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STUDIES IN LOGIC, GRAMMAR AND RHETORIC 70 (83) 2025

DOI: 10.2478/slgr-2025-0014

Martin Hinton
University of Lodz
e-mail: martin.hinton@uni.lodz.pl
ORCID: 0000-0003-0374-8834

EVALUATING ARGUMENTATIVE DISCOURSE PROCESSES

Abstract. This paper sets out basic principles for the interpretation and assessment of contextual factors in argumentative discourse, which may be combined with argumentation norms to build a system of argument evaluation. The theoretical background is given, and the procedure for evaluation is described, then exemplified.

This Informal Argument Pragmatics forms the basis for part of a larger evaluation tool, the Comprehensive Assessment Procedure for Natural Argumentation (CAPNA). CAPNA is based on an understanding of argumentation as having three distinct, but related, parts: process, reasoning, and expression. This paper describes how the procedural questions for pragmatic process evaluation are derived and employed, and considers how the proposed pragmatics relates to the rules for argumentation given in the pragma-dialectical approach.

Keywords: Comprehensive Assessment Procedure for Natural Argumentation, explainable argumentation, argument evaluation, argument pragmatics, argumentative discourse.

1. Introduction

Across the various theoretical strands of research into arguments, one point of near-universal agreement is that to properly understand their role and assess their force it is necessary to take into account certain facts about the circumstances of their employment. This is equally true for the Informal Logicians (see Blair & Johnson 2000), who realised that the decontextualised symbols of formal logic did not provide sufficient tools for dealing with arguments as they are actually used, and for the pragma-dialecticians (van Eemeren & Grootendorst 2004), who base their entire

This research was supported by the Polish National Science Centre Grant: 2022/47/B/HS1/01725. AIDA: Attitude and Identity in Argumentation; and by a grant from the Scientific Development Fund of the Faculty of Philology, University of Lodz.

approach upon an exact definition of the model argumentative situation, the Critical Discussion, and draw out their rules for arguers from the application of pragmatic principles to that form of dialogue.

More is said of the relation of the proposals in this work to the pragma-dialectical approach in section 4.6 below, but one recurring criticism which has been aimed at that theory is that by limiting itself to one type of situation in which arguments are used, and that a model situation which may not frequently be encountered in actual discourse, its scope is limited and, thus, its usefulness as an analytic methodology is reduced. It is, therefore, the aim of this paper to set out some basic principles for the interpretation and assessment of contextual factors in argumentative discourse which are more generally applicable and place no restrictions on either the goal or the format of the argumentation, but are sensitive to both.

Before a description of the proposed Informal Argument Pragmatics (IAP) can begin, a number of preliminaries are necessary to make it clear how certain terms are to be understood and what the reader should expect in the sections which follow. Firstly, and crucially to the enterprise, the IAP is a pragmatics of argumentation, not the application of the pragmatics of language to argumentative dialogues. That is not to say that there is no common ground between the two: the familiar theories of pragmatics play an important role in what is to come, but it should be understood that the aim is rather different and, I may say, more ambitious. The aim of this paper is to set out the beginnings of a pragmatics for argumentation which is analogous to the pragmatics of language in general: that is to say, that just as language cannot be properly understood by looking at sentences and the meaning of their constituent words in isolation, so too arguments cannot be properly understood by looking simply at their inferential structure and form. The IAP takes the pragmatic aspects of arguments to be all the elements external to that structure and form: their circumstances and context, both in terms of their position in the discourse and their suitability to the mode of argumentation employed.

To understand an argument as part of *an argumentation process* means to understand whether or not it is an acceptable argument *within that process*, or, at least, what it would take for it to be considered so. This leads to the second preliminary point: the purpose of this IAP is to assist in the task of evaluation. It is part of a wider system of argument evaluation – a procedure for determining argument acceptability built on a bedrock of argumentation theory both wide and firm. The procedure is developed largely from standards enjoying widespread support amongst argumentation theorists: it is not an attempt at a revolution in theory, although where

disagreement exists, choices must be made. It can be inferred from this that I consider the development of a pragmatics for argumentation to be necessary in the construction of an evaluation process for arguments, and the principal question which this paper looks to address is simply: how might such a pragmatics look?

It is important to note, of course, that pragmatic theory is in general an interpretative rather than an evaluative tool. There is, therefore, a subtle, but crucial, distinction between the IAP and the system of evaluation which is partly based upon it. The pragmatic principles for acceptable arguments outlined in the sections below are intended to help in an interpretation of what the argument move in question is actually doing, or is intended to do: it is only when certain norms of argumentation are applied to those interpretations that an evaluative judgement is made. The principles, then, are somewhat analogous to the Gricean maxims in that when they are not adhered to, our attention is gained and we are forced to consider why. Argumentation theorists could do the same with the IAP, but whereas linguists are concerned with what language means, and do not look to define utterances as 'good' or 'bad', arguments are frequently subjected to judgement and their conclusions adhered to or discarded. For that to be done with consistency and justification, however, systems of interpretation are essential.

The IAP is to be employed as the theoretical foundation for the first main stage of evaluation in a more comprehensive assessment tool. That stage considers the argumentative process within which a particular argument is delivered and the IAP is operationalised in the form of procedural questions which can be asked in order to establish the procedural acceptability of that argument. The evaluation system in question is the Comprehensive Assessment Procedure for Natural Argumentation (CAPNA) and it is described in outline in section 2 below. A full discussion of the theoretical principles on which it rests, their provenance and their potential, is contained in a recent monograph (Hinton, 2021). Little is said in that work, however, on how the interpretation and evaluation of argument processes, or rather, arguments in their processes, is to be conducted. That, then, is the chief goal of this paper: to lay out the basis for a system for the evaluation of arguments, within their discourse environment, according to the requirements and constraints of that environment, and taking into account the roles and duties of those who make them.

