

Argumentation and Cognition: Can Pragma-Dialectics Interplay with Pragma-Semantics?

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Abstract

This paper addresses the possibility of a cognitive account of argumentation, by focusing on a tentative interplay between one of today's most influential theories of argumentation – van Eemeren and Grootendorst's Pragma-Dialectics – and Relevance Theory. With this purpose, I address the extent to which cognitive approaches to communication are able to incorporate pragma-dialectical insights.

Both paradigms share today an assumption of 'soft rationality' allowing a significant departure from formal logic conceptions of communication. These experience difficulties in accounting for successful argumentation relying on logically deficient arguments, i.e. fallacies. Acknowledging Pragma-Dialectics' contribution in this respect, I investigate the model's compatibility with a cognitive agenda based on assumptions entirely different from those of a normative agenda such as Pragma-Dialectics'. The difference between Relevance Theory's internal perspective and Pragma-Dialectics' external perspective on discourse gives evidence of a different approach to communication. In the end, this comes down to evaluating whether these divergences are, in argumentation studies, irreconcilable.

Keywords: *Relevance Theory, Pragma-Dialectics, Argumentation, Cognition*

1. Introduction*

Pragma-Dialectics (henceforth *PD*) is probably one of the most influential paradigms in argumentation studies today. Over the years, its designers, Frans van Eemeren and Rob Grootendorst (1984, 1992, 1996, and 2004), have developed a model that takes into account traditional as well as recent developments of argumentation. One of the reasons of its success is probably its characteristic comprehensiveness, since *PD* integrates insights from *dialectics* (where arguing is conceived as a social interaction obeying principles of critical rationality) and *pragmatics* (where communicating is about far more than merely producing and retrieving propositional contents) into a normative agenda.

PD builds on specific philosophical considerations, postulating that arguing is basically following a systematic critical-rationalistic procedure that obeys a list of norms set by the theorist; the critical-rationalistic view stipulates that 'systematic critical scrutiny of all fields of human thought and activity is the principle that serves as the starting point for the resolution of problems' (van Eemeren and Grootendorst 2000: 131). In this respect, van Eemeren and Grootendorst do not believe cognitive studies are required in the study of argumentation, though they can help:

There is no need to have detailed knowledge of all the cognitive processes that play a role in the interpretation of a discourse of text in order to be able to carry out an analysis based on externalized textual characteristics, but some insight into

these processes can, of course, deepen the analysis. (van Eemeren and Grootendorst 2004: 74)

After having established in what sense *PD*'s pragmatic departure from formal logic approaches to argumentation addresses certain fundamental issues, I will try to show that, indeed, cognitive insights can 'deepen the analysis', by introducing two main challenges *PD* faces, that I have labelled *upstream* and *downstream* issues. The first concerns what communicators do before they evaluate an argument: *PD* provides a model of interpretation that relies on Searlean Speech Act theory (henceforth *SAT*), which itself has recourse to Gricean procedures of interpretation. I will show, in the light of well-known criticism of *SAT* by Sperber and Wilson (1995), that this model causes a few problems if we adopt a cognitive viewpoint. The second issue (*downstream*) refers to what communicators do after they have evaluated the argument, namely when a belief is fixed as stable. *PD* does not address these matters, and I will try to show that a cognitive account of argumentation should deal with the procedures by which a representation derived from an utterance can integrate the hearer's cognitive environment (i.e. when the representation is entertained as a true belief).

Having discussed the limits of *PD* from a cognitive perspective, I will address its tentative compatibility with Relevance Theory (*RT*). In doing so, I will look at both theories' aims and methodologies, as representatives of two orientations pragmatic studies of communication take today. My claim is that such interplay can prove fruitful, provided some fundamental adjustments are made. In this respect, I acknowledge the highly programmatic character of this endeavour, and assume that further research is definitely required in view of a cognitive model of argumentation.

2. The pragmatic turn of argumentation studies

2.1 Argumentation from a (formal) logic viewpoint

Argumentation has traditionally been studied by formal logic and semantics. These approaches hypothesise that natural language can be formalised via abstract formulae. This means that every sentence of a natural language can be translated into a formula, expressed in an artificial language designed to represent its structure and the relationships its constituents entertain with each other. Within this framework, an utterance is true if the conditions that make it true are met. So, for example, the utterance *Black swans exist* will be true only if the conditions under which *Black swans exist* are met, that is, if there exists at least an individual such that this individual has the property of being a swan and as well the property of being black.

Formal logic and formal semantics assume that sentence meaning representation is possible through an abstraction designed to explicate its structure and its internal dependencies. Since they are considered abstractly, sentences are conceived as non-contextualised meaningful entities. This is roughly what Cann (1993) has in mind: 'semantics is the study of meaning abstracted away from those aspects that are derived from the intentions of speakers, their psychological states and the socio-cultural aspects of the context in which their utterances are made' (Cann 1993: 1).

This is true for single sentences, but also for sequences of sentences, for instance when they are combined into an argumentative scheme. Within this framework, dealing with sound argumentation implies dealing with truth, and as seen above, truth is assessed by looking at truth conditions. Assessing the validity of an argument hence

consists in making sure that the truth of its conclusion follows from the truth of its premises. This kind of reasoning applies to a finite set of basic argument schemes, such as the *modus ponens* ($P \rightarrow Q$, P , therefore Q), as illustrated by (1):

(1) Premise 1 ($P \rightarrow Q$): If there is fire in a room, then the temperature in that room will rise within minutes.

Premise 2 (P): There is fire in this room.

Conclusion (Q): The temperature in this room will rise within minutes.

