



# RELATÓRIO DE UNIDADE CURRICULAR

## Retórica e Argumentação

Curso obrigatório da Licenciatura  
em Ciências da Comunicação

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Lisboa, 9 de Junho 2023



# REPORT ON THE CURRICULAR UNIT

## **Rhetoric and Argumentation**

Obligatory course in the BA programme in  
Communication Studies

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Lisbon, Portugal, the 9<sup>th</sup> of June 2023



Relatório de Unidade Curricular apresentado para admissão a Provas de Agregação na Faculdade de Ciências Sociais e Humanas da Universidade Nova de Lisboa, no ramo de Ciências da Comunicação (especialidade de Estudos de Argumentação), em conformidade com o estabelecido no artigo 8º do Decreto-Lei nº 239/2007, de 19 de junho de 2007.

## Table of Contents

<i>Introduction to the course</i> .....	<b>5</b>
<i>Place of Rhetoric and Argumentation in the BA programme in Communication Studies</i> .....	<b>8</b>
<i>Interplay between research and teaching</i> .....	<b>10</b>
<i>Recognition of teaching quality</i> .....	<b>12</b>
Student satisfaction .....	<b>13</b>
International teaching.....	<b>13</b>
<i>Objectives of the course</i> .....	<b>14</b>
<i>Teaching methodology</i> .....	<b>19</b>
<i>Method of evaluation</i> .....	<b>21</b>
<i>Programme, with the summary of each class</i> .....	<b>23</b>
<i>Bibliography</i> .....	<b>30</b>
Core Bibliography .....	<b>32</b>
Additional, follow-up readings .....	<b>33</b>
<i>Detailed contents (class by class)</i> .....	<b>34</b>
<i>References cited in the Report</i> .....	<b>116</b>

## Introduction to the course

The curricular unit *Rhetoric and Argumentation* (pt.: *unidade curricular Retórica e Argumentação*) is one of the 12 core courses in the undergraduate programme in Communication Studies, taught at the Department of Communication Studies (pt.: *Departamento de Ciências da Comunicação*; literally: Department of Communication Sciences), part of the NOVA School of Social Sciences and Humanities, NOVA University, Lisbon. As such, it is an obligatory course to follow each year by any of the 100-120 students seeking to obtain their BA degree in Communication, regardless of their specialisation – as well as an elective course selected by some 10-30 students from other programmes taught at the School, and international students.

I have been responsible for the course since the academic year 2016/2017, that is, since I was appointed Assistant Professor in the Department of Communication Studies. At that time, it was part of a larger set of 20 core courses compulsory for BA students to follow. I took it over from Prof. António Marquês – back then Full Professor in the Department of Communication Studies and Director of IFILNOVA: NOVA Institute of Philosophy.<sup>1</sup> Given that other philosophy-trained colleagues were previously involved in teaching the course – e.g., Prof. João Sàágua, Dr. Giovanni Damele, and Dr. Nuno Venturinha – *Rhetoric and Argumentation* is a specimen of fruitful collaboration between the philosophical inquiry conducted at the Institute of Philosophy and the quality training provided by the Department of Communication Studies. This should not be surprising in this case, given the way rhetoric and argumentation studies developed in the Occidental world. They originated in the philosophical reflection over the nature of reasoning, language, and

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<sup>1</sup> Note: In Portugal, “departments” are teaching units responsible for training and conferring higher education degrees (BA, MA, PhD), while “institutes” are research units responsible for conducting academic research, including project management. It is not uncommon for professors employed in departments to be simultaneously researchers in institutes investigating neighbouring fields or bearing distinct names.

communication, epitomised in the work of Plato, Aristotle, and the Sophists (Protagoras, Gorgias, Isocrates) (Bocheński, 1951; Ryle, 1966; Tindale, 2010).

This historical and conceptual connection is well-reflected in the title of the discipline. While this title – *Rhetoric and Argumentation* – might be criticised for putting the part (“rhetoric”) before the whole (“argumentation”), it is not a careless overlooking. Highlighting the rhetorical aspect of argumentation indicates the importance of audience for communication studies (see below). Indeed, within communication studies, rhetoric is justifiably treated as the first Western theory of communication: “The primary source of ideas about communication prior to this [20th] century, dating back to ancient times, was rhetoric” (Littlejohn, 1996, p. 117). Indeed, “[m]any see *rhetoric* as synonymous with the term *communication*, and the decision of which term to use depends largely on the philosophical tradition with which you most identify” (Littlejohn, Foss, & Oetzel, 2016, p. 45). However, as originally conceived by Plato and Aristoteles, rhetoric is but one of the three disciplines of argumentation, the other two being dialectic and logic. Therefore, the scope of the *Rhetoric and Argumentation* course is not limited to strictly rhetorical issues of language use (such as, e.g., composition and stylistics) or exclusively to understanding and mastering persuasive techniques. Instead, it examines argumentation in its fullness as a phenomenon constituted jointly by its rhetorical (persuasive), dialectical (interactional), and logical (inferential) elements. This approach is in line with the recent developments in Argumentation Theory (see Dutilh Novaes, 2021; van Eemeren et al., 2014; Lewiński & Mohammed, 2016), and in particular with the 20<sup>th</sup> century revival of rhetorical scholarship by Chaim Perelman, the author of the seminal *New Rhetoric: A Treatise on Argumentation* (1958/1969). As such, the *Rhetoric and Argumentation* is justifiably presented to the students as a

discipline that historically, theoretically, and practically undergirds all communication studies.<sup>2</sup>

In accordance with this broad conception of argumentation, the course aims primarily to stimulate a critical reflection on rational and persuasive uses of public discourse. To this end, the course uses the concepts and tools of rhetoric (both classical and contemporary), dialectic and logic, to study argumentative schemes, structures, and strategies in language. The fundamental idea behind this course is that in order to successfully navigate the modern world saturated by various forms of often strategic communication (especially in new social media) one needs to master at least basic skills of “Argumentative Literacy” and “Critical Thinking”. This course develops precisely these skills.

As explained in more detail below, the entire programme of communication studies is currently undergoing a curricular reform that started in the academic year 2022/2023. Since this reform coincides with the year of my sabbatical leave dedicated to research, this is a fantastic opportunity to rethink and reinvigorate this course. This report is a result of this reflection.

Below, I will first contextualise the course in the broader programme in communication studies and then briefly describe how it features in my portfolio of teaching and research activities. Finally, I turn to presenting in detail the course’s objectives, methods of evaluation, and contents.

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<sup>2</sup> One strong, and typical, argument for the conceptual relation between communication and rhetoric can be expressed in this way: “Rhetoric is not a debased kind of communication; it is the reality of all communication, and it leads us into experiencing the world in some particular ways and not in all ways. Rhetoric is the inescapable event in all communication—the form and the direction of the influence we exert on each other. We exert such influence in every encounter because we never experience each other outside of a communicative event.” (Crosswhite, 2013, p. 17).

## Place of *Rhetoric and Argumentation* in the BA programme in Communication Studies

In December 2021, the Portuguese Agency for Assessment and Accreditation of Higher Education: A3ES (pt.: Agência de Avaliação e Acreditação do Ensino Superior) approved the curricular reform of the BA programme in Communication Studies taught at the Department of Communication Studies of the NOVA School of Social Sciences and Humanities, NOVA University. Prepared collectively by the tenured and tenure-track professors working in the Department – and under the leadership of the then Department Chair, Prof. Cristina Ponte – the reform managed to meet the high criteria set by the A3ES, a public institution tasked with ensuring the quality of higher education. This reform has taken effect as of the academic year 2022/2023.

*Rhetoric and Argumentation* was previously taught in the second year of the BA programme and was among the 20 core courses responsible for the general education of the BA students of the Department of Communication Studies, introducing them to social sciences, humanities, and communication, both in terms of major historical developments and theoretical fundamentals. After the reform, the set of core courses is limited to 12, with *Rhetoric and Argumentation* being one of them, but now moved to the third and final year of the BA programme. It is thus among courses such as Theory of Communication, Sociology of Communication, Communication Ethics and Law, Media Discourse, History of Media, and History and Theory of the Image considered fundamental and indispensable to the education of future media and communication scholars and professionals.

As stated above, the course is obligatory for all students seeking BA in Communication, however, it is also a popular option frequented by students from other programmes offered by the NOVA School of Social Sciences and Humanities: Philosophy, Political Science, Portuguese Language and Literature, and Sociology. Furthermore, it attracts a fair share of international students. Ever since my taking it

over, *Rhetoric and Argumentation / Retórica e Argumentação* has been taught as a bilingual course, which can be attended both by Portuguese- and English-speaking students. Several simple policies introduced by me make the course genuinely bilingual. First, all the instructions and guidelines for the course – including the complete syllabus – are provided in both languages. Second, compulsory literature for the course is selected in such a way that both the Portuguese and English texts are simultaneously available. In some cases, this means a text originally written in English and then translated into Portuguese (esp. Weston’s textbook), while in other cases (Aristotle’s *Rhetoric*, Perelman’s *Realm of Rhetoric*) the original text is available both in English and Portuguese translations. Third, the PowerPoint slides or hand-outs prepared for the class are typically in Portuguese, which then allows for the in-class discussion to be conducted in English (or vice versa). The same policy applies to texts available exclusively in one language and to students’ presentations: if the original texts or examples of argumentative discourse analysed are in one language, then the presentation or discussion in another is encouraged. Finally, mid-term exams (see below for an example) and written versions of presentations are accepted in either language (and sometimes also in Spanish, for students who struggle with both English and Portuguese).

This opportunity to follow the course while being competent in either of the two languages is particularly important in the broader context of the internationalisation of Portuguese higher education and research. On the one hand, it is firmly embedded in the global academia where English is the *lingua franca*. This includes in particular the broader European academia with its landmark large-scale initiatives such as the *Erasmus +* programme of the European Union aimed at fostering academic exchange across – and even beyond – the continent. Since the NOVA School of Social Sciences and Humanities is a signatory of various institutional agreements with foreign institutions, each year a number of foreign students from countries as diverse as Turkey, Hungary, Poland, Germany, France, and, most

significantly, Italy and Spain, take some selected courses in the communication programme. These students have typically none to very limited command of the Portuguese language but are overall fluent in English. Offering a bilingual course decisively facilitates their participation; this even pertains to the Italian and Spanish students who are native speakers of the same family of languages but take the bilingual course as another opportunity to improve their Portuguese. On the other hand, the Portuguese Republic is a prime academic destination for students from former colonies and other Lusophone states where Portuguese is the official language. The programme thus receives numerous Portuguese-speaking students: especially from Brazil, but also the Portuguese-speaking African Countries (pt.: *Países Africanos de Língua Oficial Portuguesa: PALOP*) such as Angola, Mozambique, and Cape Verde; and even from other countries and territories such as East Timor and Macau. This international mobility provides for a steady influx of students who speak Portuguese – and often other local or foreign languages – but do not speak English. For this cohort, the possibility of taking the course in Portuguese is, in turn, a key advantage.

## Interplay between research and teaching

As indicated above, *Rhetoric and Argumentation* is one of the broader fundamental courses offered in the BA programme in communication, alongside others taught by me: *Philosophy of Communication* (2017-2022) whose main themes, after the curricular reform of 2022, have been further deepened and divided between: *Theory of Communication* (starting teaching in the fall of 2023) and *Communication Ethics and Law* (starting teaching in the spring of 2023). Together with the PhD seminars I have been teaching – *Specialised Seminar in Argumentation Studies, Methodology of Communication Studies*, and *Theories of Communication* – they make part of a larger, consistent portfolio of courses where theoretical issues in communication

crisscross with the key questions in the philosophy of language, argumentation theory, and speech act theory, which are all my central areas of active research (with externally-funded projects won and a steady output of peer-reviewed publications).

Indeed, my pedagogical practice in the department grew organically from my doctoral (2006-2010, University of Amsterdam) and post-doctoral (2010-2016, NOVA University of Lisbon) research. And since the most advanced field of my research is precisely argumentation, there could not be a more relevant course for me to teach than *Rhetoric and Argumentation*.

This context invites, as almost the “natural” overall pedagogy to implement, various strategies recognised within *Research-Informed Teaching*. I practice this pedagogy based on the principle that the interdependence between teaching and research is truly bi-directional. On the one hand, via research-led teaching, students get a direct, “behind the scenes” insight into the current research developed by their teacher and their team. Thanks to my experience as an active researcher in the area in which I teach – in this case: argumentation – I am always prepared to discuss theoretical issues and empirical studies recently debated in the discipline, including issues that my colleagues and I have been investigating. On the other hand, via teaching-based research, students are the source of inspiration and even direct input into my research. I certainly learn a lot during the classes, benefitting from a genuine intellectual training which the students’ probing questions, their sustained curiosity, and startling creativity continuously provide. This is particularly significant for advancing my research activities.

A good example of a successful implementation of this interactive strategy in the *Rhetoric and Argumentation* course is the empirical work on argumentation in Portugal, jointly conducted with a team of local and international colleagues (see: Lewiński, M., Hample, D., Sàágua, J., & Mohammed, D. (2018). Arguing in Portugal: A cross-cultural analysis. *Journal of International and Intercultural Communication*, 11(3), 233-253, available [here](#)). This study was prepared with the active support of

students from the course, many of whom became respondents to the online survey (distributed via SurveyMonkey) and also “research assistants” of sorts, who actively encouraged additional people in their social networks to respond to the questions in the survey. Their research participation further extended into discussions over the design of the study, this inducing the nuances of the ordinary Portuguese vocabulary surrounding the practices of argumentation. Finally, once the study was peer-reviewed and published, subsequent cohorts of students have been eager to present (mostly in Portuguese) the results of the study and discuss its at times startling results during the sessions dedicated to empirical issues of argumentation (see below Session 3).

As becomes clear below in the detailed description of the course, there are plenty further questions and themes which result directly from the interplay of my teaching with my research projects. My published work on arguments from authority, on practical argumentation, and on public debates surrounding the COVID-19 pandemic couldn't have happened without prior discussion of the cases and some theoretical grounds with students. In turn, students gain first-hand access to the text and the author, which stimulates their interest and engagement.

One important consequence of this mutually beneficial link between research and teaching is that ever since I assumed the teaching duties in the department, I actually managed to boost my research outputs, despite new labour-intensive tasks related to the 6-to-9-hours-a-week teaching load. Another is the overall student satisfaction and international recognition of teaching quality, something I turn to in the next section.

## **Recognition of teaching quality**

## Student satisfaction

In the last academic year of my teaching (2021/2022) before the sabbatical leave of 2022/2023, the *Rhetoric and Argumentation* course, with 100 students enrolled in two classes, obtained an overall student satisfaction score of **5.2/6.0** and a student satisfaction with the professor score of **5.3/6.0** (evaluations of 5.0 or more are classified as “good practices”).

It is also important to emphasise that the 2019/2020, 2020/2021, and 2021/2022 academic years were defined by the challenges of the COVID-19 pandemic. Both teachers and students had to quickly adapt to the new realities of distance learning or hybrid learning. Despite the initial technical and organisational difficulties, together with my students, we managed to achieve our pedagogical objectives set out in the syllabi. An important sign of this is that the *Rhetoric and Argumentation* class taught during the first wave of the pandemic in March-April 2020 received an overall satisfaction with the course score of **5.1/6.0**. This reveals a significant capacity – in collaboration with the students – to achieve the pedagogical objectives despite highly uncertain circumstances.

## International teaching

My teaching skills were also recognised internationally. In the academic year 2019/2020 I was invited to teach a session of the Master’s seminar “Insinuation and the pragmatics of what is (and is not) said” at the Department of English, Faculty of Human Sciences, University of Fribourg, Switzerland (18 November 2019) and to lead four sessions during the “International Winter School: Methods of argument analysis and evaluation in public contexts”, University of Zagreb, Croatia (15-18 January 2020). In the academic year 2020/2021 I taught (by Zoom) a session in the seminar

“Perspectives on Language and Communication” in the programme “Research Master in Linguistics and Communication” at the University of Amsterdam, The Netherlands (28 April 2021). Further, in the academic year 2021/2022 I was invited to teach a 3-day intensive doctoral course “Speech acts: From theoretical basics to argumentative polylogues online” within the framework of the [“Doctoral Program in Applied Linguistics: Managing Languages, Arguments and Narratives in the Datafied Society”](#) at the Faculty of Communication, Culture and Society of the Università della Svizzera Italiana, Lugano, Switzerland (30 May – 1 June 2022). I also gave an opening session entitled “Basic norms of illocution” at the “Lisbon Summer School on Speech Acts in Public Discourse: Normative Questions”, organized at NOVA School of Social Sciences and Humanities, Lisbon (23-25 June 2022). Recently, I taught at the Winter School “Argument Mining and Argumentation-based Explainable AI” organised by the University of Cyprus in Larnaca (22-24 February 2023).

All these sessions involved between 10 and 30 international students from Europe, USA, Canada, Australia, Iran, among others, and were given in English.

## Objectives of the course

As already mentioned above, the overall objective of the course is to develop skills of critical reflection on rational and persuasive uses of public discourse. In view of the foregoing discussion, this objective can be now made more specific.

A good way of grasping the main objectives of the course is the classic tri-partition between rhetoric, dialectic, and logic, originating in the work of Aristotle. As discussed earlier, this tri-partition motivates the broad perspective of the course and its very name. Since the late 1970s a communication scholar Joseph Wenzel has spoken of these as “three perspectives on argument” (Wenzel, 1990). Rhetoric approaches argumentation as “a natural process of persuasive communication” (Wenzel, 1990, p. 9). This process requires skilful adaptation of our symbolic resources

(language, image, sound) to a given audience in situations of uncertainty, where decisions cannot be based on impersonal evidence. Dialectic focuses instead on *procedures* regulating discussions in which competing claims are tested and disagreements managed through a comprehensive exchange of arguments and criticisms. Such procedures provide norms that, when followed, produce cogent argumentation leading to reasonable conclusions. Finally, logic examines the *products* of argumentation. It defines methods and standards by which we can reconstruct and evaluate the inferential structure of arguments (Lewiński & Mohammed, 2016; Wenzel, 1990).

The three disciplines of argumentation studies, understood by Wenzel as three perspectives for looking at any argumentation, define three complementary objectives for studying argumentation in the course.

*Objective 1: Provide tools and methods for understanding audiences as ultimate targets of any form of argumentation and communication. (Rhetorical objective)*

Aristotle famously claimed that rhetoric's "function [gr. *ergon*] is not to persuade but to see the available means of persuasion in each case" (Aristotle, *Rhetoric*, 1355b). As an art of public speaking, rather than aiming at immediate persuasive success, it seeks to understand and master generalisable rules constituting persuasive discourse which a student of rhetoric can aptly "see" [gr. *theoresai*]. But since "persuasive is persuasive to someone" (Aristotle, *Rhetoric*, 1356b), the very objective [gr. *telos*] of any rhetorical speech is "someone addressed", its audience (Aristotle, *Rhetoric*, 1358b).

Following Aristotle, prominent contemporary rhetoricians (Perelman, Tindale, Zarefsky) stress the centrality of audience for rhetorical argumentation:

Unlike its counterparts that draw from logic or dialectic, rhetorical argumentation is characterized by contextual features in which audience considerations are central. We are interested in how arguments are *experienced* by audiences, and how audiences are invited into argumentative situations in order to complete the reasoning. (Tindale, 2010, p. 62)

Accordingly, one of the main objectives of the course is to provide tools and methods for understanding audiences as ultimate targets of any form of argumentation. While the overall objective of the course is fostering general critical thinking skills, Objective 1 aligns very well what today's students of journalism, media, and strategic communication (including science communication) need to prioritise: the inescapable adaptability of their communication to the audiences they address if understanding and persuasion are to succeed.