In her book *Giving Reasons*, Lilian Bermejo Luque suggests that 'the evaluation of argument would be the chief aim of Argumentation Theory' and claims that this requires two things: 'a characterization of argu-

ment goodness' and a 'method for deciding upon argumentation goodness' (2011a, p. 14–15). This, she notes, requires us to consider both semantic and pragmatic aspects of argumentation; and I am in full agreement. Her own attempt to provide these, the linguistic normative model of argumentation, is based upon a specific conception of argumentation as 'a second-order speech-act complex, that is, a speech-act composed of a speech-act of adducing and a speech-act of concluding' (2011b, p. 337). I do not wish to discuss her theory in detail here, though there is much to commend it, but her characterisation of argumentation has met a good deal of resistance. For example, Biro and Siegel complain that 'speech-act analysis can tell us only whether someone is arguing, not whether she is arguing well' (2011, p. 281). They feel that this conception makes 'arguing' and 'argumentation' the same thing, and do not accept the consequences of that. A more general point is raised by David Hitchcock when he notes that Bermejo Luque's understanding of argumentation succeeds in 'distinguishing the internal aim that is constitutive of the act of arguing from a recommended external aim that arguers may or may not pursue when they argue' (2011, p. 308). He goes on to say, however, that he is not convinced that the internal aim has been correctly identified. This strikes me as a recurring problem with theories directly linking argumentation with speech acts: arguers are assigned a purpose and one can generally find examples of arguments being employed with different purposes which seems to equate to a selection of certain types of argumentation as definitive.[1] It is also the case that while Bermejo Luque provides a method for evaluation in terms of what needs to be considered, she does not provide what I would consider a fully developed procedure by which it may be done[2].

Similarly, the pragma-dialectical approach to argumentation also establishes correctness conditions based on normative aspects of speech act theory and posits a particular definition of argumentation which is necessary to provide the force for that normativity. Pragma-dialectics yields a set of rules, but, I would argue, there is no fully repeatable and explainable procedure which the student may follow in order to evaluate any particular instances of argumentation. The question of how well real world argumentation situations can be mapped onto the model of the Critical Discussion is also worth raising. The relationship between pragma-dialectics and the work set out in the paper is discussed in section 4.6 below.

It is against this background that the IAP has been constructed: it attempts to follow Bermejo Luque's suggestion and provide a standard of 'goodness', here referred to as *acceptability*, and to provide a method for its assessment in the form of a step-by-step procedure. Unlike the two models

mentioned, however, it is not based on a strict definition of argumentation as a variety of speech act, which might be objectionable to many scholars in the field and is certainly restrictive in its scope. It is one of the fundamental, motivating principles of both the IAP and the wider evaluation system which it informs that they enjoy the broadest possible application for argumentation theorists, regardless of their particular school of thought.

Although it may well be the case that an individual 'stands to benefit from evaluating objectively the justifications and arguments presented by others and from accepting or rejecting them on the basis of such an evaluation' (Mercier & Sperber, 2017, p. 333), the form of evaluation put forward here does not presuppose any reasons why it may be conducted. That said, ultimately argumentation theory must provide tools which chime with the real-life experience of arguing. That reality is often messy, imperfect and *ad hoc*. The aim of the IAP is to take into account the aspects of the discourse environment which are relevant to us when evaluating arguments and to characterise them systematically in a way which leads to a repeatable, explainable, and broadly applicable evaluation procedure.

2. CAPNA – a system for evaluation

The CAPNA is a structure designed to make systematic, repeatable, and explainable argument evaluations possible. It makes use of a number of Procedural Questions (PQs) against which arguments are tested. A full description can be found in Hinton (2021, ch. 11), but a brief overview, with diagrams setting out the parts of the procedure and their relations to one another, is provided here. The more detailed foundations behind the Process level of analysis, which is based on the IAP and is the focus of this paper, are described below in sections 3 & 4. It should first be explained just what is meant by the three qualities: systematic, repeatable and explainable. The procedure is systematic in that it attempts to take into account all relevant aspects of an argument and investigate them in a thorough and orderly fashion, not favouring one set of priorities – be they pragmatic, semantic, dialectic, rhetorical or logical – over another. That is not to say that the analyst using the procedure must consider all of these factors as equally important, or even important at all, only that the CAPNA itself provides means to test all of them and does not contain within it any assumption of their relative importance. The procedure is repeatable in the sense that the path of evaluation is clear and ordered and can be followed by any number of analysts or by the same analyst any number of times. This

does not mean, however, that the evaluations reached will always be the same, or even that they should be: one of the key goals of the CAPNA is to show precisely at what point disagreement between analysts in evaluations occurs. It is this same possibility which makes the procedure, or rather the evaluations it produces, explainable. Every rejected argument is rejected because it has failed to navigate (at least) one specific question. In this way, every criticism can be pin-pointed and the original argument can then be strengthened or defended in full knowledge of where its weakness is thought to lie. This characteristic is essential in the building of trust in the system: there are no opaque or ambivalent judgements.

The structure of the procedure is founded on a simple definition of argumentation which is intended to be all-embracing and to allow the broadest scope possible, both theoretically and in practice[3]. Argumentation is defined as: *The expression of reasoning within a process.* Each of the three elements of the definition can be easily explained. It is fundamental to the idea of an argumentative exchange, as opposed to any other form of discourse, that it involve the giving of reasons. I understand this broadly, in the sense of *rationale* proposed by Michel Dufour (2017), rather than the narrower view of the pragma-dialecticians who propose that argumentation has a certain purpose and arguers a certain intent (van Eemeren & Grootendorst, 2004). That means that any discourse situation which involves the giving of reasons can be described as containing argumentation. Secondly, this reasoning must be in some form expressed, even if only to oneself: I take the term reasoning to mean that internal process of calculation which is then put into words, although the degree to which abstract logical thought without language is possible is a question of some doubt. For the purposes of argumentation theory, however, this need not be a matter of great concern: one stage of analysis in the CAPNA looks at the premises and conclusion from the point of view of their logical structure, and another examines the language used, in the full knowledge and acceptance that the close inspection of the form of expression will often alter our understanding of the reasoning lying behind it. The division is there to serve us in our understanding, not to proclaim a truth about human cognitive processes. The third element is the process and that will be the principal concern of this paper. It is suggested that while an argument might be given without context, written on a blackboard in a lecture perhaps, all instances of the employment of arguments take place within some discursive context: they are part of a process of one kind or another, and that is what gives us the term argumentation, not just an argument, but an argument in use. This is the view found also in *De Topicis Differentiis*:

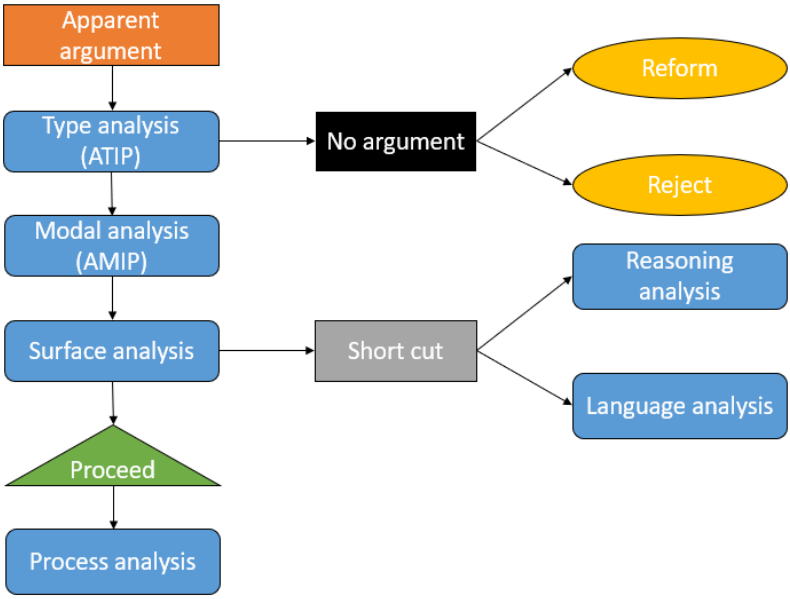
> Argument and argumentation are not the same, however, for the sense (*vis sententiae*) and the reason enclosed in discourse (*oratio*) when something [that was] uncertain is demonstrated is called the argument; but the expression (*elocutio*) of the argument is called the argumentation. (Boethius, 1978, p. 30)

The CAPNA, then, has three main stages of analysis: Process, Reasoning, and Language. These are preceded by an Initial Analysis stage (figure 1) which itself consists of three parts: an argument type analysis, an argument mode analysis, and a surface analysis. The first of these is carried out using the Argument Type Identification Procedure (ATIP) developed by Jean Wagemans (2021), which establishes, firstly, that there is an argument present, and, secondly, what type of reasoning it involves, as per the categories in the Periodic Table of Arguments (Wagemans, 2016). The approach taken by Wagemans has the great advantage of being, like the rest of the CAPNA, fully procedural and explicit. It does not involve the kind of matching of patterns necessary when employing argument schemes, for example (see Walton et al. 2008). This procedure is strictly one of identification of reasoning structure; it contains no evaluative content either of that reasoning form or of its appropriateness in the given context. The repercussions of this identification are largely seen in the later Reasoning Analysis. The second part employs the Argument Mode Identification Procedure (AMIP) which characterises an argument according to a number of parameters of how and why arguments may be delivered. These modes are discussed at length in Hinton (2021, ch. 5), but of relevance to the Process analysis are the distinctions of Formalised/Informal and Public/Private, as these affect the two principles of the IAP described in sections 4.4 and 4.5. Naturally, a great deal more could be said both in description and justification concerning these preliminary procedures. The length constraints of a journal article do not permit this, but it is important to bear in mind that these identifications are non-essential to the main CAPNA analysis, and independent of the informal argument pragmatics described herein. Any analyst who rejects the validity of these procedures can still employ the procedural questions and answer them fully. Both identification procedures are intended as aids to evaluation, not the bases of it.

Finally, the surface analysis allows for the application of the evaluator's experience in forming an impression as to what the greatest weakness of the argument is likely to be, and jumping to the corresponding section of analysis accordingly, if desired. There is no strict requirement for the PQs to be asked in a set order, so where the analyst believes the premise of the argument to be false, for instance, PQs relating to premise acceptability in

the Reasoning Analysis section can be asked at once. This surface analysis might be thought of as introducing an element of evaluation at the stage of identification, however, it is important to note that the intuition or experience of the analyst is only guiding them as to the order in which they evaluate aspects of the argument: they cannot jump from this stage straight to an acceptability judgement, since every judgement must be made on the basis of answers to the PQs.

Figure 1. CAPNA Initial Analysis



This flexibility in the course of the analysis does not, however, undermine the importance of the overall structure: knowing the type of error that makes an argument unacceptable – of process, of reasoning, or of language – is as valuable to the evaluator as knowing which particular procedural question exposed it. The three stages examine very different aspects of the argument and it may well be that certain analysts will have greater skills and interest in one of those aspects, or that a particular type of discourse will require particular attention to be given to one of them.

In this paper, the focus is on the Process analysis, but a few words concerning the Reasoning and Language analysis stages are in order. Firstly, the Reasoning analysis is conducted on a standardised form of the argument, equating to the structure 'x because y', as per the methodology of the ATIP. Certainly, a great many considerations are involved in making this recon-

struction, amongst them issues of the pragmatics of meaning, and these are discussed by Wagemans (2023). It is important to bear in mind that the analyst is expected, in general terms, to understand the language of the arguer: if the original statements have been misunderstood or misinterpreted by the receiver, no method of analysis or evaluation can be to any avail. The CAPNA is not designed to perform normal linguistic processing. The other stages of analysis take into account both the standardised form of the ATIP and the original text.

