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Projet de thèse
Sous la direction du Prof. Louis de Saussure

"When temporal expressions don't tell time:

A pragmatic approach to temporality, argumentation and subjectivity"

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1. Introduction

In ordinary conversation, as well as in various types of written text, one can hear (or read) temporal expressions being used that appear to do something different than give the time of the event described or even of the utterance itself. Instead, they can be used to order argumentative clauses, they may also be responsible for indirect speech acts or even be a means of showing a subjective attitude or point of view. Temporal expressions, be they tenses, adverbs, certain adverbial phrases or connectors are found in almost all linguistic productions. Thus, the fact that they may be used to express something more than simple temporality is of great import to the study of natural language. This is common to several languages, possibly all. Since this is the case, we have decided to further explore the inner workings of temporal expressions.

The argumentative use of temporal expressions is a well-known phenomenon acknowledged by many pragmatic approaches. We propose, however, that the kinds of explanation put forward so far – i.e. the "naturalness" of the metaphorical transfer from referential temporal ordering to argumentative ordering – are defective on several levels. For example, when listing government officials (1) is argumentative but (2) is not (it is temporal):

> (1) First, there is the president, *then* the vice-president, then the secretary of state…

> (2) ? First, there is the president, *afterwards* the vice-president, afterwards…

In French, this is also the case, as (3) and (4) illustrate, where (3) is argumentative and (4) is not:

> (3) Jean et Marie se voient souvent, *maintenant*, je ne sais pas s'ils sont amants.

> (4) ? Jean et Marie se voient souvent, *en ce moment*, je ne sais pas s'ils sont amants.

The commonly accepted "time metaphor" surrounding this type of transfer fails; thus we reject the idea that within argumentative discourse, the passage of time simply equates progression in the speech or text. Most importantly, there is no theory on offer that satisfactorily handles the very specific pragmatic enrichment of a semantic form denoting time to a pragmatic meaning expressing argumentative relations. Thus, in this project, we suggest that this kind of enrichment does not principally rely on discursive features, as the textual linguistics or discourse grammar traditions suppose, but is instead achieved through the contextualization of the linguistic form, through the search for relevance (Sperber & Wilson). We will show that there is much more complexity involved in this enrichment than is usually admitted; and we aim at spelling out the part of it which is determined by the procedure encoded by the expression itself and the part which is commanded by usual contextualizing operations.

2. Initial problem & thesis originality

The object of our research will be the study of utterances and sentences wherein temporal expressions are used to communicate something other than time. Our perspective will integrate both the semantics and pragmatics of such linguistic productions and include notions from studies on argumentation and input from cognitive trends in linguistics and pragmatics. By *temporal expressions* we mean tenses, temporal adverbs and connectors. By

communicating something other than time, we mean *not principally denoting temporality*; whether or not a temporal utterance can be utterly devoid of temporality will be considered as well. Finally, we will argue that temporal expressions understood in this way are used argumentatively and/or have an effect on the subjectivity (or point of view) of utterances in which they appear.

This approach is by no means widespread, and we will attempt to develop an adequate model for such occurrences, using tools and data from several different domains which have not yet been corroborated in depth. We want to show that an integrated pragma-semantic model coupled with tools hailing from argumentation theory and cognitive linguistics will bring out a new and enlightening understanding of these phenomena.

Past and current research on the subject has been undertaken in various fields including philosophy of language, narratology, studies of rhetoric or even critical literary theory. For our research, we will adopt Sperber & Wilson's (1986, 1995) Relevance Theoretic framework, going in the direction of a conceptual/procedural distinction, first posited by Blakemore (1987, 1992) and developed by Luscher (1998) and especially Saussure (2003) into a *procedural pragmatics*. From Sperber & Wilson's framework, we retain their distinction between descriptive and non-descriptive uses of language. Saussure's procedural pragmatics provides us with an algorithm geared for dealing specifically with temporal expressions used non-descriptively. Naturally, we will include insights and data from several fields but will subsume them to a predominantly procedural from of cognitive pragmatics in order to give as unified an account as possible. This perspective is hearer-oriented, specifically focused on what a hearer's interpretation of a given utterance is and how he achieved this understanding.

We will attempt to answer the following series of questions:

1. First of all, why and how is it that temporal expressions do not necessarily yield a temporal interpretation?
2. Secondly, how do hearers arrive at an understanding of this sort, and be reasonably confident that this interpretation is what was actually intended by the speaker?
3. Finally, what specific conditions must exist, or, in what context do these temporal expressions function in this way?

