An Epistemological Approach to the Translation of Tenses and Aspects in English-French and French-English Contexts

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Abstract

Abstract: This paper delves into the complexities of translating tenses and aspects, particularly in English-French and French-English contexts, advocating for an epistemological approach that entails a meticulous examination of source language (SL) tense and aspectual elements, as well as considerations of situational context, textual nature (e.g., direct speech, narrative, retrospection, anticipation) and pragmatics. The concept of tense inherently encompasses aspect, which delineates the structure of actions conveyed by verbs. Aspect may denote completeness or incompleteness, iteration or punctuality, semelfactivity, telicity, atelicity, frequency, and permanence, among other qualities. Employing a qualitative method, this paper first outlines the theoretical underpinnings of the notions discussed, followed by concrete examples. The study reveals that tense, originally derived from the concept of time, is intricately linked with aspect and action. Aspect, moreover, extends beyond linguistic realms to encompass philosophical (e.g., Aristotelian aspect) and metalinguistic dimensions. A cross-linguistic examination of tense and aspect unveils multifaceted relationships encompassing lexical, philosophical, semantic, syntactic, pragmatic, and strategic dimensions, necessitating further elucidation.

1. INTRODUCTION

This paper sets out to discuss the notions of tense and aspect in a cross-linguistic perspective. Indeed, the translation of tenses from English into French and vice-versa reveals interesting phenomena relating to aspect, which is a verbal category, time, pragmatics, and epistemology, i.e. the theory of knowledge. The term pragmatics is used in this paper following the definition given by Sonnenhauser (2008, p.2085) in a paper entitled Aspect interpretation in Russian – a pragmatic account: ''Pragmatics deals with the processes that guide the search for additional information provided by the encyclopedic knowledge associated with the respective lexical items, by background assumptions, etc., and with its combination with the semantically encoded information.'' What this means is that in Russian aspectology, the meaning of aspectual verbs is semantically encoded in the lexicon, but their interpretation requires a pragmatic inference that takes into account the context and encyclopedic knowledge

about the lexical item. This Russian researcher insists on the contribution of pragmatics to infer the meaning of aspectual verbs in context.

In the beginning, time, as a logical notion, was used to refer to the past, the present, and the future. The grammatical notion of tense was discovered later. Therefore, there is a need to stress that the notion of tense was derived from that of time. This latter notion was studied by early philosophers including Aristotle. Aristotle's discussions on the concept of time can be found in several of his works, including *Physics*, *Metaphysics*, *Nicomachean Ethics*, *Politics*, *Rhetoric*, and *Poetics*. In *Physics* (-350 B.C.), Aristotle discusses the concept of time which is an element of nature. In Book 3, the Greek philosopher explains that: "The science of nature is concerned with spatial magnitudes and motion and time, and each of these at least is necessarily infinite or finite, even if some things dealt with by the science are not." (Aristotle, -350, p.6) In the same book, Aristotle answers the following questions about time: "Does it belong to the class of things that exist or to that of things that do not exist? Then secondly, what is its nature?" (Ibid, p.22) The answer given to the first question is as follows: "One part of it has been and is not, while the other is going to be and is not yet." (Ibid) In effect, the part of time that has been and is not in the past, while the one that is going to be and is not yet in the future. In addition, Aristotle introduces the notion of 'now' which lies between the past and the future.

Regarding the confusion between the notions of time and tense, Binnick (1991, p.9) notes in *Time and the Verb* that:

> Although Plato implicitly suggests a tense distinction in his discussions of the three times, his is usually interpreted as a purely logical categorisation, not yet a grammatical one." Furthermore, the Greeks took time to distinguish between the logical category of time and the grammatical category of tense. This lack of distinction between the two concepts is reflected in the words used in Greek, Latin, and Romance languages such as French, to designate both time and tense today. The Greek word for time and tense is *Khronos*; the Latin word is *tempus,* the French word is *temps*, and so on.

In another paragraph, Binnick says that "Diogenes Laertius tells us that it was the fifth-century B.C. philosopher Protagoras who first recognized tenses." (Ibid, p.10). It became clear to the Greeks that the Greek verb provided many extra tenses which should be varieties of one or more of the three (tenses). Before this recognition by Protagoras, the Greeks used to believe in the three times, three tenses theory. Having recognized tenses, the Greeks understood that the varieties of each tense (past, present, and future) were various aspects of the same.

In *The Evolution of Grammar TENSE, ASPECT, AND MODALITY IN THE LANGUAGES OF THE WORLD*, Bybee, J. et al. (1994, p.2) recall that "Friedrich 1974 and Comrie 1976, have shown that verbal categories, and in particular aspect […] can profitably be studied in a cross-linguistic perspective, and that certain semantic properties tend to recur in the verbal categories of unrelated languages." The question of aspect is also implicit in this definition of motion in Aristotle's *Metaphysics*:

> Since no action which has a limit is an end, but only a means to the end, as, *e.g.* the process of thinning [removing of fat], and since the parts of the body themselves, when one is thinning them, are in motion in the sense that they are not already that which it

is the object of the motion to make them, this process is not an action, or at least not a complete one, since it is not an end; it is the process which includes the end that is an action. […] Now of these processes, we should call the one type motions and the other actualizations. Every motion is incomplete—the processes of thinning, learning, walking, building—these are motions, and incomplete at that. […] and that which is causing motion is different from that which has caused motion. But the same thing at the same time is seeing and has seen is thinking and has thought. The latter kind of process, then, is what I mean by actualization, and the former is what I mean by motion. (p.143)

In this quotation, the notion of aspect implies motion, change (of state or place), potentiality, actualization, and time. All these notions will contribute to this discussion.

Last but not least, this paper examines the notions of tense and aspect and their usage in discourse. Related notions, including *Aktionsarten*, Aristotelian aspect, and Slavic aspect will contribute to shed light on this discussion which posits that the choice of an equivalent tense in a target language (TL) necessitates an epistemological approach that uses notions such as time, tense, aspect, the ontology of situations, contexts, the nature of the text, the narrative device, phases, pragmatics, etc.