*Objective 2: Enhance communicative skills of critical debate, disagreement management and conflict resolution. (Dialectical objective)*

In his treatise on dialectic, the *Topics*, Aristotle claimed that the method of dialectical argumentation he has developed is "useful for three things: practice [gr. *gymnastike*], encounters, and philosophical sciences" (*Topics*, 101a). One objective of dialectic is thus an exercise in argumentative skills, a task comparable to modern collegiate debate competitions. Another is a general method adequate to critically testing "the plausible" opinion [gr. *endoxa*], rather than "the certain" knowledge [gr. *episteme*], via daily argumentative encounters in the public sphere. The final one – and yet another one distinguished later in *Topics*, that of getting at the "first principles of any particular science" – are important parts of Aristotle's philosophical and scientific method. Dialectic serves as a critical examination of any body of conflicting views on any topic, aimed "to bring out the difficulties and inconsistencies

in these assembled views” and “to set the stage for a scientific theory” which “must resolve these problems” (Smith, 1993, p. 351). While the latter function has morphed into contemporary philosophy of science (e.g., in Popper’s critical rationalism), it is the first two that form the backbone of today’s dialectical approaches to argumentation.

Recent theories such as van Eemeren and colleagues’ pragma-dialectics, Walton’s new dialectic, and Jackson & Jacobs’ normative pragmatics broadly define the goal of argumentation as that of resolving or managing disagreement via dialogical encounters, not unlike those envisaged by Aristotle for his time and context. In the context of our complex communication via social media and elsewhere, these skills are more precious and needed than ever. Hence the second primary objective of the course is to assist students in better understanding and developing their skills of managing disagreement via dialectical practices of argumentation.

*Objective 3: Improve general logical and critical thinking skills of students.*  
(Logical objective)

In the realm of argumentation, logic (Aristotle’s “analytics”) commands the highest level of methodological rigor needed for formal proof and scientific demonstration. Aristotle’s chief achievement in logic was the definition of deduction and its concrete model: the syllogism. According to him, “deduction is an argument in which, certain things having been conceded, something else different from the things conceded of necessity follows through the things conceded” (Aristotle, *Topics*, 100a). As is well-known, fundamental advances have been made in logic ever since Aristotle’s first formal theory. Yet, students in logic, argumentation, and critical thinking courses – including the Portuguese students enrolled in the *Rhetoric and Argumentation* course – typically maintain familiarity with the Aristotelian syllogisms

and other basic concepts such as square of opposition and certain fallacies thanks to their prior high-school training.

While this course is not envisaged as an introduction to logic in and of itself, its important objective is to deepen the students' understanding of the nature of inference, both formal and informal. This includes various forms of practical reasoning and other informal argument schemes such as arguments from expert opinion, from example, or analogy. The basic assumption is that strengthening competence in identifying, evaluating, and constructing such forms of argument improves capacity for rational judgement and enhances general thinking skills.

As briefly mentioned above, the course thus uses the concepts and tools of rhetoric (both classical and contemporary), dialectic and logic, to study argumentative schemes, structures, and strategies in language. The underlying idea is that in order to successfully navigate the modern world saturated by various forms of often strategic communication (especially in new social media) one needs to master at least basic skills of "Argumentative Literacy" and "Critical Thinking". This course develops precisely these skills among students of communication, both in their capacity as critical users and (current or future) producers of media content.

The overall aspirational goal for alumni of the course is to enhance their civic competences and values fit for the 21<sup>st</sup>-century media-driven world. While meant to be understood in the most modest way possible, adequate for a small-scale undergraduate course, this objective aligns very well with the reflection on the purpose of studying rhetoric and argumentation since Aristotle onwards.

In addition to these general objectives, the course also has further auxiliary goals – formulated in its syllabus made available to students – which can be formulated as follows:

- a) Obtain relevant information about the "rhetorical" discipline as a study of rational and argumentative methods of persuasion;

- b) Have an adequate understanding of the historical origin of rhetoric, dialectic and logic understood as three argumentative disciplines with specific methods and techniques of reasoning, whose objective is rational persuasion;
- c) Understand the most relevant contemporary interpretations of the status and function of argumentation and rhetoric;
- d) Define the logical concept of argument as a formally valid deduction from given premises and some of its main forms (modus ponens, modus tollens...);
- e) Evaluate, from a critical point of view, the formal and informal conception of argumentative reasoning, its empirical and contextual limits;
- f) Understand and identify failures of reasoning through the analysis of the most common fallacies.

## Teaching methodology

These objectives are realised through three types of pedagogical activities which, taken together, allow students to master the principles of argumentation analysis and critical thinking, namely:

- I) **Theoretical exposition** of the basic concepts and tools of rhetorical and broadly argumentative analysis. This is done via PowerPoints prepared for the class, as well as through obligatory and suggested readings. These readings include excerpts of some classical texts (*Aristotle's Rhetoric*), influential modern texts (*Perelman's The Realm of Rhetoric*), and theory-based but practice-oriented textbooks (*Weston's Rulebook for Arguments*). Typically, the first of the two weekly sessions is dedicated to this part.
- II) **Practical application** of the concepts and techniques discussed in theoretical sessions. This is done in two basic ways:

- Critical analysis of significant instances of argumentation. Examples carefully discussed in the last years include Donald Trump’s inaugural address (20 January 2017), where various rhetorical strategies, commonplaces, and fallacies are present, and the classic film *12 Angry Men* (Sydney Lumet, 1957), which provides not only a famous example of forensic rhetoric, but also a particularly fertile ground for identifying dialectical concepts and dynamics (e.g., the burden of proof, argument from concession to contradiction) and logical inferences (e.g., *reductio ad absurdum*, *modus tollens*, disjunctive syllogism) (see Sessions 5-6 below).
- Training in argument mapping techniques via the *Rationale* software. Students lay out the structure of complex arguments with the aid of an online argument mapping platform Rationale®, developed by ReasoningLab™, an Amsterdam-based company, (see <https://www.rationaleonline.com/>). The platform offers an intuitive, easy-to-use Graphic User Interface with low learning curve – thus perfectly suited for a quick intensive course, dedicated to students already familiar with basic concepts of argumentation studies (see Sessions 15-16).

III) **Students’ teamwork.** Apart from the group homework on argument schemes (see Session 12) and in-class group training with the Rationale platform (see Session 16), after the mid-term exam students prepare:

- *Group presentations.* Groups of 3-5 students prepare and present an argumentative analysis of texts of their own choice. These presentations are prepared in line with the guidelines provided (see below, Session 22), but are otherwise creative achievements in critical argument analysis of the students themselves. Notable examples of such analyses

in the last years include Greta Thunberg's speeches at the UN General Assembly and in the EU Parliament, argumentative debates in the Portuguese TV programme *Prós e Contras* (*Pros and Cons*), or André Ventura's (the leader of the right-wing Chega / Enough party in Portugal) populist rhetoric.

## Method of evaluation

It is important to stress that the course is governed by the principle of dialogical engagement between the students and the teacher. Indeed, all the courses I teach have an open structure to encourage an effective and broad interaction with students. In undergraduate courses, with classes of 60-80 students, this involves: continuous many-to-many dialogue with students (rather than one-to-many "lecturing"); work in peer-to-peer groups; dedicating 2-3 sessions exclusively to the students' questions and doubts; personalised help in preparing student presentations; detailed discussion of the presentations, with a special focus on peer-to-peer feedback.

This approach allows for personalised attention and assessment, even in larger cohorts. Active students can improve their final grades via their presentations, homework, and active participation throughout the course.

Yet, the main evaluation of this course is composed of two elements:

60% - written mid-term exam (end of April)

40% - group presentations (May)

Details of the exam are given below in the description of Session 18, while the guidelines for group presentations are provided in Session 22. All members of the 3-to-5 person group are given the same grade, unless there are overwhelming reasons

to differentiate the grades (noticeable or reported free-riding, non-negligible difference in performance).

In the Portuguese education system, the grades are given on a 0-20 scale, with 10 being the lowest passing grade. These grades are officially converted (in the well-known US-scale) in the following way:<sup>3</sup>

A+	20
A	19
A-	18
B+	17
B	16
B-	15
C+	14
C	13
C-	12
D+	11
D	10

Note: the average final grade for the 2021/2022 *Rhetoric and Argumentation* course was 16.5.

The appeal exam (for students who obtained a final grade of 8 or 9 out of 20)<sup>4</sup> takes place in the exam session in June, after the end of the classes. During the same exam, students who passed the course with a grade of 10 or more have the opportunity to improve their final grade.

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<sup>3</sup> [https://www.dges.gov.pt/sites/default/files/conversao\\_eua.pdf](https://www.dges.gov.pt/sites/default/files/conversao_eua.pdf).

<sup>4</sup> Students who obtain a final grade equal to or less than 7 have to repeat the discipline in the following academic year. Students who have a final grade equal to or higher than 10 are approved in the course but can ask for the improvement of their grade.

## Programme, with the summary of each class

This course runs through one entire semester (the 2<sup>nd</sup>, February-to-May, semester of the 3<sup>rd</sup> and last year of the BA programme in Communication Studies) that typically lasts 14 weeks and includes 2 weekly sessions of 2 hours. Altogether, some 28 sessions are scheduled and, roughly, 10 are dedicated to theoretical discussion, 10 to practical application of concepts and methods of argumentation analysis in class, 6 to presentation and discussion of students' work, and 2 sessions to the mid-term exam (revision of the material, exam itself).

The content of the course corresponds to its objectives and reflects its methodology. It introduces some of the classical concepts alongside modern methods in their actual context.

Session	Summary	Literature
		(Optional readings in parentheses)
1	<ul style="list-style-type: none"> <li>• <b>Introduction: practical matters</b></li> <li>• Course organisation</li> <li>• Discussion of the "argument as a natural category" with students</li> </ul>	
2	<ul style="list-style-type: none"> <li>• <b>Rhetoric and Argumentation: basic concepts</b></li> <li>• Various definitions of argument (classic and contemporary)</li> <li>• Argumentation as:</li> <li>• <i>Product</i>: inference (premises and conclusion)</li> </ul>	Lewiński & Mohammed, 2016 (O'Keefe, 1977) (Jacobs & Jackson, 1981)

	<ul style="list-style-type: none"> <li>• <i>Procedure</i>: dialogue, disagreement, and debate</li> <li>• <i>Process</i>: influence, persuasion, and public discourse</li> </ul>	
3	<ul style="list-style-type: none"> <li>• <b>Argument and argumentation: between abstract concepts and concrete uses</b></li> <li>• Discussion of the Portuguese understandings and practices of argumentation</li> <li>• Argument in Portugal</li> <li>• Sharing experiences of dialogue, disagreement, and conflict</li> </ul>	(Lewiński, Hample, Sàágua, & Mohammed, 2018)
4	<ul style="list-style-type: none"> <li>• <b>Logic, Dialectic and Rhetoric: the three classical disciplines of argumentation</b></li> <li>• Aristotelian tradition</li> <li>• Wenzel on three perspectives of argumentation</li> <li>• <b>Logic</b>: Argumentation as a <i>product</i>: chains of reasoning and inferences</li> <li>• <b>Dialectic</b>: Argumentation as a <i>procedure</i>: the norms of debate</li> <li>• <b>Rhetoric</b>: Argumentation as a <i>process</i>: techniques of persuasion and influence</li> <li>• Perelman &amp; Olbrechts-Tyteca's New Rhetoric</li> </ul>	Perelman, 1982: Preface, Ch. 1 (Wenzel, 1990)

5-6	<ul style="list-style-type: none"> <li>• <b>An example of logical, dialectical and rhetorical argument</b></li> <li>• <i>12 Angry Men</i> by Sydney Lumet (1957) – screening of the 95min film (Session 5)</li> <li>• Discussion of its argumentation: both “internal” (argumentation <i>in</i> the film) and “external” (argumentation <i>of</i> the film) (Session 6)</li> </ul>	
7	<ul style="list-style-type: none"> <li>• <b>Formal / logical arguments</b></li> <li>• Concept of a deductive / valid / sound inference</li> <li>• Basic forms of valid arguments: <i>modus ponens, modus tollens, hypothetical syllogism, disjunctive syllogism, dilemma, reductio ad absurdum</i></li> </ul>	Weston, 2017: Ch. 1 & 6
8	<ul style="list-style-type: none"> <li>• <b>Practical application of the basic types of valid deductive arguments</b></li> <li>• Students engage in the identification and evaluation of formal arguments (<i>modus ponens, modus tollens, hypothetical syllogism, disjunctive syllogism, dilemma, reductio ad absurdum</i>) in various texts</li> <li>• Apart from students’ own examples and case studies, a pre-prepared set of exercises is discussed with them. This set</li> </ul>	

	includes examples from the <i>12 Angry Men</i> film	
9	<ul style="list-style-type: none"> <li>• <b>Informal arguments</b></li> <li>• Arguments that justify the plausibility of conclusion - but cannot conclusively prove its truth</li> <li>• Argumentation Schemes: recognised patterns of argumentation</li> <li>• Critical questions</li> <li>• Basic types of informal arguments: arguments from examples, arguments by analogy, causal arguments</li> </ul>	Weston, 2017: Chs. 2-5 (Groarke & Tindale, 2015, Chs. 9-10)
10	<ul style="list-style-type: none"> <li>• <b>Arguments from authority</b></li> <li>• Distinction between the <i>epistemic</i> and <i>deontic</i> authority</li> <li>• Importance of arguments from epistemic authority of experts in daily life</li> <li>• Basic features of epistemic authority</li> <li>• General scheme for arguments <i>from</i> and <i>to</i> authority</li> <li>• Critical questions for arguments <i>from</i> and <i>to</i> authority</li> </ul>	(Lewiński, 2022)
11	<ul style="list-style-type: none"> <li>• <b>Practical argumentation</b></li> <li>• Distinction between <i>theoretical</i> and <i>practical</i> argumentation</li> </ul>	(Lewiński, 2017)

	<ul style="list-style-type: none"> <li>• Practical argumentation as argumentation about what to do</li> <li>• Detailed scheme of practical argumentation: Circumstances, Goals, Values, and Means-Goal premises</li> <li>• Inference licence in terms of the necessary, satisfactory, or the best means</li> <li>• Critical questions to test the strength of practical argumentation</li> </ul>	
12	<ul style="list-style-type: none"> <li>• <b>Homework and Exercise</b></li> <li>• Students are divided into groups and assigned homework in which various types of informal arguments (arguments from example, arguments by analogy, causal arguments, arguments from authority and practical argumentation) are identified and evaluated in various texts</li> <li>• These group analyses are then discussed in the class</li> </ul>	Text of students' choice
13	<ul style="list-style-type: none"> <li>• <b>Fallacies</b></li> <li>• Fallacies as errors, inaccuracies in arguments</li> <li>• Formal fallacies: affirming the consequent, denying the antecedent</li> <li>• Informal fallacies and informal argument schemes: hasty generalisation (cf.</li> </ul>	Weston, 2017: Ch. 10

	<p>argument from example), false analogy (cf. argument by analogy), false cause and slippery slope (cf. causal argumentation), <i>argumentum ad verecundiam</i> and <i>ad populum</i> (cf. argument from authority), <i>argumentum ad consequentiam</i> (cf. practical argumentation)</p> <ul style="list-style-type: none"> <li>• Other informal fallacies: <i>ad hominem</i>, <i>ad baculum</i>, <i>ad ignorantiam</i>, <i>ad misericordiam</i>, straw man, equivocation, false dilemma, complex question, begging the question (<i>petitio principii</i>)</li> </ul>	
14	<ul style="list-style-type: none"> <li>• <b>Fallacies: exercise</b></li> <li>• Identification of formal and informal fallacies in various texts, social media contents, and public speeches or debates</li> </ul>	
15	<ul style="list-style-type: none"> <li>• <b>Training in argument mapping via Rationale platform</b></li> <li>• Differences between various types of premises, objections, and rebuttals (objections to objections) are explained</li> <li>• Basic principles of identifying and reconstructing premises in natural discourse are discussed</li> <li>• The structuring of the premises in a map is practiced</li> </ul>	<a href="https://www.rationaleonline.com/">https://www.rationaleonline.com/</a>

	<ul style="list-style-type: none"> <li>The evaluation of the structures built is practised via various real-life examples</li> </ul>	
16	<ul style="list-style-type: none"> <li><b>Rationale: practical exercise</b></li> <li>Further training in the use of Rationale via presentation and discussion of students' argument maps presented in groups of 4-5 members</li> </ul>	<a href="https://www.rationalonline.com/">https://www.rationalonline.com/</a>
17	<ul style="list-style-type: none"> <li><b>Revision of the material</b></li> </ul>	
18	<ul style="list-style-type: none"> <li><b>Mid-term exam</b></li> </ul>	
19	<ul style="list-style-type: none"> <li><b>Audience as the "goal" of rhetoric</b></li> <li>Aristotelian rhetoric: <ul style="list-style-type: none"> <li>Three types of proof: <i>ethos</i>, <i>pathos</i>, and <i>logos</i></li> <li>Three types of rhetoric: deliberative, judicial, and epideictic</li> </ul> </li> <li>Perelman's <i>New Rhetoric</i>: <ul style="list-style-type: none"> <li>Demonstration vs. argumentation</li> <li>Particular vs. universal audience</li> </ul> </li> <li>The rhetorical situation (Bitzer)</li> </ul>	Aristotle, 2007: I.1-I.3 Perelman, 1982: Chs. 2-3 (Bitzer, 1968) (van Eemeren et al. 2014, Ch. 5)
20	<ul style="list-style-type: none"> <li><b>Rhetorical argumentation: practical session</b></li> <li>Identification of the elements of <i>ethos</i>, <i>pathos</i>, and <i>logos</i> in public discourse</li> </ul>	

	<ul style="list-style-type: none"> <li>• Analysis of the different audiences / target audiences in various argumentative texts</li> <li>• Understanding of the rhetorical situation and the genres of rhetoric involved</li> </ul>	
21	<ul style="list-style-type: none"> <li>• <b>Argumentation in complex, 21<sup>st</sup>-century communication</b></li> <li>• <i>Polylogue</i> and social media</li> <li>• <i>Positions, players, and places</i> for argumentation</li> </ul>	(Lewiński & Aakhus, 2023: Ch. 3)
22	<ul style="list-style-type: none"> <li>• Preparation for students' group presentations</li> </ul>	
23-27	<ul style="list-style-type: none"> <li>• Students' Presentations</li> </ul>	
28	<ul style="list-style-type: none"> <li>• General Discussion and Final Wrap-up, including the publication of final grades</li> </ul>	

## Bibliography

Bibliography for this course is divided into the core, obligatory readings, and additional, follow-up readings. The core bibliography is deliberately short for two very important reasons. First, as the key goal of the course is to develop critical skills in argumentation identification, analysis, and evaluation, the focus on selected

fundamental texts (Aristotle and Perelman) as well as on a concise but analytically strong handbook (Weston) is well justified. Apart from that, a brief encyclopaedia entry introducing students to the chief concepts of argumentation and locating argumentation studies in communication and philosophy scholarship is a required reading (Lewiński & Mohammed, 2016). The “less is more” principle allows students to develop critical and applied *know-how* rather than adding another body of *knowing-that* to their curriculum. Second, given that typically, out of around 130-150 enrolled students, some 10-20% are foreign students (Erasmus and otherwise), the choice of materials available both in Portuguese in English is essential (see above). All the texts included in this bibliography have their Portuguese and English translations (Weston’s book is the only one written originally in English). These texts are available to students via the InforEstudante platform (restricted access), or via NOVA FCSH’s library. The Lewiński & Mohammed text, published exclusively in English, is presented in Portuguese, either by myself or a group of student volunteers.

The additional, follow-up readings include some of the influential texts in the recent scholarship on argumentation, critical thinking, and rhetoric – or texts (co-)written by myself, in accordance with the research-informed teaching approach (see above). Since these texts are all published in English, special provisions are taken to make them available to students less comfortable with English as an academic language (see above). When necessary, summaries of the core ideas of the texts are prepared in Portuguese by me and made available to students as PowerPoints or pdfs (this pertains especially to the texts (co-)written by myself). On other occasions (e.g., the Lewiński et al., 2018 study), groups of student volunteers are invited to present the text in Portuguese at the beginning of the in-class session. This presentation and the PowerPoint / pdf (available on the course’s online platform) introduce other students to the main ideas of each text. (Volunteers typically get their final grade upgraded after quality presentations.)