These questions will be looked at from several angles: as we have seen above, the non-descriptive use of temporal expressions leads us to consider their argumentative potential and their effects on point of view, since a temporal expression which does not denote (only) temporality will be assumed to be used non-descriptively, that is, for the purpose of something other than *describing* temporality. Consider the following:

(5)   Qu'allait-il faire maintenant?
(6)   What was he to do now?

Where in French the *imparfait* coupled with *maintenant* in (5) can express the perspective of a character in Free Indirect Speech (FIS). In English, this is also possible and hinges on the use of *now* in this specific (fictional narrative) context, as (6) illustrates.

In (7) and (8), spoken after hearing the doorbell ring, the future tense is not used to describe a future moment, but a present one and furthermore these examples express a strong probability, perhaps even a certainty (i.e. if the mailman is expected).

(7)   Sarà il fattore.   [case of future epistemic use in Italian]

(8)   That'll be the mailman.   [case of future epistemic use in English]

The use of temporal adverbs such as *then* in (1) or *yet* in (9) and tenses as per (5)-(8) all show examples of utterances not used descriptively; despite this fact, they are perfectly understood by native speakers as being acceptable linguistic productions. Indeed, there is no confusion between the *yet* in (9) & (10) and the one in (11) or (12), below:

(9)   Those paintings are ugly and expensive, *yet* people buy them.

(10)   The sun was bright, *yet* cold.

(11)   John hasn't seen Mary *yet*.

(12)   Are we there *yet*?

These are only a few of the occurrences that can be found in various languages of temporal expressions producing different effects, according to the context of course, but also (perhaps especially) because of procedural elements encoded within them.

A new pragmatic model – an essentially procedural one – will permit us to better describe the way temporal expressions, and ultimately connectors, illocutionary adverbs, certain adverbials and indexicals function. Our goal is to present a tested and tried method of accurately predicting how hearers construct relevant interpretations of utterances. More specifically, our project shall provide answers as to the specific contributions that conceptual information can bring to implicatures and inferences, on the one hand, and the actual constraints that procedural information imposes on implicatures and inferences. Finally, we will attempt to modify Sperber & Wilson's distinction of descriptive and non-descriptive uses by adding a supplementary category: argumentative use.

3. State of the Art

3.1. Cognitive or Radical Pragmatics

This theoretical frame aims at explaining communication with an ostensive-inferential system of interpretation, and has two major traditional views of this type of communication: the Gricean & Neo-Gricean perspective and Sperber & Wilson's Relevance-Theoretic approach. We favor the latter; in our view it is a sounder and more adaptable framework. Though this theory is not specifically attuned to temporality, as more grammatical or narrative approaches have been, it does present some work which will be of crucial use to us. We have already mentioned Blakemore's distinction between conceptual encoding and procedural encoding, and Sperber & Wilson address both this distinction (1993) and, more recently, some aspects of time & temporality (1998). This framework posits the importance of the context since utterances are perceived as semantically underdetermined and in need of a cognitive pragmatic mechanism to achieve full (or at least optimal) comprehension. Saussure's procedural model (2003) is of particular use to our research as it addresses both temporality and postulates the importance of procedural encoding within temporal expressions. We have no real objections to this frame (at this time), other than that it has not, in our opinion, been exploited to its full potential, with regards to the type of problem we are addressing here.

Recent relevance-theoretic developments on temporality and point of view include work from Sthioul (1998a) on tense and perspective, Saussure & Sthioul's description of narrative uses of the French *imparfait* (1999), and Rocci's analysis of epistemic future tense usage in Italian (2000). For connectors or discourse markers, Blakemore (1987) and Blakemore & Carston (1999) have explored the conceptual/procedural distinction in English, and in French, scholars

such as Luscher & Moeschler (1990), Sthioul (1998b), Saussure (2000b, 2003a), Tahara (2004) and Saussure & Sthioul (2005) have detailed the derivation of procedures of several grammatical expressions.

3.2. The Semantic Traditions

Several approaches to time and temporality exist in the field of semantics, including Vendler (1967) and Dowty's (1986) *aspectual semantics* which consider the temporal properties of predicates as being directly linked to their encoded aspect, aspectual classes and the notion of telicity. Thus, it is widely admitted that (cf. Bohnemeyer 1998 and Boogaart 1999) if a predicate is atelic the normal progression of time is blocked; otherwise, the temporal progression is not only allowed, but mandatory. This point may be of some importance since aspect is a feature of sentences that could play an unexpected role in triggering the non-descriptive or argumentative reading. However, semantic approaches have not, to our knowledge, pursued this research about aspectual triggering of argumentative inference.

