ISSA Proceedings 2014 ~ A Plea For A Linguistic Distinction Between Explanation And Argument

Abstract: There is no clear consensus about a difference between explanation and argument. After having explained why traditional points of view of informal logic raise a problem, I'll argue for a linguistic point of view on this question and show how rhetorical strategic moves can exploit the blurry frontier between explanation and argumentation. A third category seems necessary to introduce – "apparent explanation" – and two French connectives – "car" and "parce que" – will be used to describe differences.
Keywords: Explanation, argument, informal logic, linguistics, connectives, car, parce que.

1. *Introduction*

The aim of this paper is to highlight some linguistic insights on the difference between explanation and argument in order to make apparent some rhetorical strategic moves that exploit the blurry frontier between both them. In order to achieve that objective, French connectives "car" and "parce que" will be used at the end of the paper – but the main ideas should remain clear for non-French speakers.

I would like here to offer a slightly new point of view on a very old and common problem: how to distinguish between explanation and argumentation? I will offer here a linguist's point of view on this problem, which is often tackled by philosophers and critical thinkers. After having explained the linguistic clues I use to distinguish explanation and argument, I will discuss rhetorical strategies that exploit the appearance of an explanation to fulfil argumentative purposes. During this examination, I will need to speak about the French connectives "car" and "parce que", but non-French speakers will be able to understand what I would like to underline.

Broadly speaking, two points of view on a difference between explanation and argumentation can be found in the literature. The first one comes from a

philosophical side – mainly informal logic and critical thinking – and a second one comes from a linguistic side, which is perhaps less known outside French tradition on argumentation. There are problems within each of these sides: the old issue of differences between explanation and argumentation is still not resolved. Recently, McKeon (2013) argued for example that explanations should be considered as arguments. On the other side, Trudy Govier (Govier, 2005) has written that explanation and arguments are different, but some explanations can nevertheless be seen as arguments within different contexts.

Now the French linguist Jean-Michel Adam considers that explanations and arguments have different patterns, called sequences. He argued in a seminal book that argumentative sequence (inspired from Toulmin's model) differs from an explicative sequence by the explicit presence of a problem and a solution. Thus, example 1 must be seen as an explanation:
(1) Why should I stop smoking ? Because, as soon as I run, I have difficulties to breathe.

An explanation, according to Adam (Adam, 2011), ties together four "propositions" (not in a logical sense): P. exp. 0: Introduction; P. exp 1: Problem or Question (Why P ? How P?); P. exp 2: Solution or Answer (Because Q) and P. exp. 3: Conclusion – Evaluation. The presence of an explicit question and its immediate answer introduced by because seems to be the criteria to distinguish explanation and argumentation. But the example (2) would probably be seen as an argumentative move in Adam's viewpoint.

(2) I should stop smoking, because as soon as I run, I have difficulties to breathe.

The problem of these two similar examples is that a conclusion can be an *explanandum* and that premises can function as an *explanans*, just because of the presence of a why-question. This sudden change of nature of the sequence seems unsatisfactory, since the semantic point of view within these clauses seems untouched.

On the philosophical side, problems arise because of several difficulties rightfully underlined by Govier (1987):
1. In this example, 'thus' is used is the pardigmatic logical role, preceding the conclusion in an argument. But in other cases, 'thus' functions just as naturally in an explanation.

2. According to the classic deductive-nomological account, explanation is one type of argument. Although this account is now widely criticized, it was dominant in the philosophy of science for several decades and still enjoys influence.
3. As many informal logic teachers have observed for their displeasure, it is very difficult to teach students the distinction between explanation and argument. They find it hard to grasp in theory and still more difficult to apply in practice.
4. Even when the distinction is grasped in theory, many passages, real or invented, can be interpreted as either explanation or argument. (Govier 1987, p. 159 – 160)

The first quotation illustrates that the same connectives can be used in argumentation and explanation; this is also the case in French. The second one points out that, historically, explanation was just an argument scheme; thus explanation was seen as a category inside argument. The third one illustrates a very common pedagogical problem: a lot of people, including students but not excluding teachers, do not understand the difference between explanation and argumentation. The last one, finally, emphasizes either an empirical problem of some unclassified examples or an insufficiency of theory that prevails to distinguishing explanation and argument. Why is this so difficult to grasp a difference between these two types of reasoning? Answering this question needs to understand first how they are both defined.