## Core Bibliography

- Aristotle. (2007). *On rhetoric: A theory of civic discourse*. Trans. by G.A. Kennedy. 2<sup>nd</sup> edition. Oxford: Oxford University Press.
- Aristóteles. (2005). *Retórica*. Trad. portuguesa: Manuel Alexandre Júnior, Paulo Farmhouse Alberto, & Abel do Nascimento Pena. 2<sup>a</sup> edição, revista. Lisboa: Imprensa Nacional-Casa da Moeda.
- Lewiński, M., & Mohammed, D. (2016). Argumentation theory. In K. B. Jensen, R. Craig, J. Pooley & E. Rothenbuhler (Eds.), *International Encyclopedia of Communication Theory and Philosophy* (pp. 1-15). New York: Routledge.
- Perelman, Chaïm. (1982). *The Realm of Rhetoric*. Trans. by W. Kluback. Notre Dame: University of Notre Dame Press. (Original work published 1958.)
- Perelman, Chaïm. (1993). *O Império Retórico: Retórica e Argumentação*. Trad. portuguesa: Fernando Trindade & Rui Alexandre Grácio. Porto: Asa.
- Weston, Anthony. (2017). *A Rulebook for Arguments*. 5<sup>th</sup> ed. Indianapolis: Hackett Publishing Company.
- Weston, Anthony. (2005). *A Arte de Argumentar*. Trad. portuguesa da 2<sup>a</sup> edição: Desidério Murcho. Lisboa: Gradiva.

## Additional, follow-up readings

Bitzer, L. F. (1968). The rhetorical situation. *Philosophy and Rhetoric*, 1(1), 1-14.

Eemeren, F. H. van, Garssen, B., Krabbe, E.C.W., Snoeck Henkemans, A.F., Verheij, B., & Wagemans, J.H.M. (2014). *Handbook of argumentation theory*. Dordrecht: Springer.

Groarke, L. A., & Tindale, C. W. (2015). *Good reasoning matters! A constructive approach to critical thinking*. (5<sup>th</sup> Ed.). Oxford: Oxford University Press.

Jacobs, S., & Jackson, S. (1981). Argument as a natural category: The routine grounds for arguing in conversation. *The Western Journal of Speech Communication*, 45(2), 118-132.

Lewiński, M. (2017). Practical argumentation as reasoned advocacy. *Informal Logic*, 37(2), 85-113.

Lewiński, M. (2022). Challenging authority with argumentation: The pragmatics of arguments *from and to authority*. *Languages*, 7(3), 207.

Lewiński, M., & Aakhus, M. (2023). *Argumentation in complex communication: Managing disagreement in a polylogue*. Cambridge, UK: Cambridge University Press.

Lewiński, M., Hample, D., Sàágua, J., & Mohammed, D. (2018). Arguing in Portugal: A cross-cultural analysis. *Journal of International and Intercultural Communication*, 11(3), 233-253

O'Keefe, D. J. (1977). Two concepts of argument. *Journal of the American Forensic Association*, 13(3), 121-128.

Wenzel, J. W. (1990). Three perspectives on argument: Rhetoric, dialectic, logic. In J. Schuetz & R. Trapp (Eds.), *Perspectives on argumentation: Essays in honor of Wayne Brockriede* (pp. 9–26). Prospect Heights, IL: Waveland.

## Detailed contents (class by class)

### Session (1)

#### Summary:

Introduction: practical matters

Course organisation

Discussion of the “argument as a natural category” with students

This first session is dedicated to organisational issues. It introduces students to the course both in terms of practical matters and its content. The basic composition of the course is being explained: how the theoretical and practical classes interact with each other. Then the rationale behind the course, its objectives, and its place in the broader curriculum of the BA programme in Communication Studies are being presented. Subsequently, each class in the syllabus is being briefly introduced: attention is given to both the content of each class and its practical execution. The methods of instruction, of class discussion, and of students’ presentations and debates are being discussed. Finally, the methods of evaluation – the midterm exam and the presentations – are presented in detail.

Students are invited to ask any question regarding any of these matters.

Once the subject-matter of the course is being introduced and the practical questions are being satisfactorily dealt with, students are encouraged to share and discuss their views on argumentation and rhetoric. In this way, before any formal introduction to the literature on the topic, they are invited to form their early ideas on “argument as a natural category” (see Jacobs & Jackson, 1981).

## Session (2)

### Summary:

Rhetoric and Argumentation: basic concepts

Various definitions of argument (classic and contemporary)

Argumentation as:

*Product*: inference (premises and conclusion)

*Procedure*: dialogue, disagreement, and debate

*Process*: influence, persuasion, and public discourse

This first class with an assigned obligatory reading (Lewiński & Mohammed, 2016), begins with the introduction of argumentation studies as a discipline that investigates the practices and standards of using arguments.

**Argumentation is understood as a communicative activity of producing and exchanging reasons in the context of doubt or disagreement.** As such, it constitutes or contributes to a wide range of fundamental social processes, from political debates to legal disputes, scientific inquiry, and interpersonal conflicts. In contrast to much research within communication, argumentation studies combine descriptive study of how we argue with normative inquiry into the standards of good argumentation. In this sense, the study of argumentation has a long interdisciplinary tradition that starts with ancient rhetoric, dialectic, and logic and continues today to include recent research in areas such as online communication and artificial intelligence. All these topics are briefly introduced as points for much more detailed discussion further along in the course.

The term “argument” is interactively examined with students in some detail. In English, it is used to refer to many things. A recent *Oxford English Dictionary* records five senses of the term:

- 1) an exchange of diverging or opposite views, typically a heated or angry one.

- 2) a reason or set of reasons given in support of an idea, action or theory.
- 3) *Mathematics & Logic* an independent variable associated with a function or proposition and determining its value.
- 4) *Linguistics* any of the noun phrases in a clause that are related directly to the verb, typically the subject, direct object, and indirect object.
- 5) *archaic* a summary of the subject matter of a book.

(*OED*, digital edition, 2021)

We thus face a classic case of an ambiguous, homophonic *term* of a natural language which denotes, in this case, no less than five different *concepts*. Leaving aside the specialised and well-defined concepts of mathematics and linguistics – as well as the archaic use<sup>5</sup> – we are left with “two concepts of argument”, namely (1) and (2) above. Indeed, an important contribution to this debate during the 1970s and 1980s was precisely O’Keefe’s (1977) distinction between “two concepts of argument.” Argument<sub>1</sub>—an argument that someone *makes*—is a verbal act containing a set of propositions (premises) supporting another proposition (conclusion). Argument<sub>2</sub>—an argument that someone *has*—is a verbal activity, a kind of interaction where some claim is disputed. These two senses cover well the ordinary ways of speaking about arguments, at least in English. They also account for a continuum of phenomena studied as arguments: from “mathematical arguments” (i.e., proofs) in formal reasoning to “serial arguments” (i.e., quarrels) among couples studied in interpersonal communication.

Key contributions to argumentation studies stress, however, that its central object of study is argumentation understood as exchange of reasons in the context of doubt or disagreement (Jackson & Jacobs, 1980; Jacobs & Jackson, 1981). Most relevant cases are, then, those where arguments<sub>1</sub> are produced within arguments<sub>2</sub> or, conversely, arguments<sub>2</sub> that include arguments<sub>1</sub>. Prototypical arguments of that kind

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<sup>5</sup> Other European languages such as Portuguese and Spanish, however, use “argumento” still today to denote a plot, story, scenario, or screenplay of a film.

are found in legal disputes where typically two sides clash over the contested issue (argument<sub>2</sub>) and proceed by producing reasons supporting their case (arguments<sub>1</sub>), next to objections against the other side's case. This approach makes the study of deductive proofs, that transfer certainty from one set of claims to another leaving no space for doubt and disagreement, somewhat peripheral to argumentation studies. Similarly, heated verbal conflicts where parties only trade insults, but no reasons, are not within the chief interest. In this sense, the study of argumentation departs from formal disciplines such as deductive logic and turns to examining actual happenings of argumentation, employing empirical methodologies such as discourse analysis. All the same, by focusing on reasons, argumentation studies become directly related to the philosophical study of rationality and gain their normative dimension. This is no surprise given that even in ordinary usage the notions of "good reason" and "bad reason" are inherent to the notion of "reason." Accordingly, the study of *fallacies* ("bad arguments" broadly conceived) constitutes a central part of argumentation studies. Such normative investigations often have a practical objective of correcting errors and improving the way we argue, as evidenced in numerous textbooks on "good reasoning," "critical argumentation," or "critical thinking."

Against this basic background, various definitions of argument and argumentation are then presented and discussed. They are divided as belonging to either the *product* (inference with premises and conclusions), or the *procedure* (dialogue or debate in which a disagreement is managed), or the *process* (or reasoned influence or persuasion via public discourse).

#### **Product-definitions:**

- An *argument*, in the sense of a *train of reasoning*, is the sequence of interlinked claims and reasons that, between them, establish the content and force of the

position for which a particular speaker is arguing. (Toulmin, Rieke, & Janik, 1984, p. 14)

- We define an *argument* as a set of reasons offered in support of a claim. (Groarke & Tindale, 2015, p. 7)
- Arguments are efforts to *support* certain views with reasons. “To give an argument” means to offer a set of reasons or evidence in support of a conclusion. (Weston, 2017, p. xiii)
- Argument: Any group of propositions of which one, the conclusion, is claimed to be supported by the others, the premises. The conclusion of an argument is *inferred* from the premises of the argument. (Copi, Cohen, & Rodych, 2019, p. 5)

#### Procedure definitions:

- Arguments are disagreement relevant speech events; they are characterized by the projection, avoidance, production, or resolution of disagreement. (Jackson & Jacobs, 1980, p. 254)
- The term *argumentation* will be used to refer to the whole activity of making claims, challenging them, backing them up by producing reasons, criticizing those reasons, rebutting those criticisms, and so on. (Toulmin, Rieke, & Janik, 1984, p. 14)
- Argumentation is a verbal, social, and rational activity aimed at convincing a reasonable critic of the acceptability of a standpoint by putting forward a

constellation of propositions justifying or refuting the proposition expressed in the standpoint. (van Eemeren & Grootendoest, 2004, p. 1)

### Process definitions

- The study of argumentation is the “the study of the discursive techniques allowing us to *induce or to increase the mind’s adherence to the theses presented for its assent*” (Perelman & Olbrechts-Tyteca, 1969, p. 4)
- *Argumentation is the practice of justifying claims under conditions of uncertainty.* Justifying a claim involves a specific means of persuasion, namely reasoning. It involves persuading a person to accept a claim by offering what that person will regard as good reasons for believing it. (Zarefsky, 2019, p. 3)

### Session (3)

#### Summary:

Argument and argumentation: between abstract concepts and concrete uses  
Discussion of the Portuguese understandings and practices of argumentation  
Argument in Portugal  
Sharing experiences of dialogue, disagreement, and conflict

(This description is based on Lewiński, Hample, Sàágua, & Mohammed, 2018, a recommended reading for this class.)

This practical class is dedicated to discussing some features of the Portuguese practices of and vocabulary for arguing. This is done, in the first place, against the students’ own intuitions and experiences – already touched upon in Session 1, but

now enriched with their study of various definitions and approaches to argumentation in Session 2. In the second place, the empirical results of the study, “Arguing in Portugal: A cross-cultural analysis” (Lewiński, Hample, Sàágua, & Mohammed, 2018) are presented and debated.

In Portuguese, “argumentation” (*argumentação*) is primarily an academic term, and not one commonly used in everyday language to denote argumentative practices. “Conversation” (*conversa*) or “discussion” (*discussão*) are the more commonly used terms. Furthermore, “an argument” (*um argumento*) is always a product (a reason or a set of reasons) and never a process or procedure (a verbal activity); in O’Keefe’s (1977) terms, it refers only to argument<sub>1</sub> and never argument<sub>2</sub>. In Portuguese one cannot say “I had an argument with João” (*Eu tive um argumento com o João*); instead, one would say “I had a discussion with João” (*Eu tive uma discussão com o João*). But by saying this, one conveys a certain negative connotation related to quarrelling; if that connotation is not intended, one should say “I had a conversation with João” (*Eu tive uma conversa com o João*). This leaves the Portuguese with a certain dilemma—at least when looking from the perspective of the capacious English notion of “argument.” In the first case (*uma discussão*), they risk injecting possibly unintended aggressiveness into the description of the arguing process. In the second case (*uma conversa*), they risk dissipating the argumentative character of the communicative encounter.

Interestingly, the verbs *argumentar* (“to argue”) and *discutir* (“to discuss”) are largely interchangeable and clearly associated with the verb *conversar* (“to have a conversation”). The Portuguese tend to tacitly associate the action conveyed by these verbs as something friendly and cooperative: a conversation where reasons are going to be exchanged and assessed – it is not primarily about me or you, it is about reasons. This is strongly contrasted with the nominalization of *discutir* preceded by an indefinite article – *uma discussão* (“a discussion”) – which has an aggressive connotation of a verbal fight not present in the verb. The activity described by a noun

tends to be perceived as the result of something that I already have in mind and want to confront you with – it is a more personal situation of “me against you.”

Given the complex semantics of “argumentation” in Portuguese, the study of Lewiński, Hample, Sàágua, & Mohammed (2018) added the following explanation in the introduction to the Portuguese survey distributed online:

*No que se segue usa-se o termo “argumentação” no sentido habitual de uma troca de argumentos entre duas ou mais pessoas. Preferiu-se este termo aos termos “discussão” ou “debate”, eventualmente mais correntes, para poder abarcar com um só termo “mais neutro” uma argumentação que tanto pode ser calma e ponderada, e por isso mais conotada com o termo “debate,” como animada ou mesmo conflituosa, e por isso mais conotada com o termo “discussão.”*

*In what follows we use the term “argumentation” in the usual sense of an exchange of arguments between two or more people. This term is preferred over the more common terms “discussion” or “debate” in order to cover with one “more neutral” term the practice of argumentation, which can be both calm and deliberated, and therefore close in its meaning to “debate,” as well as animated or even conflictual, and therefore associated with the term “discussion.”*

In accordance with this, the survey mostly used the terms *argumentação* and *argumento*. When the English survey explicitly disambiguated “argument” to a “conflict discussion,” it was translated accordingly as *discussão conflituosa*.

As the study of Lewiński et al. (2018) indicated, in contrast to US respondents, Portuguese report to argue more prosocially, cooperatively and civilly, and are more sophisticated in their reflections about arguing. It seems that at least some of the differences in orientations towards argumentation in the US and Portugal can be explained by the, just presented, way in which the concept of “argument” is perceived in both cultures. Basically, argument tends to be positively valued in

Portugal (just like a “good reason” is), so Portuguese people have little reason to avoid it, take it too personally, or be very worried about its interpersonal effects. Neither the Portuguese verb *argumentar* nor the noun *argumentação* carry the negative connotations of English “arguing.” This might partly explain the non-standard results in the motivational patterns, namely the fact that in Portugal prosocial inclinations predicted argument approach, while in the US they predicted argument avoidance. Portuguese people can manifest their prosocial concerns by arguing – presumably understood as engaging in a cooperative conversation where reasons are jointly produced, exchanged, and assessed. By contrast, Americans are prosocial by avoiding arguments, that is, by avoiding verbal fights.

Summarising these empirical results and connecting them to the first two Sessions of the course: the differences in experiencing the practices of argumentation between the Portuguese and Americans might be, at least partly, due to deeply held understandings of argument, discussion, and conversation in ordinary Portuguese. Van Eemeren et al. (2014, pp. 3–4) stress that the meaning of the Latin-based counterparts of the English “argument” and “argumentation” in many other European languages – including the Portuguese *argumentação* – are devoid of the sense of conflict or quarrel. “Argumentation” simply signifies the process of producing and exchanging reasons, and its products.

These results are an entry point into the discussion on the use and value of argumentation in Portugal and elsewhere. Students are encouraged to challenge the study by sharing their understanding of the daily practices of argumentation.

## Session (4)

### Summary:

Logic, Dialectic and Rhetoric: the three classical disciplines of argumentation  
Aristotelian tradition

Wenzel on three perspectives of argumentation

- **Logic:** Argumentation as a *product*: chains of reasoning and inferences
- **Dialectic:** Argumentation as a *procedure*: the norms of debate
- **Rhetoric:** Argumentation as a *process*: techniques of persuasion and influence

Perelman & Olbrechts-Tyteca's New Rhetoric

(This description is based on Lewiński & Mohammed, 2016, an obligatory reading introduced earlier in Session 2.)

As with so many other disciplines, Aristotle provided the first authoritative systematisation of the ideas on argumentation in the Western world. Aristotle's philosophical views were shaped by a general functionalistic principle according to which each discipline requires precision adequate to its subject and aims.

In the realm of argumentation, logic ("analytics") commands the highest level of methodological rigour needed for formal proof and scientific demonstration. Aristotle's chief achievement in logic was the definition of deduction and its concrete model: the syllogism. Deduction is an inference where from some supposed statements (premises) another statement (conclusion) necessarily follows; that is, it cannot be the case that the premises are true but the conclusion false. The *syllogism* is a particular form of deductive argument. It uses classes of predication ("all," "some," "none") to connect three different terms (e.g., humans, mammals, and fish) in a construction consisting of a major premise, minor premise, and a conclusion. For instance:

<i>All humans are mammals.</i>	(major premise)
<i>and</i>	
<i>No fish are mammals.</i>	(minor premise)
<i>therefore</i>	
<i>No fish are humans.</i>	(conclusion)

Dialectic defines the resources and rules for verifying claims vis-à-vis a set of commonly accepted or reputable opinions (rather than scientific knowledge). This happens through a contentious argumentative discussion where the questioner tries to bring the answerer to a contradiction, thus showing his position to be unsustainable. As discussed above, in ancient Greece, the art of dialectic was used as an exercise in argumentative skills, a task comparable to modern collegiate debate competitions. Moreover, Aristotle saw it as a general method adequate to critically testing “the plausible” (rather than “the certain”) and—a much debated claim—to examining philosophical topics and getting at the very first principles of particular sciences. Dialectical arguments rely on *topoi*, commonplace inferential patterns, such as “from results to causes.” Fallacious arguments can be seen as “sophistical refutations” resorted to in a dialectical discussion.

For Aristotle, rhetoric is “a counterpart of dialectic”: It employs similar resources but in a less stringent context of public speaking. Rhetors aim at persuading their audiences by adjusting all the available means of persuasion they can marshal to the occasion at hand. There are three basic means of persuasion: *Ethos* rests on the character of the speaker, *pathos* on attending to the hearers’ emotions, and *logos* on the quality of the arguments. One crucial means of persuasion via *logos* is the *enthymeme*, a rhetorical version of the syllogism where one of the premises is implicit and left to be filled by the audience. For instance, when arguing that Athens should seriously consider attacking Sparta because this will be beneficial to the Athenians, one does not need to spell out that all things beneficial to the Athenians should be seriously considered by them. In general, rather than focusing on technically sophisticated but possibly tedious arguments, rhetorical arguers should adapt to the audiences, by grasping well their characteristics on a given occasion. Accordingly, Aristotle’s three genres of rhetoric—deliberative, judicial, and ceremonial (*epideictic*)—are distinguished primarily through the type of audience addressed: assembly members, jurymen, and spectators of public speeches.

Aristotle's theorising shaped for centuries our understanding of argumentation and often remains surprisingly relevant in addressing its current problems.