Formal dynamic semantics, of the type proposed in *DRT* by authors such as Kamp (1981), Kamp & Reyle (1993), Vet (1985, 1991) and in *SDRT* by Lascarides & Asher (1993) and Asher & Lasarides (2003), refer to *rhetorical relations* which operate upon properties of temporal order, based on their hypothesis that temporal relations are linked to general discursive relations. Other recent works within *DRT* include Molendijk & De Swart (1998) and Molendijk (2005). These semantic approaches have essentially been concerned with the contribution of tenses to the truth conditions of utterances with respect to temporal order and sequencing in discourse and have yielded complex truth conditional mechanisms for temporal expressions' production of meaning. Though insightful, these approaches have certain limits, namely, that they are overly semantic (despite admitting the importance of pragmatics in the comprehension of temporality) which entails a predominantly truth conditional appreciation of temporal expressions. For our purposes, such truth conditionality is too restrictive, as we are specifically interested in phenomena which are not necessarily truth conditional. Furthermore, aspectual and formal semantics do not sufficiently relate the importance of the context in utterance/sentence comprehension (see Saussure 2003 for a detailed discussion).

3.3. Integrated Pragmatics (or Argumentative Semantics)

Anscombre & Ducrot's (1983) work on connectors in utterances, which they consider as being predominantly argumentative, offers a wealth of information in the form of well-formulated analyses of typical French connectors (*et, mais, ou, donc, enfin, ensuite* etc.). Their framework considers the use of language as being non-truth conditional, it is strongly anti-descriptivist. That which is of most interest to us is Ducrot's consideration of connectors as not encoding concepts (as do for instance "horse" and "door") but instructions (e.g. procedures) which tell one in what way an utterance is to be understood. Another view which will be of use in our project is the notion that utterances can be metalinguistic and that connectors are used metalinguistically; this enables a speaker to refer not to the content of an utterance but to the utterance itself.

Corinne Iten (1999) offers a convincing criticism of Anscombre & Ducrot's work, from a relevance theoretic perspective. Indeed, though we agree with Anscombre & Ducrot's idea that utterances can and are used argumentatively and metalinguistically, we perceive their approach as being too extreme with regards to their assertion that not only is language essentially non-truth conditional, but it is also "illusory" (their term) to believe that language can be used for anything other than argumentation, since it is its argumentative aspect which,

for them, determines the meaning of utterances. This postulate leads almost inevitably to a relativistic conception of language and linguistics, which we reject. More importantly, the type of enrichment that leads the hearer to a non-temporal interpretation of a temporal expression is not solved, since the Ducrot/Anscombre tradition adopts an internal view of language that rejects imports from cognitive science. However, we strongly take into account the numerous observations made in relation to our topic by the scholars of the Ducrotian tradition, notably Rossari's staff in Fribourg (see also Rossari 1997, 2000).

3.4. Argumentation Theory

Although recent Argumentation Theory, as developed by van Eemeren & Grootendorst (2004), picks up on the idea that discourse can be used argumentatively, van Eemeren & Grootendorst, Walton (1995, 2003) and other Argumentation Theorists consider discourse as a means for resolving differences in opinion. Thus, this framework's dialectic approach concentrates on how *reasonable discussants* resolve their differences and concentrates on the types of strategies that can be used to attain their goals. Furthermore, Argumentation Theory does not address the question of how a hearer reaches a specific interpretation, nor does it explore temporal expressions used argumentatively. We therefore anticipate that the application of this theory within our project will be, at best, ancillary, and useful for considerations of argumentation only.

3.5. Discourse Analysis, Textual Linguistics and Psychological Approaches

Discourse analysis and textual linguistics have also made contributions to the study of time and temporality, particularly Benveniste (1966, 1974) and Weinrich (1964, 1973), whose work on temporal expressions and argumentation has inspired more recent theorists, such as Adam (1992, 1994, 1996). Their work has pointed out the variation in the behavior of tenses according to the utterances' situation: verb forms will depend, for instance, on whether they are in the context of a fictional story, a newspaper article or a historical text. Benveniste's most important contribution to our research is the distinction between the (subjective) time of enunciation and (objective) chronological time. Yet, though some data will be relevant for us, our proposed theoretical frame will consider phenomena that occur across different types of utterances (and sentences); therefore these approaches will only be of secondary importance. In addition, the French authors Damourette & Pichon (1911-1936) and Guillaume's (1929) psychological perspective of language can offer us some elements, in the form of analyses of temporal expressions used non-descriptively. From Guillaume we can retain one specific component, an anti-polysemic paradigm which posits that for any given linguistic form there is a permanent central element in its signification that generates every possible meaning (Guillaume calls this the *signifié de puissance* "potential signified"). Though Damourette & Pichon's observations are exclusively of French language expressions, we think it possible that many of their insights can be adapted for English (and other languages) and appropriately imported into our framework.