2. LITERATURE REVIEW

This literature review examines the notions of time, tense, aspect, action, pragmatics, and other notions through the theories of Aristotle, Binnick, Bybee et. al, Weinrich, Chuquet and Paillard, Sonnenhauser, and others.

In *Time and the Verb, A Guide to Tense and Aspect,* Binnick (1991) discusses the notions of time, tense, aspect, etc., and makes some important points that will start us off in this discussion.

But for Aristotle, "a verb is a composite sound with a meaning, indicative of time"; it is tense which is its essential feature. To this day the verb is thought of as a "time-word"—as in German, in which the usual term, alongside the learned *Verb,* is *Zeitwort.* It is that part of speech which is concerned with distinctions of time, that is, with tense. […] Even after twenty-five hundred years of investigation by students of meaning, grammar, logic, and philosophy, tense is very poorly understood. (p.3)

That after twenty-five hundred years of investigation, tense is poorly understood underlines the importance of this study. Indeed, this article focuses on tense which is a grammatical category; however, in a bid to put this notion in the right context, the article will, first of all, shed light on the logical notion of time from which the notion of tense is derived. As indicated earlier, many philosophers, including Aristotle, discussed the concept of time. In *Physics* (-350 B.C.), Aristotle discusses the concept of time which is an element of nature. In Book 3, the Greek philosopher explains: "The science of nature is concerned with spatial magnitudes and motion and time, and each of these at least is necessarily infinite or finite, even if some things dealt with by the science are not." (Aristotle, -350, p.6) In addition to the notions of past and future mentioned above, Aristotle introduces a new concept which is 'now', i.e. the link between the past and the future. The Greek philosophers were able to distinguish the three parts of time, i.e. the past, the present, and the future. But how did they distinguish between time and tense?

In ***Time and the Verb***, Binnick (op. cit., p.9), indicates that there are many tenses in Greek, including present, aorist (a type of past), and future, but also imperfect, (present) perfect, and past perfect (pluperfect). (Ibid, p.9) The aorist or indefinite does not indicate whether the event happened just now or long ago.

In *On Interpretation*, Aristotle explains the notion of tense but in a confusing manner. His explanations led the Stoics to "call only the infinitive 'verb,' but [to call] indicatives like *peripatei* ('he's walking') or *graphei* ('he's writing') [a] *kategorema* ('predicator') or *sumbama* (i.e. 'event')." (Ibid, pp.10-11) "Diogenes Laertius tells us that it was the fifth-century B.C. philosopher Protagoras who first recognized tenses." (Ibid). It became clear to the Greeks that the Greek verb provided many extra tenses which should be varieties of one or more of the three. For Dionysius Thrax, therefore, "the Past has four subspecies -Imperfect, Perfect, Pluperfect, and Aorist. (Ibid, p.11) According to Dionysius and the Stoic-Varronian theory of tense, the perfect and pluperfect apparently share the meaning of completed action. The present and imperfect express an incomplete and/or ongoing action. It is to this distinction of completion that the aorist and future are indifferent. (Ibid, p.20)

At this stage, terms such as time, tense, verb, action, and event have been used to describe various logical and grammatical notions. Equally important in this discussion is the concept of *aspect* that needs to be explained.

In *Analyse linguistique des problèmes de traduction*, Akpaca (2023) says that: "*A propos de l'aspect, le Dictionnaire de linguistique (Larousse 1994) indique que c'est une catégorie grammaticale qui exprime la représentation que se fait le sujet parlant du procès exprimé par le verbe (ou par le nom d'action), c'est-à-dire la représentation de sa durée, de son déroulement ou de son achèvement (aspects inchoatif, progressif, résultatif, etc.)*." (101-102) The point made in this definition is that aspect is a grammatical category that describes the process expressed by a verb or an action word in terms of its duration, progress, or completion. Akpaca (Ibid) has quoted Chuquet and Paillard as well. The latter distinguish between lexical aspect and grammatical aspect. Every verb expresses a process or a state. Be, have, contain, etc., are states, while paint, age, and write are processes.

From a similar perspective, in *The Evolution of Grammar TENSE, ASPECT, AND MODALITY IN THE LANGUAGES OF THE WORLD*, Bybee, J. et al. (1994) take us through the definitions and characteristics of various aspects including the imperfective, perfective, present continuous, habitual, continuative, frequentative, iterative, completive, resultative, anterior, telic, and atelic. In 5.1 (pp.125-126), Bybee et al. give a definition of the **imperfective** citing Comrie 1976 and 1985b and Dahl 1985. In these authors' works, imperfective views the situation "not as a bounded whole, but rather from within, with explicit reference to its internal structure" (see Comrie 1976: 24). Imperfectives may apply to either past, present, or future time. For example, 'What are you planting?' is an example of imperfective in the present. In the future, we would say: 'What will you be planting? Unlike imperfectives, **perfectives** describe a situation that is bounded temporally. It cannot be simultaneous with the moment of speech. For example, 'By June next year, I will have completed my training.' Other examples of aspects discussed in *The Evolution of Grammar* by Bybee et al. include the **completive**. Bybee et al. (op cit, p.318) explain that (the) completive is used to describe something that is done thoroughly and to completion, e.g. to shoot somebody dead, to eat up. **Anteriors**, also called

perfects, are different from completives; they signal that the situation occurs before the reference time and is relevant to the situation at the reference time. They are often used with adverbs such as 'already' and 'just'. They may occur with past or future tense marking. (See page 54) On page 55, the author explains that **a stative** predicate describes a state or a situation that does not change unless something happens to change it. Among dynamic situations, there are **telic** and **atelic**. A telic situation has an endpoint (for example to play a sonata), whereas an atelic situation does not (for example to play the piano).