An important contemporary contribution to understanding the classic tripartition between rhetoric, dialectic, and logic is due to an American communication scholar, Joseph Wenzel. Since the late 1970s Wenzel has written of them as "three perspectives on argument" (Wenzel, 1990). Rhetoric approaches argumentation as "a natural process of persuasive communication" (p. 9). This *process* requires skilful adaptation of our symbolic resources (language, image, sound) to a given audience in situations where decisions cannot be based on impersonal evidence. Dialectic focuses instead on *procedures* regulating discussions in which competing claims are tested through a comprehensive exchange of arguments and criticisms. Such procedures provide norms that, when followed, produce cogent argumentation leading to reasonable conclusions. Finally, logic examines the *products* of argumentation. It defines methods and standards by which we can reconstruct and evaluate the inferential structure of arguments (see also the earlier discussion in Session 2). Wenzel stresses that these are perspectives from which we can view each argument, rather than distinct types of argument (a claim continuously debated in the field). Moreover, while each perspective requires descriptive insights, they are all driven by a normative objective of defining what a good argument is.

Frans van Eemeren and Rob Grootendorst (2004) relate the normative underpinnings of rhetoric, dialectic, and logic to three different conceptions of rationality distinguished by Stephen Toulmin. Rhetoric is imbued with *anthropological* rationality, where judgments of rationality are always relative to a given community situated in a certain historical and cultural context. Dialectic embodies *critical* rationality, where rational claims are those that are critically tested through some methodical procedures. Finally logic, in its mainstream variants, largely follows the norms of *geometrical* rationality, based on the idea of complete and conclusive proof.

*Perelman's new rhetoric*: Chaïm Perelman was a Polish-born, Brussels-based philosopher (1912–1984) who worked closely with the Belgian academic Lucie Olbrechts-Tyteca (1899–1987). Together they wrote *Traité de l'argumentation: La nouvelle rhétorique* (1958), translated into English as *The New Rhetoric: A Treatise on Argumentation* (1969). Together, they were concerned with the study of ordinary argumentation that “eludes the certainty of calculations” (1969, p. 1) and that is consequently not covered by formal logic. Their study of argumentation is primarily descriptive, aiming to provide an inventory of common argumentation techniques rather than standards for their evaluation.

For Perelman and Olbrechts-Tyteca, central to the investigation of argumentation is the audience: “since argumentation aims at securing the adherence of those to whom it is addressed, it is, in its entirety, relative to the audience to be influenced” (1969, p. 19). Accordingly, a good arguer is the one who adapts to her audience. However, given that speakers more often than not face “composite audiences” holding heterogeneous opinions, the task of adapting one’s argumentation becomes complex. Here, Perelman and Olbrechts-Tyteca’s distinction between *particular* and *universal* audiences becomes crucial. Apart from seeking the adherence of the embodied particular audiences, a speaker may argue as if addressing the universal audience. The universal audience is an ideal reasonable audience that a certain speaker wishes to influence, and that she defines depending on the context and purposes of the argument (see also below Session 19).

Perelman and Olbrechts-Tyteca emphasise that in order to increase the adherence of the audience, argumentation needs to be anchored in a “basis of agreement” between the speaker and her audience. In order to secure that, the arguer needs to choose “facts,” “truths,” and “presumptions” that are accepted by her audience as well as “values,” “hierarchies,” and “loci” that are shared by them.

In making their inventory of argumentation techniques, Perelman and Olbrechts-Tyteca distinguish between two main processes that underlie them: (i)

*association*: “schemes which bring separate elements together and allow us to establish a unity among them”; and (ii) *dissociation*: “techniques of separation which have the purpose of dissociating, separating, disuniting elements which are regarded as forming a whole” (1969, p. 190). The techniques that rely on a process of association include making use of quasi-logical arguments, appeals to the existing structure of reality, and arguments that establish a new structure of reality. Argumentation by dissociation divides a seemingly united concept into two contrasting aspects (“pairs”), such as “appearance–reality,” typically in response to incompatibilities.

Perelman and Olbrechts-Tyteca view their rhetoric, wedded to dialectic, as a general theory of ordinary argumentation. They provide an immense reservoir of insights into techniques of argumentation and its general audience-dependence (see also Tindale, 2015). For its merits, *The New Rhetoric* has had a lasting influence on argumentation scholarship in general, and especially on rhetoricians and legal rhetoricians.

**Literature:** Perelman (1982), Preface, Ch. 1  
(Wenzel, 1990)  
(Lewiński & Mohammed 2016) (previously read in Session 2)

## Session (5-6)

### Summary:

An example of logical, dialectical and rhetorical argument:

*12 Angry Men* by Sydney Lumet (1957)

Discussion of its argumentation: both “internal” (argumentation *in* the film) and “external” (argumentation *of* the film)

These two practical sessions – one dedicated to jointly watching the film, another to discussing it in the classroom – take into focus Sidney Lumet’s classic 1957 film *12 Angry Men*. The utility of this particular film in “teaching argumentation theory and practice” has been previously recognised in the discipline (Alcolea-Banegas, 2011; Nardone, 1995); indeed, it has been hailed as “being an exceptional teaching resource” (Hanscomb, 2019, p. 173). Some basic lines of analysis have accordingly been provided, ranging from the pragma-dialectical analysis of the various stages of a critical discussion, to the critical thinking virtues it promotes, and the visual and emotional aspects of the multi-modal argument the film makes. The film indeed excels in all these elements, but the focus of the discussion to be developed with students in the present course is instead on the (informal) logical, dialectical, and rhetorical forms of argumentation *in* and *of* the film.

To start with, a brief summary: In the jury room of the New York County Courthouse, 12 jurors prepare to deliberate on the case of an 18-year-old boy from a troubled neighbourhood accused of premeditated murder of his father. The judge instructs them that if there is any “reasonable doubt”, the jurors are to return a verdict of acquittal. All the same, if found guilty, the defendant will receive a “mandatory” death sentence. The verdict must be unanimous.

The evidence seems convincing: a neighbour testified that through the window she saw the defendant stabbing his father with a knife. Another neighbour testified that he heard the defendant threaten to kill his father and his body hit the ground, then saw the defendant run past his door through a peephole. The boy had multiple records and recently purchased a distinctive switchblade knife that was found at the crime scene – but the boy claimed to have lost it. The knife at the scene was cleaned of fingerprints.

Upon a preliminary vote, 11 jurors vote to convict the accused. Just one of them, juror no. 8 played masterfully by Henry Fonda, expressed his “reasonable doubt” over the case made by the prosecution. Among other things, he questions

the credibility of the witnesses, the alleged uniqueness of the murder weapon, and the overall consistency of the story. Confronted with enormous peer-pressure, through at times dramatic rounds of argument and vote, he nonetheless succeeds in convincing, one-by-one, his fellow jurors and ultimately tipping the vote to a unanimous "not guilty" decision.

The discussion of the film during Session 6 is driven by students' insights and observations. However, a number of focal themes is introduced to put the spotlight on the logical, dialectical, and rhetorical aspects of argumentation.

First, the dialectical aspects of argumentative practice are elaborated. In the words of Wenzel, "the dialectical perspective embraces all methodological, procedural approaches to organizing argumentative discussions. The focus of this perspective [...] is on rules, standards, attitudes and behaviors that promote critical decision-making." (1990, p. 16). This definition captures very well the way the case in the film is set up. Right at the start, the judge instructs the jurors in the following way:

"You've listened to a long and complex case, murder in the first degree. Premeditated murder is the most serious charge tried in our criminal courts. You've listened to the testimony, had the law interpreted as it applies in this case. It's now your duty to sit down and try and separate the facts from the fancy. One man is dead. Another man's life is at stake. If there's a reasonable doubt in your minds as to the guilt of the accused - a reasonable doubt - then you must bring me a verdict of not guilty. If there's no reasonable doubt, then you must, in good conscience, find the accused guilty. However you decide, your verdict must be unanimous. In the event that you find the accused guilty, the bench will not entertain a recommendation for mercy. The death sentence is mandatory in this case. You are faced with a grave responsibility. Thank you, gentlemen."

A number of straightforwardly dialectical “rules, standards, attitudes and behaviors” is comprised in this concise speech. First, the decision must be unanimous. Second – as is characteristic of argumentation in criminal courts – the standard of proof is set very high: a proof of guilt must be established beyond “reasonable doubt”. Any such doubt, by contrast, requires a non-guilty verdict: this means that the burden of proof – a fundamental dialectical concept – is firmly on the prosecution. To evaluate this burden the jurors must “separate the facts from the fancy” – an epistemic standard based on witness and expert testimony and other evidence. Finally, the jurors must act responsibly and reason towards conclusion “in good conscience.” These rules are then repeated and overseen by the jury’s foreman, alongside other procedural rules, such as the order of speaking and method of voting (by raising hand or by secret ballot). What’s more, the jurors themselves self-regulate their exchanges, by explicitly and repeatedly stating “we want to hear your arguments” to one another: indeed, it is only (good) argument that warrants a change of position.

Additionally, various rounds of back-and-forth critical argumentation in the film are straightforwardly analysable from the dialectical perspective. For instance, the very apex of the elenctic Socratic method – catching one’s opponent in a contradiction – is demonstrated when one juror first claims that the boy’s reportedly “yell[ing] it at the top of his lungs: *I’m gonna kill you*” to his father is a direct proof of a serious, deliberate intention to kill (“The kid said he’d kill him and he did!”). But then, agitated, himself shouts “Let me go! I’ll kill him! I’ll kill him!” towards the juror no. 8, who then retorts: “You don’t really mean you’ll kill me, do you?”

Further, logical arguments are reconstructed from the jurors’ discussions. Some of them are quite pristine cases of formal deductive arguments. Consider a rather complex, but as such all the more fascinating, example of the *reductio ad absurdum* put forward by one of the jurors right in the middle of the jury deliberation (see exercise in Session 8 for a reconstruction of this argument):

“Let us assume that the boy really did commit the murder. Now, this happened at 10 minutes after 12. Now, how was he caught by the police? He came back home... at three o’clock or so, and he was captured by two detectives in the hallway of his house. Now, my question is: If he really had killed his father, why would he come back home three hours later? Wouldn’t he be afraid of being caught?”

Informal logical arguments involve, especially: *arguments from expert opinion* (as per expert witnesses heard in court); *arguments by analogy* (your nose is irritated in a similar way to the witness’s nose, and as you wear glasses, she must be wearing them too – so how could she see the murder lying in bed without glasses?); *causal arguments* and *arguments from example*. All these are the key informal argument schemes this course will later elaborate on (see Sessions 9-12). Unsurprisingly, many of these arguments go astray and constitute fascinating examples of, mostly informal, fallacies: hasty generalisation, *post hoc ergo propter hoc*, *ad hominem*, *ad baculum*, *ad populum*, the straw man are all there for students to observe (see Sessions 13-14).

Last, but certainly not least, the jurors more or less explicitly invoke the three standards for criticising informal arguments – the arguments’ *relevance*, *acceptability*, and *sufficiency* in establishing the case “beyond reasonable doubt” – later theorised by Johnson & Blair (1977).

So far, the film seems to be a piece of a somewhat rigid didactic exercise. But over and above its dialectical and logical merits, it is the rhetorical aspect of the film that makes it a fascinating piece of civic argumentation. Despite the misnomer – jury “deliberation” – the film is an intriguing contemporary instance of judicial rhetoric, already theorised in Aristotle’s *Rhetoric*. It exhibits argument in its fullness: the masterfully played-out diverse characters of the jurors lay ground for moving *ethotic* and *pathetic* arguments. While *logos* seems to reign – as per the foregoing dialectical

and logical analysis – the display of both vice and virtue is stunning. Adaptation to the (mixed) audience, strategic use of phrase and enthymemes – as well as of rage, composure, and indifference – make the entire “deliberation” a fascinating example of rhetoric, even for 21<sup>st</sup>-century students.

Finally, it is also discussed how the film itself as a work of popular art makes itself an important argument in the American public sphere at the time – and perhaps universally (see below is Session 19 for Perelman’s distinction between “particular” and “universal” audience). This “external argument” (Alcolea-Banegas, 2011) is mostly a multi-modal, cinematographic *argument by example* against the death penalty – and for the virtue of argument-driven democratic decision-making procedures of free and equal citizens, who only introduce themselves to each other *after* the session is duly concluded.

In this sense, the film is not only a fascinatingly rich example of various forms of argumentation – it is also a powerful argument for argumentation itself.

## Session (7)

### Summary:

Formal / logical arguments

Concept of a deductive / valid / sound inference

Basic forms of valid arguments: *modus ponens*, *modus tollens*, hypothetical syllogism, disjunctive syllogism, dilemma, *reductio ad absurdum*

This class is dedicated to a brief introduction to the most common types of formal logical arguments. For the sake of clarity – and given the students’ assumed familiarity with some basic formal logic, an obligatory element of the philosophy curriculum in

Portugal's high-schools – the discussion is limited to “zeroth-order” propositional logic and the basic forms of valid arguments recognised in it.

The class starts with a clarification of the notions of *deductive*, *valid*, and *sound* arguments. Aristotle's classic definition of a valid deductive argument was already mentioned above (see discussion of Objective 3 above). While immense progress with formalising arguments has been made since the rise of modern logic in the late 19<sup>th</sup> and early 20<sup>th</sup> century, the basic idea remains the same. Accordingly, in line with the mainstream introductory textbooks on logic, the following definitions are offered:

“A *deductive* argument is one whose premises are claimed to provide conclusive grounds for the truth of its conclusion. If that claim is correct—that is, if the premises of the argument really do assure the truth of its conclusion with necessity—that deductive argument is *valid*. Every deductive argument either does what it claims, or it does not; therefore, every deductive argument is either valid or invalid. If it is valid, it is impossible for its premises to be true without its conclusion also being true.” (Copi, Cohen, & Rodych, 2019, p. 150)<sup>6</sup>

On the basis of this, *sound* argument is defined as a valid argument with true premises. Accordingly, two basic axes for the evaluation of formal arguments are introduced: *premise acceptability* and *logical consequence* (Groarke & Tindale, 2015, pp. 55-62). (Of course, these two criteria apply – albeit in quite a different way – also to inductively based, informal arguments, something that is subsequently discussed in Sessions 9-12 dedicated to informal argument schemes.)

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<sup>6</sup> Note that Copi, Cohen, & Rodych's definition is somewhat unorthodox, as it leaves room for fallacious, i.e., invalid arguments, to still be counted as deductive arguments. This will have pedagogical value when fallacies are discussed, even if a standard definition would rather omit this complication: “In ‘deductive’ arguments the link between premises and conclusion is so strong that a conclusion *necessarily* follows from the premises. In arguments of this sort, it is impossible for us to accept that the premises are true and still reject the conclusion. We call arguments of this sort *deductively valid*.” (Groarke & Tindale, 2015, p. 60).

The basic forms of valid deductive arguments are presented as follows:

### *Modus ponens*

**Basic form:**

If [sentence  $p$ ] then [sentence  $q$ ].

[Sentence  $p$ ].

Therefore, [sentence  $q$ ].

**Briefly:**

If  $p$  then  $q$ .

$p$ .

Therefore,  $q$ .

**Formalised:**

$p \rightarrow q$

$p$

$\therefore q$

**Example:**

*If I'm Portuguese, then I'm European.*

*I'm Portuguese.*

*Therefore, I'm European.*

## *Modus tollens*

### **Basic form:**

If [sentence  $p$ ] then [sentence  $q$ ].

[Not true that sentence  $p$ ].

Therefore, [not true that sentence  $q$ ].

### **Briefly:**

If  $p$  then  $q$ .

Not- $p$ .

Therefore, not- $q$ .

### **Formalised:**

$p \rightarrow q$

$\neg q$

$\therefore \neg p$

### **Example:**

*If I'm Portuguese, then I'm European.*

*I'm not European.*

*Therefore, I am not Portuguese.*

## *Hypothetical syllogism*

### **Basic form:**

If [sentence  $p$ ] then [sentence  $q$ ].

If [sentence  $q$ ] then [sentence  $r$ ].

Therefore, If [sentence  $p$ ] then [sentence  $r$ ].

**Briefly:**

If  $p$  then  $q$ .

If  $q$  then  $r$ .

Therefore, If  $p$  then  $r$ .

**Formalised:**

$p \rightarrow q$

$q \rightarrow r$

$\therefore p \rightarrow r$

**Example:**

*If I'm Portuguese, then I'm Iberian.*

*If I'm Iberian, then I'm European.*

*Therefore, If I'm Portuguese, then I'm European.*

***Disjunctive syllogism***

**Basic form:**

[Sentence  $p$ ] or [sentence  $q$ ].

[Not true that sentence  $p$ ].

Therefore, [sentence  $q$ ].

**Briefly:**

$p$  or  $q$ .

Not- $p$ .

Therefore,  $q$ .

**Formalised:**

$p \vee q$

$\neg p$

$\therefore q$

**Example:**

*You're Portuguese or Spanish.*

*But you're not Portuguese.*

*Therefore, you must be Spanish.*

## **Dilemma**

**Basic form:**

[Sentence  $p$ ] or [sentence  $q$ ].

If [sentence  $p$ ] then [sentence  $y$ ].

If [sentence  $q$ ] then [sentence  $z$ ].

Therefore, [sentence  $y$ ] or [sentence  $z$ ].

**Briefly:**

$p$  or  $q$

If  $p$  then  $y$ .

If  $q$  then  $z$ .

Therefore,  $y$  or  $z$ .

**Formalised:**

$p \vee q$

$p \rightarrow y$

$q \rightarrow z$

$\therefore y \vee z$

**Example:**

*You're Portuguese or you're Angolan.*

*If you're Portuguese, then you're European.*

*If you're Angolan, then you're African.*

*Therefore, you're European or you're African.*

[Note how this complex argument depends on *modus ponens*.]

***Reductio ad absurdum***

**Basic form:**

To prove: [sentence  $p$ ]

Assume the opposite: [sentence not- $p$ ].

Infer from this assumption a conclusion: [sentence  $r$ ]. [E.g., by inferring that if not- $p$ , then  $q$ ; and if  $q$  then  $r$ .]

Show that  $r$  is false (contradictory, "absurd," morally or practically unacceptable...).

Conclude: [sentence  $p$ ] must be true after all.

### **Briefly:**

To prove:  $p$

Assume not- $p$

If not- $p$  then [...]  $r$ .

$r$  and not- $r$

Therefore,  $p$ .

### **Formalised:**

Prove:  $p$

Assume:  $\neg p$

$\neg p \rightarrow [(\neg p \rightarrow q) \wedge q \rightarrow ] r$

$r \wedge \neg r$

$\therefore p$

### **Example:**

*Let me prove that I'm European.*

*Let assume I'm not European.*

*If I were not, then I would have to be from somewhere else.*

*If I were from somewhere else, then I would have to be born outside of Europe or at least have a family there.*

*But I was born in Europe and the only family I know of is from Europe.*

*Therefore, I'm European.*

[Note how this complex argument combines *disjunctive syllogism*, *hypothetical syllogism* and *modus tollens*.]

Literature: Weston (2017), Chs. 1 & 6

## Session (8)

### Summary:

This practical session is dedicated to the practical application of the basic types of valid deductive arguments.

Students engage in the identification and evaluation of formal arguments (*modus ponens*, *modus tollens*, *hypothetical syllogism*, *disjunctive syllogism*, *dilemma*, *reductio ad absurdum*) in various texts.

Apart from students' own examples and case studies, a pre-prepared set of exercises is discussed with them. This set includes examples from the *12 Angry Men* film.

Below, I present an exemplary set of exercises in formal arguments, including exercises based on the arguments taken out of the *12 Angry Men* film. The assigned exercises are followed by model responses (although in some cases variants are admissible):

PART 1

(do at least 3)

Which argument form is it?

Lay out the premises and conclusions.

(1) If my ticket is fake, then they will not let me in the concert. My ticket is fake.  
Therefore, they will not let me in the concert.

**(Response:)**

*modus ponens*

1. If my ticket is fake, then they will not let me in the concert.
2. My ticket is fake.

---

Conclusion: They will not let me in the concert.

(2) If I do the homework, then I'll pass this class. If I pass this class, then I will never have to study logic again. Therefore, if I do the homework, I will never have to study logic again!