Secondly, the Language analysis stage, although based on the Informal Argument Semantics (IAS), relies in part on an understanding of the pragmatics of language. The borderline between pragmatics and semantics is not, of course, always clear, and the semantics is designed to look deeply at meaning: a task into which pragmatic concerns will surely enter. In particular, one of the rules for this stage is that the argument must be complete: this means that implied premises and any other relevant implicatures of either the premises or conclusion should be made explicit. These matters are discussed in Hinton (2020, 2021). The question may then arise as to why the focus here is not on this pragmatic element to the linguistic analysis: the answer is that while the application of pragmatic theory to argumentative texts is a rich field of research, the goal of this paper is not to apply the pragmatics of language to arguments, but to apply the fundamental principles of pragmatics to argumentation, creating an Informal Argument Pragmatics. The following section sets out what this means.

3. Informal Argument Pragmatics

If a large part of pragmatic theory in linguistics is concerned with the issue of 'How to do things with words' then, by extension and analogy, the IAP is an attempt to explain how to do things with arguments. The most basic idea of the classic text referred to, that 'it is always necessary that the *circumstances* in which the words are uttered should be in some way, or ways, *appropriate*' (Austin 1962, p. 8), is carried over and applied specifically to the practice of argumentation. Austin gives an example of what he means by appropriate circumstances for a performative function: in order to place a bet by saying 'I bet...' it is necessary that the event on which one wishes to bet has not already taken place. If that condition is not met, the words one utters can still be understood, but they are unable to perform their intended function, and no act, of betting at least, is carried out by saying them. This is the case too with the making of arguments: one's statement does not lose

its meaning in the semantic sense when it falls foul of the pragmatic norms of argument; indeed, it may contain much that is persuasive, but it fails to play a role in the discourse because the circumstances of this occasion or argumentation in general are inappropriate for it.

Pragmatic appropriateness and argumentative acceptability are not, of course, the same thing, and there is a difference between understanding what force an utterance has and judging it with an evaluation, but there are some interesting parallels between Austin's ideas and the way in which argument has traditionally been studied. He states that:

> Besides the uttering of the words of the so-called performative, a good many other things have as a general rule to be right and to go right if we are to be said to have happily brought off our action. What these are we may hope to discover by looking at and classifying types of case in which something *goes wrong* (1962, p. 14).

The classification of types of case in which something goes wrong looks very much like the work of fallacy theory. From Aristotle's thirteen sophisms forward, philosophers studying argument and reasoning have been preoccupied with the search for such types and their arrangement into classes. Austin, of course, goes on to list 'some at least of the things which are necessary for the smooth or 'happy' functioning of a performative' (1962, p. 14) and this is an area where argumentation theory has, perhaps, been less prolific. Both the IAP and the semantics which forms the basis of the language evaluation component of the CAPNA, set out five key attributes which are necessary for the 'happy' or acceptable functioning of an argument. These are at once more precise and further reaching than, for example, the RSA – relevance, sufficiency, acceptability – criteria of Johnson and Blair (2006) or Trudy Govier's ARG – acceptable, relevant, good grounds – conditions (2010), which only address the reasoning element of argumentation and give little indication of how compliance may be assessed. At the same time, they perform a rather different function from that of the 15 'Rules for a critical discussion', outlined by van Eemeren and Grootendorst (2004, p. 135–457), a comparison I return to below.

A second point worth noting is that Austin immediately makes a distinction between infelicitous utterances which are 'misfires', where 'the procedure which we purport to invoke is disallowed or is botched' and, thus the intended act is not achieved, and those which are 'abuses', that is 'infelicities where the act *is* achieved' (1962, p. 16). He warns the reader that these are technical uses of these terms which we should not interpret in the everyday sense, but still it does seem as though a similar distinction between types

of fallacy might be valuable: there are arguments which are 'botched' and fail to fulfil their function, and there are arguments which do achieve their purpose, but do so in a 'hollow' sense. This could be understood as reflecting the difference between the accidental, clumsy employment of fallacious arguments and their intentionally manipulative use. However, as tempting as this division is, the difficulty of reading the intentions of arguers means that categorisations of fallacies have generally shied away from drawing it. For our purposes, a better analogy between Austin's performatives, referred to above, and the arguments we want to evaluate would be to consider 'misfires' as the arguments which do not perform their function of *contributing to the debate*, regardless of their success in persuasion or the intention of their proponent. 'Abuses' would be arguments which are admitted to the debate but are found on closer inspection not to fulfil the necessary conditions of an acceptable argument. Looked at in this way, the Process stage of the CAPNA is largely interested in misfires, and the remaining stages focus on abuses.

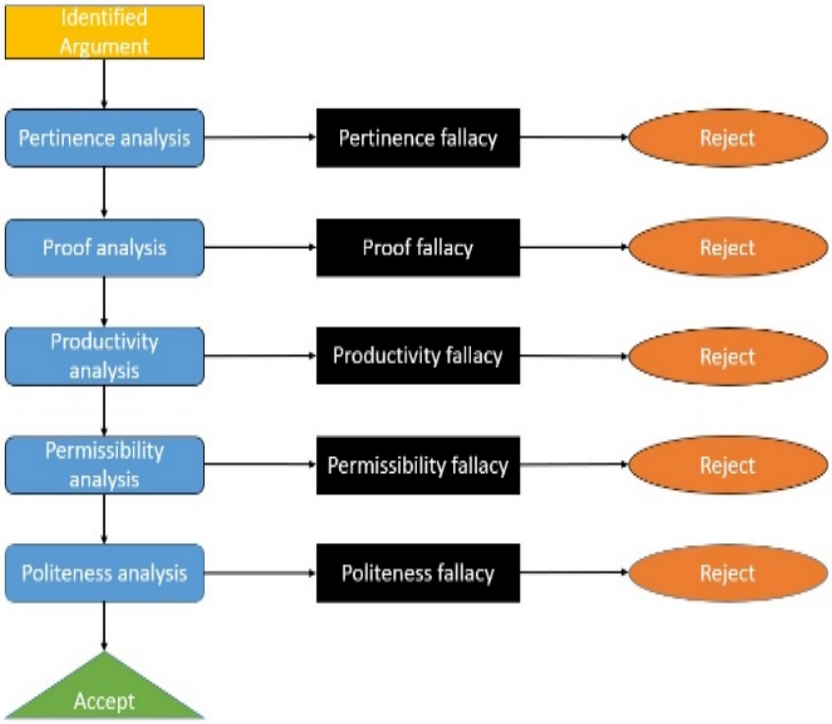
It is important at this point to reinforce the point that the Process analysis is based on the IAP, but they are not the same thing. The pragmatics establishes five principles, which may be characterised as rules or maxims, and the analysis stage is formed of the questions which test a particular argument against those rules. The answers to those procedural questions allow the analyst to make an acceptability evaluation, but they may also be used simply in the description and interpretation of the act of giving the argument.