To sum up the general frame in which explanations and arguments are distinguished, a good starting point is the following one: "Arguments offer justifications; explanations offer understanding" (Govier, 2005, p. 21). In another way:
In order for a collection C of propositions to represent one's evidential reasons for a proposition P, one must be more certain of the propositions in C than one is of P. (2) In order for a collection C of propositions to represent one's explanatory reasons for a proposition P, one needn't be more certain of the propositions in C than one if of P (McKeon, 2013, pp. 286–287)

This leads to consider that "(P) Carole is the best math student in the class, (Q) because she is the only student in the class who is going to a special program for gifted students" (Govier, 2005, p. 22) may be interpreted as an explanation if everyone knows (P) but as an argument if the addressee must be convinced that (Q) is true. Hence, the difference between argumentation and explanation depends on addressee's knowledge.

But this view, which is presented as unstable as Govier's example of Carole reveals ("Even when the distinction is grasped in theory, many passages, real or invented, can be interpreted as either explanation or argument" (1987: 159)) may also be unsatisfactory. I would like to highlight three obstacles of the philosophical approach in the next sections.

2. *Philosophical obstacles*

The first obstacle is that certainty is viewed as an evaluation by the addressee. McKeon argues against Govier's premise that "one must be more certain of the propositions in C than one is of P" (McKeon 2013: 286), writing: "[Govier's premise] is false. […] I am certain of A and B, but not of C. I come to see that A and B are evidential reasons for C and as a consequence I become equally certain of C […]" (McKeon 2013, p. 287).

This counter-argument exhibits the pronoun "I", which is clearly the addressee's epistemic evaluation of C, between uncertainty or certainty. Thus, certainty appears to be a cognitive reality and not a linguistic feature. It raises a problem of access to an evaluation of certainty for any analyst. This absence of a clear-cut criterion about addressee's evaluation prevents any analyst to settle between explanation and argument in ambiguous cases.

As a linguist, my solution is not to evaluate cognitive certainty but to describe how it is linguistically encoded. Works on epistemic modality**[i]** epitomizes this view on certainty to the extent that "manually annotate and consequently automate identification of statements with an explicitly expressed certainty or doubt, or shades of epistemic qualifications in between" (Rubin, 2010, p. 535) can now be done. It means that a discourse analyst interested in evaluating whether a statement is an explanation or an argument should focus on certainty encoded by the speaker's rather than addressee's evaluation. In this frame, only absolute certainty (the highest of the five levels described by (Rubin, Liddy, & Kando, 2006; Rubin, 2010)) is a relevant category for explanation.

The second obstacle is also tied with cognitive contingencies. Context-dependency is quite an hurdle in this case. These two quotations illustrate the problem [italics are mine]:

Passages that appear to be arguments are sometimes not arguments but explanations. The appearance of words that are common indicators […] cannot settle the matter, because those words are used in both explanations and

arguments. *We need to know the intention of the author*" (Copi & Cohen, 2008, p. 19).

In such a context, there would be no point in arguing for that claim, because there is no need to try to rationally persuade anyone that it is true; the people *spoken to already believe it* (Govier, 1987, p. 23).

My view, as a linguist and discourse analyst, is that we can only infer relevant intentions from what is said and make assumptions about the addressee's mental states (beliefs, desires, intentions, etc.) from a contextual point of view. Works by Grice (1975) or Sperber & Wilson (1996) are typically used to calculate meaning from what has been said. On the other side, rhetoric is first defined by making adjustments with addressee's beliefs and desires (Herman & Oswald, 2014). Knowing intentions and beliefs is quite an impossible task, but a discourse analyst should make assumptions or hypotheses about these mental states and estimate their probability within a given context of communication.

The third philosophical obstacle is linked with a strong vision of truth. "Explaining why C [I should stop smoking] is true is the very same thing as giving a reason to think C is true" (Wright, 2002, p. 37) is a typical quotation that illustrates how evaluating truth is unavoidable in these matter or in order to settle the question. Linguists, on the other side, aren't generally interested in knowing the truth, but they are interested in showing how reality is represented.