3.6. Philosophy of Language (and Mind)

Finally, the domain of Philosophy of Language offers a wide range of perspectives on temporality, argumentation and subjectivity. Specifically, two recent philosophers Récanati (1993, 2000) and Corazza (2002, 2004) address the problem of indexicals both in terms of temporality and as operators affecting the point of view within utterances. As philosophers,

both have researched the relation between thought and language, with a perspective engaging at once the semantics and the contextual data of various utterance types. What is of particular interest to our project is their treatment of temporal expressions such as "now" and "then", which both see (in slightly different terms) as being indicators of perspective in addition to, or instead of, denoting time. In parallel, we can add Gherasim's work on indexicals and subjectivity (2003 and forthcoming), wherein she explores the mechanisms of indexicality vis-à-vis Récanati's *perspectivals*; this last notion is of import to our appreciation of how certain classes of expressions can set off interpretations of sometimes unexpected points of view.

4. Frame, methodology and hypotheses

4.1. Theoretical frame

A. Relevance Theory

Our guiding theoretical frame will be that of Relevance Theory, put forth by Sperber & Wilson (1995 [1986]). Their approach is one of cognitive pragmatics, based on an ostensive-inferential communication model, which treats natural language utterances (and sentences) as being semantically underdetermined and dependant upon the utterances' context for overall comprehension. This perspective also makes Relevance Theory not restricted to truth conditions, rather it is the interpretative process undertaken by the hearer which yields what they call cognitive effects. In addition, Sperber & Wilson add an economic law of cost and effect to the process, the idea ultimately being that to achieve optimal relevance a speaker must produce an utterance that costs as little effort as possible while granting the greatest effect possible for the hearer. When the hearer, assuming that communication is successful, has achieved comprehension, he will have discovered the speaker's intended meaning.

In brief, the speaker has a certain set of assumptions (~thoughts) about a state of affairs in the world and wishes to share them with her audience – the hearer – and the first step will be in the utterance's logical form (a set of concepts) which will then be decoded by the hearer into its propositional form (after disambiguisation, reference-assignment etc.) yielding the speaker's explicit content as well as the most appropriate implicit content within the given context. It appears, thus, that communication is not necessarily exact, and rather, it is approximate, due in part to the hypothetical deductions at work in the hearer's mind during the comprehension process.

If we have chosen to use this theory as our primary methodological framework in our analysis and description of temporal expressions which denote something other than time, it is essentially a question of the theoretical soundness of this theory and its adaptability (since it is a general theory of human cognition) to virtually any type of linguistic production in a number of situations. In addition, Sperber & Wilson's distinction of descriptive and non-descriptive use is central to our problematic. The former use deals with utterances that represent the speaker's thought(s) about an actual or desirable state of affairs; while the latter are utterances that represent the speaker's thoughts about attributed thoughts a propos a state of affairs. For a more detailed account we refer to *Relevance: Communication and Cognition* (1995[1986]).

B. Procedural Pragmatics

The main hypothesis of Saussure's procedural model (2003) is that temporal expressions in general can de separated into two categories: conceptual expressions and procedural expressions. This hypothesis was developed by Saussure based on Blakemore's (1987) observations of connectors and on Moeschler & al. (1998) and especially Saussure's (2003) observations of verb tenses. For Saussure, tenses are all procedural and their potential enrichment into non-descriptive uses is due either to its inherent procedure or to natural pragmatic enrichment (in turn due to the derivation of implicatures). This procedural model is situated within Relevance Theory and considers the interpretation process as a calculation based on an utterance's constituents' semantic properties, pragmatic derivation and according to instructions (procedures) encoded within certain expressions. Following Relevance Theory's postulate that interpretation is not only a matter of decoding, Saussure's model proposes to describe what precise linguistic procedures can be recovered from expressions, and how the mind's reasoning capacities deal with these instructions to reach the appropriate conclusions.