In the same vein, Binnick (1991) expounds in *Time and the Verb* the **Slavic Aspect, the Aristotelian Aspect, and Aktionsarten**. Binnick (Ibid, p.135) notes that "the earliest Greek grammarians seem to have been aware that alongside tense their language marked a second type of distinction, the one which we call aspect." According to the Oxford English Dictionary, the word 'aspect' was imported from Slavic tradition into Western grammar in 1853. Further, the author recalls that the term 'aspect' comes from the Slavic (e.g. Russian) word *vid*, meaning view and vision. The etymological root of aspect is spect-, which means 'see, look (at), view' (cf. *prospect, inspect, spectacle,* etc.). (Ibid, p.136) Almost all verbs in Slavic languages have two sets of tense forms, namely the perfective and the imperfective, unlike Greek which has three aspects, namely imperfect, pluperfect, and aorist. In Russian, the perfective is formed using a prefix though other devices exist, including vowel and stem change, the choice of another lexical item, and stress shift. (See page 137)

Aspect and *Aktionsarten*: Binnick recalls that when Slavic aspectology was introduced to Western scholars, it caused considerable confusion. L. Boldyrev distinguished five semantic classes of verbs, namely inchoatives, indeterminate duratives, frequentatives, semelfactives, and unitary completives. (Ibid, p.140) Throughout the nineteenth century, the notion of aspect developed and included distinctions such as accomplished-unaccomplished, durative-nondurative, and semelfactive-frequentative. Binnick notes that *Aktionsarten* is synonymous with 'modes d'action' and 'kinds of action'. In a nutshell, Aktionsarten focuses on action, i.e. the action expressed by the verb. This action may have various orientations and circumstances. It can be repetitive, durative, punctual, resultative, inchoative, etc. Binnick says that *Aktionsarten* are purely lexical categories, non-grammatical, optional, and unsystematic, defined in very specific terms such as inceptive or resumptive. (Ibid, p.170) Another important point about Aktionsarten is the phasic structure of aspect it has come up with. Indeed, Aktionsarten regards the action expressed by the verb in phases and sub-phase sequences.

On the same score, Sonnenhauser (Ibid, 2077) notes that ''Verbs in Russian are either perfective (pf) or imperfective (ipf.). Depending on their terminativity-value, simplex verbs may be pf or ipf: inherently terminative verbs are pf per default, cf. (1a), inherently aterminative verbs ipf, cf. (1b).'' The author gives the following examples to show how 'aspect' is morphologically marked in Russian. a. *'On otkryl dver'*. (He open:PST:pf door) 'He opened the door.'/ b. Rebenok kricˇal. (child cry:PST:ipf) 'The child was crying.'/ 2. a. *On otkryval dver*' (he open<yva>:PST:ipf door). 'He was opening the door.' / b. Rebenok krik*nu*l. (child cry<nu>:PST:pf) 'The child cried out.' (Ibid, 2078) Note that the verb 'to open' is spelled *otkryl* in the perfective aspect, but in the imperfective aspect the spelling changes to *otkryval*. Unlike English and French, in Russian, aspect is marked on the verb (or lexicon). The notion of lexical aspect exists in Russian and is called the default aspect.

The notion of 'default aspect' (Bohnemeyer & Swift, 2004) is not applicable to all languages with grammatical aspect but only to those that assign aspect already in the lexicon, like Russian. The main conclusion of Sonnenhauser's paper is as follows: ''the trouble with the ipf aspect thus consists in the multitude of possible readings, the high degree of context-dependency, and, as a consequence, the inadequacy of most previous analyses. To cope with these difficulties, the present paper argues for the incorporation of pragmatics.'' The multiple possible readings of the ipf aspect in Russia are exemplified in the following statements: 3. a. On napisal nekotorye slova arabskimi bukvami. (He write:PST:pf some words Arabic: INST letters: INST) 'He wrote some words in Arabic letters.' /b. On pisal nekotorye slova arabskimi bukvami. (He write:PST:ipf some words Arabic:INST letters:INST) 'He was writing/could write/usually wrote/ wrote some words in Arabic letters.' (Ibid, 2078) The author explains that the pf aspect in (3a) gives rise to the interpretation of the action being completed; the ipf aspect in (3b) does not explicitly exclude 'completedness' and allows for a variety of interpretations. Among the readings proposed for the ipf aspect are the actual-processual, the conative, the general-factual, the habitual, the iterative, the potential, the continuous and the atemporal reading (cf. Paducˇeva, 1996). In addition, Sonnenhauser says that traditionally, the ipf aspect is characterized in terms of 'ongoing activity' or 'non-completed action'. However, this characterization cannot account for all the data, cf. (4):

4. a. Ty pokazyval ej eˑto pis'mo? (You show:PST:ipf her this letter) 'Did you show her this letter?' b. Ran's ˇe on rabotal v universitete. (in.the.past he work:PST:ipf at university) 'He worked at university.' (= He was a teacher at university.)

Although (4a) and (4b) are ipf, they express neither an ongoing activity nor an incomplete action, but the statement of a fact in (4a) and a characterization in (4b). The examples in (4) thus

illustrate the inadequacy of traditional aspect definitions. A serious problem for purely semantic

definitions is the context-dependency of aspect readings, as illustrated in (5): 5. On nicˇevo ne delal, tol'ko lezˇal i kuril. (Stoll, 2001:85) (He nothing NEG do:PST:ipf, only lie:PST:ipf and smoke:PST:ipf) (i) He wasn't doing anything, just lying (around) and smoking. (ii) He didn't do anything, only lay (around) and smoke. (5) can either describe a specific situation (i) or a general habit (ii). The interpretation depends on the broader context since the encoded information does not provide any clues indicating which reading is the relevant one. This example emphasizes the limitations of semantics in accounting for the interpretation of the Russian ipf aspect. To cope with these difficulties, Sonnenhauser argues for the incorporation of pragmatics in interpreting aspect meaning.

Aristotelian Aspect: The Aristotelian categorisation is different from the Slavic aspect and *Aktionsarten*. Binnick (Ibid, p.172) explains that the Aristotelian distinctions have considerable importance for the philosophy of action and intention. Vendler distinguishes four categories:

Activities	*Accomplishments*	*Achievements*	*States*
Run	run a mile	recognize	desire
walk	walk to school	find	want
swim	paint a picture	win the race	love
push a cart	grow up	stop/start/resume	hate
drive a car	deliver a sermon/	be born/die	know/believe"
	recover from illness		

The Aristotelian approach to aspect is philosophical. To ascertain this, just consider the difference between 'to run' and 'to run a mile'. To run is just an activity, while to run a mile is not only an activity but also has an end or a target to be achieved. It is telic, i.e. terminative. From this perspective, an accomplishment is different from an activity because an activity is atelic.