(3) (P) Joe took the time machine, (A) because he needed digital pictures of Napoleon during the battle of Waterloo.

(3) will be seen as an explanation even if (P) is very likely to be false in 2014, because (P) is represented as real. Linguistic markers underline it: use of the simple past; act of an assertion; no doubt mentioned on an epistemic level. This utterance appears to be true and is intended to appear so for the addressee independently of our knowledge of the state of the world.

So, if we accept to get around those obstacles as I do with the linguist's points of view I've just underlined, we can define explanation like this:

Explanation of a proposition (p) by a proposition or a set of propositions (q) implies that (p) is linguistically presented as indisputable, i.e. represented as true or as certain

This leads of course to another difficulty: what is linguistically indisputable? The key criterion I shall use here is *linguistic modalities*.

3. *Using linguistic modalities*

I'll use the most thorough book on the subject in French, Laurent Gosselin's book published in 2010 (Gosselin, 2010) in which he detailed six types of modalities: alethic, epistemic, appreciative, axiological, boulomaïc and deontic modalities. It is important to underline that we will not use logical modalities like necessity or contingency. Of course, the modalities that are tied with the question of explanation are essentially alethic modalities (truth represented) and epistemic modalities on certitude. Let's see those two cases.

"Alethic modality characterizes fundamentally descriptive judgments [they are supposing preexisting facts and report them] that refer to an existing reality, independently of judgments passed on it"(Gosselin 2010 : 314), my translation). Statements expressing alethic modality are not considered as standpoints, but as facts which cannot be presented with "I guess that" or "I find that" – see example 4. This is quite a good test to identify modalities.

(4) Joan is a widower → ?? I guess that Joan is a widower / It is a fact that Joan is a widower

Conversely, epistemic modalities are linked with subjectivity. Gosselin talked about "subjective truth". It is difficult to insert a circumlocution like "It's a fact that" before an epistemic utterance – see example 5 – without a sort of power grab on this utterance. There's no problem however to insert "I guess that"

(5) My computer is too old → ? It is a fact that my computer is too old / I guess that my computer is too old

Alethic modality is quite clear: it is the only modality that necessarily leads to an explanation. Those statements are linguistically represented as true. Hence, any causal conjunction following an alethic statement A is designed to offer an explanation of it (why A? or How A?).

Dealing with epistemic modality is a bitt more complex and confusing. Epistemic modality concerns "subjective truths", beliefs on objects of this world, "descriptive judgments which do not constitute value judgments, but which do not also put back to an autonomous reality" (Gosselin, 2010, p. 325). With epistemic

modality, what is represented is not a matter of truth but a matter of certainty and a matter of degrees of certainty.

In principle, epistemic modality expressed in (6) leads to argumentation, since the conclusion is a standpoint and following arguments give reasons to justify beliefs.

(6) My computer may be too old now.

But there is a major problem with epistemic modality when the epistemic value is absolute certainty (e.g.: "My computer is too old"). Here, the subjective part of the clause, which was inherent in the modal verb "may", seems erased by the certitude of the modal verb "to be". This is a strong rhetorical move when epistemic modalities appear to be transformed into alethic ones – see the move between (7) and (8).

(7) "It is estimated that there are 2 million weapons in Switzerland" → (8) "There are 2 million weapons in Switzerland" (and it's a fact)

With this kind of move, an evaluation of reality appears to be encoded as something which is imposed as true. In this case, when reasons are provided, they appear as explanations. (8) is not expected to be contradicted or called into question. This strategy offers a crucial advantage for the speaker, which is pointed out by Aristotle in Topics:
Not every problem, nor every thesis, should be examined, but only one which might puzzle one of those who need argument […]. For people who are puzzled […] to know whether snow is white or not need perception. (Aristotle, 2014)

This move – transforming epistemic clauses into alethic utterances – uses what Danblon (2001) calls obviousness effect. A consequence of this effect is to let appear some premises or conclusions as not open to discussion or to justification or not expecting to be discussed – as some linguistic presuppositions do.