4. The five Ps of Good Process

Although it is important not to get overly involved in mere terminology, I refer to the quality required for an argument to be of good process as 'appropriateness'. The principle of appropriateness, then, is analogous to the principle of relevance (Wilson & Sperber, 1986). This is not the place for a discussion of the broad literature on relevance, but as Wilson and Sperber state that relevant input is that which has 'cognitive effects', or makes 'a worthwhile difference to the individual's representation of the world' (2004, p. 608), so we may state that appropriate arguments are those which make a difference to the discourse: that is, they are admitted to it; they touch upon its matter; they are accepted as, at least, worthy of some degree of consideration. The over-arching principle of the appropriateness of an argument can be teased apart and further elaborated into five max-

ims of argumentation process, each related to a norm or set of norms, and forming five corresponding stages of analysis. In this section, the five stages are explained and justified, and a selection of the PQs which correspond to them are presented (table 1). For each of the categories there is a general rule, adherence to which governs the acceptability evaluation.

Figure 2. CAPNA Process Analysis



4.1. Pertinence

Rule: The conclusion of the argument must be pertinent to the given discourse.

The term 'pertinence' is designed to refer more precisely to what is commonly, and not always clearly, meant by 'relevance'. This is necessary, since within the IAP there are ways in which an argument can be deemed irrelevant to the process, even when it does pertain to the issue at hand. Pertinence, then, is simply the quality of having to do with the matter which is under discussion – what would come under Grice's maxim of relation (Grice, 1975). As with other elements of the evaluation process, this is to

a degree a subjective measure, and it may be influenced by the analyst's understanding of the function of the argument (Hinton et al., forthcoming). This pertinence of subject, what the argument is concerned with, is to be distinguished from relevance within the reasoning itself. An argument which draws an irrelevant conclusion from its premises would be found to commit a fallacy at the Reasoning stage of the evaluation.

4.2. Proof (burden of)

Rule: The argument must accept the burden of proof.

The responsibility of an arguer to accept the burden of proof when putting forward a proposition has been explicitly recognised in the literature since at least Locke. He uses the term *argumentum ad ignorantiam* to describe the practice where those trying to 'drive others and force them to submit to their Judgments [...] require the Adversary to admit what they allege as a Proof, or to assign a better' (Locke 1690, Bk IV, Ch. XVII, §20). More simply, when an arguer expects that the mere statement of a standpoint is enough to make it accepted until it has been disproved, that arguer is unfairly shifting the burden of proof onto the adversary. The adversary must now prove that the standpoint is wrong, while its proponent sits idle. Any argument, then, which bases its conclusion on the lack of an argument against it, is to be rejected without further examination as it is a denial of the responsibilities of the arguer within the given process. As Walton notes in his description of the concept, 'burden of proof only makes sense in relation to a concept of argument as reasoned dialogue, where there are two sides to the argument' (1988, p. 239): it is very much a quality of the process of arguing rather than of the arguments themselves.

4.3. Productivity

Rule: The conclusion must add something to the process. Conclusions should not be the same as premises.

In formal logic, circular reasoning is considered valid: this is one reason why formal logic is a poor tool for the evaluation of natural language reasoning, where circularity and 'begging the question', that is, assuming the conclusion is true in the construction of the premises, have traditionally been considered unacceptable. The difference being that logical relations and the formulae expressing them simply exist, but dialogues occur for a reason, and

any statement that does not add anything new to the context, which is not productive, cannot be an acceptable argument. Note, this does not mean that such statements are meaningless or even inappropriate in conversation, only that they do not constitute an admissible contribution.

Support for the principle of productivity can be found in the first book (I 1) of Aristotle's *Prior Analytics*, where he gives a definition of the syllogism: 'A syllogism is an argument in which, certain things being posited, something other than what was laid down results by necessity because these things are so' (2009, 24b19–20). The key phrase here is, of course, 'something other than' which stresses the need for the conclusion to be different from the premises. This serves as a reminder that until quite recently all logic was informal logic.

Where the evaluator finds that the acceptability of the premises rests upon the truth of the conclusion which they are apparently supporting, the argument must be rejected. In many cases, this relationship may not become clear until the reasoning or language analysis stages, but this is one of the strengths of the CAPNA system: an argument which is flagrantly circular commits a fallacy of process because it represents an abnegation of the duties of the arguer, within that context. On the other hand, an argument found to be circular only after careful examination of its structure or its form of expression, would not be considered an abuse of process, but an error of reasoning or expression. Traditional notions of fallacy are ill-equipped to make such nuanced distinctions.

4.4. Permissibility

Rule: The argument content and offered evidence must be admissible to the given mode of discourse.

There are a number of ways in which an argument may be considered inadmissible and, therefore, rejected from the discourse, regardless of its cogency or other merit. The most obvious examples relate to specific rules of certain types of discourse: witness testimony in court, which is strictly regulated; anecdotal evidence in science, which is informally policed. Such rules may be written and officially enforced, or simply understood by participants, without explicit formulation. The same may occur in any particular dialogical situation: participants may agree to rule out certain topics or types of argument, as in the opening stage of the critical discussion in Pragma-dialectics (van Eemeren & Grootendorst, 2004, pp. 59–60), after some negotiation or from a tacit acceptance that they must avoid taboo or

uncomfortable themes. Rules, therefore, may be mode specific or dialogue specific.

Unlike pragma-dialectics, though, the maxim of permissibility is not purely devolved to intersubjective agreement. It is also at this stage that an outside evaluator may raise legal or ethical concerns about the form of argument being employed. Arguments which constitute 'hate speech', bullying or manipulation, may be rejected, with the evaluator required to offer a justification for that rejection if called upon to do so.