The aspect of formal logic approaches to argumentation I want to stress here is the fact that their system applies to abstract representations, i.e. sentences, or sequences of sentences (as opposed to *utterances*), irrespective of their situational conditions of realisation. Accordingly, their application to ‘real-life’ argumentation raises certain issues. This might be a consequence of what we call the *underspecification of semantic meaning*, namely the fact that a proposition does not linguistically encode its full meaning. Implicit or unarticulated constituents of meaning (see Perry 1986) play a decisive role in interpretation; formal logic has trouble capturing all these, as we shall see next.

Indeed, it must first be noted that we seldom use canonical forms of logical deduction schemes (for instance the *modus ponens* illustrated above, in (1)) when we argue. Even if the underlying form of an argument can match one of these conceptual schemes identified by logicians, the actual utterance usually differs from it, sometimes to an extent that makes its reconstruction quite difficult, although our mind usually has no trouble in doing so. The discrepancy between the abstract structure and its use in an argument, among other reasons, has led to the view that formal logic could benefit from some complement.

Second, we can argue without using specifically argumentative connectives, and still communicate causal justification. This entails that interpretation also relies on decisive elements that are external to the sentence. Take for instance (2) and (3):

(2) Winston fell unconscious. The burglar hid his bludgeon back into his coat.

(3) Let’s take an umbrella, or did you want to get wet? (van Eemeren and Grootendorst 1992: 47)

Even if no linguistic argumentative pointer direct us to understand the second sentence as representing the cause of the event represented in the first one, (2) is perfectly unproblematic, since we can interpret that Winston fell unconscious *because* the burglar hit him with a bludgeon. We are able to infer this kind of relation because of background knowledge and contextual information, which are not linguistically nor conceptually encoded into the stimulus. The consequence of this is that our mind relies on mechanisms that do not rely exclusively on some kind of ‘hard rationality’.

In (3), the proposal is followed by a question that clearly has to be interpreted as an argument meant to sustain the claim that the speaker and the hearer should take an umbrella. However, no explicit argumentative pointer favours this interpretation (the linguistic connective ‘or’ does not semantically encode causality, but disjunction). Van Eemeren and Grootendorst explain the causal relationship by putting forward that the first clause is not literally a standpoint (you cannot answer *I disagree* to *let’s take*

an umbrella) and that the second is just a yes/no question. I would also add that the alternative offered in the second clause is somewhat ridiculous (no one would at first glance be inclined to get wet); as such, it is easily disposable, and reinforces the initial proposal. Moreover, from a strictly semantic point of view, we cannot even decide whether (3) carries argumentative force or not. What if the speaker considered that the hearer had reasons to get wet (because he/she likes it, or for any other possible reason)? In this case, (3) would not be argumentative, but strictly interrogative. The point is that we cannot explain why (3) can be argumentative by virtue of its semantic or logical properties, without calling upon the context. Just as in (2), it is only *pragmatically* that we can infer argumentative force from (3).

Logical approaches can also have trouble explaining causal relationships even in occurrences where explicit argumentative connectives are used, such as (4):

(4) I don't support Bush, because Bush is Bush.

Bush is Bush is a tautology, so under logical considerations, it would be totally uninformative, which in turn would make it a weak argument. However, when processing (4), we are led to infer that by uttering *Bush is Bush*, the speaker meant something more than just asseverating some trivial proposition such as 'Bush = Bush'. Rather, *Bush is Bush* being introduced as an argument by the connective *because*, we will try to find an interpretation that satisfies its argumentative function. And we can perfectly well come up with a plausible conclusion, even if logically, – or semantically – such a conclusion about the second clause's interpretation is not encoded.

As Dascal notes, 'our 'natural reasoning' often deviates from the norms of correct reasoning'. We should consequently be out for an account of 'a wide range of ways of extending our knowledge that cannot be handled by formal logic alone' (Dascal 2005b: 5). Formal logic should thus be interfaced with other approaches, such as a pragmatic theory of argumentation. This is precisely how van Eemeren and Grootendorst envisage their model. They started from – though they did not limit themselves to – a pragmatic perspective, shaped by the idea that language is a social practice, and that communication is about doing things in addition to saying things. Departing from formal – or classical – logic, which addresses causal conceptual relationships between sentences, *PD* addresses argumentation in terms of the *utterances* performed by a speaker who wishes to convince a hearer of the tenability of her/his standpoint. This pragmatic account, in my sense, is one of the strong contributions of *PD* that led to a 'pragmatic turn' in argumentation studies.

2.2 Pragma-dialectics: Argumentation as a social practice

As van Eemeren and Grootendorst conceive it, '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 and Grootendorst 2004: 1). The overarching contribution of *PD* is to consider argumentation as a phenomenon of actual interaction, in addition to a matter of abstract conceptual structures. This benefits the theory by adding contextual data as parameters of crucial importance.

Arguing is resolving a difference of opinion by advancing propositions sustaining the claim whose acceptability is being questioned. This presupposes first that there are two participants, one of them casting doubt on the acceptability of the other's

standpoint.¹ As a result, argumentation is a dialectical process: not only does it involve the participation of two individuals working out the resolution of a dispute, but it also requires systematically submitting of statements to doubt, therefore forcing their proponents to defend them.

One feature of *PD* is the model's ambivalence, in that argumentation is conceived of both as a process and as a product: 'The term *argumentation* refers at the same time to the process of arguing ('I am about to complete my argumentation') and to its product ('This argumentation is not sound')' (van Eemeren and Grootendorst 2004: 1). Being a process, it is conceived as a goal-oriented activity realised by the speaker's performance of speech acts. As a product, argumentation is the result of this process, i.e., the performance of argumentative speech acts. These considerations pertain to the point of view of argumentative 'production'.

