edwardsville, IL: Southern Illinois University Press.
- Shu, Kai, Amy Sliva, Suhang Wang, Jiliang Tang and Huan Liu. 2017. Fake news detection on social media: A data mining perspective. *ACM SIGKDD Explorations Newsletter* 19(1): 22–36.
- Sinclair, John and Malcolm Coulthard. 1992. Towards an analysis of discourse. In *Advances in spoken discourse analysis*, ed. Malcolm Coulthard. London, UK: Routledge.
- Stalnaker, Robert. 1974. Pragmatic presuppositions. In *Semantics and philosophy*, eds. Milton Munitz and Peter Unger. New York, NY: New York University Press.
- Stalnaker, Robert. 2002. Common ground. *Linguistic Philosophy*. 25: 701–21.
- Stevenson, Charles. 1937. The emotive meaning of ethical terms. *Mind*. XLVI(181): 14–31.
- Stevenson, Charles. 1938. Persuasive definitions. Mind. 47: 331–50.
- Stevenson, Charles. 1944. *Ethics and language*. New Haven, CT: Yale University Press.
- Strawson, Peter. 1971. Identifying reference and truth-values. In *Logico-Linguistic Papers*, ed. Peter Strawson. London, UK: Methuen.
- Stubbs, Michael. 1983. Discourse analysis: The sociolinguistic analysis of natural language, Vol. 4. Chicago, IL: University of Chicago Press.
- Stump, Eleonore. 2004. *Boethius's "De topicis differentiis."* Ithaca, IL and London, UK: Cornell University Press.
  - The Tweets of President Donald J. Trump: The Most Liked and Retweeted Tweets from the Inauguration through the Impeachment Trial. 2020. Forefront Books.
- Toulmin, Stephen. 1958. *The uses of argument*. Cambridge, UK: Cambridge University Press.
- Walton, Douglas. 1981. The fallacy of many questions. *Logic and Analysis* 95–96:291–314.
- Walton, Douglas. 1987. *Informal fallacies*. Amsterdam, Netherlands: John Benjamins.
- Walton, Douglas. 1989. *Informal logic*. New York, NY: Cambridge University Press.
- Walton, Douglas. 1990. What is reasoning? What is an argument? *Journal of Philosophy*. 87: 399–419.

- Walton, Douglas. 1992. *The place of emotion in argument*. University Park, PA: Pennsylvania State University Press.
- Walton, Douglas. 1994. Begging the question as a pragmatic fallacy. *Synthese* 100(1): 95–131.
- Walton, Douglas. 1995a. Argumentation schemes for presumptive reasoning. Mahwah, NJ: Routledge.
- Walton, Douglas. 1995b. *A pragmatic theory of fallacy*. Tuscaloosa, AL: University of Alabama Press.
- Walton, Douglas. 1997. *Appeal to expert opinion*. University Park, PA: Pennsylvania State University Press.
- Walton, Douglas. 1998a. *Ad hominem arguments*. Tuscaloosa, AL: University of Alabama Press.
- Walton, Douglas. 1998b. *The New Dialectic. Conversational contexts of argument*. Toronto, ON: University of Toronto Press.
- Walton, Douglas. 1999a. The fallacy of many questions: On the notions of complexity, loadedness and unfair entrapment in interrogative theory. *Argumentation*. 13(4): 379–83.
- Walton, Douglas. 1999b. Profiles of dialogue for evaluating arguments from ignorance. *Argumentation*. 13(1): 53–71.
- Walton, Douglas. 2001a. Abductive, presumptive and plausible arguments. *Informal Logic* 21(2): 141–69.
- Walton, Douglas. 2001b. Persuasive definitions and public policy arguments. *Argumentation and Advocacy* 37(3): 117–32.
- Walton, Douglas. 2002. *Legal argumentation and evidence*. University Park, PA: The Pennsylvania State University Press.
- Walton, Douglas. 2006. Fundamentals of critical argumentation. New York, NY: Cambridge University Press.
- Walton, Douglas. 2007a. The speech act of clarification in a dialogue model. *Studies in Communication Science* 7(2): 165–197.
- Walton, Douglas. 2007b. *Media argumentation: Dialectic, persuasion and rhetoric.* New York, NY: Cambridge University Press.
- Walton, Douglas. 2008. *Informal logic: a pragmatic approach*. New York, NY: Cambridge University Press.
- Walton, Douglas. 2009. *Ethical argumentation*. Laham: Lexington Books.
- Walton, Douglas. 2010a. Why fallacies appear to be better arguments than they are. *Informal Logic* 30(2): 159–84.
- Walton, Douglas. 2010b. A dialogue model of belief. *Argument and Computation* 1(1): 23–46.

- Walton, Douglas. 2010c. Types of dialogue and burdens of proof. *Computational models of argument: Proceedings of COMMA 2010*, eds P. Baroni, F. Cerutti, M. Giacomin and G. R. Simari, Amsterdam, IOS Press, 2010, 13-24.
- Walton, Douglas. 2015. Presumption, burden of proof, and lack of evidence. L'Analisi Linguist. e Lett. 16(1): 49–71.
- Walton, Douglas. 2016. Argument evaluation and evidence. Cham, Switzerland: Springer.
- Walton, Douglas and David Godden. 2005. The nature and status of critical questions in argumentation schemes. *The uses argument Proceedings of a Conference at McMaster University*. 18–21 May, 2005. Hamlilton, ON: Ontario Society for the Study of Argumentation.
- Walton, Douglas and Erik Krabbe. 1995. Commitment in dialogue. Albany, NY: State University of New York Press.
- Walton, Douglas and Fabrizio Macagno. 2010. Wrenching from context: The manipulation of commitments. *Argumentation*. 24(3): 283–317.
- Walton, Douglas, Christopher Reed and Fabrizio Macagno. 2008. Argumentation schemes. New York, NY: Cambridge University Press.
- Walton, Douglas, Alice Toniolo and Timothy Norman. 2016. Towards a richer model of deliberation dialogue: Closure problem and change of circumstances. *Argument and Computation* 7(2–3): 155–173.
- Widdowson, Henry George. 1979. *Explorations in applied linguistics*. Oxford, UK: Oxford University Press.