4.5. Politeness

Rule: The argument must be expressed in accordance with the social norms of the given mode of discourse.

The major difference between politeness and permissibility is that politeness refers largely to the form of expression, meaning that arguments rejected at this stage can usually be rephrased and re-evaluated, whereas an inadmissible argument cannot be so easily rescued. Rules on politeness may be semi-institutionalised, such as where the Speaker of the House decides on 'unparliamentary language' using a combination of judgement and precedent, or more individual. Where the latter is the case, an evaluator may decide that an argument is not appropriate to the discourse because of slurs, insults, or swearing, for example. Naturally, many arenas for argumentation expect a degree of verbal 'rough and tumble', and may have few, if any, norms connected with politeness.

At the same time, politeness is often associated with indirectness (Brown & Levinson, 1987) or conventionalisation (Blum-Kulka, 1987; Terkourafi, 2015), both of which might lead to difficulties in obtaining a proper understanding of the argumentative content of a particular piece of discourse. Indirect language may be considered to lack clarity, something which would be detected at the Language Analysis stage, although this would usually be repairable through a more straightforward rephrasing. Conventionalisation 'is inherently evaluative' (Terkourafi, 2015, p. 16) which might lead some arguments to be rejected because they are not expressed in the conventional manner, rather than because their language or intent is truly unacceptable in this context, or conversely, might mean some arguments are given undue credibility simply by virtue of their being expressed according to the conventions of the situations. Either way, it is clear that an analyst must take great care in moving from the assessment of degrees of politeness to the making of evaluative judgements.

Table 1

Selected Procedural Questions

Level of Analysis	Sub-levels	Procedural Questions
Pertinence	Topic relevance	Does the argument address the topic at issue?
		Does the argument introduce new topics to change the subject?
	Discourse relevance	If the argument is a response, does it accurately characterise the original argument?
		Does the argument contradict what has previously been agreed?
		Does the argument fulfil the role assigned to the arguer?
Proof	Burden of proof	Does the argument accept the relevant burden of proof?
		Does the argument deny the need for proof?
	Lack of evidence	Is lack of evidence cited as proof?
		Is that lack of evidence significant? Should such evidence be expected?
Productivity	Circularity	Is the argument conclusion assumed or stated in the premises?
	Tautology	Is the argument a tautology?
Permissibility	Mode specific	Is the argument of a type formally admissible in this mode?
		Does the argument contain implications of facts or opinions inadmissible in this mode?
	Dialogue specific	Does the argument comply with any stipulations made by the participants in the dialogue?
		Does the argument take unfair advantage of one of the participants?
Politeness		Does the language of the argument meet norms for politeness in the given mode?

4.6. The 5 Ps and Pragma-dialectics

Before moving on to show how these questions operate with an example, it is worth noting the similarities and differences between the categories described above and the rules for critical discussion set out within the pragma-dialectical approach. Certainly, pragma-dialectics is the best known attempt to bring pragmatic considerations into mainstream argumentation theory and it has been a significant influence on the IAP, but many of its principles have been the object of considerable criticism (E.g. Lumer, 2010; Siegel & Biro, 2008). The first and most important difference between the rules

described by van Eemeren and Grootendorst and the categories given here is that while the IAP and the Process analysis of the CAPNA are directed firmly at individual arguments, 'The rules of the pragma-dialectical discussion procedure pertain to the behavior of people' (van Eemeren & Grootendorst, 2004, p. 135). The rules set out the entitlements and obligations of participants in the discussion and whether or not they have been adhered to is a matter for the participants alone, through the important concept of intersubjective agreement. The relationship between those rules and any possible external evaluation is, then, somewhat fraught. The rules of the IAP, on the other hand, are designed to guide any assessor, whether within or without the argumentative discourse itself, to make an evaluation of an argument's acceptability.

Secondly, in pragma-dialectics, the rules 'specify in which cases the performance of certain speech acts contributes to the resolution of the difference of opinion' (ibid.). This means that a purpose – the resolution of a difference of opinion – shared by the participants is assumed. While the rules can be applied in other situations, they are not designed to be so. The IAP, on the other hand, makes no assumption as to the motivation of the arguers and is applicable across a whole range of discourse situations – anywhere that an argument is advanced, in fact.

The highlighting of these differences should not be taken as a slight on the pragma-dialectical system. The Informal Argument Pragmatics has a very different purpose and is intended to be applicable in a wide range of situations rather than to describe a model discussion.

Nonetheless, there are some clear parallels between the systems and the IAP is certainly informed by the pragma-dialectical rules. Rule 2 (van Eemeren & Grootendorst, 1995) obliges arguers to defend their standpoints, that is to accept the burden of proof; while Rules 3 & 4 state that both attacks on and the defence of a standpoint must use arguments which 'relate' to that standpoint – that is, in the terminology of the IAP, they must be Pertinent. Rule 8 refers to the validity of the inference, something which the CAPNA deals with at the Reasoning stage, and Rule 10 to the linguistic form, which is considered within the Language analysis stage. The rest of the stipulations refer to what arguers may or may not do and are closely linked to the motivations of the critical discussion. As mentioned above, Permissibility is a matter for the participants, who are ruled by strictures of 'reasonableness' rather than explicit laws governing their intercourse. The category of Permissibility in the IAP is far more wide-ranging and can encompass any set of rules applied to any argumentative discourse. Similarly, Politeness is only an issue in pragma-dialectics if

the goal of dispute resolution is disturbed; within the IAP it is offered as a reason why one may deem an argument unacceptable within a particular context.

It should be clear from the foregoing that the IAP is not offered as a replacement for the pragma-dialectical rules, and makes no claim to superiority: rather, it incorporates some of the key norms and characteristics which provide the foundation for those rules and attempts to expand the scope of discourse analysis possible with a framework which does not take one variety of dialogue as paradigmatic.