4. *Pseudo-explanations*
There are also moves in which the speaker can exploit the blurring lines between explanation and argument without transforming modalities. In order to analyze such moves, one must decide if the conclusion of an argument or an explanation is represented as admitted. In other words, the analyst must evaluate if the speaker commits the audience to believe the reality described in the conclusive clause. This evaluation, founded on linguistic clues, leads me to conclude that we need a

third category between argument and explanation: a kind of pseudo-explanation where (p) is considered as admitted and takes advantage of the certainty expressed to appear as explicative but, as these statements remain non-alethic, they may be disputed like an argument. Here are some cases of apparent explanations or *pseudo-explanations*:

The first case exploits the "invisible" epistemicity of non-axiologic evaluative terms: "Philip is tall", "Taxis are expensive". This move counts clearly on a supposed common ground, or a *doxa,* between speaker and audience. If Philip is a classic European basketball player, probably no one will contest (P) "Philip is tall"; if he is a grown-up French man whose height is about 1m80 (5.91 feet), (P) will probably be more disputable. If, finally, his height is about 1m55 with the same contextual data, (P) will probably be considered as ironic. Because the speaker counts on a collective acceptance on his/her claim, "Philip is tall, because he ate a lot of soup" can be counted as an explanation. Still, the "conclusion" part of it remains intrinsically epistemic and cannot be considered as "pure" explanation.

The second case is an echo of the first one. *Doxa* and stereotypes taken for granted – e.g. "French people are eating cheese after the main course, because…" – offer also apparent explanations. In this example, the speaker gives no linguistic clue that "French eating cheese after the main course" is a disputable generalization. It is assessed as a monolithic truth. Hence, the audience is invited to consider it as true and non-disputable.

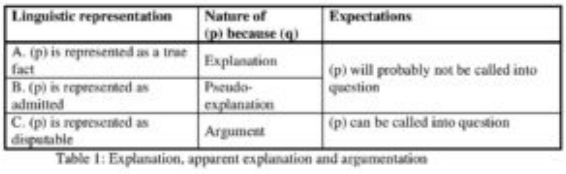
The third and last case I see – without aiming at completeness of these observations – can be called a gamble on certainty. The future tense, even if it is inherently unknown and disputable, may encode a virtual certainty. "John will arrive at noon: he told me that he caught the 11:00 am train" offers an example where future can be taken for granted and represented as certain.

These cases have one common trait: they count on audience's acceptance. Now, in contrast, we may find alethic clauses that are in fact linked with argument and not explanation or pseudo-explanation. Inference to best explanation is, despite its name, an argumentative move. If (9) is alethic, (p), in example 10, becomes epistemic, because (q) is used to establish the truth represented in (p).

(9) John has left the party

(10) (p) John has left the party, (q) because no one has seen him for an hour

Yet, alethic form of (p) conceals the intrinsically uncertain conclusion. Note that "I am certain that John has left the party" is completely epistemic and appears paradoxically less certain than (2). In these cases, the process of establishing a conclusion implies in retrospect that (p) cannot be considered as true or certain. Hence, it cannot be an explanation. It is important to see that alethic nature of (p) disappears when it becomes clear that (p) is inferred and not stated.



Linguistic representation	Nature of (p) because (q)	Expectations
A. (p) is represented as a true fact	Explanation	(p) will probably not be called into question
B. (p) is represented as admitted	Pseudo-explanation	
C. (p) is represented as disputable	Argument	(p) can be called into question

Table 1: Explanation, apparent explanation and argumentation

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Finally, axiological or evaluative modalities ("I love it") are not represented as true nor admitted because of the speaker's commitment in evaluative terms and deontic modalities ("we should do that") are intrinsically tied with a possible disagreement. These cases are open to disputation, which is a key criterion to identify an argumentative process. Even when appreciative modalities are generalized, for instance "This is a great movie", the subjective adjective "great" is intrinsically representing a subjective evaluative standpoint that isn't cancelled in generalization. Let's sum up our position, before seeing how connectives can interact with this table.