**(Response:)**

*hypothetical syllogism*

1. If I do the homework, then I'll pass this class.
2. If I pass this class, then I will never have to study logic again.

---

Conclusion: If I do the homework, I will never have to study logic again.

(3) You have to wear a mask or wash your hands. You don't have to wear a mask. It follows that you have to wash your hands.

**(Response:)**

*disjunctive syllogism*

1. You have to wear a mask or wash your hands.
2. You don't have to wear a mask.

---

Conclusion: You have to wash your hands.

(4) If I study philosophy, I will be poor. If I study law, I'll be miserable. And philosophy or law are my only options! So I'll be either poor or miserable.

**(Response:)**

*dilemma*

1. I will study philosophy or law.
2. If I study philosophy, I will be poor.
3. If I study law, I'll be miserable.

---

Conclusion: I'll be either poor or miserable.

(5) It's clear that she doesn't want to go surfing. Suppose that she wanted to go surfing. If she wanted to go surfing, she would have already gone by now. She hasn't gone surfing. Therefore, she doesn't want to go surfing.

**(Response:)**

*reductio ad absurdum*

Prove: She doesn't want to go surfing.

1. She wants to go surfing. (Supposition)

2. If she wants to go surfing, she has already gone surfing by now.
3. She has already gone surfing. (by *modus ponens* from 1 and 2)
4. She hasn't gone surfing.
5. She has and hasn't gone surfing (contradiction formed with 3 and 4)

---

Conclusion: She doesn't want to go surfing.

## PART 2

(do at least 1)

Which argument form is it?

Lay out the premises and conclusions.

(6) How can you think that the earth is flat?? Think about it: if it was flat, then people would have fallen off the edge. But no one has fallen off the edge. Thus, the earth is not flat.

**(Response:)**

*reductio ad absurdum*

Prove: the earth is not flat.

1. The earth is flat. (Supposition)
2. If the earth is flat, people must have fallen off the edge.
3. People must have fallen off the edge. (*modus ponens* from 1 and 2)
4. No one has fallen off the edge.
5. People must have fallen and no one has fallen off the edge.  
(contradiction from 2 and 3)

---

Conclusion: The earth is not flat.

(7) If I can do the homework, then I'm smart. If I'm smart, then I don't need to do the homework. Therefore, if I can do the homework, then I don't need to do the homework.

**(Response:)**

*hypothetical syllogism*

1. If I can do the homework, then I'm smart.
2. If I'm smart, then I don't need to do the homework.

---

Conclusion: If I can do the homework, then I don't need to do the homework.

**PART 3**

**(do at least 1)**

**Which argument form is it?**

**Lay out the premises and conclusions.**

- (8) – Employee: I deserve some holidays, don't you agree?  
– Employer: LOL if you deserve a holiday, then I'm the Shah of Persia.

**(Response:)**

*modus tollens*

1. If you deserve a holiday, then I'm the Shah of Persia.
2. I'm not the Shah of Persia

---

Conclusion: You don't deserve a holiday.

(9) Suppose that heavier things fall faster. Then, two objects tied together will fall slower (because the lighter one will slow both of them). And two objects tied

together will fall faster (because they are heavier). Therefore, heavier things do not fall faster.

**(Response:)**

*reductio ad absurdum*

Prove: heavier things don't fall faster

1. Heavier things fall faster. (Supposition)
2. If heavier things fall faster, then 2 things of different weight tied together will fall slower than each individual thing (because the lighter one will slow them).
3. If heavier things fall faster, then 2 things of different weight tied together will fall faster than each individual thing (because they are heavier together)
4. 2 things of different weight tied together will fall slower than each individual thing (because the lighter one will slow them). (*modus ponens* from 1 and 2)
5. 2 things of different weight tied together will fall faster than each individual thing (because they are heavier together) (*modus ponens* from 1 and 3)
6. The 2 things will fall faster and slower. (contradiction from 4 and 5)

---

Conclusion: Heavier things don't fall faster.

#### **PART 4**

**(do at least 1)**

(10) If there's no reasonable doubt, then you must, in good conscience, find the accused guilty. However you decide, your verdict must be unanimous. In the event that you find the accused guilty, the bench will not entertain a recommendation for mercy. The death sentence is mandatory in this case. [LINK](#)

**(Response:)**

*hypothetical syllogism:*

1. If there's no reasonable doubt, then you must find the accused guilty.

2. If you find the accused guilty, he will be sentenced to death.

---

Conclusion: If there's no reasonable doubt, he will be sentenced to death.

(11) There is a question I would like to ask. Let us assume that the boy really did commit the murder. Now, this happened at 10 minutes after 12. Now, how was he caught by the police? He came back home... at three o'clock or so, and he was captured by two detectives in the hallway of his house. Now, my question is: If he really had killed his father, why would he come back home three hours later? Wouldn't he be afraid of being caught?

**(Response:)**

*reductio ad absurdum:*

Prove: The boy did not commit the murder

1. The boy committed the murder. (Supposition)
2. If the boy had committed the murder, he would not come back home 3 hours later.
3. The boy did not come back 3 hours later. (*modus ponens* from 1 and 2)
4. The boy came back home 3 hours later.
5. The boy came and didn't come back 3 hours later. (contradiction from 3 and 4)

---

Conclusion: The boy did not commit the murder.

## Session (9)

**Summary:**

Informal arguments: Arguments that justify the plausibility of conclusion - but cannot conclusively prove its truth

Argumentation Schemes: recognised patterns of argumentation

Critical questions

Basic types of informal arguments: arguments from examples, arguments by analogy, causal arguments

The nature of the inferences underlying arguments has been the subject of much scholarship in argumentation studies. Indeed, the revival of argumentation theory starting in the mid 20<sup>th</sup>-century was driven by a turn toward understanding human reasoning as a context dependent and communicative phenomenon (Toulmin, 1958; Perelman & Olbrechts-Tyteca, 1969; see also van Eemeren et al., 2014; Lewiński & Mohammed, 2016; Zarefsky, 2019). Mindful of the limits of pure logical formalism as an explanation and a normative model for reasoning in human conduct, including science, argumentation studies re-emerged around the acknowledgment that human reason extends beyond the application of topic-neutral formal inferences to empirically verifiable statements. Value judgements, conceptual discussions, practical estimations, and deliberations of daily life have their own “informal logic” guided by recognised “inference-tickets” (Ryle, 1949; 1954). Importantly, the recognisability of inference-tickets varies from field to field (Toulmin, 1958): what counts as a legitimate legal formula in some jurisdictions (“the death penalty is mandatory in the case of murder conviction”) can be challenged on moral grounds, etc.

The chief difference between the formal and informal inferences is that the latter are grounded in the material content of the premises, rather than in abstract relations between propositions or their parts. The key consequence of this is that formal inferences – to which students have just been introduced – can be used to “prove” conclusions by “preserving the truth” of premises and conveying it on the conclusion via more or less complex chains of reasoning. Such *monotonic* inferences, in an important sense, simply draw the consequences of the conceptual content already existing in the premises so that the addition of new information does not

affect the logical consequence established between the premises and the conclusion. By contrast, informal inferences are *ampliative*: they make a “leap in the dark” by adding in the conclusion new information inferred from the premises. As such, they cannot conclusively prove and guarantee the truth of the conclusion, but instead justify its plausibility with varying degrees of strength – and the addition of any further information can alter the inference, either by strengthening, weakening, or indeed defeating it altogether. Strong formal arguments are thus deductively valid in the sense defined above, while strong informal arguments are *cogent*: if correctly advanced, they make conclusion the best possible “truth-candidate” (Rescher, 2006): one that is based on the best possible available information that is so far unrebutted.

In this first session, three “classic” types of informal argument schemes are discussed.

### **1) Arguments from examples**

For Aristotle, arguments from example (*paradeigma*) were a rhetorical counterpart of the dialectical induction (*epagoge*). While inductive arguments are more rigid in their requirement to rely on multiple examples captured in representative samples allowing for strong generalisations, arguments from example can be purely particular, either in the sense of inferring something from one particular case to another, or from one (or very few) particular cases to a generalisation. Aristotle’s classic example of the latter form (with a generalisation) is as follows:

For example, [when someone claims] that Dionysius is plotting tyranny because he is seeking a bodyguard; for Peisistratus also, when plotting earlier, sought a bodyguard and after receiving it made himself tyrant, and Theagenes [did the same] in Megara, and others, whom the audience knows of, all become examples for Dionysius, of whom they do not yet know whether he makes his

demand for this reason. All these actions fall under the same [genus]: that one plotting tyranny seeks a guard. (Aristotle, *Rhetoric*, 1357b)

Various other examples are discussed in the class. However, the most important consideration is the introduction of the concept of *critical questions*: possible doubts and counter-considerations that can be raised against any informal argument scheme. In line with most theorising in argumentation studies – from Aristotle, to Perelman, van Eemeren & Grootendorst, Walton, and Tindale – critical questions point to the inextricable link between rhetorical and dialectical argumentation. While informal arguments are typically part and parcel of the art of rhetoric, critical questions require to think of argumentation in terms of a dialectical exchange between a *proponent*, the one who proposes an informal argument to support their conclusion, and *opponent*, the one who opposes the argument via critical questioning.

In accordance with the principle of two axes of evaluation of arguments – acceptability of premises + the evaluation of the inference (Groarke & Tindale, 2015, pp. 55-62) – the critical questions are divided into two groups:

Step 1: Check the quality of the premises:

- Are they accurate examples? Did it really happen?

Step 2: Check the quality of the inference: Can we get to the generalisation?

- Do we have enough examples?
- Are they representative? (Do we have a “representative sample”?)
- How do examples fare against general comparisons and background rates?
- Are there counterexamples?

## 2) *Arguments by analogy*

The above argument of Aristotle about (wannabe) tyrants seeking bodyguards was presented as a classic case of an argument from example (*paradeigma*). But noticeably, it wouldn't work to start with if the situation of Peisistratus and Theagenes were not similar enough to this of Dionysius to support the claim that he too will act alike. Indeed, there is quite some debate regarding the relations between Aristotle's *paradeigma* and argument from likeness (*homoiototes*) (see Bartha, 2019, for an overview). But given the practice-based orientation of the course, this question – as well as other related questions discussed in the literature, such as: is analogy inductive or deductive? Is it a ground-level argument or rather a meta-argument? (Guarini, 2004; Woods & Hudak, 1989; Stevens, 2018) – will not be directly treated, unless students specifically inquire into them.

Argument from analogy relies on some accepted similarities between a *Source* domain and *Target* domain and acknowledgment of some additional *Quality* of the Source domain to support the conclusion that the similarity in this respect also extends to the Target domain. A simple semi-formal representation of such an argument goes as follows (see Bartha, 2019; Groarke & Tindale, 2015, pp. 280-284):

PREMISE 1:            *S* is similar to *T* in certain (known) respects.  
PREMISE 2:            *S* has some further quality *Q*.  
CONCLUSION:        Therefore, *T* also has the quality *Q*, or some quality *Q*\* similar to *Q*.

On the basis of this elementary scheme – and a larger tradition of examining the arguments from analogy – some basic criteria for advancing good arguments from analogy, can be reconstructed (see Bartha, 2019):

- (1) The more similarities (between two domains), the stronger the analogy.
- (2) The more differences, the weaker the analogy.

- (3) The greater the extent of our ignorance about the two domains, the weaker the analogy.
- (4) The weaker the conclusion, the more plausible the analogy.
- (5) Analogies involving causal relations are more plausible than those not involving causal relations.
- (6) Structural analogies are stronger than those based on superficial similarities.
- (7) The relevance of the similarities and differences to the conclusion must be taken into account.
- (8) Multiple analogies supporting the same conclusion make the argument stronger.

None of these can be treated in terms of hard-and-fast criteria – indeed, each of them can be disputed – but if anything, they provide useful pedagogical guidelines to assessing analogical argumentation. Similarly to above, this assessment can be based on critical questions:

Step 1: Check the quality of the premises:

- Does the *Source* domain *S* have a quality *Q*?

Step 2: Check the quality of the inference:

- Are there really known similarities between the *Source* and *Target* domain?
- What is the nature of the similarity (structural, accidental, causal)?
- Are the objects being compared similar in any relevant respect?
- Are the differences (which always exist) relevant or not?

Literature: Weston (2017), Chs. 2-5

### **3) Causal arguments**

Next to arguments from example and by analogy, causal arguments belong to a small set of fundamental types of human reasoning. Our understanding of the world relies, to a large extent, on our grasp of causal relations between various phenomena, both in ordinary and scientific reasoning. Causality is a fascinating and somewhat inscrutable phenomenon that, in analogy to analogy, has attracted concerted attention of philosophers and scientists (see esp. John Stuart Mill on “five methods of induction”) and continues to be investigated. It is also a complex phenomenon, with various species of causes distinguished (cf. the *root* cause, the *direct* cause, and the *contributing* cause in modern medicine). Typically, no single event is an effect of a single cause, thus assigning causality is a major challenge in domains of science, health, and law. Our understanding of past events, predictions of future events, as well as apportion of blame in human activity all rely on causal reasoning.

All this makes the study of causal arguments both enormously significant and challenging. However, as in the case of other informal argument schemes, the basic features of the inference have been successfully grasped (Groarke & Tindale, 2015, pp. 241-245) in the following layout<sup>7</sup>:

PREMISE 1:           X is correlated with Y.  
PREMISE 2:           The correlation between X and Y is not due to chance.  
PREMISE 3:           The correlation between X and Y is not due to some mutual cause  
                                  Z.  
PREMISE 4:           Y is not the cause of X.  
CONCLUSION:         X causes Y.

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<sup>7</sup> Groarke & Tindale present this as a scheme of “general causal reasoning” in distinction with “particular causal reasoning.” The latter uses the general causal principle “X causes Y” as a premise which, together with the so-called *inference to the best explanation* (“the causal principle is the best explanation of the y in question”), leads one to conclude in a particular case that “this x caused this y” (Groarke & Tindale, 2015, pp. 252-255). Below I add the consideration of the *inference to the best explanation* as the last critical question for causal arguments.

Against this background, some basic critical questions regarding any causal argument can be formulated:

Step 1: Check the quality of the premises:

- Is there really a correlation between X and Y?

Step 2: Check the quality of the inference:

- Has a chance correlation been ruled out?
- Is the correlation not due to a common underlying cause?
- Has the causation been assigned in the right direction?
- Is "X causes Y" the best possible explanation of Y?

This session is concluded by stressing the usefulness of the schematic reconstruction of arguments from example, by analogy, and from cause to effect, and of the associated critical questions, for a more critical appreciation of public arguments and for general critical thinking skills.

## Session (10)

### Summary:

Arguments from authority

Distinction of the epistemic and deontic authority

Importance of arguments from epistemic authority of experts in daily life

Basic features of epistemic authority

General scheme for arguments *from* and *to* authority

Critical questions for arguments *from* and *to* authority

(This description is based on Lewiński, 2022, an optional reading for this session.)

In the shortest of definitions, authority is “a right to rule” (Raz, 1990, p. 2). But what is the nature of this right; how is it exercised; by whom, over whom, and on what, are perennial questions in philosophy, legal and political theory, sociology, and beyond. One chief line of inquiry is into the relations between authority and reason. Early modern philosophy’s analysis of the structure and functions of reason, epitomised by René Descartes, John Locke, and Immanuel Kant, was highly sceptical of authority as a reason-guiding principle (Zagzebski, 2012). Locke famously identified an appeal to authority of “learned, eminent, or powerful men”—*argumentum ad verecundiam*—as one of the three main fallacies of reasoning, next to *ad hominem* and *ad ignorantiam* (1690; see Goodwin, 1998; Hamblin, 1970). Human reason should instead be governed by the *argumentum ad iudicium*, grounded in “proofs and arguments and light arising from the nature of things themselves” (Locke, 1690; Hamblin, 1970: 160). Advancing Locke’s ideas, in his *Elements of Logic* (1826) and *Elements of Rhetoric* (1828), Richard Whately distinguished between the authority of an expert’s “example, testimony, or judgment” (*auctoritas*) and the authority of those in a position of power (*potestas*) (Hansen, 2006). While the deference to the former might be presumptively reasonable, it might also be usurped by the latter, thus leading to the fallacy of authority. In their 18<sup>th</sup> and 19<sup>th</sup>-century writings, Jeremy Bentham and John Stuart Mill further articulated main philosophical misgivings about arguments from authority. Building on their critiques, Charles Sanders Peirce reconstructed as the chief culprit the medieval principle “that all knowledge rests on either authority or reason; but that whatever is deduced by reason depends ultimately on a premise derived from authority” (Peirce, 1877, p. 1). Reason is thus squeezed out allowing “the method of authority” derived from this principle to unduly overtake the rational fixation of belief offered by “the method of science”.

While these arguments belong firmly to the history of philosophy, their thrust is very much a contemporary concern. One ongoing debate regards the distinction

between *epistemic* and *deontic authority* (Bocheński, 1965; cf. Whately's *auctoritas* vs. *potestas*). The former—also called theoretical, cognitive, or *de facto* authority—is an authority to perform reliable assertions, grounded in knowledge or expertise within a specific field. The latter—also called practical, administrative, or *de jure* authority—is instead an authority to issue commands, based in a recognised entitlement to direct others. A superbly trained lieutenant can be an epistemic authority to an uninstructed major, but it's the latter who, by his military rank, has deontic authority over the former (Bocheński, 1965; see Goodwin, 1998; Koszowy & Walton, 2019). While the distinction is powerful and clear enough, there are complex cases that attract scrutiny, such as doctor's imperatives ("take two of these each morning!"): are they epistemically or deontically grounded, or both? (Goodwin, 1998).

A persistent worry is that the reliance on authority stifles independent examination of reasons, thus undercutting both the agents' autonomy and the epistemic quality of their inquiry. It is, as such, potentially both illegitimate and irrational (Raz, 2006). Yet, in the complex world we live in, vast majority of our knowledge is second-hand knowledge, derived from the testimony of others in the position to know, be they eyewitnesses, experts, or public authorities (Lackey, 2008). We simply can't reason without arguments from authority. Thus emerges a paradox—authority appears to be both an unreasonable form of argumentation and its very condition of possibility. There are at least three forms of response to this paradox. One might deny that deference to the authority's judgment is presumptively reasonable: experts too can be mistaken or biased (Duijf, 2021; Mizrahi, 2018). By contrast, one may instead maintain that deference to authority has not just a presumptive but indeed a preemptive status (Raz, 2006; Zagzebski, 2012). Since experts are experts precisely because they know better, consistently following their judgements is, overall, an epistemically better strategy than trying to correct their judgments with my own inexpert reasons; the latter are thus effectively preempted. Finally, one can argue that an argument from (an expert's) authority, while

presumptively good, should be demoted to but one of the elements in the overall mix of reasons we weigh (Lackey, 2018). Apart from non-experts' own understanding of the topic, this mix includes means that they have to reasonably assess the expertise of experts, without becoming experts themselves: they can verify experts' institutional credentials, check if there are particular interests biasing what they say, compare their past predictions with what actually happened, or see how experts fare in public discussions with other experts (Goldman, 2001, 2018; cf. Fuhrer et al., 2021; Goodwin, 2011). On such a view, authority is a ubiquitous phenomenon of human rationality that relies on a critical evaluation of the authority in question and its judgments. The question thus turns to the shape and quality of argumentative activities.

Argumentation theory has a long tradition of examining arguments from authority. The key question is a normative one: under which conditions and in which forms are such arguments reasonable? There is no space and no need to discuss this tradition in more detail in the classroom (see Zenker & Yu, 2023 for a recent overview) but a good example of this approach is Walton's proposal, recently revised in Koszowy & Walton (2019). For Walton and his colleagues, the basic argument from (expert's epistemic) authority consists of a straightforward syllogistic structure:

*Major Premise:* Source *E* is an expert in subject domain *S* containing proposition *A*.

*Minor Premise:* *E* asserts that statement *A* is true (false).

*Conclusion:* *A* is true (false).