To understand the Aristotelian categories, an ontology, or a set of models of situations, is required. To this end, consider 'to walk to school' and 'to stop'. While it takes a while to walk to school, it does not take long to stop or start. That is one difference between an accomplishment and an achievement. Only non-statives (expressions other than those of states) occur in the progressive: *John is knowing the answer. (Ibid, p.173) When an activity or accomplishment occurs in the simple present tense (or any non-progressive tense), it has a frequentative (or habitual) interpretation in normal contexts (while in null context a stative is a true present): John knows the answer, (right now); John runs, (habitual); John recites a poem, (habitual). (Ibid, p.174)

Imagine the following situations: (a) I *run home.* It denotes an accomplishment with a full complement of phases. (b) I *finish running home* denotes only the culminative phase. (c) I *begin to finish running home* denotes the initial subphase of the culminative phase. Binnick (Ibid, p.207) says that "Verbs (and expressions containing them) can refer to events as wholes or phases (or sets of phases) within them.

2.1. The Grammatical Notion of Tense in Weinrich's Theory: -

In *Le temps*, Weinrich (1973), distinguishes two groups of tense in French, namely the tenses used for commenting, and those used for narrating stories, e.g. in novels (*les temps commentatifs et les temps narratifs*). The first group (used for commenting) comprises the *présent*, *passé composé*, and *futur*, while the second one comprises the *passé simple*, *imparfait*, *plus-que-parfait*, *conditionnel*, and *passé antérieur*. While the first group is used in scientific publications and in direct speech, the second one is used to narrate stories in novels, for example. On this score, Weinrich (1973, p.25) explains that *"La répartition des temps entre un groupe narratif et un groupe commentatif demande à être analysée de plus près...Elles transmettent du locuteur à l'auditeur un signal bien spécifique : "ceci est un commentaire", ou au contraire "ceci est un récit".* This statement means that there are two groups of tense that are used for narrating or commenting. When a speaker uses a particular tense, the reader is aware that this is a narrative or a comment. In a subsequent section, the tenses are specifically mentioned. *"Voici distribués en deux listes les principaux temps du français. Temps*

commentatifs – passé composé, présent, futur; Temps narratifs – plus-que-parfait, passé antérieur, imparfait, passé simple, conditionnel. (Ibid, p.69)

Weinrich (1973, p.112) explains the narrative technique of *mise en relief* (i.e. foregrounding). Indeed, as far as the relationship between *Imparfait* and *Passé Simple* is concerned, Weinrich explains that French, as well as other Romance languages, has two tenses while some other languages such as English and German have only one tense. For example, the phrase 'he sang' and 'er sang' can be translated sometimes by '*il chantait*' or by '*il chanta*' depending on the circumstance. The most important signal of the change of tense is the role each of these tenses (*Imparfait* and *Passé Simple*) plays in the structure of narratives. Furthermore, Weinrich (Ibid, pp.114-115) makes the following remark:

> Au contraire, ce qui est ici en question est la fonction des temps dans les textes ; plus précisément imparfait et passé simple étant en français des temps narratifs, leur fonction dans les récits. Celle-ci n'est autre que de donner du *relief* au récit en l'articulant par une alternance récurrente entre premier plan et arrière-plan. L'imparfait est dans le récit le temps de l'arrière-plan, le passé simple le temps du premier plan.

In this quotation, Weinrich explains that the *Passé Simple* is used for foregrounding, while the *Imparfait* is used for *backgrounding*. Other important terms used in *Le temps* by Weinrich (Ibid, p.66) are *Perspective de locution*, which is characterized by the use of retrospective or prospective tenses, and le *temps du texte* (the tense of the text). The retrospective tenses are *Plus-que-parfait* and *Passé antérieur*, while the prospective tense is *conditionnel* (the conditional tense). The author says that when the narrator wants to attract the reader's attention to something important, he uses these tenses which represent a break from the normal narrative tenses, i.e. *Imparfait* and *Passé Simple.* Quite often, the time when an action occurs or the action time (called Aktzeit by Dieter Wunderlich) is different from the time of the narration. In this particular case, retrospective and/or prospective tenses are used to signal that. (Ibid, p.68) Sometimes, the action time and the textual time (or tense) may coincide. This is the case in performative speech where the text is read out to perform an action. During (the) baptism, for example, the words uttered or read by a priest represent the baptismal ceremony. However, when the action time and the narration time are identical, the tenses used are the *Imparfait* or *Passé Simple;* in the case of a commentary, *présent* is used. This is called *zero degree*. There is a temporal transition when, in the same sentence, there is a movement from one tense to another. For example, when transitioning from *Imparfait* to *Plus-que-parfait*, there is a temporal transition. However, this temporal transition is homogeneous because both tenses are background tenses. On the other hand, the transition from *Imparfait* to *Passé Simple* is heterogeneous because of the presence of a background tense and a foreground tense. There is a temporal metaphor when there is a shift from narration to commentary; furthermore, when the heterogeneous transition is abandoned for the retrospection technique, there is also a temporal metaphor.

3. METHODOLOGY
3.1. Method

In conducting this research, a desk study has been done on the definitions of concepts such as time, tense, and aspect using e-books, printed books and the Internet. After this initial stage, examples of aspect have been searched for in religious, financial, and political

publications (including the Bible, newspapers, and political reports). The interpretation of these aspects relies on the qualitative method.

3.2. Instruments

The instruments used to conduct this research and write this paper include a laptop, the Internet, websites, e-books, printed books.