However, *PD* also envisages the perspective of reception through its analytical application. It provides in effect a model for argument evaluation that aims at assessing whether an argumentative sequence can be deemed acceptable:

Using the [critical discussion] model as a guide, the reconstruction aims to produce an *analytic overview* of all components of a discourse or text that are pertinent to the resolution of a difference of opinion. Pursuing this aim involves examining exactly which points are at issue, which procedural and material points of departure are chosen, which explicit, implicit, indirect, and unexpressed arguments are advanced, which argument schemes are used in each single argumentation, and how the argumentation that is formed by combining single argumentations is structured. (van Eemeren and Grootendorst 2004: 96)

From an epistemological point of view, *PD* is based on *SAT* (following Austin (1962) and Searle (1969)) and on Gricean pragmatics, in the sense that the interaction in which argumentation is embedded follows conventions and complies with an elaborate version of Grice's Cooperation Principle, the 'Communication Principle' (See van Eemeren and Grootendorst 2004: 76-77). *PD* regards argumentation as a social practice that observes certain conventional rules. In this respect, it partly matches the goals of discourse analysis, where discourses are seen as 'corpus wholes' and studied from the outside, in terms of their structure and the dependence relations their constituents have with each other.

2.3 The pragmatic model of critical discussion (*PD*)

The conceptual core of *PD* is the ideal model of the *critical discussion*. It is defined as follows:

By a *critical discussion* we mean a discussion between a protagonist and an antagonist of a particular standpoint in respect of an expressed opinion, the purpose of the discussion being to establish whether the protagonist's standpoint is defensible against the critical reactions of the antagonist. (van Eemeren and Grootendorst 1984: 17)²

Through a critical discussion, which is the ideal format an argumentative discussion should embrace, participants (protagonist and antagonist) exchange views in order to arrive at a resolution of the dispute by agreeing on the acceptability or unacceptability of the standpoint called into question. This procedure unfolds following – in its most recent version (see Van Eemeren and Grootendorst 2004: 136-157) – a set of fifteen rules 'intended to enable language users to conduct themselves as rational

discussants'. These are also 'calculated to prevent anything that might hinder or obstruct the resolution of a dispute' (van Eemeren and Grootendorst 1984: 151). In parallel, there are also ten commandments (See van Eemeren and Grootendorst 2004: 190-196) listing the prohibited moves that would be detrimental to the resolution of the dispute and which simplify the fifteen rules by focusing on prohibitions. Summing up, arguing requires the observance of critical-rationalistic standards set by the theorist, which underlie the rules for a critical discussion. Successful argumentation thus ideally requires a reasonable (in critical-rationalistic terms) behaviour to ensure the resolution of the difference of opinion at stake.

As for the analysis of argumentation, it is achieved by reconstructing the argumentative path undertaken by the participants. Argumentative moves, i.e. speech acts performed during the discussion, will be evaluated in terms of the extent to which they contribute to the resolution of the dispute, according to the ideal model of the critical discussion, and following the rules mentioned above. From the analyst's point of view, *PD* considers both the speaker and the hearer, as participants of the critical discussion.

In line with formal and informal logic, one of their concerns is centred on argument soundness/validity. However, this approach to validity differs from classical argumentation studies, because it is *pragmatic* (where *pragmatics* denotes, via *SAT*, a shift from propositional concerns to illocutionary ones, thus proposing a way of dealing with semantic underspecification and integrating contextual considerations) and *dialectic*, since argumentation is thought of as a social activity involving a discussion procedure regulated according to standards of critical rationality (see van Eemeren and Grootendorst 2004: 59 for a detailed discussion of dialectic developments of argumentation studies since the 1950s). In this respect, fallacies are no longer merely conceived as conceptual faults or logical mistakes, but rather as inadequate or forbidden pragmatic moves performed in argumentative discourse by a participant. Classical logic assesses validity relatively to the conceptual structure of argumentation, independently from utterance production, whereas *PD* does so relatively to the very *performance* of argumentation. In fact, *PD* makes fallaciousness become a matter of illocutionary inappropriateness, thus avoiding a restriction of its scope to propositional content.

Those speech acts that do not go by the rules of the critical discussion will be discarded as valid arguments insofar as they do not contribute to the resolution of the dispute and thus considered to be fallacious. In other words, fallacies are speech acts that violate the rules (i.e. the rules for a critical discussion, though it can be the case that these match speech act felicity conditions³). Let's take an example to illustrate this strong claim of *PD*.

(5) Winston's arguments are nonsensical; everybody knows he spent some time in a mental institution some months ago.

This example can illustrate a violation of Commandment # 6 ('Discussants may not falsely present something as an accepted starting point or falsely deny that something is an accepted starting point' (van Eemeren and Grootendorst 2004: 193)) as follows:⁴ if the fact that Winston was admitted in a mental institution has not clearly been established beforehand as an accepted premise by the participants, then (5) is fallacious in that it asserts that this has been the case. As we can see, here, the problem does not lie with the content of the utterance nor in its logical internal articulation; but within what the speaker *did* by uttering (5)⁵.

Sound argumentation is not believed to be just a matter of conceptual management of information, but a step-by-step procedure and a social practice that unfolds while observing precise rules. Accordingly, *PD* tries to be able to capture what formal logic and semantics could not account for. Since this is also one of the goals of cognitive pragmatics regarding a theory of communication, in the next section I will try to evoke a possible interface between these two approaches.

3. Interrogating *PD* from a cognitive pragmatic perspective

3.1 Upstream issues

Interpretation is a necessary condition for evaluation, since we need to make sense of any piece of information before we can evaluate it. So, intuitively, a fully-fledged theory of argumentation should address the question of *interpretation*, or at least include some module on which it can rely to deal with the question of meaning construction. This is an issue that *PD* addresses via its reliance both on *SAT* and on an elaborate version of Grice's framework.