5. Example Evaluation

In a recent paper arguing for a pluralist approach to fallacy identification, Eugen Popa (2021) analysed an editorial published in *The Lancet* in 1855 and written by its founder, Thomas Wakley. Wakley was responding to the views of John Snow on the transmission of cholera, a subject exercising both the scientific community and politicians of the time. It may be interesting to evaluate an extract from that same text here as both exemplifying the CAPNA process and contrasting it with another method of analysis.

Apparent argument:

> Dr. Snow next admits that gases from the decay of animal matter may produce vomiting but says this would not be injurious unless frequently repeated. Is this scientific evidence? Is it consistent with itself? Is it in accordance with the experience of men who have studied the question without being blinded by theories?

ATIP: In order to identify the argument type a good deal of reconstruction is necessary, along with the assumption that the rhetorical questions are to be answered negatively. We can then say that Wakley makes three arguments with the same conclusion: Snow's opinion is to be rejected because it is not scientific evidence, because it is inconsistent, and because it is not in accordance with the experience of fair judges. All three are of the canonical form *a* is *X*, because *a* is *Y*. They can, therefore, be categorised as first-order predicate arguments. The conclusion is a value judgement, and the premises are either facts or values: the accusation of not being scientific evidence (arg. 1) can be understood as a pejorative qualification and thus be labelled as a statement of value; calling Snow's opinion inconsistent

(arg. 2) is a logical judgment, another subtype of value premises; and the premise stating it not to be in accordance with the experience of trustworthy others (arg. 3) can be interpreted as something that is observable and a statement of fact. Arguments 1 and 2 are thus identified in the PTA as arguments from standard (St), and argument 3 is an argument from criterion (Cr). At the level of reasoning analysis, this categorisation affects the PQs asked concerning the strength of the lever – the warrant that allows the inference to be made.

AMIP: As the three arguments are contained in one passage and expressed in the same form, their modal analysis will yield the same result. The mode of arguing here is Informal (to the extent that it is not strictly rule-governed, although some limitations may apply), and Public (because published).

Process analysis:

For reasons of space, only the PQs likely to cause problems for each argument will be raised.

Arg. 1: Snow's opinion is to be rejected because it is not scientific evidence.

Pertinence *Does the argument address the topic at issue?*
If the argument is a response, does it accurately characterise the original argument?

Since it is highly questionable whether anyone has claimed that Snow's opinion is valuable because it is itself scientific evidence, rather than being based on it, the obvious point that an opinion is not such evidence commits a pertinence fallacy and can be rejected.

Arg. 2: Snow's opinion is to be rejected because it is inconsistent.

Proof *Does the argument accept the relevant burden of proof?*

Since Wakley's claim here is that his opponent has made a logical error, it would be reasonable to expect him to show wherein that error lies. He does not do so.

Productivity *Is the argument a tautology?*

The argument might well be rephrased as saying simply that 'Snow is wrong because he is wrong'; or 'Snow's argument is not logical because it's illogical'. Similarly to above, Wakley claims that Snow is wrong, but does not provide a reason. His argument commits fallacies of Proof and Productivity.

Arg. 3: Snow's opinion is to be rejected because it is not in accordance with the experience of fair judges.

This argument is based on an empirical claim: it is pertinent and productive, it accepts the burden of proof by providing a reason, it is reasonably polite despite the implication that Snow has been 'blinded by theories', and by raising the issues of expert opinion and peer agreement it is certainly a permissible type of argument within the context. That being the case, Arg. 3 can progress to the reasoning analysis, where the acceptability of the premise and the strength of the argument lever are assessed in line with its earlier classification.

In his own analysis of a longer passage containing this text, Popa identifies the fallacies of *ad hominem*, straw man, and *ad verecundiam*. He gives no method for this, only assuming that: 'the fallacies in Wakley's text are sufficiently clear and that they are performed in a context where the normative pull of reason and reasonableness is sufficiently strong to warrant the application concepts such as ad hominem, straw man, and *ad verecundiam*' (Popa, 2021, p. 404). He then goes on to illustrate a number of ways in which Wakley could dodge accusations of fallacious reasoning and to advocate a 'pluralist approach to criticism' (p. 409). I would suggest, however, that the reason such accusations may fail to stick is precisely because the fallacies were merely assumed to be 'sufficiently clear': their identification was not backed up by any procedure and appealed only to traditional conceptions, not to any explicitly defended set of argument norms. Whilst much of Popa's criticism of what he calls 'classical approaches' is justified and well made, I would suggest that the principle failings they exhibit are a lack of systematicity and a conflation of identification and evaluation steps. These are issues which the CAPNA, on the basis of IAP, can resolve.

6. Conclusion

The research project of which the work described in this paper is a part takes as its starting point the assumption that a tool for the systematic and repeatable evaluation of arguments would be of great use to analysts, researchers, and students of critical thinking. No such tool, with a fully elaborated, step-by-step procedure for producing a comprehensive assessment and an explainable acceptability judgement is currently available. In order for that evaluation to be comprehensive, it is suggested that the nature and circumstances of the discourse process within which an argument is put forward must be taken into account.

This paper has set out to describe an Informal Argument Pragmatics by means of which the elements of an argument specifically related to the dialogical process it aims to influence can be evaluated. There is certainly scope for this approach to be further developed, but it is suggested that the development of procedural questions which can provide an evaluation of the 5 Ps representing the maxims of appropriateness yields a technique for evaluation which is at once systematic, flexible, rigorous and nuanced. It is important to remember that the IAP forms the basis of the Process Analysis section of the CAPNA but is not synonymous with it: the analysis may well be extended and deepened in future iterations without changes to the principles on which it rests.

The example evaluation illustrates how the CAPNA arrives at explicit fallacy judgements in rejecting unacceptable arguments through the application of PQs. Whilst evaluators may answer these questions differently, the points at which they differ are immediately apparent, making the evaluations explicit and explainable. These qualities are not only useful in resolving disputes amongst those evaluating arguments, but also mean that the tool can be applied in environments where a decision procedure with clear criteria is required.