3.3. The data

The data include the following: **1**. Various translations of the simple past in various Bible versions; in these examples, the simple past is translated into French by *imparfait, passé simple,* and *passé composé*. **2.** Translation of the simple past in various Bible versions; these examples show that the simple past used in some verses is translated into French by different tenses in different Bible versions. **3.** Translation of tenses in the Book of Daniel, 6:12-28; in this book, different French versions of the Bible (i.e. the Jerusalem Bible, TOB, and Louis Second) use different tenses to translate the same verses. While some of these translations seem to be convincing, others fail to convince. **4.** Translation of the simple past in the context of a newspaper; in this case, the simple past is translated by the *passé composé* instead of the *passé simple* and *imparfait* used in previous instances. **5.** Durative aspect expressed by the ***passé composé;*** in this case, the *passé composé*, which normally expresses the completion of an action, expresses the durative aspect. Most of the time, it is the *imparfait* and sometimes the *passé simple* that express the durative aspect. **6.** The pluperfect translated by the *subjonctif imparfait*; this example shows that only the context determines the choice of the right tense in the target language. **7.** Durative and progressive aspects are expressed by the simple present and a verb phrase; in this example, the progressive aspect is expressed by a verb in the simple present. It is normally the present continuous that expresses the progressive aspect. **8.** The resultative aspect used as the culminative point of an evolving process; in this particular example, it is the semantics of the verb that expresses the culminative and resultative aspects. A grammatical category does not express this aspect in the text.

3.4. The Epistemological Data Analysis Approach

Under the epistemological approach, the translation of an SL tense into the TL follows a cognitive process that takes into account several determinants such as the aspect expressed by the SL verb, the context, the nature of the text, the sociological background, pragmatic inference, etc. Several examples will be given to explain these preliminary remarks. Let us take an example given in this paper, i.e. the case of Jonah who was sent by God to Nineveh to preach and convert the people there. The French version of JB uses *passé simple* to present the outcome of Jonah's mission to Nineveh, whereas Louis Second uses *imparfait.* The use of *passé simple* presents Jonah's mission in two phases: phase 1 is narrated in *imparfait*, while phase 2 is narrated in *passé simple*. In this particular example, the factors that combine to justify the choice of the two phases are sociological and historical (Nineveh and its people were going to be destroyed by God after forty days because of their evil ways), grammatical (the transition from *imparfait* to *passé simple*), aspectual (the two-phase structure of Jonah's mission), and philosophical (Jonah's mission represents an accomplishment, according to Aristotelian aspect).

Another justification of the epistemological approach can be seen in the following example: Ezekiel 47:6-8. In this example, the simple past is used from Verse 6 to Verse 8, while in the French version, the following tenses are used instead: *passé simple* (used three

times) followed by *passé antérieur*, and then by *imparfait*, and finally by *passé simple* (again). The combination of this series of tenses in the French version is not a mere accumulation. Every tense signals something peculiar. As indicated earlier, passé simple is used for foregrounding, while imparfait is used for backgrounding. Passé antérieur expresses anteriority of an action compared to another one. The structuring of the tenses in the sentence is also a matter of careful consideration. The approach taken in this example to select the various tenses is dictated by the rules of narratology. It is an example of a temporal metaphor. It is illustrative of pragmatic inference in the sense that the situational context is interpreted and the meaning is inferred.

In the book of Daniel, Daniel was thrown into the lions' den but they did not harm him. Subsequently, the king had the men accusing Daniel thrown into the pit and they had not reached the floor of the pit before the lions crushed their bones. An alternative translation suggested by us is: '*Ils n'eurent pas atteint le fond de la fosse lorsque les lions leur broyèrent les os*'. JB proposes this translation: 'et avant même qu'ils eussent atteint le fond de la fosse, les lions s'étaient emparés d'eux et leur avaient broyé les os.' Both the *subjonctif* and *plus-que-parfait* used in this sentence express anteriority, which is not quite right. In the alternative translation suggested above, there is a succession of *passé antérieur* and *passé simple*, which is the result of an epistemological approach to tense translation. Weinrich calls this technique 'heterogenous temporal transition'.

In the context of a newspaper, the simple past is translated by passé composé, which is one of the tenses that are used to make comments. The epistemological approach extends to this context, which calls for the translator's awareness of the contextual use of tenses. Sonnenhauser's concept of pragmatic inference is also very useful in this discussion. She explains that ''Lexical items may encode two kinds of information (Blakemore, 2002): conceptual information about the content of the associated concept (representational information) and procedural information about how to manipulate this concept (computational information).'' (Sonnenhauser, p.2084) The procedural information has an encyclopedic entry that is related to the hearer's or reader's extended knowledge about the relevant concept. This knowledge together with the semantic knowledge encoded in the concept and the particular context helps to infer the meaning of the concept or aspect.

4. RESULTS

The following results have been obtained following this research on the translation of tenses in English-French and French-English contexts:

1. The selection of a TL tense to translate a SL tense is not done haphazardly;

2. There is no perfect fit between an SL tense and a TL tense; therefore, it is the context that determines the selection of the right tense in the target language;

3. The context is important in determining the meaning of an aspectual verb in the languages that have default verbal aspects because the semantic information of the verb is encoded in it, but pragmatics helps to infer the meaning of the verb in context;

4. In the Bible, different tenses are used in different versions to translate the same verses in the French language;

5. The notion of aspect is derived from the notion of tense which proceeds from the notion of time;

6. Tense, aspect, and action are interrelated in the sense that every tense expresses an aspect and aspect describes the action expressed by a verb;

7. (An) aspect can be incomplete or complete, progressive, iterative, punctual, habitual, inchoative, terminative, etc.

8. There is a need for a theory of tense and aspect that takes into account the background situation or context of the action, the various phases of the action, the narrative techniques employed, the nature of the text (commentary or narrative), the purpose of the speaker, etc.

9. Aspect is not simply a grammatical notion; it is also a lexical, syntactic, and phonological notion;

10. A great number of existing translations need to be revisited so that temporal aspects may be adequately reviewed;

11. Aspectology and temporal questions need to be given adequate importance in translation studies.

5. DISCUSSION

The initial examples are taken from the Bible. The first one is the story of Jonah who was sent by God to Nineveh. The first time that God sent him there, he did not want to go. According to the Jerusalem Bible, in Jonah 3:1-4, "The Word of God was addressed a second time to Jonah: 'Up!' he said 'Go to Nineveh, the great city, and preach to them as I told you to… Jonah went on into the city, making a day's journey. He preached in these words, 'Only forty days more and Nineveh is going to be destroyed'. Verse 3:5 reads:

Table 1: Various translations of the simple past in various Bible versions

La Bible de Jérusalem *Jonas, chapitre 3* (**FRENCH**)	**Jerusalem Bible** **Jonah Chapter 3** (**ENGLISH**)	*La Bible TOB* *Jonas Chapite 3* (**FRENCH**)
Jon 3:5 Les gens de Ninive crurent en Dieu ; ils publièrent un jeûne et se revêtirent de sacs, depuis le plus grand jusqu'au plus petit.	3:5 And the people of Nineveh believed in God; they proclaimed a fast and put on sackcloth, from the greatest to the least.	3:5 que déjà ses habitants croyaient en Dieu. Ils proclamèrent un jeûne et se vêtirent de sacs, des grands jusqu'aux petits.