The inference rule warranting the step from premises to the conclusion – “generally, but subject to exceptions [...] if an expert states that a statement *A* is true, then *A* can tentatively be accepted as true” – is, according to Koszowy & Walton, merely optional, as one of the “several ways” the simple scheme “can be expanded” (2019,

p. 291). Nonetheless, it is this inference rule that reveals the defeasible character of arguments from authority (mind the “generally, but subject to exceptions” clause). More specifically, something that Walton’s approach is well-known for, it is “subject to defeat by the asking of appropriate critical questions” (Koszowy & Walton, 2019, p. 292), namely:

**Expertise Question:** How credible is E as an expert source?

**Field Question:** Is E an expert in the field F that A is in?

**Opinion Question:** What did E assert that implies A?

**Trustworthiness Question:** Is E personally reliable as a source?

**Consistency Question:** Is A consistent with what other experts assert?

**Backup Evidence Question:** Is E’s assertion based on evidence?

These questions seem standard considerations in appraising epistemic authority. Indeed, Goldman’s list of “five possible sources of [argument-based] evidence” for evaluating “experts” by “novices”, captures an almost co-extensive set of elements:

(A) Arguments presented by the contending experts to support their own views and critique their rivals’ views. (Cf. consistency and backup evidence question)

(B) Agreement from additional putative experts on one side or other of the subject in question. (Cf. consistency and expertise questions)

(C) Appraisals by “meta-experts” of the experts’ expertise (including appraisals reflected in formal credentials earned by the experts). (Cf. field and expertise questions)

(D) Evidence of the experts’ interests and biases vis-à-vis the question at issue. (Cf. trustworthiness question)

(E) Evidence of the experts’ past “track-records” (Cf. backup evidence and expertise question)

(Goldman, 2001, p. 91)

Another approach to an argument scheme from expert opinion is to drain the scheme from any such substantive considerations, and instead focus on the barebones of the inference itself. Wagemans (2011) is one exponent of such a minimalistic approach, grounded in the pragma-dialectical theory of argumentation (note the conclusion-on-the-top convention). According to him, the scheme can be limited to the following elements:

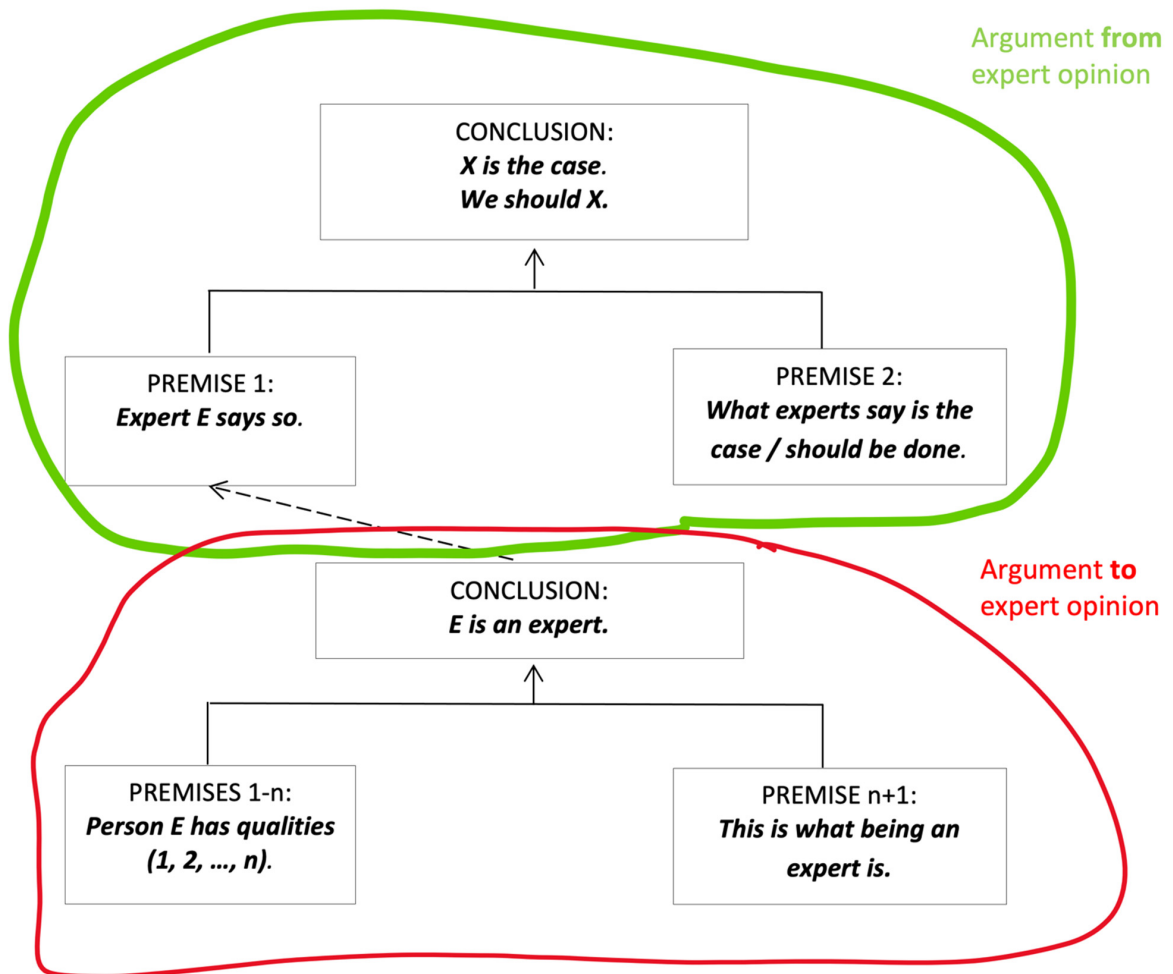
1 Opinion O (X) is true or acceptable (Y). [conclusion]

1.1 Opinion O (X) is asserted by expert E (Z). [premise]

1.1' Being asserted by expert E (=Z) is an indication of being true or acceptable (=Y). [linking premise aka the inference rule]

This scheme is inferentially correct, as it includes the necessary inference rule as indeed necessary, rather than optional. It can further be extended to include various substantive considerations, such as those above. Indeed, Wagemans (2011) offers one good way of doing it, resorting to the concept of *subordinative* (aka *serial*) argumentation, whereby one of the two premises (1.1 or 1.1') is further supported by more precise sub-arguments with substantive content regarding the quality of expertise.

The scheme below is a simple way of organising the tradition of investigating appeals to authority in terms of an argument scheme from expert opinion (see Lewiński, 2022).



On top there is the argument *from* expert opinion: an expert says something and we argue *from* this that it is the case / should be done. The inference rule (Premise 2) is that what experts say is the case / should be done. Being a presumptive rule, it can be controverted on a case-by-case basis via an all-things-considered judgement. However, it can also be objected to as a rule: *Are experts really to be revered and followed?* (cf. Duijf, 2021; Mizrahi, 2018) That would be the only critical question to the argument scheme as a scheme. It is a relevant concern, as it is the question many sceptics, including populists resorting to cheap anti-science scepticism, ask. Premise 1 can be questioned too, but in a manner of an empirical, rather than inferential, question: perhaps expert E just never said X?

Importantly, a simple semantic presupposition of Premise 1 of the argument *from* expert opinion is that E is (indeed) an expert. Once we start critically examining this issue, it becomes a to-be-defended conclusion of the argument *to* expert opinion. How do we defend that someone is an expert? Goldman's (2001) and Koszowy & Walton's (2019) considerations presented earlier nicely capture what expertise is in the social world we live in. An arguer can thus offer a set of premises (1, 2, ..., n) that defend the status of the expert in question. This, again, opens a set of *empirical* questions: Did she really publish in top peer-reviewed journals? Is her PhD in the discipline under discussion? Did she "get things right" in the past? Even if so, is she not biased this time round? Etc. Finally, the inference rule (Premise n+1) states that the set of qualities adduced is sufficient to identify someone as an expert. This too can be challenged: perhaps being *against* the consensus within the discipline is what being a *real* talent is (as the 19<sup>th</sup>-century "solitary genius" myth would have it) or having a strong, partial interest is an inherent quality of expertise?<sup>8</sup>

This layout linking arguments *from* and *to* authority—and in particular the epistemic authority of an expert—brings about a number of advantages. It seems to strike the right balance between the somewhat baroque schemes of Walton and colleagues and the minimalistic scheme of Wagemans. It incorporates all chief elements recognised by them in a novel order that rearranges and clarifies the critical questions that can be asked when authority is to be challenged. Perhaps most surprisingly, it puts all but one of Walton's critical questions as targeting the argument *to* rather than *from* authority.<sup>9</sup> Further, these are questions against the empirical rather

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<sup>8</sup> See Fuhrer et al. (2021), Goldman (2018), and Moldovan (2022) for a recent discussion on what it takes to be an expert.

<sup>9</sup> The only straightforward exception being the "opinion question" targeting the *empirical* Premise 1 of argument *from* authority (as such, also not a proper inferential scheme question). The "consistency" and "backup evidence" questions are ambiguous between addressing Premise 1 of the argument *from* authority and one of the Premises 1-n of the argument *to* authority. Yet, the latter reading seems to take precedence: saying something consistent with other experts and properly backed up (e.g., by scientific results) is a general characteristic of an expert, rather than a contingent feature of one assertion.

than the inferential premise of the scheme (against Toulmin's *Data*, rather than *Warrant*). They are thus doubly removed from what a critical question against a scheme of reasoning should be. The rationale behind this relegation is quite straightforward: if we are not dealing with experts to start with, we can hardly have an argument *from expert* opinion. (Mind you: even if there is a genuine expert / authority invoked, an argument *from her* opinion can still go wrong: an expert can be misrepresented or expertise can be in-principle challenged.)

In this way, the layout organises the ways of challenging authority. Returning to our two-step organisation of critical questions, used consistently throughout the course:

Step 1: Check the quality of the premises:

- Did Expert say X?
- Does the Expert have the following qualities:
  - Does she have the right credentials (diplomas, employment contracts, publications, grants, professional membership)?
  - Does she belong to the discipline under discussion?
  - Is she recognised by other experts in the discipline?
  - Can she defend her position with reasonable arguments when debating with critics?
  - Did she "get things right" in the past?
  - Even if so, is she not biased this time round?

Step 2: Check the quality of the inference:

- Should we follow experts to start with?
  - Do we have to rely on experts in this case?
- Are these the qualities of an expert?
  - Don't we have a better expert available?

## Session (11)

### Summary:

Distinction between Theoretical and Practical argumentation

Practical argumentation as argumentation about what to do

Detailed scheme of practical argumentation: Circumstances, Goals, Values, and Means-Goal premises

Inference licence in terms of the necessary, satisfactory or the best means

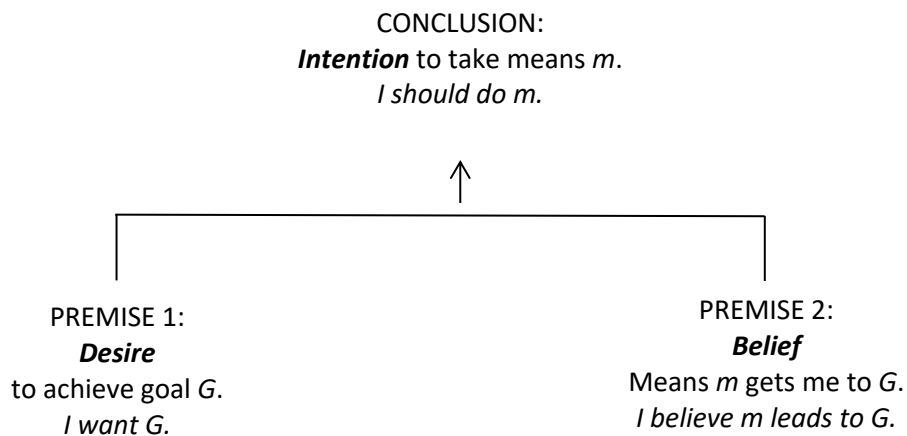
Critical questions to test the strength of practical argumentation

Among the many important distinctions in philosophy and argumentation theory regarding types of reasoning and argumentation, one stands out as being most basic: the distinction between the theoretical and practical reasoning. *Theoretical reasoning* is typically defined as reasoning about what to believe – and since our beliefs can be very concrete and practical, it is not “theoretical” in the sense of abstracts theoretical thoughts. It rather pertains to our understanding of the world and the propositional attitudes such as beliefs, conjectures, or estimations that we form about it (perhaps “epistemic” reasoning would be more accurate). By contrast, *practical reasoning* is reasoning about what to do. It concerns the way we should act in the world, given what we believe and desire. As such, it surpasses our beliefs about the world and includes our desires, goals, and values to guide action in the world. Linguistically speaking, the matter forming theoretical reasoning are exclusively assertions – and other similar speech acts such as hypotheses or estimates – while practical reasoning additionally includes value judgments and imperatives.

The basic scheme of practical reasoning is, again, derived from Aristotle’s classic work – in this case from the so-called “practical syllogism” discussed by him in *Nicomachean Ethics*. While the philosophical examination of the scheme continues (e.g., Audi, 2006; Broome, 2013; Searle, 2001), its basic elements remain

rather constant. An individual agent reasons towards a practical conclusion (typically understood in terms of *intentions* or similar states such as *dispositions* or *decisions* to act) from other states (premises) such as *desires* and *beliefs*:

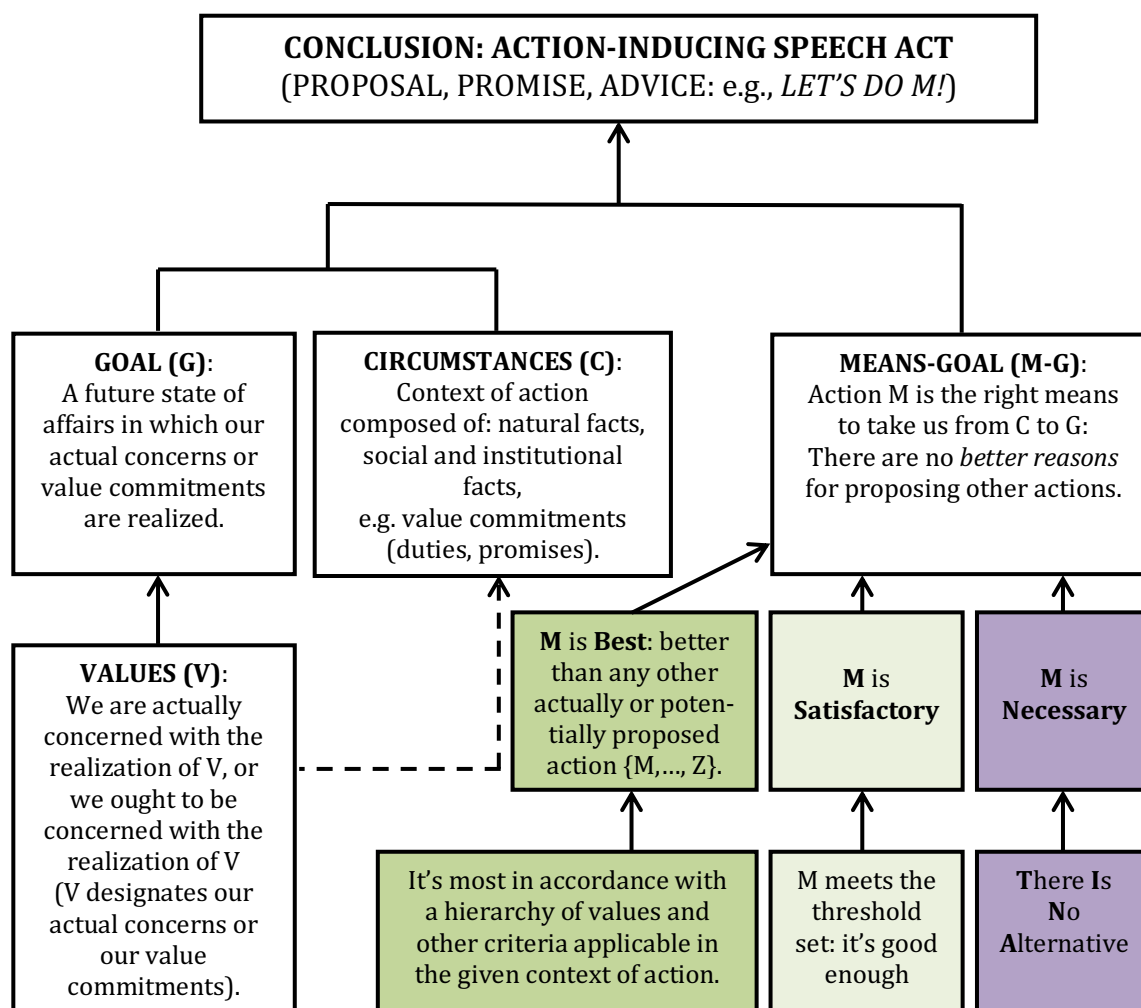
**The basic scheme of practical reasoning**



Argumentation theory have too carefully investigated practical reasoning in terms of an argument scheme of practical argumentation (for recent work, see van Berkel & Wagemans, 2023; Lewiński, 2017, 2021; Macagno & Walton, 2018). A particularly useful, both theoretically and pedagogically, representation of practical argumentation is due to Fairclough & Fairclough (2012). There, practical argumentation starts from an action-question: What shall we do under current (unwelcome) circumstances to reach the desired goals? Its starting point is thus a gap between what is and what should be. To bridge this gap, practical argument accordingly progresses from the problem to be defined and solved (*Circumstances*), in the context of the *Values* and *Goals* pursued. It then examines how various *Measures* can solve the problem by bringing one ever closer to the desired *Goals*. Finally, the best all-things-considered solution is presented as the conclusion of the inference.

The scheme presented below is derived from the work of Fairclough & Fairclough (2012) and refined by Lewiński (2017, 2021). It has proven useful in various applications to practically relevant cases: from environmental discourse (Rodrigues, Lewiński, & Üzelgün, 2019), to EU energy policies (Lewiński, 2018), and debates over COVID-19 pandemic (Lewiński & Abreu, 2022).

Figure 2: The scheme of Practical Argumentation



Three features of this scheme have a particular pedagogical significance.

First, the scheme shapes the framework of relevance for (multi-party) deliberation. Typically, different parties argue for the contextual betterness of their

proposals for action {M, N, O... Z} (see the “M is the Best” box). Their deliberation develops then as an *argumentative polylogue* (Lewiński & Aakhus, 2023) along the lines of possible disagreements over the various elements of the structure.

Second, the scheme clarifies the notion of the means-goal premise which reflects the basic inference licence of practical argument: the conclusion is reasonable to the extent that there are “no better reasons for proposing other courses of action”. Only when strengthened with this principle is the “X leads to Y” Means-Goal premise properly licenced and the entire PA generates reasonable, even if expectedly defeasible, results. Further, this premise itself is grounded in one of the three basic inference licences warranting the choice of “the right means” taking us from the current (unwelcome) *Circumstances* to the (desired) *Goals*. We can thus warrant our conclusions by issuing a comparative claim that either the means are necessary, or that they are satisfactory (good enough), or that they are the best among all the possible alternatives (these are mutually exclusive, so we can follow only one of them at a time). (See Lewiński, 2017 for a detailed analysis).

Third, the scheme provides a well-defined account of how to criticise and evaluate practical argumentation. In accordance with the general approach proposed in the course, it clearly demarcates the attacks on the main premises (*Circumstances*, *Goals*, *Values*), from criticisms of the inference licences related to the type of inferential step made (necessary, satisfactory, or the best means) (see Lewiński, 2017 for further discussion).

Step 1: Check the quality of the premises:

- Are we indeed facing the *Circumstances* presented?
  - Are these *Circumstances* problematic to start with?
- Should we adhere to these *Values*?
- Are these the *Goals* to pursue?
  - Do these *Goals* realise our *Values*?

- Are they feasible?
- Do they not conflict with other relevant *Goals*?