NOTES

[1] Bermejo Luque gives a spirited response to her critics in 2011b.

[2] See the appraisal of conductions provided in her (2019) where her model is implemented but not in a systematic way which could be followed by others.

[3] This definition is not intended to represent a universal truth and, therefore, replace all other definitions. Rather it expresses what *Argumentation* is taken to mean within this work, without imposing any such conception on anyone else.

REFERENCES

Aristotle (2009). *Prior Analytics Book I.* Translated with an Introduction and Commentary by Gisela Striker. Clarendon Aristotle Series. Oxford: Clarendon Press.

Austin, J. (1962). *How to do Things with Words.* London: Oxford University Press.

Bermejo Luque, L. (2011a). *Giving reasons: A linguistic-pragmatic approach to argumentation theory* Argumentation Library (Vol. 20). Dordrecht: Springer Science & Business Media.

Bermejo Luque, L. (2011b). Exchanging Reasons: responses to critics. *Theoria.* Revista de Teoría, Historia y Fundamentos de la Ciencia, vol. 26, 72: 329–343.

Bermejo Luque, L. (2019). The Appraisal of Conductions. *Informal Logic* 39 (2): 123–145.

Biro, J. & Siegel, H. (2011). Argumentation, Arguing, and Arguments: Comments on Giving Reasons. *Theoria*, vol. 26, 72: 279–287.

Blair, J.A. & Johnson, R. (2000). Informal Logic: An Overview. *Informal Logic*, 20 (2): 93–107.

Blum-Kulka, S. (1987). Indirectness and politeness: same or different? *Journal of Pragmatics*, 11 (2): 131–146.

Boethius, A. (1978). *De Topicis Differentiis*. Translated, with notes and essays on the text, by Eleonore Stump. Ithaca and London: Cornell University Press.

Brown, P. & Levinson, S. (1987). *Politeness: Some Universals in Language Usage*. Cambridge: Cambridge University Press,.

Dufour, M. (2017). Argument or Explanation: Who Is to Decide? *Informal Logic*, 37(1), 23–41.

Govier, T. (2010). *A Practical Study of Argument*. 7th edition. Belmont, CA: Wadsworth.

Grice, H. P. (1975). Logic and Conversation. In P. Cole & J. Morgan (Eds.), *Syntax and Semantics, 3: Speech Acts* (pp. 41–58). New York: Academic Press.

Hinton, M. (2020). Towards a Theory of Informal Argument Semantics. In: Dutilh Novaes, C., Jansen, H., van Laar, J.A., & Verheij, B. (eds.). *Reason to Dissent – Proceedings of the 3rd European Conference on Argumentation, Volume II*, 279–392. London: College Publications.

Hinton M. (2021). *Evaluating the Language of Argument*. Argumentation Library Vol. 37. Cham: Springer.

Hinton, M., Kobierski, M, Olkowska, W. & A. Sroka. (forthcoming). Functions of Argument: Changing minds about what? *Proceedings of the 13th International Conference of the Ontario Society for the Study of Argumentation* (OSSA).

Hitchcock, D. (2011). Arguing as Trying to Show That a Target-claim is Correct. *Theoria*, vol. 26, 72: 301–309.

Johnson, R.H., & Blair, J.A. (2006). *Logical Self-defense*. New York: Idebate Press.

Locke, J. ([1690] 1975). *An Essay Concerning Human Understanding*. Oxford: Oxford University Press.

Lumer, C. (2010). Pragma-dialectics and the function of argumentation. *Argumentation*, *24*(1), 41–69.

Mercier, H. & Sperber, D. (2017). *The Enigma of Reason*. Cambridge (Mass.): Harvard University Press.

Popa, E. (2021). Farewell to Fallacies (and Welcome Back!). *Philosophy and Rhetoric*, Vol. 54, No. 4, 397–420.

Siegel, H., & Biro, J. (2008). Rationality, reasonableness, and critical rationalism: Problems with the pragma-dialectical view. *Argumentation*, *22*(2), 191–203.

Terkourafi, M. (2015). Conventionalization: A new agenda for im/politeness research. *Journal of Pragmatics*, 86: 11–18.

van Eemeren, F. H., & Grootendorst, R. (1995). The pragma-dialectical approach to fallacies. In Hansen, H.V., and Pinto, R.C. (Eds.) *Fallacies: Classical and Contemporary Readings*, 130–144. University Park: Penn State University Press.

van Eemeren, F.H., & Grootendorst, R. (2004). *A Systematic Theory of Argumentation*. Cambridge: Cambridge University Press.

Wagemans, J.H.M. (2016). Constructing a Periodic Table of Arguments. *OSSA conference archive. 106* https://scholar.uwindsor.ca/ossaarchive/OSSA11/papersandcommentaries/106/

Wagemans, J.H.M. (2021). *Argument Type Identification Procedure (ATIP)* – Version 4. Published online December 30, 2021. www.periodic-table-of-arguments.org/argument-type-identification-procedure

Wagemans, J.H.M. (2023). On the hermeneutics of persuasive discourse: How to identify an argument type? *Journal of Pragmatics*, 203, 117–129.

Wakley, T. (1855). "Editorial." *Lancet* 65: 634–37.

Walton, D. (1988). Burden of Proof. *Argumentation*, 2, 233–254.

Walton, D. (2004). Classification of Fallacies of Relevance. *Informal Logic*, 24(1), 71–103.

Walton, D. (2015). The Basic Slippery Slope Argument. *Informal Logic*, 35(3), 273–311.

Walton, D., Reed, C., & Macagno, F. (2008). *Argumentation Schemes*. Cambridge: Cambridge University Press.

Wilson, D., & Sperber, D. (1986). Inference and Implicature in Utterance Interpretation. In T. Myers, K. Brown, & B. McGonigle (Eds.), *Reasoning and Discourse Processes* (pp. 241–263). London: Academic Press.

Wilson, D., & Sperber, D. (2004). Relevance theory. In L. Horn & G. Ward (Eds.). *Handbook of Pragmatics* (pp. 607–632). Oxford: Blackwell.