In Jonah 3:5, especially in the French version of the Jerusalem Bible, the *passé simple* is used to translate the message expressed by the simple past in English, unlike the TOB which uses *imparfait*. There is a noticeable difference between these two interpretations. The use of the *passé simple* in the Jerusalem Bible implies that 'as soon as the people of Nineveh received God's message through Jonah, they repented.' It was said earlier that the *passé simple* expresses the inchoative and sudden aspects. Why does TOB use the *imparfait* to translate this particular message from God? As indicated earlier, the *imparfait* suggests a habitual and durative aspect. This tense does not mark a cut-off point in the attitude of the people of Nineveh towards God.

It rather suggests the idea that even before Jonah's arrival, they believed in God. The *passé simple* is the aspect that best describes the situation of the people of Nineveh at that particular time. After all, why would God decide to destroy the city of Nineveh if its people believed in Him even before Jonah's arrival? The *passé simple* illustrates and confirms the idea of repentance following Jonah's preaching. Translators should be tense-conscious. In this particular situation, the impact of Jonah's preaching should be foregrounded; and one way of doing so is to use the *passé simple* in the French version. In this particular context, this tense functions like a code among the syntactic elements of the sentence and in the narrative strategy adopted by the translator. Tense and aspect as verbal categories contribute to constructing sentence semantics by structuring the actions expressed by verbs in phases. This article calls the use of this aspectual and temporal device ***an epistemological approach to tense translation***. This implies that translators should be aware of the connection between tense, aspect, and situations. In every story or situation, some parts need to be foregrounded, while others need to be *backgrounded*. The *passé simple* used in the Jerusalem Bible makes Jonah's mission more impactful and memorable. It shows that from that time on, the people of Nineveh repented and believed in God. Concerning Aristotelian aspectology, this mission is like an accomplishment. Let us examine another temporal phenomenon in a second example taken from the Bible.

Table 2: Translation of the simple past in various Bible versions

Jerusalem Bible Matthew 3:16-17	TOB Matthieu 3:16-17	Bible de Jérusalem Matthieu 3:16-17
3:16 As soon as Jesus was baptised he came up from the water, and suddenly the heavens opened and he saw the Spirit of God descending like a dove and coming down on him. 3:17 And a voice spoke from heaven, 'This is my Son, the Beloved; my favour rests on him'.	3:16 Dès que Jésus fut baptisé, il remonta de l'eau, et voici que les cieux s'ouvrirent : il vit l'Esprit de Dieu descendre comme une colombe et venir sur lui. 17 Et des cieux, une voix disait : « Celui-ci est mon Fils bien-aimé, celui qu'il m'a plu de choisir. »	16 Dès que Jésus fut baptisé, il remonta de l'eau, et voici que les cieux s'ouvrirent : il vit l'Esprit de Dieu descendre comme une colombe et venir sur lui. 17 Et des cieux, une voix disait : « Celui-ci est mon Fils bien-aimé, en qui je trouve ma joie. »

In the English version, two tenses (i.e. the simple past and the present) plus a present participle are used. In contrast, four tenses (passé simple, imparfait, présent, passé composé) and the infinitive are used in the French version of TOB. Three tenses (*passé simple, imparfait, présent*) and the infinitive are used in the French version of the Jerusalem Bible. The French version of the Jerusalem Bible and TOB presents the story under two phases: in the first phase, the *passé simple* is used to foreground the baptism, while the second phase (i.e. the background) starts with the use of the *imparfait* that talks about a simultaneous action taking place outside the baptism proper: '*Et des cieux, une voix disait…*" The interplay of *passé simple* and *imparfait* in narrating the particular circumstances of Jesus' baptism is yet another example of **an epistemological approach to tense translation**.

Table 3: Translation of tenses in the Book of Daniel, 6:12-28

Jerusalem Bible (ENG)	Jerusalem Bible (Fr.)	Louis Second

12. These men **came** along in a body and **found** Daniel praying and pleading with God	12. Ces hommes s'en vinrent en nombre et trouvèrent Daniel qui suppliait et implorait Dieu.	**11** Alors ces hommes entrèrent tumultueusement, et ils trouvèrent Daniel qui priait et invoquait son Dieu.

In this verse, both the Jerusalem Bible and the Louis Second version use the *passé simple* to translate the simple past. One striking feature common to both versions is the use of the *imparfait* as the equivalent of the present participles (praying and pleading). Indeed, according to Weinrich's theory, the –ing form is used as a background tense. In this third example, the story is presented in two phases in French. The first phase, which is punctual, is narrated in the *passé simple*, while the second phase, which is durative, is narrated in the *imparfait*; this suggests that Daniel's action started before the men came and continued after their arrival. This is also **an epistemological approach to tense translation**.

In this other example, Daniel was put in the lions' den with the hope that he would be eaten by them.

Table 4: The simple past translated into French by the *passé composé*

Jerusalem Bible (ENG)	Jerusalem Bible (Fr.)	Louis Second
23. My God **sent** his angels who **sealed** the lions' jaws, they **did** me no harm, since in his sight I am blameless, and I have never done you any wrong either, O king.'	23. Mon Dieu a envoyé son ange, il a fermé la gueule des lions et ils ne m'ont pas fait de mal, parce que j'ai été trouvé innocent devant lui. Et devant toi aussi, ô roi, je suis sans faute."	**22** Mon Dieu a envoyé son ange et fermé la gueule des lions, qui ne m'ont fait aucun mal, parce que j'ai été trouvé innocent devant lui; et devant toi non plus, ô roi, je n'ai rien fait de mauvais.