More specifically for our research, which we see as a continuation of Saussure's work on temporality, his procedural pragmatics model makes use of the conceptual/procedural distinction; this will be an appropriate orientation for our analyses of temporal expressions used non-descriptively. Another outgrowth of this model is Saussure's notion of free conjecturing (*conjectures libres*) whereby he suggests that the derivation of the propositional form from the logical form and the derivation of explicatures and implicatures are not undertaken consecutively, but rather, in parallel (cf. Saussure forthcoming).

4.2. Methodology

On a general level, we will envisage our research according to the principles of a naturalist and mechanist methodology; our hope is that such an approach will reduce unwarranted speculation. For this, a controlled reductionism shall be applied to our framework, through our use of a hypothetic-deductive model which should in principle help us to avoid occurrences of unfalsifiability and unjustified speculation. This scientific perspective will limit our framework to a reasonable methodology, thereby ensuring epistemological soundness from the formulation of our hypotheses up to our end-results. In so doing, we shall keep clear of holistic perspectives both for the phenomena treated and the overall research process. Our chosen approach can thus permit us a certain level of transdisciplinarity, with each perspective contributing some elements to our research, functioning as an efficient heuristics, while shunning a naïve and inoperable mixing and matching of diverse disciplines.

For this we will proceed as follows: first, we will start by listing natural language occurrences in ordinary conversation (principally in English, though data from French and Spanish will also be used) wherein temporal expressions do not function as we would normally expect them to e.g. by denoting the time of events or actions in the world. Once we've reached as exhaustive a list as possible, we will focus on analyzing whether these non-descriptive uses are of a conceptual or procedural type and proceed to classify them accordingly. The project's second stage will consist in the actual pragma-semantic analyses, which will include a description of the natural inferences which can be derived in the case of the conceptual expressions; a modelization of the expressions considered as procedural will be undertaken on the basis of Saussure's algorithmic procedural model as applied to non-descriptive uses of French *imparfait* and *plus-que-parfait*. The final stage of our research will include our review

of the problematic cases – borderline or undecided cases – and an examination of the semantics-pragmatics interface (and possibly tweaking the procedural model). Though we anticipate no problems with it, Saussure's model has been specifically tried and tested on non-descriptive temporal expressions in French (French indicative verb tenses) and we will assure ourselves that this model functions equally well with other temporal expression types (adverbs, adverbials and connectors) and of its complete translatability into English, before beginning our analyses.

As has been noted above (section 4.1.B) we will distinguish between two types of meaning determination of linguistic expressions in context: conceptual and procedural expressions. An expression is considered conceptual if the totality of its possible meanings can be determined on the basis of the underlying encoded concept. An expression is considered procedural if all its potential meanings cannot be foreseen by conceptual material and normal enrichment mechanisms e.g. the derivation of implicatures (cf. Saussure & Sthioul 2002). In other words, expressions deemed procedural are not to be seen as devoid of any concept, just that this concept is accompanied by, or dependant upon, computational instructions encoded within.

When a given expression is conceptual then all possible uses of this expression can be determined either by *narrowing*, that is, by designating a referent which satisfies its semantic properties, or by *loosening*, which enlarges the range of possible referents the expression can have (Sperber & Wilson, 1995 [1986]). An example of the first occurrence is the verb *open* which can be coupled with *door* or *bottle*, but whose properties must be narrowed down to accommodate two different actions; hence, some of the properties of *open* could be "remove", "push", "pull" or "lift" – the property of "push" or "pull" will more readily be associated with a door than with a bottle or a tube of toothpaste. With loosening, an expression will not use its regular properties – indeed some may even be cancelled out – but rather an appropriate meaning will be assigned with regards to context; for example *flat* in the phrase "Holland is flat", which it is not, strictly speaking, but in comparison to Switzerland (part of the context or the interlocutors' cognitive environment) it would be appropriate to qualify Holland this way.

When, on the other hand, an expression is procedural if neither *narrowing* nor *loosening* can be made to apply to it to achieve a relevant meaning. This is the case of common conjunctions such as *and* or *but*, or of several temporal expressions such as *since* or *then*. Note that *but* is not restricted to a purely contrastive usage, as in "nobody here but me" (*but=except*); something similar can be said of *since*'s usual temporal usage, for example in "since you're here, stay for lunch" (*since±because*). The potential inferences such expressions can activate, whether it be on the level of explicatures or that of implicatures, are instructed by a specific inferential schema. There are currently three principal procedural models within Relevance Theory: Blakemore's inference chains, Luscher & Moeschler's inference trees and Saussure's procedural algorithms (2000, 2003), which will be used here. The algorithmic inference schema presents the double advantage of being more flexible than the chain model and more precise than the tree model with regards to the interpretative conditions.