Step 2: Check the quality of the inference:

- Are the measures presented as necessary really necessary?
  - Aren't there any alternatives to what is proposed?
- Are the measures presented as satisfactory really satisfactory?
  - Is the threshold set in the right way (not too low, not too high)?
- Are the measures presented as the best really the best?
  - Have all possible alternatives been duly considered?
  - Have all possible comparisons among alternatives been duly considered in a way that allows for an all-things-considered judgment?

## Session (12)

### Summary:

Homework and Exercise

Students are divided into groups and assigned homework in which various types of informal arguments (arguments from example, arguments by analogy, causal arguments, arguments from authority, and practical argumentation) are identified and evaluated in various texts

These group analyses are then discussed in the class

Below, I present an exemplary text apt for analysis in terms of informal argument schemes and critical questions.

*Giorgio Agamben, "The state of exception provoked by an unmotivated emergency", February 26, 2020*

<https://positionspolitics.org/giorgio-agamben-the-state-of-exception-provoked-by-an-unmotivated-emergency/>

*This is a translation of an article that first appeared as "Lo stato d'eccezione provocato da un'emergenza immotivata," in Il Manifesto, 26 Feb, 2020.*

*In order to make sense of the frantic, irrational, and absolutely unwarranted emergency measures adopted for a supposed epidemic of coronavirus, we must begin from the declaration of the Italian National Research Council (NRC), according to which "there is no SARS-CoV2 epidemic in Italy."*

*It continues: in any case "the infection, according to the epidemiological data available as of today and based on tens of thousands of cases, causes light/moderate symptoms (a variant of flu) in 80-90% of cases. In 10-15%, there is a chance of pneumonia, but which also has a benign outcome in the large majority of cases. We estimate that only 4% of patients require intensive therapy."*

*If this is the real situation, why do the media and the authorities do their utmost to create a climate of panic, thus provoking a true state of exception, with severe limitations on movement and the suspension of daily life and work activities for entire regions?*

*Two factors can help explain such a disproportionate response.*

*First and foremost, what is once again manifest here is the growing tendency to use **the state of exception as a normal governing paradigm**. The executive decree (decreto legge), approved by the government "for reasons of hygiene and public safety," produces a real militarization "of those municipalities and areas in which there is at least one person who tests positive and for whom the source of the infection is unknown, or in which there is a least one case that is not connected to a person who recently traveled from an area affected by the contagion."*

*Such a vague and indeterminate formula will allow [the government] to rapidly extend the state of exception to all regions, as it is practically impossible that other cases will not appear elsewhere.*

*Let us consider the serious limitations of freedom imposed by the executive decree:*

- 1. A prohibition against leaving the affected municipality or area for all people in that municipality or area.*
- 2. A prohibition against entering the affected municipality or area.*
- 3. The suspension of all events or initiatives (regardless of whether they are related to culture, sport, religion, or entertainment), and a suspension of meetings in any private or public space, including enclosed spaces if they are open to the public.*
- 4. The suspension of educational services in kindergartens and schools at every level, including higher education and excluding only distance learning.*
- 5. The closure of museums and other cultural institutions as listed in article 101 of the Statute on cultural heritage and landscape, and in executive decree number 42 from 01/22/2004. All regulations on free access to those institutions are also suspended.*
- 6. The suspension of all kinds of educational travel, in Italy and abroad.*
- 7. The suspension of all publicly held exams and all activities of public offices, except essential services or public utility services.*
- 8. The enforcement of quarantine and active surveillance on individuals who had close contact with confirmed cases of infection.*

*It is blatantly evident that these restrictions are disproportionate to the threat from what is, according to the NRC, a normal flu, not much different from those that affect us every year.*

*We might say that once terrorism was exhausted as a justification for exceptional measures, the invention of an epidemic could offer the ideal pretext for broadening such measures beyond any limitation.*

*The other factor, no less disquieting, is the state of fear, which in recent years has diffused into individual consciousnesses and which translates into a real need for **states of collective panic**, for which the epidemic once again offers the ideal pretext.*

*Therefore, in a perverse vicious circle, the limitation of freedom imposed by governments is accepted in the name of a desire for safety, which has been created by the same governments who now intervene to satisfy it.*

Apart from a careful identification and reconstruction of various types of informal arguments, students are invited to apply various critical questions to the text they choose to examine. Can these questions be satisfactorily answered? Discussion of this normative issue introduces the problem of fallacious argumentation, something the course turns to in the next two sessions.

## Session (13)

### Summary:

Fallacies:

Fallacies as errors, inaccuracies in arguments

Formal fallacies: affirming the consequent, denying the antecedent

Informal fallacies and informal argument schemes: hasty generalisation (cf. argument from example), false analogy (argument by analogy), false cause and slippery slope (cf. causal argumentation), *argumentum ad verecundiam* and *ad populum* (cf. argument from authority), *argumentum ad consequentiam* (cf. practical argumentation)

Other informal fallacies: *ad hominem*, *ad baculum*, *ad ignorantiam*, *ad misericordiam*, straw man, equivocation, false dilemma, complex question, begging the question (*petitio principii*)

The notion of a fallacy is notoriously polysemic. Standard dictionaries (such as the *Oxford English Dictionary*) record the varied meanings of a fallacy as a “mistaken belief,” “invalid argument,” or “faulty reasoning,” and trace its etymology to the deceptive character (Latin *fallere* = ‘to deceive’). These meanings are noticeably related (according to the *Oxford English Dictionary*, a “mistaken belief” is fallacious “especially [when] based on unsound arguments”), yet also potentially confusingly different. This becomes clear in the ways the varied meanings of a fallacy are taken up by different disciplines: epistemologists focus on mistaken, unjustified beliefs; logicians on formally invalid arguments; cognitivists on faulty, biased reasoning; social psychologists and communication scholars on the deceptive, persuasive nature of fallacious discourse (Lewiński & Oswald, 2013).

What remains constant across all these approaches is that fallacies are understood as errors or inaccuracies in reasoning or argumentation: they are the opposite of “good reason” or “good argument.” From the perspective of this course, three distinct perspectives on fallacy are to be distinguished:

- 1) **Logical fallacies** are arguments that violate the rules of formal validity, for instance those of propositional logic or predicate logic (e.g., Aristotle’s syllogisms). They thus let one infer false conclusions from true premises.
- 2) **Dialectical fallacies** are, instead, violations of the rules of a reasonable discussion, ones that “derail” methodical critical testing of the interlocutors’ opposing views. They let the discussion advance via a spurious procedure concluded in an unreasonable decision.

- 3) *Rhetorical fallacies* are discursive and, potentially, multimodal strategies that undermine the transparency of the process of public argument. They let the audiences be persuaded by pathetic, ethotic, and pseudo-logical appeals which abuse the community's resources of shared knowledge and value base.

These three ways of understanding fallacies are direct consequences of approaching argumentation in its fullness as rhetorical, dialectical, and logical (see above). Wenzel, in his seminal discussion of these three perspectives on argumentation, stresses their normative orientation:

The particular normative stance of each perspective can be seen in the answers each gives to the question "What is a good argument?" The rhetorician would say something like, "Good arguing consists in the production of discourse (in speech or writing) that effectively helps members of a social group solve problems or make decisions." The dialectician might say, "Good argumentation consists in the systematic organization of interaction (e.g., a debate, discussion, trial, or the like) so as to produce the best possible decisions." The logician might say, "A good argument is one in which a clearly stated claim is supported by acceptable, relevant and sufficient evidence." (Wenzel, 1990, p. 12)

Fallaciousness of argumentation is thus the flipside of its "goodness": fallacies are bad arguments, however defined.

Of course, one can discuss the simplicity of such categories. In particular, "rhetorical fallacies" seem a contradiction in terms: isn't rhetoric the realm of fallacies to start with? What would be the rhetorical rules to violate? But rhetorical theory from Aristotle to Perelman, Farrell, Zarefsky, and Tindale stresses the normative credentials

of rhetorical argumentation: enthymemes, ethotic arguments, and pathetic appeals have their rhetorically acceptable and unacceptable variants. Further, as made famous in Hamblin's seminal work on fallacies, the "standard treatment" of fallacies based on their logical validity is also questionable. The standard definition of a fallacy as an argument "that seems to be valid but is not so" (Hamblin, 1970, p. 12), appears to correctly capture what fallacies are: seemingly reasonable but in fact deceptive arguments that attempt to persuade us with some covert illogical trick. Take, for example, the argument from ignorance (*ad ignorantiam*): "ghosts exist because nobody has ever proven they don't." However, as Hamblin extensively argues, many classic fallacies do not fall under this definition; some indeed directly contradict it, as there are arguments recognised as fallacious that actually seem *invalid*, but logically speaking are valid. For instance, circular arguments (*petitio principii*, begging the question)—such as "the soul is immortal because it never dies"—are logically correct but hardly persuasive inferences.

Altogether, dialectical approaches to fallacies (as defended by Hamblin, 1970, and later van Eemeren & Grootendorst, 2004), but with careful attention to the logical and rhetorical aspects of argumentation, seem to correctly capture our intuitions on fallacies within a comprehensive theoretical approach. This is the approach adopted in the course for the exposition and explanation of some of the main fallacies.

(I) Formal fallacies:

Erroneous uses of *modus ponens* and *modus tollens*

***Affirming the consequent***

If  $p$  then  $q$ .

$q$ .

Therefore,  $p$ .

**Formalised:**

$p \rightarrow q$

$q$

$\therefore p$

**Example:**

*If I'm Portuguese, then I'm European.*

*I'm European.*

*Therefore, I'm Portuguese.*

***Denying the antecedent***

If  $p$  then  $q$ .

Not  $p$ .

Therefore, not  $q$ .

**Formalised:**

$p \rightarrow q$

$\neg p$

$\therefore \neg q$

**Example:**

*If I'm Portuguese, then I'm European.*

*I'm not Portuguese.*

*Therefore, I'm not European.*

(II) Informal fallacies and informal argument schemes:

**Hasty generalisation** (cf. argument from example)

Drawing a sweeping generalisation on the basis of one or very few examples

*The world is against me: nasty shopkeeper, the parking fee, and now a flat tire in the middle of nowhere.*

*"He was born in a slum. Slums are breeding grounds for criminals. It's no secret that children from slums are potential menaces to society. I think... The kids who crawl out of these places are real trash." 12 Angry Men*

**False analogy** (cf. argument by analogy)

Relying on a comparison of objects whose similarities are non-existent, irrelevant, or purely coincidental.

*Faith is like WiFi: It's invisible, but it has the power to connect you to what you need.*

**False cause or post hoc ergo propter hoc**: "after, therefore because of" (cf. causal argumentation)

Inferring a causal relation where there is no relation at all, it is merely coincidental (as in a pure succession of events), or it is a correlation that is not causal (e.g.: "people who eat organic yoghurt jog more", where the healthy lifestyle choices are the cause of both organic diet and regular exercise).

*In September 2021, US rapper Nicky Minaj, wrote the following on her Twitter:*

*“My cousin in Trinidad won’t get the vaccine cuz his friend got it & became impotent. His testicles became swollen. His friend was weeks away from getting married, now the girl called off the wedding.”*

***Slippery slope*** (cf. causal argumentation)

Starting from a proposition that initiates a causal chain of increasingly severe / adverse propositions until reaching an overly exaggerated conclusion.

*If you allow abortion, the number of abortions will increase, and soon there will be no more children, and then no parents to have children. Do you want to entirely remove human life from the Earth?*

***Ad populum (crowd appeal)*** (cf. argument from authority)

Invoking the beliefs of large groups of people as an authoritative justification of the conclusion

*Nobody in China believes that the SARS-CoV-2 virus could have leaked from the laboratory in Wuhan, so it certainly didn’t, right?*

***Argumentum ad verecundiam*** (cf. argument from authority)

Invoking as authoritative an opinion of a pseudo-expert, expert in an irrelevant field, or a biased one.

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*Argumentum ad consequentiam* (cf. practical argumentation)

A form of fallacious argument that confuses theoretical with practical reasoning, to the effect that epistemic conclusions are accepted or rejected on the basis of the desirability / undesirability of their consequences.

*There is no war in Ukraine, because if it were a real war, the world would be at a danger of nuclear oblivion.*

(III) Other informal fallacies:

*Ad hominem*

Attacking the person, not the argument

*Noam Chomsky cannot be right about the linguistic competencies of Chat GPT-3: isn't he the guy who received a \$ 270.000 transfer from Jeffrey Epstein, the most horrible of sexual offenders?*

### ***Ad baculum (threat appeal)***

Trying to convince the other party with threats, rather than relevant arguments

*The former Russian president Dmitry Medvedev has told the state-owned news agency RIA that the more destructive the weapons Ukraine receives from its western backers, the higher the risk of "nuclear apocalypse."*

### ***Ad ignorantiam***

Arguing from the lack of knowledge that the opposite is true (while it could be equally unknown or plainly wrong)

*Ghosts exist because nobody has ever proven they don't.*

### ***Ad misericordiam (appeal to pity)***

Arguing in favour of something or someone (notably, the arguer themselves), invoking defects, dangers, or limitations of what or who one wants to favour.

*Dear funding agency: we understand and very much appreciate your evaluation of our project proposal – but if you maintain your negative evaluation our entire programme of research and a number of jobs will be in serious danger. Please reconsider.*

### **Straw man**

A fallacy of argumentative discussion in which an arguer misrepresents her adversary's standpoint or arguments in such a way that they become easier to refute, and then attacks the misrepresented position as if it were the one actually defended by the adversary

*P: Social policies of the government are plainly inefficient: a number of scientific studies, including one recently published in "Sociology", expose major faults of the policies.*

*A: It's funny to say that the government's social policies are inefficient based on just one scientific study.*

### ***Equivocation***

Argue fallaciously based on a dual meaning a word has.

*Women and men are physically and emotionally different. Therefore, the sexes are not "equal", so the law should not pretend that they are!*

### ***False dilemma***

Argument that draws a conclusion from premises that are supposed to represent the only two alternatives to choose from – while in fact there are more.

*Since the universe could not have been created out of nothing, it had to be created by an intelligent force.*

### ***Complex question (fallacy of many questions)***

Asking one question while introducing a presupposition to what is said that constitutes another question that should be but isn't explicitly asked. As a result, the

other party cannot directly answer the question – whether in the affirmative or negative – without committing to the hidden presupposition.

*When did you stop trusting the Nazi propaganda, Mr. Stalin?*

### ***Begging the question (petitio principii)***

Consists of having already included in the premises, often implicitly, what is presented in the conclusion.

*God exists because the Bible says so and I know this is true because it was God herself, after all, who wrote it!*

Literature: Weston (2017), Ch. 10

## **Session (14)**

### **Summary:**

Exercise:

Identification of formal and informal fallacies in various texts, social media contents and public speeches or debates

This session is dedicated to students' search for fallacies of various kinds in examples of public argumentation of their choice. Each case is carefully reconstructed, evaluated, and discussed, especially vis-à-vis the critical questions relevant to various informal argument schemes studied earlier.

## **Session (15)**

## Summary:

Training in argument mapping via Rationale platform

Differences between various types of premises, objections, and rebuttals (objections to objections) are explained.

Basic principles of identifying and reconstructing premises in natural discourse are discussed.

The structuring of the premises in a map is practiced.

The evaluation of the structures built is practised via various real-life examples.

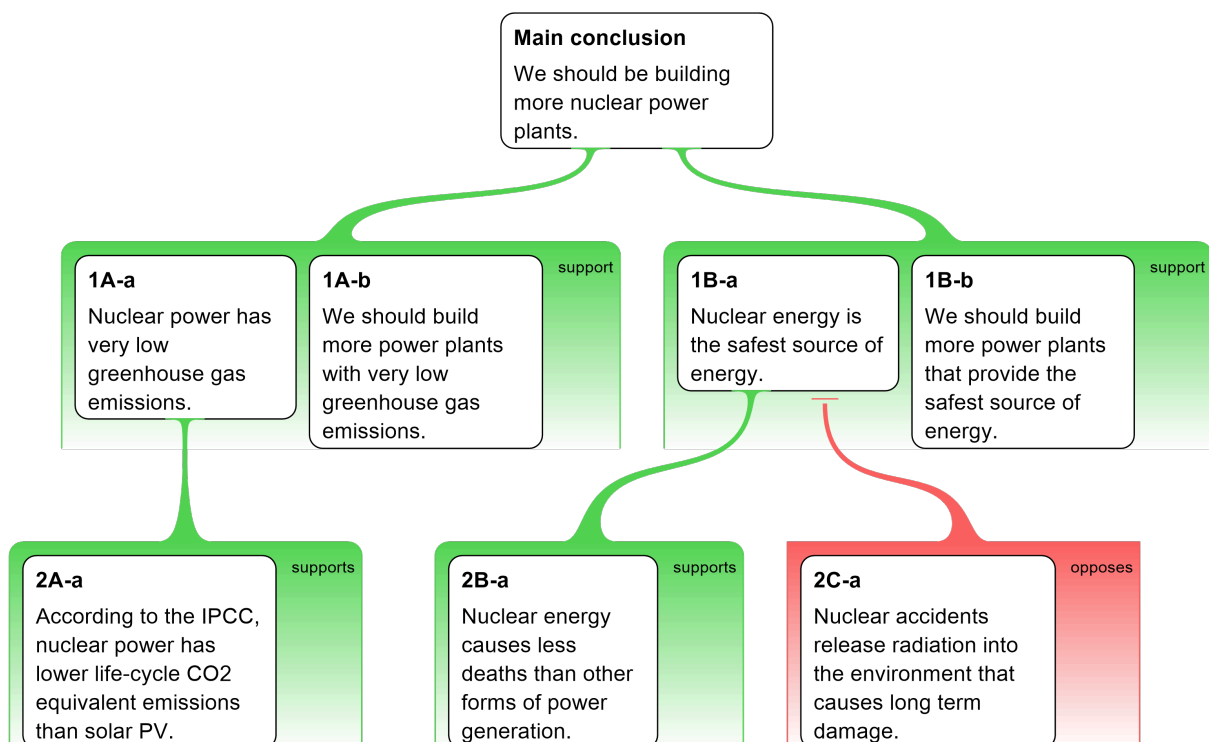
Organising the structure of complex arguments in diagrams is part and parcel of argumentation studies (see esp. Freeman, 2011). Traditionally, it has been done manually via simple paper-and-pencil representations. Today, however, computer-assisted *argument mapping* technologies have become commonplace: there is plethora of commercial and open access software allowing for diagramming arguments.

Argumentation mining technologies have played an increasingly important role in argumentation and critical thinking instruction. Apart from anecdotal evidence from teachers' experience and students' satisfaction, empirical studies too corroborate the usefulness of such technologies for pedagogical purposes:

Pre- and post-test studies have demonstrated the pedagogical benefit of argument mapping using cohorts of university students and intelligence analysts as subjects, and by comparing argument mapping interventions with data from comparison groups or benchmarks from other meta-analytic reviews. It has been found that intensive practice mapping arguments with the aid of software has a strong positive effect on the critical thinking ability of students. Meta-analysis has shown that high-intensity argument mapping courses improve critical thinking scores by around 0.8 of a standard deviation—more

than twice the typical effect size for standard critical thinking courses (van Gelder, 2015). This strongly suggests that argument mapping is a very effective way to teach critical thinking. (Davies, Barnett, & van Gelder, 2021, p. 115)

An exemplary argument for the use of nuclear power is illustrated below (taken from Davies, Barnett, & van Gelder, 2021, p. 116). It showcases the main conventions used in argument mapping. The main conclusion is on the top, supported by subsequent main premises (numbers 1xx) and sub-premises (2xx), represented in green. By contrast, possible counterarguments / objections are presented in red. Premises containing Data are indicated with small caps "a" letters (e.g., 1 A-a: *Nuclear power has very low greenhouse gas emissions*), while to so-called linking premisses containing Warrants of arguments are numbered with small caps "b" letters (e.g., 1A-b: *We should build more power plants with very low greenhouse gas emissions*).