The *passé composé* is used in this example to translate the simple past because it is a direct speech. This is what Weinrich calls a comment(ary). Whenever the narrator gives the floor to a character to speak directly, the simple past is translated into French by the *passé composé*. This is also an example of the **epistemological approach to the translation of tenses**. At this stage, it is becoming obvious that the translation of tenses from English into French follows criteria and justifications. Translators do not just choose any tense in the target language (French) to translate a source language tense. There is always an "epistēmē" (ἐπιστήμη), a Greek word which means "knowledge" or "understanding." "Epistemology" refers to the philosophical study of knowledge, its nature, and its justification.

Table 5: Several translations of the simple past into French – Ezekiel 47:6-8

Jerusalem Bible	TOB	Louis Second
6. He then said, 'Do you see son of man?' He took me further, then brought back to the bank of the river. 7. When I got back, there were many trees on each bank of the river. 8. He said, 'This water flows east down to the	6. Il me dit : ''As-tu vu fils d'homme ?'' Il m'emmena puis me ramena au bord du torrent. 7. Quand il m'eut ramené, voici que, sur le bord du torrent, il y avait des arbres très nombreux, des deux cÔtés. 8. Il me dit :	Il me dit: As-tu vu, fils de l'homme? Et il me ramena au bord du torrent. 7Quand il m'eut ramené, voici, il y avait sur le bord du torrent beaucoup d'arbres de chaque côté. 8Il me dit: Cette eau coulera vers le district

Araba and to the sea; and flowing into the sea, it makes its water wholesome. 9. Wherever the river flows, all living creatures teeming in will live. Fish will be very plentiful, for wherever the water goes it brings health, and life teems wherever the river flows.	''Cette eau s'en va vers le district oriental et descend dans la Araba : elle pénètre dans la mer ; quand elle s'est jetée dans la mer, les eaux sont assainies. 9. Et alors tous les êtres vivants qui fourmillent vivront partout oú pénètrera le torrent. Ainsi le poisson sera très abundant, car cette eau arrivera là et les eaux de la mer seront assainies : il y aura de la vie partout oú pénètrera le torrent.	oriental, descendra dans la plaine, et entrera dans la mer; lorsqu'elle se sera jetée dans la mer, les eaux de la mer deviendront saines. 9Tout être vivant qui se meut vivra partout où le torrent coulera, et il y aura une grande quantité de poissons; car là où cette eau arrivera, les eaux deviendront saines, et tout vivra partout où parviendra le torrent.

In this example, the simple past is used from Verse 6 to Verse 8, while in the French version, the following tenses are used instead: *passé simple* (used three times) followed by *passé antérieur*, and then by *imparfait*, and finally by *passé simple* (again). How to justify the use of several tenses in the French language while only one tense is used in English? Actually, in describing the flow of the spring in the Temple, *passé simple* is used on several occasions to foreground several parts of the description (e.g. '*Il me dit', 'Il m'emmena puis me ramena au bord du torrent', 'Il me dit'*). Unlike *passé simple*, *imparfait* is used to put some details of the description in the background (e.g. *'voici que, sur le bord du torrent, il y avait des arbres très nombreux*). *Passé antérieur* is used to mark the anteriority of some actions compared to others. It shows the chronology of the story by indicating the successive stages. It signals that some actions have occurred before others. (e.g. *'Quand il m'eut ramené … Il me dit'…*) Whenever there is an association of *passé antérieur* and *passé simple*, the relationship of anteriority of some actions compared to others is obvious. Another striking point is the structuring of the tenses in the description. The tenses' structure is like an architectural construction. The writer or translator is the one constructing the story with temporal tools to highlight some aspects, put other aspects in the background, and show the sequence of actions and events throughout the narrative experience. Temporal devices and techniques carry signals and meanings in French. There is another temporal phenomenon in Verse 8 which is in the simple present. JB also narrates the story in the present. However, Louis Second narrates it in the future. This poses a semantic problem. The questions raised in the translation of these verses illustrate and confirm the need for an epistemological approach to tense translation.

Table 6: The pluperfect translated by the *subjonctif imparfait*

Jerusalem Bible (ENG)	Jerusalem Bible (Fr.)	Louis Second
25. The king **sent for** the men who had accused Daniel and **had them thrown** into the lion pit, they, their wives and their children: and they had not reached the floor of	25. Le roi manda ces hommes qui avaient calomnié Daniel et les fit jeter dans la fosse aux lions, eux, leurs enfants et leurs femmes : et avant même	24Le roi ordonna que ces hommes qui avaient accusé Daniel fussent amenés et jetés dans la fosse aux lions, eux, leurs enfants et leurs femmes; et avant qu'ils fussent parvenus au fond de

the pit before the lions had seized them and crushed their bones to pieces.	qu'ils eussent atteint le fond de la fosse, les lions s'étaient emparés d'eux et leur avaient broyé les os.	la fosse, les lions les saisirent et brisèrent tous leur os.

In this example, the pluperfect 'had not reached' is translated by the *subjonctif passé* because of the presence of the time adverbial marker *avant même.* The first occurrence of the pluperfect is translated into French by the *plus-que-parfait*: 'the men who had accused Daniel': '*ces hommes qui avaient calomnié Daniel*'. 'They had not reached the floor of the pit before the lions had seized them and crushed their bones': '*et avant même qu'ils eussent atteint le fond de la fosse, les lions s'étaient emparés d'eux et leur avaient broyé les os.*' In this example, the pluperfect is translated by the *plus-que-parfait* and the *subjonctif passé* because of the presence of the time adverbial *avant même.* Louis Second uses another temporal approach: '*et avant qu'ils fussent parvenus au fond de la fosse, les lions les saisirent et brisèrent tous leur os*.' The *passé simple* (*saisirent et brisèrent tous leurs os*) is used in this Bible version where the JB uses the '*plus-que-parfait*' (*les lions s'étaient emparés d'eux et leur avaient broyé les os*). Though the *plus-que-parfait* used in this context by the JB is instrumental in narrating the story clearly, it seems that the *passé simple* used in the Louis Second version is more accurate. The point is that instead of saying: '*avant même qu'ils eussent atteint le fond de la fosse, les lions s'étaient emparés d'eux et leur avaient broyé les os'*, it is possible to find an alternative translation as follows: '*ils n'eurent même pas atteint le fond de la fosse lorsque les lions les saisirent et brisèrent tous leurs os.*' In this alternative translation, two tenses are used, namely the *passé antérieur* and the *passé simple*. The *passé antérieur* is used in this context to express anteriority relative to the *passé simple*; in other words, it is used to narrate an event or an action that had taken place before the event or action reported in the *passé simple*. Louis Second's translation in this particular example is more convincing. This is **another example of an epistemological approach to tense translation**.