However, as Dascal points out:

Current debates about the 'foundations' of Speech Act theory (...) and its critique (...) and of pragmatics in general (...), about how to develop an action-based dynamic and dialogical grounding of the study of language use (...), about the universality or culture-specific character of communicative competence and practice (...), about the 'correct' number of the conversational maxims (...) and the (in)sufficiency of the principle of cooperation (...) – all this shows that the field of research created by the pioneers is far from having secured sound philosophical foundations. Progress towards this aim requires further dialogue between dialogue researchers and philosophers. (Dascal 1998: 17)

SAT and Gricean pragmatics have indeed been called into question by more recent pragmatic approaches. Let's take a look at the substance of these objections.

SAT holds that an addressee can understand a speech act if s/he is able to grasp its illocutionary force, i.e. if s/he is able to know what kind of speech act is at stake (assertion, promise, request, order, and so forth). In order to identify the speech act that has just been performed by the speaker – and thus to understand it –, the addressee will need to place it into the right category. This implies recognising the speaker's *intention*; the means by which s/he does so are assumed to be conventional, i.e. it is because we know by convention that specific verbal expressions are used to achieve specific effects (such as understanding which speech act has just been performed) that we are able to recognise the speech act. For instance, it is indeed conventional to use yes/no questions such as (6), and other discourse sequences containing polite expressions and/or modality, in order to perform requests:

(6) Could you pass the salt, please?

SAT holds that identifying speech acts is decisive in interpretation, and that speech act identification is achieved by recognising, by conventional means, the patterns that the utterance reveals. According to Searle, communication will be successful 'if the hearer understands the sentence, i.e., knows its meaning, i.e., knows the rules governing its elements' (Searle 1969: 48). That is to say that speech acts have to obey certain conventional rules in order to be recognised by the hearer, and therefore understood. This account of interpretation conveys the idea that understanding a

speech act (i.e. any utterance) implies being able to classify it. However, this raises a few problems.

First of all, one single utterance can correspond to different speech acts. Nevertheless, *SAT*'s answer does not explain exactly how and why this is the case. Take for instance (7):

(7) We wouldn't want this subject to be mentioned in Laszlo's presence.

Depending on the context, (7) could either be a request, an assertion, an order, an advice or even a threat. In cases where no linguistic or prosodic pointers favour one interpretation over another, pragmatic approaches rely on contextual information to explain how we derive meaning. In particular, Searle says that this is the case, provided the 'utterance in a context can indicate the satisfaction of an essential condition without the use of the explicit illocutionary force-indicating device for that essential condition' (Searle 1969: 68). The context is believed to make up for the lack of explicit illocutionary force markers and allow satisfying the speech act's essential conditions; yet, this does not tell us concretely how it happens. *SAT* alone does not address scrupulously the question of *how* context is solicited to solve speech act indeterminacy (i.e. illocutionary force identification). This is probably why Searle called upon the Gricean framework to address this question when discussing indirect speech acts.

Sperber and Wilson (1995) criticised this view from the cognitive perspective of speech processing as follows.⁶ Basically, with respect to Speech Act theory, the arguments come down to the fact that it lacks explanatory adequacy:

It is one thing to invent, for one's own theoretical purposes, a set of categories to use in classifying the utterances of native speakers, or to try to discover the set of categories that native speakers use in classifying their own utterances. It is quite another to claim that such a classification plays a necessary role in communication and comprehension. (Sperber and Wilson 1995: 244)

What they mean is that *SAT* is not necessarily to be criticised for classifying speech acts, but that there are no clear or solid reasons to believe that this classification plays a role in comprehension. Stating that we are able to classify a speech act as an advice does not say much as to how, but mainly whether, we are able to do it. Sperber and Wilson take the example of a tennis player and make the following comparison: it is not because a tennis player is unable to recognise a lob, a volley, a backhand or a smash that he cannot perform one. The same applies to speech acts, according to the authors: you don't necessarily need to recognise the type of a speech act in order to make sense of it, or even perform it. It doesn't seem cognitively plausible to picture the mind reflecting upon speech act types in order to perform or interpret one since it is too costly, from a cognitive point of view, to compute an additional and unnecessary layer of information. All in all, *RT* would probably claim that calling upon conventional reasons and establishing a classification without explaining how we use it does not, from a cognitive perspective, shed enough light on the question of the role and the construction of context in the mechanisms of interpretation.

Sperber and Wilson also discuss the foundational works of H. P. Grice. His breakthroughs on meaning and communication allowed pragmatics studies to develop a model of inferential communication postulating the co-operation between communicators, and the idea that they follow and exploit certain communicative standards – or norms –, the four 'maxims of conversation' (quantity, quality, manner

and relation), when they verbally interact. The strong assumption of this paradigm is the idea that explicit and implicit meaning is calculated. This is done following a rational mental procedure that Grice calls the 'working-out schema'.⁷ Now, it has been argued, for instance in Wilson (2000 and 2003), that this explanation of meaning construction faces problems of cognitive plausibility (it seems unlikely that small children go through such procedures, even when they seem pretty good with implicature derivation)⁸, fails to explain how an implicature is retrieved, and thus merely shows how 'once constructed, it [the implicature] might be confirmed as part of the speaker's meaning' (Wilson 2000: 419). As a matter of fact, it is partly in reaction to the issues faced by Speech Act theory and by Grice's framework that *RT*'s model was built.

Consensus is consequently not achieved regarding the vast issue of meaning construction. However, for the past decade, cognitive pragmatics has started to develop an experimental agenda (see for instance Noveck and Sperber 2004). Experiments tend to confirm the idea that there are alternatives to a Searlean and Gricean account of meaning construction. In this sense, it could be useful to integrate these into a cognitive model of argumentation.