These two sessions of the course (sessions 15 and 16) are dedicated precisely to the “intensive practice mapping arguments with the aid of software.” The software of choice is *Rationale*® (<https://www.rationaleonline.com/>), an online argument mapping platform developed by *ReasoningLab*™, an Amsterdam-based company. *Rationale* offers an intuitive, easy-to-use Graphic User Interface with low learning curve – thus perfectly suited for a quick intensive course, dedicated to students already familiar with basic concepts of argumentation studies.

Before the session students are requested to familiarise themselves with the *Rationale* Guide and FAQs, freely available here <https://www.rationaleonline.com/docs/en/rationale-guide>. During the first session, the basic concepts and skills are learned via working through concrete examples in the *Rationale* online interface (the instructor has “*Rationale* Education Extra” license). The differences between various types of premises, objections, and rebuttals (objections to objections) are explained. Further, the basic principles of identifying and reconstructing premises in natural discourse are discussed. Then, the structuring of the premises in a map is practiced. Finally, students are introduced to and trained in the evaluation of the structures built via various real-life examples.

This is an in-person, interactive group session lead by the instructor. Students are then invited to form groups and come prepared to the next session with mapped examples of argumentation of their own choice.

## **Session (16)**

### **Summary:**

Exercise: Further training in the use of *Rationale* via presentation and discussion of students’ argument maps presented in groups of 4-5 members.

## Session (17)

### Summary:

Revision of the material

This class is dedicated to discussing any topic – whether theoretical or practical – that students feel uncertain about and might wish to clarify, re-examine, or deepen. It also explains the structure of the mid-term exam to be taken in the next session.

## Session (18)

### Summary:

Mid-term exam

This session is dedicated to a 2-hr paper-and-pencil exam (or its online version via Google Forms). In what follows, I present an exemplary exam sheet.

The distribution of grading is as follows:

- |  |           |                   |
|--|-----------|-------------------|
| a) Multiple choice questions (1-4):          | 1 pt each | (4 pts in total)  |
| b) Short questions with justification (5-6): | 3 pt each | (6 pts in total)  |
| c) Mini-essay of argumentative analysis (7): | 10 pt     | (10 pts in total) |

Altogether, students can get **up to 20 points** (maximum score in the Portuguese education system).

Please note that this is but an example – and substantive variations of the exam can be proposed. For instance – especially in the context of online exams – questions need to be adjusted so as to prevent easy Google searches. The mini-essay question can also be altered in order to mitigate for ChatGPT-generated answers. One option that prevents such forms of cheating is to present students with an argument map,

and ask them to create an argumentative text, with a conclusion and argumentation of their choice, that reflects this structure.

### Exemplary mid-term exam

1. O objetivo fundamental de um argumento informal é: The main goal of an informal argument is to:

- A) Provar a verdade de uma conclusão Prove the truth of a conclusion
- B) Justificar a plausibilidade da conclusão Justify the plausibility of a conclusion
- C) Usar falácias para persuadir o auditório Employ fallacies to persuade the audience

2. Segundo Perelman, o problema fundamental da retórica clássica (desde a Idade Média ao século XX) – em contraposição à retórica antiga de Aristóteles e de outros autores – era:

According to Perelman, the main problem with the classic rhetoric (from the Middle Ages to the 20th century) – as opposed to the antique rhetoric of Aristotle and others was:

- A) Delimitação do âmbito da retórica ao estudo das figuras retóricas (estilo)  
Reduction of the field of rhetoric to the study of rhetorical figures (style)
- B) Atenção excessiva nos métodos formais de argumentação (prova)  
Excessive focus on the formal methods of argument (proof)
- C) Problemas éticos relativos à retórica como forma de persuasão pública (manipulação)  
Ethical problems related to rhetoric as a form of public persuasion (manipulation)

3. Se o nosso professor é Português, então fala Português sem sotaque If our teacher is Portuguese, then he speaks Portuguese

*Mas ele não fala Português sem sotaque* with perfect accent  
*accent* But he doesn't speak Portuguese with perfect  
*Então, não pode ser Português* So, he cannot be Portuguese

Esta forma de argumento formalmente válido é chamada: 1) modus tollens 2) dilema 3) silogismo disjuntivo

This form of a valid formal argument is called:

4. George W. Bush uma vez famoso disse: "Ou você está com a gente, ou você está com os terroristas". Qual é a falácia proferida?

George W. Bush once famously said: "Either you're with us, or you're with the terrorists". Which fallacy did he commit?

.....  
.....

5. Esta é uma entrevista com um DJ: This is an interview with a DJ:

DJ: Acho que é um bom disco, vende-se muito bem. I think it's a great record, it sells very well.

Jornalista: Quais são as razões deste sucesso comercial? What are the reasons of this commercial success?

DJ: Como acabei de dizer, é realmente um bom disco! Like I just said, it's really a great record!

Qual é a falácia? Porquê? What is the fallacy? Why?

.....  
.....  
.....  
.....  
6. Escreva um exemplo – breve, mas sólido – de argumento com base em exemplos:

Write a short – but sound – example of an argument from example:

.....  
.....  
.....  
.....

7. Considere o argumento de autoridade seguinte: Consider the following argument from authority:

*Marcelo Rebelo de Sousa disse em Senegal: "Quando nós abolimos a escravatura em Portugal, pela mão do Marquês de Pombal, em 1761 - e depois alargámos essa abolição mais tarde, no século XIX, demasiado tarde -, essa decisão do poder político português foi um reconhecimento da dignidade do homem, do respeito por um estatuto correspondente a essa dignidade". É claro, portanto, que os portugueses não tinham escravos no século XIX e todos reconheciam a dignidade de todo ser humano, branco ou negro.*

*The President of Portugal, Marcelo Rebelo de Sousa said in Senegal: "When we abolished slavery in Portugal, by the hand of the Marquis of Pombal, in 1761 - and then we extended this abolition later, in the 19th century, too late - this decision of the Portuguese political power was a recognition of the dignity of man, of respect for a status corresponding to that dignity". It is clear, therefore, that the Portuguese did not have slaves in the 19th century and that everyone recognized the dignity of every human being, white or black.*

Que tipo de críticas (critical questions) podemos avançar para verificar a força deste argumento? É um argumento forte ou fraco? Pode definir algumas falácias? Justifique a sua análise.

Which forms of criticism (critical questions) can we ask to verify the strength of this argument? Is it a strong or weak argument? Can you identify any fallacies? Justify your critique.

MAX 200 palavras / words!

## Session (19)

### Summary:

Audience as the “goal” of rhetoric

Aristotelian rhetoric:

The three types of proof: *ethos*, *pathos* and *logos*

The three types of rhetoric: deliberative, judicial and epideictic

Perelman's *New Rhetoric*:

Demonstration vs. argumentation

Particular vs. universal audience

The rhetorical situation (Bitzer)

This session starts preparing students for their own argumentative performances by stressing the role of the audience in argumentation. As mentioned earlier, one of the three main objectives of the course is to “provide tools and methods for understanding audiences as ultimate targets of any form of argumentation and communication”. This objective reflects the very communicative nature of argumentation as understood in *rhetorical* approaches:

Whether we focus on the contemporary or the Aristotelian definition of rhetoric, what this field contributes to argumentation is its concern for audience. It regards the approval by an audience – especially by an audience of critical thinkers, as we shall see – as the ultimate test of an argument's soundness and as the goal an arguer wishes to achieve. (Zarefsky, 2019, p. 8)

This brief citation captures very well the rhetorical orientation towards audience understood in a normative way: the goal of argumentative practice is to convince the audience of highly skilled, critical recipients of one's discourse. This means that “reasoning with an audience in mind is not the same thing as pandering to an audience, telling the audience whatever it wants to hear” (Zarefsky, 2019, p. 12). Rhetorical adaptation to the audience is thus not simple fulfilment of the audience's demands, wishes, and instincts. Nor is it persuasion at all costs, including various forms of manipulation and deception, commonly associated with rhetoric understood as the treacherous art of undue and underhand influence. Instead, rhetorical focus on the audience amounts to adjusting one's premises, inferences, style, and delivery to

the knowledge, values, and capacities of one's listeners. It also amounts to respecting their insight and skills – if not of the audience immediately participating in the rhetorical situation, then at least of their critically minded “better selves.”

These themes have permeated Aristotle's theorising of the “good”, useful rhetoric (as stereotypically opposed to the “bad”, useless rhetoric of the Sophists – but see Tindale, 2010). In order for the students to properly appreciate these Aristotelian origins – and to familiarise them with a classical Greek text – this session starts with the overview of the main concepts of the first three “chapters” of Book I of Aristotle's *Rhetoric* (in either the Portuguese or English translation).

As discussed at the beginning of the course (see Session 4), for Aristotle, rhetoric is “a counterpart of dialectic”, an argumentative art which employs similar resources but in a less stringent context of public speaking. The key task for rhetors is to persuade their audiences by adjusting “all the available means of persuasion” to the occasion at hand. There are three basic *entechnic* “means of persuasion” or rhetorical proofs (*pisteis*) available to rhetors:

Of the *pisteis*, some are *atechnic* (“non-artistic”), some *entechnic* (“embodied in art, artistic”). I call *atechnic* those that are not provided by “us” [i.e., the potential speaker] but are preexisting: for example, witnesses, testimony from torture, contracts, and such like; and *entechnic* whatever can be prepared by method and by “us”; thus one must use the former and invent the latter. Of the *pisteis* provided through speech there are three species; for some are in the character [*ethos*] of the speaker, and some in disposing the listener in some way, and some in the speech [*logos*] itself, by showing or seeming to show something. (Aristotle, *Rhetoric*, 1355b-1356a)

Importantly, “disposing the listener in some way” means that “they are led to feel emotion [*pathos*] by the speech” (1356b): in this way, the famous tri-partition of *ethos*,

pathos, and logos as the basis of rhetorical argument is elucidated in Aristotle. In each case, the key factor is a thorough understanding of audiences and their characteristics – especially emotions (*pathos*) – and then skilful adaptation of one’s character (*ethos*) to be presented and words and reasons (*logos*) given to the audience on a given occasion, “for we do not give the same judgment when grieved and rejoicing or when being friendly and hostile” (1356b).

But even more importantly, there are certain standard contexts for civic rhetoric and thus standard types of audience. Indeed, Aristotle’s three genres of rhetoric—deliberative, judicial, and ceremonial (*epideictic*)—are distinguished primarily through the type of audience addressed: assembly members, jurymen, and spectators of public speeches. In Aristotle’s words:

The species [*eide*] of rhetoric are three in number; for such is the number [of classes] to which the hearers of speeches belong. A speech consists of three things: a speaker and a subject on which he speaks and someone addressed, and the objective [*telos*] of the speech relates to the last (I mean the hearer). Now it is necessary for the hearer to be either an observer [*theoros*] or a judge [*krites*], and [in the latter case] a judge of either past or future happenings. A member of a democratic assembly is an example of one judging about future happenings, a juror an example of one judging the past. An observer is concerned with the ability [*dynamis*] [of the speaker]. Thus, there would necessarily be three genera of rhetorics: *symboleutikon* [“deliberative”], *dikanikon* [“judicial”], *epideiktikon* [“demonstrative”]. (Aristotle, *Rhetoric*, 1358a-b)

In the class, further details of the three “rhetorical proofs” (*ethos*, *pathos*, *logos*) are discussed, as are the three genres, especially as applied to today’s discourse.

Further, some of the basic concepts of Perelman's *New Rhetoric* are presented. To start with, the basic formulation of the goal of argumentation in terms of the audience is presented:

The aim of argumentation is not to deduce consequences from given premises; it is rather to elicit or increase the adherence of the members of an audience to theses that are presented for their consent. (Perelman, 1982, p. 9)

This approach thus clearly contrasts "the theory of demonstration as developed in formal logic" with "a theory of argumentation that is similar to Aristotle's dialectical reasoning" (Perelman, 1982, p. 4). (Note Aristotle's claim that rhetoric is "counterpart" of dialectic.) Demonstration departs from unquestionable axioms and "deduces consequences" following explicit rules of valid inference formulated in formal systems. Its material are expressions of formal language devoid of any ambiguity and, crucially, there is no consideration of the audience to whom the argument is presented. By contrast, "argumentation is intended to act upon an audience, to modify an audience's convictions or dispositions through discourse" (Perelman, 1982, p. 11). In turn, "the audience is not necessarily made up of those the speaker expressly addresses" but, "for the development of a theory of argumentation" is best understood "as the gathering of those whom the speaker wants to influence by his or her arguments" (Perelman, 1982, p. 14).

This distinction allows to further distinguish between:

- *Particular* audience one wishes to *persuade*, e.g., a here-and-now audience of a lawyer in a court of law (cf. judicial rhetoric) or of a priest in a church (cf. epideictic rhetoric);
- *Universal* audience one wishes to *convince* – consisting of "all of humanity, or at least all those who are competent and reasonable" in that they would follow the "facts, truths, and universal values [...]"

supposed to compel the assent of every sufficiently enlightened human being" (Perelman, 1982, pp. 14-17).

Finally, various types of particular audience are then discussed in the context of what Bitzer calls a *rhetorical situation*: "a natural context of persons, events, objects, relations, and an exigence which strongly invites utterance" (Bitzer, 1968, p. 5). Diverse examples of such situations, and their related particular audiences and genres of rhetoric, are discussed.

Literature: Aristotle (2007), I.1-I.3  
Perelman (1982), Chs. 2-3  
(Bitzer, 1968)

## Session (20)

### Summary:

Practical session:

Identification of the elements of *ethos*, *pathos* and *logos* in public discourse

Analysis of the different audiences / target audiences in various argumentative texts

Understanding of the rhetorical situation and the genres of rhetoric involved

This practical session is based on the examples of public argumentation (monological, dialogical, polylogical) selected by students, and is aimed at increasing the students' competence in applying rhetorical concepts and methods to the analysis of argumentation.

## Session (21)

### Summary:

Argumentation in complex, 21<sup>st</sup>-century communication

*Polylogue* and social media

*Positions, players, and places* for argumentation

This session introduces students to the polylogue framework for studying argumentation, as recently developed by Lewiński & Aakhus in their Cambridge University Press monograph, *Argumentation in Complex Communication: Managing Disagreement in a Polylogue* (2023).

Polylogue framework departs from the critique of the dialogical and conversational approaches where argumentation is predominantly conceptualised as two parties arguing pro and con positions with each other in one place. This dyadic bias undermines the capacity to engage argumentation in complex communication in contemporary, digital society. To face this complex reality of mediated communication, polylogue framework offers an alternative course of inquiry for the analysis, evaluation, and design of argumentation as polylogue: various players arguing over many positions across multiple places. Taking up key aspects of the conceptualisation of argumentation as a communicative, situated practice, the polylogue framework engages a wider range of discourses, messages, interactions, technologies, and institutions necessary for adequately engaging today's entanglement of argumentation and complex communication in human activities.

The focus of the session is on the crucial starting points for an inquiry into argumentation as polylogue. *Polylogue* is presented as the natural state of affairs for argumentation. The framework then elaborates how argument is embedded in communication and communication in activity, how argumentation is for communication, and how argumentation is a source of communicative innovation for polylogue. This profoundly social view of argumentation grounds the idea that polylogues are disagreement management practices in which various *players* pursue their contrasting *positions* across multiple *places*. In this way, the polylogue

framework introduces students to a new social ontology of argument in complex communication. This ontology fundamentally shifts descriptive, normative, and prescriptive attention to how contexts for argumentation are made via interaction and how argument is implicated in broader chains of social action and cognition. The polylogue framework thus scaffolds the discovery, analysis, and design of argumentative structures and functions for complex discourses and interactions of today, especially in a computer-mediated context.

A *position* on an issue can be seen as a response to an open Wh-question, such as “What shall we do now?” or “Which is the right description of situation?” Given the openness of *Wh-questions*, a contrast class to consider is larger than in the case of simple *yes/no questions*: typically, Wh-questions generate a genuine multiplicity of contrary positions simultaneously defended and objected to in a polylogue.

*Players* denote a wide variety of communicative agents involved in many-to-many argumentation. Beyond dialectical proponents and opponents (or rhetorical speakers and audiences) this concept includes distinct production (principal, author, animator) and reception (ratified hearers, overhearers, eavesdroppers, messengers, final targets, etc.) roles (Goffman, 1981; Levinson, 1988). It also includes various social and institutional roles of speakers: a criminal trial with the judge, jury members, prosecutor, defence attorney, witnesses, forensic experts, victim, and defendant is a classic case (see the *12 Angry Men* film). The polylogical notion of a player reflects the idea that in today’s complex argumentative interactions there is no uniform *audience* or *public* in the classic rhetorical sense, and no single *opponent* or *antagonist* to engage in a neat dialectical encounter.

Finally, *places* refer to the *when* and *where* players and positions come together in argumentation. Places are not restricted to a geographical location at a particular time nor are they simply given; places are formulated and are phenomenologically real for participants and observers. So, places involve the

particular sociolinguistic work, including the physical, technological, and institutional conditions, that project and enable (or limit) various kinds of participation status and the available moves and countermoves in interaction. Polylogue highlights the formulation of place, the ecology of places, and the design of place in disagreement management and their active role in the interactivity that shapes the initial puzzle and the ensuing disagreement. This sense of place does not feature prominently as a matter of argumentative concern in the received argumentation analysis where place, if it is recognised, is treated as a container of interaction (e.g., courtroom, classroom, editorial page) or a static context delineating two key parties who are taking either pro or con sides on a question (e.g., witness-lawyer, teacher-student, columnist-audience) (Lewiński & Aakhus. 2023).

These key concepts are then applied to an analysis of a complex online discussion on a topic of students' interest.

## **Session (22)**

### **Summary:**

Preparation for students' group presentations

This session is dedicated to discussing with students, in as much detail as possible, the final work students are to deliver: their group presentations. These presentations put to work the conceptual and methodological tools of rhetoric and argumentation covered earlier in the course and advance on the in-class and at-home exercises prepared by students and analysed in some detail during the practical sessions. The session is partly driven by students' questions and concerns, and partly by pre-prepared guidelines for students' presentations. For convenience, I cite here exemplary guidelines as discussed with students in this session and shared with the via the online *InforEstudante* platform.

## Guidelines for students' presentations

- Choose an example of argumentative discourse of your – and, hopefully, our – interest: some public speech, (a part of) a debate, (excerpt from) an important written text, etc.
- Each presentation will last 30min: 20min for actual presentation, 10min for discussion;
- In your presentation:
  - 1) Present the discourse / summarise the text for us, the audience;
  - 2) Describe the historical context of the speech, its “rhetorical situation”;
  - 3) Describe the (actual, intended, possible) audience;
  - 4) Describe the:
    - a. genre of rhetoric (deliberative / judicial / epideictic);
    - b. genre of speech (inaugural address / Press conference / TV debate / written article / interview, Facebook post, Twitter exchange, etc.);
  - 5) Identify the fragments of *ethos*, *pathos* and *logos*; which of these types of rhetorical arguments dominate the speech?
  - 6) Describe the main conclusion (the point, the message) of the speech;
  - 7) Identify main formal / informal arguments for the conclusion;
  - 8) Identify some fallacies, if there are any (normally, there are...);
  - 9) Identify some rhetorical figures / tropes (metaphors, metonymy, anaphora, etc.) (optional)
  - 10) Summarise your analysis by presenting the constellation of positions, players and places engaged in argumentation.
  - 11) Give a general evaluation of the speech: Reasonable? Persuasive?

## **Session (23-24-25-26-27)**

### **Summary:**

Students' Presentations

Given the typical size of the *Rhetoric and Argumentation* class of 60-75 students, 15 slots (3 per session of 1 hr 45 min) for groups of 4-5 students are made available for the presentation and joint discussion (involving other students and instructors) of their final analyses of public argumentation.

## **Session (28)**

### **Summary:**

General Discussion and Final Wrap-up, including the publication of final grades.

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(Note: these are not to be confused with the separate Bibliography for the course: see above)

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