5. *French connectives in interaction with explanation and argument*

Because can be translated in French either by "parce que" or "car" (see Zufferey, 2012). The main difference is the following one: "Parce que" is generally and quite often connected to an explicative move:

"Affirmation that p has a cause q, in the phrase p parce que q always takes for granted truth of p. We start with p, considered as undisputed and then we present its origin q". (Groupe Lambda-l, 1975, p. 59, my translation)

This quotation of the seminal article on differences between those French connectives highlights that q can be taken for granted, even if q is open to discussion. Hence, using "parce que" is a possible rhetorical strategy in order to make an argument appear as an explanation:

(11) According to Samy Chaar, who has met her some time ago, this nomination "is good news, because [parce que] we have avoided a war of succession" (*Le Temps*, October 10 2013, my translation).

Example (11) illustrates that the speaker seems to "forget" the evaluative modality contained in "good news" and offers this argumentative move as an explanation. The obviousness effect of "good news" included in an explicative move is an interesting power grab: the audience is supposed to accept the idea of "good news". This strategic move can be illustrated in table 1 from case C to case A and B. Unlike "parce que", "car" is exclusively argumentative:
Enunciation of q is represented as being intended for justification of the enunciation of p (groupe lambda-l 1975 : 259, my translation)

"Car" illustrates a double meta-discursive move: "I've said p and I justify p by saying q". "Car" doesn't directly give a cause of (p) but a reason that justifies saying (p). This presupposes that (p) can be disputed. Therefore, "car" is strictly an argumentative indicator. Hence, when "car" is used with apparent explanations, it reveals inherently greater expectations to be called into question than with "parce que" and gives up "explicative appearance" to exhibit an argumentative nature. This move from case B in table 1 to case C can be illustrated by (example 12)

(12) (p) The conference fee is expensive, (q) because (CAR) organizing committee must pay many students to do the job

The use of "car" instead of "parce que" reveals that (p) may already be a disputed issue in a community that leads the speaker to a justification. The speaker acknowledges that (p) is a matter of concern or may lead to an open debate. Thus, the pseudo-explanation is in fact embedded in a real or potential argumentative situation. Some examples are even stranger. In principle, if "car" is strictly argumentative, one shouldn't find "car" with alethic modality. It's not the case. Examples (13) and (14) show it:
(13) (p) Noël Mamère : "I'm leaving the Green Party, (q) because [car] the party is captive of its factions" (Le Monde, September 26, 2013, p. 10, my translation).

(14) (p) Nelson Mandela's agony goes on (q) because [car] "his soul isn't in peace", according to traditional chiefs who estimate that Mandela's ancestors are irritated by family quarrels (Tribune de Genève, June 30, 2013, my translation)

In those examples, (p) are undisputed statements of fact. So, what are the effects of this move from case A in table 1 to case C ?

From a contextual point of view, Noël Mamère's and Nelson Mandela's cases are clearly moving from a non-polemic linguistic explanation taking place in a polemic context. Even if truth of (p) isn't called into question, the causes in (q) are expected to be disputed. "Car", in these situations, reveals the speaker's self-consciousness that his/her explanation will almost certainly create a dispute or arouse an opposition: disagreements about offered causes or about the link between (p) and (q) are now expected.

This… explanation may let us understand an empirical test lead by Sandrine Zufferey (2012). In this test, participants were asked to fill a blank within two clauses with either "parce que", "car" or "puisque" (since). Example (15) has delivered rather unexpected results.

(15) John laughed _ Peter stumbled

Indeed, 72,5% of participants put "parce que" (72,5%) as a connective between these clauses whereas 27,5% participants prefer "car" (27,5%). It is perfectly standard and expected to see a massive preference for "parce que" because of the alethic nature of "John laughed". But how to explain that more than a quarter of tested people prefer "car"? It is difficult to answer, because there wasn't any situational context in this test. But in order to understand that "car" is still perceived as possible, one must probably admit that "car" shows a readiness for a discussion. To be more precise, "car" indicates that "Peter stumbled" may be disputed as the true or the only cause of John's laughter.