4.3. Hypotheses

A. The first hypothesis we posit is based on aforementioned observations of temporal expressions that denote an argumentative or subjective value over the temporal reading. Thus, these expressions will be said to be used *non-descriptively* as per the distinction between descriptive and non-descriptive use. This hypothesis poses no problem as to its validity within the relevance-theoretic framework.

B. Our second hypothesis follows from the observation that expressions can be construed as conceptual or procedural. Thus, we will posit that procedural expressions either authorize or prohibit non-descriptive uses according to their interpretative algorithm. When they do authorize such uses, the algorithm will specify *ad hoc* the conditions of this particular pragmatic enrichment as well as the various outputs possible. In this way, we shall be able to explain the possible meanings and nuances with the required high level of granularity necessary to pragma-semantic analysis.

Conceptual expressions lead to regular pragmatic enrichment of a deductive type wherever the context permits it, as required by the search for relevance. Pragmatic enrichment can concern either the meaning to be attributed to the expression itself – in which case it occurs at the level of the explicatures – or it will take place for the interpretation of the utterance as a whole, for instance a non-literal proposition – and in this case the speech act is produced by implicature. As already noted, in the case of enrichment centered on a particular expression, the non-descriptive use can be obtained through narrowing or loosening.

C. We have seen Sperber & Wilson's distinction between a descriptive use – the utterance is a representation of the speaker's thought(s) about a real of desirable state of affairs – and an non-descriptive use – the utterance is a representation of the speaker's thought(s) about an attributed or relevant representation (for instance someone else's thought(s) about a real or desirable state of affairs).

To this we will add our third hypothesis: there is what we shall call an argumentative use which can be characterized as being a specific non-descriptive use existing either as a sub-type or in parallel (we lean towards the latter), wherein non-descriptive conceptual and procedural expressions are geared towards argumentation. We construe this use as being an utterance which is a representation of the speaker's thought(s) about a representation that is relevant to the dialogue, debate or negotiation in which it occurs. Thus we would be able to distinguish between non-descriptive use and argumentative use according to the situation in which they occur; additionally, we may also be able to differentiate them in term of speaker's intentions.

Therefore, a language's argumentative use (if it exists as we've outlined it) is only one way of communicating, and by so doing, it does not imply that the informative aspect of language is absent. Naturally, we foresee that the argumentative use will be applicable to both oral (e.g. classes, political speeches) and written linguistic productions (e.g. scholarly writings, newspaper articles).

D. Finally, we will stipulate a more radical hypothesis: linguistic expressions deemed as being procedural such as a temporal expression used non-descriptively may encode instructions with no given hierarchy – that is, the temporal instruction is not necessarily the default procedure. We shall see if this hypothesis is too extreme for all temporal expressions, and if it is perhaps only applicable to linguistics units that pertain to more than one grammatical category. (This may be the case for *yet* which is both an adverb and a conjunction.) If our hypothesis holds, we may say that the procedures encoded within certain expressions are purely determined by context, in other words, they would be strongly pragmatic discourse markers. In addition, this may have consequences for the point of view or perspective of a given linguistic production.

5. Conclusion

This project must necessarily make use of several interfaces in order to provide a complete account of how the interpretation of non-descriptively used temporal expressions actually functions. By thoroughly analyzing temporality, argumentation and subjectivity in utterances and sentences we will:

1. help expand the knowledge of how time functions whether used descriptively or non-descriptively;
2. shed light on derived argumentative uses, through the use of expressions not seemingly designed for that purpose;
3. and further explore how changes of perspective can be set off, for instance, by indexicals.

Our results may prompt a selective re-categorization of grammars' traditional classification of parts of speech according to their functions and perhaps re-consider tenses as being *more* than just a means of explicating time in language and thought.[1]

Our goal is to achieve a better understanding of our linguistic comprehension processes which will, in turn, enable a more thorough investigation of human communication and cognition. Ultimately, our research should help in classifying temporal expressions in such a way as to render them more readily accessible for use in general research in theoretical linguistics, second language teaching, computational linguistics and psycholinguistic experimentation.

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[1] By this we do not mean "discourse type" markers that lead to modifications of grammatical expressions according to their text or discourse type.

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