3.2 Downstream issues

I am interested here in the effects (i.e. the 'perlocutionary' effects) of argumentation, hence the label of *downstream issue*. *PD* does not focus on such an issue. It will certainly explain how argumentation unfolds and specify under which conditions a critical discussion is deemed valid. But it does not provide insights regarding the posture I would like to explore, namely that argumentation studies should also explain the effects of argumentation on people's beliefs as cognitive representations. One argues in order to convince, unless one just argues for the sake of arguing, which happens only when one decides to do so (as in an 'arguing contest'), not in ordinary conversation.

In line with the ambitions a theory such as *RT* nourishes, I am interested here in knowing if *PD* would be able to make an incursion into matters of belief fixation. Now, intuitively, we would expect sound arguments to convince (leading *ipso facto* to belief fixation) and fallacies to fail to do so. But things are far more complicated, since experience shows us that while sound arguments may fail to convince, fallacies may actually succeed. Consider the following examples:

(8) Winston: 'Why are you washing the potatoes if you are going to peel them anyway?'

Laszlo: 'Let me do things my way'.

(9) 'Four million Japanese people cannot be wrong. That was the number of people that rushed to purchase Dragon Quest on its release in Japan.'⁹

Reconstructing (8), it appears that Winston's standpoint is that Laszlo should not wash the potatoes. This statement is sustained by the argument that dirt comes off the potatoes when peeling them, and therefore follows the conclusion that it is unnecessary to wash the potatoes before peeling them. At first glance, this argument is sound, and could be pretty convincing. But what if Laszlo wants to deal with potatoes the way he was taught to by his parents (i.e. washing them first)? What if he considers that it is more pleasant to peel clean potatoes than potatoes covered with dirt? In other terms, what if Laszlo does not process the information under critical-rationalistic

standards? These different potentialities could overtake sound argumentation and lead Laszlo to reject the representation yielded by Winston's statement, even though the supporting argument was valid. More generally, this tends to show that belief fixation does not necessarily follow from valid argumentation – probably because other parameters enter belief fixation/rejection processes – and therefore that there are important nuances to add to the intuitive idea that sound argumentation makes its conclusion convincing.

Conversely, (9) may well not be ruled out as non-convincing, though it exploits the fallacy known as the *bandwagon fallacy*, or *Argumentum ad Populum*. The context is the release of an awaited videogame in Japan. By uttering (9), the journalist is actually communicating positive attitudes as to the game's quality. I can easily imagine that despite being fallacious, this type of argument can weigh in someone's decision to buy the game ('If everyone does, it must be good, so why not buy it too?').

It follows from these observations that the mind does not always follow critical and logical pathways when coming to entertain a belief as true. Otherwise, (8) would be unequivocally valid and would therefore lead to belief fixation, while (9) would not. Psychological and sociological studies, such as Milgram's famous experiments on obedience (Milgram 2004 [1974]), or Festinger's work on the notion of *cognitive dissonance* (Festinger 1957) have suggested that other parameters can influence people's beliefs and behaviour. These experiments, along with others, tend to suggest that argumentation is one process among other cognitive phenomena by which people are led to entertain beliefs as true. In this respect, it would make sense for argumentation studies to incorporate cognitive considerations and address the problem of belief fixation. The current multidisciplinary tendency of argumentation studies – addressed by linguists, philosophers, logicians, sociologists, psychologists, communication scientists and cognitive scientists – should thus come as no surprise.

Argumentation in *PD* is not conceived as an *online* cognitive process to the extent that it does not explicitly formulate interrogations about the mechanisms by which the human mind deals with communication. From a cognitive stance, *PD* does not literally *explain* argumentation. It certainly has two levels of explanation: the first is the *micro* level of speech act rules used in speech act performance and recognition. This type of explanation is not *internal* in a cognitive sense, since there is no recourse to cognitive procedures detailing how we understand speech acts. The second level is the *macro* explanation of the critical discussion procedure, which obeys to conventional norms set by the theorist. This level gives evidence of an *external* approach to language, where language is construed from without (as opposed to from within) the individual, as a social construct whose regulating principles govern people's behaviour in communication. My intention is to see whether this type of approach can host *internal* cognitive insights.

4. How could PD and RT be interfaced?

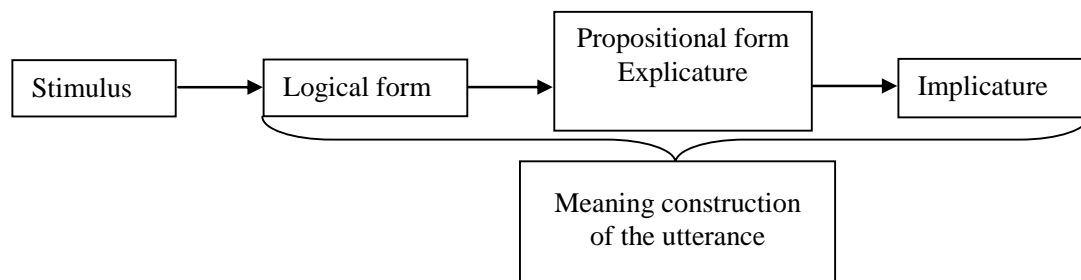
4.1 RT

RT is a naturalistic mechanistic theory of communication that describes and attempts to explain how meaning is constructed on the basis of contextualised linguistic stimuli. It is naturalistic in the sense that it addresses natural cognitive mechanisms that we humans deploy when processing communicated information. Relevance theorists try to explain the phenomenon of meaning construction, by detailing the

processes (contextualisation, enrichment with information the stimulus does not carry itself) that a communicative stimulus goes through in order to achieve its communicative function, that is, the conveyance of speaker meaning. One of the assumptions of this naturalistic approach is that it addresses *actual* phenomena, i.e. mechanisms intervening as we process information.