6. *Conclusion*

We wanted to highlight in this paper that, in a linguistic perspective, two criteria must be used to make fruitful distinction between explanation and argument: one is a semantico-enunciative analysis of proposition (p) which may be done with linguistic modalities; the second one is pragmatic expectations to be eventually called into question a in a real or potential context. These two criteria lead to distinguish in fact three categories: explanations, apparent explanations and arguments. We defined apparent or pseudo-explanations as non-alethic clauses explained or justified by some reason if and only if these non-alethic clauses are expressed with an absolute certainty, i.e. taken for granted by the speaker.

Strategic moves to open or to close a possible disputation must be analysed within this frame. We may find at least two cases: non-certainty bound modalities (deontic or evaluative modalities for example) may be linguistically encoded as generalized ("This is a wonderful movie"). In this case, it seems that the evaluative nature of this clause will remain as argumentative. But in the second case ("John is rich"), erasing the epistemic nature of this clause ("I think that John is rich") leads in fact to turn an argumentative move into an explanation. Finally, the dynamics of some connectives (at least in French) is a way to analyse rhetorical and strategic moves: adding a layer of explanation on intrinsic argument (some uses of parce que) or expressing in an explanation an expectation of plausible future argument (some rare cases of car).

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NOTE
i. "Epistemic modality, or certainty, concerns a linguistic expression of an estimation of the likelihood that a certain hypothetical state of affairs is, has been, or will be true (Nuyts, 2001). Subtle linguistic clues, or markers, contribute toward the user's understanding of how much credibility can be attached to individual propositions and whether the information comes from the first-hand or second-hand sources" (Rubin, 2010, p. 535)

References
Adam, J.-M. (2011). *Les textes: types et prototypes.* Paris: A. Colin.
Aristotle. (2014). *Complete works of Aristotle, Volume 1: The revised Oxford translation*. Princeton University Press.
Copi, I. M., & Cohen, C. (2008). *Introduction to logic* (13 edition.). Upper Saddle River, N.J: Prentice Hall.
Danblon, E. (2001). La rationalité du discours épidictique. In M. Dominicy & J.-M. Adam (Eds.), *La mise en scène des valeurs: la rhétorique de l'éloge et du blâme* (pp. 19–47). Lausanne - Paris: Delachaux et Niestlé.
Gosselin, L. (2010). *Les modalités en français: la validation des représentations*. Amsterdam - New York: Ed. Rodopi.
Govier, T. (1987). *Problems in argument analysis and evaluation*. Dordrecht - Providence-U.S.A: Foris.

Govier, T. (2005). *A practical study of argument* (6th ed.). Belmont [etc.]: Thomson Wadsworth.
Grice, H. P. (1975). Logic and conversation. In D. Davidson & G. Harman (Eds.), *The logic of grammar* (pp. 64–75). Encino, Calif: Dickenson Pub. Co.
Groupe Lambda-l. (1975). Car, parce que, puisque. *Revue Romane,* 10, 248–280.
Herman, T., & Oswald, S. (Eds.). (2014). *Rhétorique et cognition: perspectives théoriques et stratégies persuasives / Rhetoric and cognition: theorical perspectives and persuasive strategies*. Bern: P. Lang.
McKeon, M. W. (2013). On the Rationale for Distinguishing Arguments from Explanations. Argumentation, 27(3), 283–303.
Rubin, V. L. (2010). Epistemic modality: From uncertainty to certainty in the context of information seeking as interactions with texts. *Information Processing & Management*, 46(5), 533–540.
Rubin, V. L., Liddy, E. D., & Kando, N. (2006). Certainty identification in texts: Categorization model and manual tagging results. In J. G. Shanahan, Y. Qu, & J. Wiebe (Eds.), *Computing Attitude and Affect in Text: Theory and Applications* (pp. 61–76). Springer Netherlands.
Sperber, D. (1996). *Relevance: Communication and Cognition* (2 edition.). Oxford - Cambridge, MA: Wiley-Blackwell.
Wright, L. (2002). Reasoning and Explaining. *Argumentation*, 16(1), 33–46.
Zufferey, S. (2012). “Car, parce que, puisque” revisited: Three empirical studies on French causal connectives. *Journal of Pragmatics*, 44(2), 138–153.