Communication in *RT* is conceived as a process presupposing an input stage (where the communicative physical stimulus is produced by the speaker and made available to the hearer) and an output stage (the mental representation achieved after the stimulus has been processed by the mind). The hearer derives first the logical form of the stimulus, which is a structured sequence of concepts corresponding to its syntactic and semantic structure. Then a propositional form is derived, mainly with the disambiguation of the logical form. ‘Explicatures’ are derived at this stage and correspond roughly to the propositional content of the stimulus. The mind then takes those conceptual representations as an input, and processes them together with retrievable contextual information, in order to produce implicatures¹⁰ and derive the speaker’s intentional meaning. Figure 1 shows how meaning construction works according to *RT*:

Figure 1. RT’s model of meaning construction



Let’s take an example:

(10) The dog is on the sofa.

Logical form: The concepts structure of this sentence is roughly articulated as follows: ‘There is an x and there is a y such that x has the property of ‘being on’ y’.

Propositional form: x = Basil, Laszlo’s dog; y = the sofa that is in the living room of Laszlo’s flat; ‘Basil is on Laszlo’s sofa right now’ (explicature).

Implicature: ‘Will someone get the dog off the sofa?’ By saying (10), the speaker may be implying that the dog should not be on the sofa, and therefore by uttering (10), the speaker may be actually asking the addressee to make the dog get off the sofa.

RT’s model treats mental representations almost like material objects that interact with each other according to a step-by-step procedure.¹¹ We will see in what follows that the model also tries to explain why this is the case.

RT provides a model of *how* meaning is constructed by contextualising an utterance and thus overcomes the difficulties that a simple code model would have explaining implicit components of information¹². In doing so, one could think that *RT* is positivistic¹³ since it addresses, in a mechanistic fashion, the question of explaining *how* we construct meaning the way we do. This would be the case if *RT* had limited its scope to what Figure 1 illustrates, i.e. the discovery of constant relationships

between facts – as opposed to the determination of causes why these facts to occur the way they do.

In addition to exposing how communication works, *RT* postulates the existence of a relevance engine ruled by an economy principle that explains *why* an output solution, in a given context, is preferred over another. Therefore, it is not positivistic in an exclusive descriptive sense; rather, it is positivistic in a ‘scientific’ sense that includes both description and explanation. The goal of *RT* is to account for how and why a particular interpretation is derived. According to Sperber and Wilson (1995), the human mind pursues efficiency; whenever confronted with some kind of processing, the hypothesis is that it will privilege, among several possible options, the option that yields the largest quantity of effects for the lowest amount of allocated efforts. In other words, the path the mind will take in processing information is the one that fits best the ratio between the effort required and the anticipated effect. *RT*’s definition of relevance rests on the idea that speaker’s intention and speaker’s meaning are the same thing, since any utterance carries an *informative intention*, i.e. roughly a propositional content, and a *communicative intention*, i.e. the intention of making the informative intention manifest.

This idea applied to communication leads to the following assumptions: the less effort it takes to derive a representation, the more it is relevant, and therefore the more it is likely to match the speaker’s intentional meaning. In parallel, the more contextual effects a representation produces in context, the more it will be relevant, and therefore, the more it will be likely to match the speaker’s intentional meaning. Both options evidently convey the idea that the representation with the best ratio between cognitive effort and contextual effect is the one which corresponds best to the speaker’s original intention. Sperber and Wilson consider the mind to be ‘geared towards the maximisation of relevance’ (1995: 266), that is, towards seeking equilibrium to optimise processing.

4.2 Is it actually feasible to integrate *PD* and *RT*?

In Oswald (forth.), I have discussed the possibility of making *PD* the *critical module* (in line with Chilton 2005) that *RT* lacks, while noting that it would require further work on the modalities according to which such an integration could be thought of. Building a cognitive account of argumentation would perhaps contribute to settle both *upstream* and *downstream* issues *PD* faces. On one hand, *PD* would take as an input the output of *RT*’s meaning construction procedures, and perform its evaluation to determine if the argument is sound or not. Downstream, this evaluation would become the input processed by the mind in order to determine if the representation is to be fixed as a stable belief or not. The underlying idea of this tentative interface is to make *PD* part of a causal chain of cognitive operations. Two directions have to be explored by further research on *PD*’s role as *RT*’s critical module.

The first relates to the triggering of *PD*. I have argued, in the light of examples (8) and (9), that the mind does not always follow logical or critical pathways when evaluating an argument. We need to address the question of *why* this is so. Following Petty and Cacioppo’s (1986) idea of a ‘central’ (rational or critical scrutiny of the stimulus) or a ‘peripheral’ (focusing on aspects distinct from the subject matter) cognitive route for information processing, we should look for the parameters that make the mind go ‘critical’ in some cases. This type of research calls upon psychological and cognitive insights about the way we process information. Also, it matches the general idea of a

‘soft rationality’ as defined by Dascal: ‘By ‘soft’ rationality I understand, broadly speaking, a conception of rationality that seeks to account for and develop the means to cope with the host of situations – theoretical as well as practical – where uncertainty and imprecision are the rule’ (Dascal 2005a: 58). Acknowledging that we do not always process the information in a critical way when confronted to arguments entails that there are other ways of processing information. This calls for an investigation on the triggering of the critical module.

The second issue relates to the proper functioning of the critical module. In Oswald (forth.), I have argued that there is no reason not to consider that our mind follows critical-rationalistic standards in the particular case of argumentation leading to belief fixation. In principle, this is acceptable, but only if we refer to a specific kind of information processing, and it does not capture cases where these standards are not followed (i.e. when we believe because we trust the speaker’s (apparent) benevolence, because we don’t think it is necessary to process the information critically,¹⁴ or for any other possible reason). It remains that an integration of *PD* and *RT* could still imply the preservation of *PD*’s philosophical substrata (i.e. critical-rationalistic standards of reasonableness, although these are not envisaged in a dialogical perspective). Programmatically, at least, these directions could seem worthwhile exploring.

Nevertheless, things get more complex if we dismantle *PD*’s architecture. *SAT* does not only provide the input of *PD*’s evaluative engine; it also entails that the performance of speech acts, by virtue of their social nature, creates *commitments* contributing to constrain and adjust the argumentative exchange along the way. Therefore, using *RT* instead of *SAT* to supply *PD*’s input (in the sense of a meaning construction module) would probably also, in the end, do away with the dialectical role of speech acts in a critical discussion, since *PD* would no longer be able to rely on *SAT*. This would result in a completely different model, far from the original theory of argumentation known as Pragma-Dialectics. This would be the first sign of an incompatibility between *PD* and *RT*.

A second source of incompatibility follows from the fact that *PD* is normative, while *RT* is not. *PD* assumes the model of the critical discussion to be *ideal*, recognising that ‘real-life’ argumentation can to a certain extent be different, and therefore that an *a posteriori* reconstruction is required to assess argument validity. This does not tell us how we actually argue, or if the participants of a critical discussion go by the rules as argumentation unfolds. It merely tells us how we *should* argue, and, *a posteriori*, whether the participants have obeyed the rules. Of course, pragma-dialecticians will say that the rules constraining a critical discussion are based on critical-rationalistic standards of reasonableness, and therefore that they specify one way of performing argumentation. However, as I have shown above, there are reasons to doubt that the mind of an individual, even if s/he is engaged in argumentation, systematically follows these standards. I certainly agree with the fact that it represents one way of processing arguments. But as it is quite clear by now, my claim is that it is not the only one, and consequently that a comprehensive theory of argumentation should address cognitive mechanisms and try to focus on what we actually do, in addition to focusing on what we should do. Numerous studies in cognitive science and psychology, particularly on the management of information by autistic subjects and children, have indeed been addressing these issues for over two decades now, among which Newcombe and Zaslou (1981), Tomasello, Farrar and Dines (1983), O’Neill (1996), Noveck and Sperber (2004), Bretherton (1991), Baron-Cohen (1995). This

experimental research should not be overlooked by scientific accounts of information processing, such as an account of argumentation.

5. Conclusion

Can we still say that an integration of *RT* and *PD* into a cognitive model of argumentation remains plausible? This could seem rather unlikely, unless we are willing to give up certain epistemological foundations of *PD*, notably its reliance on *SAT*. As noted in section 3.2., the reconsideration of *PD*'s architecture into a cognitive paradigm would imply two distinct directions for research: upstream issues would have to be addressed and empirically tested (which has already been undertaken, see for instance Van der Henst and Sperber (2004)) and downstream issues, on the other hand, would also need to pursue a cognitive ambition, as I tried to show above. However, integration necessarily involves some heavy restructuring.

The epistemological incompatibility between *PD* and *RT* could come as a surprise, since both claim to be pragmatic theories. It must however be underlined that they radically diverge in their account of communication: *PD* is an *external* approach to language, by virtue of its normative agenda and its conception of communication as a social practice, whereas *RT* is *internal* in that it conceives discourse as the result of individual mental processes exploiting the stimuli the outside world brings to the awareness of the individual.¹⁵ Slightly simplifying the picture, these two tendencies coexisting in the field of Humanities point to a dichotomy between that which stems from the social sphere and that which stems from the individual sphere. Although the task of diminishing divergences seems rather laborious, I believe that a simple clarification can set favourable grounds on which to build a fruitful collaboration. Let me elaborate on this very point.

Sociologic approaches usually consider cognitive approaches to exclude any type of concern about social phenomena, because these are not believed to be *material*, in that they easily escape full describability by virtue of their ineffability: you cannot hold a social construct in your hand and describe it like you could describe a physical object. Therefore, according to this view, these objects could not possibly be known the same way physical phenomena can, and as a consequence the positivistic methodology of 'hardcore' science should be discarded when addressing social matters. However, as things stand, if such social phenomena exist (as I think they do, if only on a representational level), then we can make mental representations and communicate about them. Therefore, why couldn't these representations (or social constructs) be part of cognitive processes – as inputs or outputs – the same way other types of representations are? This is how cognitive pragmatics would probably tackle the problem: social practices would be addressed via the mental representations we make of them, avoiding an external account based on underlying and determining principles of social interaction whose cognitive plausibility looks sometimes hard to defend. In relation to the overarching claim of this paper, I believe this is the kind of principle that could initiate a fruitful dialogue between social and cognitive approaches to argumentation studies.

* Patrick Morency needs also to be thanked for his necessary native speaker advice. I would also like to thank Louis de Saussure for the insightful discussions around this paper. Remaining mistakes are my own.

¹ There need not be two *actual* participants, since one can argue by oneself in order to judge the acceptability of a proposition by casting doubt on it and deciding upon reflection whether it is valid or not. However, casting doubt presupposes both a standpoint and its being called into question, and, by extension, it involves two participants (the one holding the standpoint, and the one calling it into question) – even if one of them remains *virtual*.

² The critical discussion produces an *analytic overview* of the discourse, which is a global picture of the argumentation that took place, divided in four stages: *confrontation* (making the standpoint explicit and accepted as a questionable standpoint), *opening* (the participants manifest themselves as parties – protagonist and antagonist – and determine whether there is a common ground to conduct a meaningful exchange), *argumentation* (participants advance arguments in order to overcome doubts regarding the standpoints), and *concluding* stage (the participants establish whether the standpoint has been successfully defended or not). It must be noted that these stages, except the argumentation stage, can remain implicit, but they have to be made explicit afterwards in the critical discussion in order to assess the resolution of the difference of opinion. See also van Eemeren and Grootendorst (2004: 57-62).

³ For a discussion of the conditions that have to meet for argumentative speech acts to be felicitous, see Chapter 3 of van Eemeren and Grootendorst (1992: 26).

⁴ It should be also noted that in some contexts, (4) can be purported to carry a fallacy known as *ad hominem attack*. This consists in introducing irrelevant premises about the proponent, in order to make him, and as a consequence his arguments as well, untrustworthy. This amounts to distract the hearer from validity checking of the arguments, which is a also fallacious move.

⁵ One could object that classical logic already addressed these issues, notably when dealing with fallacies shifting or reversing the burden of proof (that is, making your opponent prove that your own statement is wrong instead of proving yourself that it is right). The contribution of *PD*, however, is to be sought on the discursive level, to the extent that their study of argumentation broadens its scope to sociological considerations. Argumentation, as a social practice, is analysed as an *event* with social conditions of production, and therefore in relation to its context.

⁶ Since *PD* elaborates on *STA* in order to define argumentation as a complex speech act (also referred to as a ‘speech act complex’ in Chapter 2 of van Eemeren and Grootendorst 1984), these issues can also pass on to *PD*.

⁷ Grice’s ‘working out schema’ for conversational implicatures:

- (a) He has said that *p*.
- (b) There is no reason to suppose that he is not observing the maxims, or at least the CP [= Co-operative Principle].
- (c) He could not be doing this unless he thought that *q*.
- (d) He knows (and knows that I know that he knows) that I can see that the supposition that he thinks that *q* is required.
- (e) He has done nothing to stop me thinking that *q*.
- (f) He intends me to think, or is at least willing to allow me to think, that *q*.
- (g) And so he has implicated that *q*.

(Taken from Wilson (2000: 416). Also found in van Eemeren and Grootendorst (1984: 120)).

⁸ See Wilson (2000 and 2003) for a discussion based on evidence from experimentation in child psychology, by Bretherton (1991) Newcombe and Zaslou (1981), Tomasello, Farrar and Dines (1983), O’Neill (1996).

⁹ Taken from ‘Dragon Quest fires up gamers’, article by Seth Goolnik, April 14, 2006. Found at <http://news.bbc.co.uk/1/hi/technology/4907668.stm>.

¹⁰ *RT* builds on Grice’s conception of implicature. Sperber and Wilson criticized the classification of conversational maxims (quantity, quality, relation, manner); in their opinion, these can all be reduced to the maxim of relevance, which gives *RT* its name.

¹¹ This brief summary of *RT*’s conception of communication and meaning construction leaves room for two remarks that the scope and purpose of this paper will not let us develop extensively, but that deserve to be mentioned. First, it must be said that these processes are not believed to be necessary

reflexive – or to a certain extent conscious – by RT theorists, because they refer to what we actually do every time we communicate with someone, without even thinking about it (it would not be plausible to claim that we process all utterances by, for instance, literally asking ourselves the question of disambiguation; we just know how to disambiguate an expression, without necessarily having to do it step by step). So these can be unconscious processes, unlike cases where we consciously use our cognitive resources to process information, for instance when we hesitate between two decisions and we list the advantages and disadvantages of each in order to pick the most suitable one.

Second, when we describe a step-by-step procedure that unfolds over time, such as the one depicted in Figure 1, the question of the temporal order of the stages comes up. In other words, when dealing with a multi-stage process, we should ask ourselves if these stages are consecutive in time, or if they can be partly parallel, if not simultaneous. According to Saussure (2005), the different levels of interpretation could be deployed in parallel, aiming at a coherent set of representations which reinforce each other mutually. As he points out, ‘a strong implicature strengthens the hypothesis that the propositional form and other derived explicatures are correct, and in turn these strengthen the assumption according to which the ‘syntactical’ interpretation, i.e. the construction of the logical form, indeed corresponds to the speaker’s meaning’ (2005: 114, my translation).

¹² Code models, such as those inspired by works by Shannon and Weaver (*The Mathematical Theory of Communication*, 1949), seem inadequate in the sense that they do not account for semantic indeterminacy. Implicit representations have to be added to the semantic content, so that full comprehension of speaker meaning is achieved. To take a common example, ‘Could you turn on the light’ is literally nothing but a yes/no question: you could answer ‘yes’ and still fulfil the expectations of the required answer, because if you decode the information, what you get is a strict instruction to answer by yes or by no. However, and this is conventional, we understand this literal question as a request to turn the lights on, and we act accordingly. A code model would not be able to go beyond the literal level of communication – unless it were able to provide an incommensurable database of background information – and would therefore fail to explain how we are able to enrich the semantic meaning of an utterance.

¹³ I would like to thank Csilla Weninger for bringing up this issue during the question session of this talk, back in June 2006 at the University of East Anglia (CADAAD 2006). It allowed me to elaborate further on *RT*’s epistemological foundations (see section 3.1).

¹⁴ This goes in line with the idea of ‘shallow processing’, discussed for instance by Allott (2005). The idea is that the mind does not anticipate enough positive effects from the interpretation of the stimulus. As a consequence, the allocated effort is less important and the stimulus is not fully processed, thus allowing for ‘weak representations’ to be derived.

¹⁵ The reason why this kind of approach is often referred to as positivistic probably follows from the fact that it postulates on a very concrete level that cognition too exploits a causal chain between *events* (or material phenomena) and that it conceives the mind as an input/output processing machine whose functioning can be modelled and, to a certain ideal extent, known. Qualifying an approach as ‘positivistic’ often conveys some kind of pejorative image; I believe however that Humanities, from the point of view I tried to support throughout this paper, can gain from the clarity and the thoroughness characteristic of natural ‘hardcore’ sciences.

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