An example of a consecutive use of the *passé antérieur* and *passé simple* is given by Maurice Grevisse and André Goosse in paragraph 885 of *Le bon usage*: "*Lorsque j'*EUS PARCOURU *la note* [...], je relus *de bout en bout [...] les instructions du Conseil* (GRACQ, *Rivage des Syrtes,* **p. 138).** (Grevisse, 2008, p. 1095) Another example is given on the following page: '*Il* N'ÉUT *pas plus tôt* APERÇU *son père qu'il courut à lui (Ac.* **1935, s. v.** *pl)* (Ibid, p.1096) In the logic of the epistemological approach to tense translation, many existing translations need to be assessed and reviewed to abide by the rules of an epistemological approach to tense translation.

To end this discussion on the translation of the simple past into French, it is worth mentioning that most of the time, *imparfait* and *passé simple* are the tenses that are used in the case of narratives or stories. However, in the case of comments and/or direct speech, *passé composé* is used. As far as other tenses used in narrating stories in the past are concerned, the choice of the equivalent tenses in French depends on the context.

Table 7: Translation of the simple past in the context of a newspaper

English	French
In June 2010, when the first signs of the eurozone crisis became apparent, a letter	En juin 2010, lorsque les premiers signes de crise de la zone euro sont devenus évidents,

signed by three hundred economists pointed out the inherent dangers of austerity policies, which would further depress the demand for goods and services as well as employment and incomes, thus making the payment of debts, both public and private, still more difficult.	une lettre paraphée par trois cents économistes a souligné les dangers inhérents des politiques d'austérité, qui ne feraient que déprimer la demande de biens et de services ainsi que l'emploi et les revenus, rendant dès lors le remboursement des dettes, tant publiques que privées, encore plus difficile.

In a paper titled A Study of Tense, Aspect, and Modality in the French Translation of The Economists' Warning by The Financial Times, Akpaca (2014) gave the above-mentioned example.

In this story extracted from the Financial Times, the simple past is translated by the *passé composé* because this is an instantiation of the *temps commentatif* (i.e. a tense used for commenting), according to Weinrich's theory. In this type of write-up, the simple past is regularly translated by the *passé composé*.

Table 8: Durative and progressive aspects expressed by the simple present and a verb phrase

The international environment continues to experience developments that increase uncertainty about the future of the world.	L'environnement international ne cesse de connaître des évolutions qui accroissent l'incertitude quant à l'avenir du monde.

The verb phrase 'continues to experience' expresses a progressive and durative aspect even though the verb is in the simple present. The French syntagm '*ne cesse de connaÎtre*' also expresses a progressive and durative aspect even though the verb is in *présent simple*.

Table 9: The progressive aspect translated by a verb phrase and the *présent simple* in French

While the effects of the Russia-Ukraine war are still vivid and growing, here is the Israel-Palestine conflict, which is unfolding with indescribable intensity, leading to humanitarian tragedies of an unprecedented magnitude, characterised by flagrant contempt of the International Law and International Humanitarian Law.	Alors que les effets de la guerre russo-ukrainienne sont encore vivaces et ne cessent de s'amplifier, voici le conflit israélo-palestinien qui se déploie avec une indescriptible intensité, entraînant des drames humanitaires d'une amplitude jamais égalée, caractérisés par un mépris insoupçonné du droit international et du droit humanitaire.

The progressive and durative aspect appearing in the verb phrase 'the effects of the Russia-Ukraine war **are** still vivid and **growing**' is expressed by the verb phrase '*les effets de la guerre russo-ukrainienne sont encore vivaces et **ne cessent de s'amplifier***' in French. The progressive aspect in French is not marked in the verb, as is the case in English, but by the verb phrase '*ne cessent de s'amplifier*'.

Table 13: The resultative aspect used as the culminative point of an evolving process

The shelling of Palestinian civilians, the systematic destruction of their lives, their means of existence, the trivialisation of death, all these anomalies combine into a	Le pilonnage des civils palestiniens, la destruction systématique de leurs vies, de leurs moyens d'existence, la banalisation de la mort, toutes ces anormalités s'agrègent en

| tragedy, which has lasted for a hundred days already. | une tragédie qui semble s'inscrire dans la durée, cent jours déjà. |

Indeed, against a background of shelling, destruction, and trivialisation of death, the phrase 'all these anomalies combine into a tragedy' expresses a resultative aspect. The rest of the sentence reads: '…a tragedy which has lasted a hundred days already'. This is translated into French as follows: '…*une tragédie qui semble s'inscrire dans la durée, cent jours déjà.*' The French translation is poor in the sense that the perfective aspect expressed by the present perfect 'has lasted' is translated by the durative aspect in the verb phrase '*semble s'inscrire dans la durée*'. The right translation should be: '…*une tragédie qui a déjà duré cent jours*'. This alternative French phrase expresses "*l'aspect accompli*" (i.e. the complete aspect or an action that has already taken place).

These few remarks on temporal and aspectual analyses of translation underscore the need to train translators on key translation aspects, including tense and verb aspects, to avoid misinterpretations and confusion. This remark is important in this era of Artificial Intelligence where translations are generated par Artificial Intelligence.

6. CONCLUSION

This article has discussed the challenges related to the translation of tenses and aspects from English into French and vice-versa. It emerges from this discussion that the notion of tense derives from that of time which has a tripartite nature, namely past, present, and future. For a long time, the theory of three times, three tenses prevailed. However, logicians and linguists came to discover that alongside tense, there was an underlying notion called 'aspect'. In effect, temporal grammar has, so far, generated a web of aspectual features. Aspect focuses on the actions expressed by the verb(s). Aspect can be inceptive, progressive, or terminative. It can also be punctual, iterative, complete, or incomplete, etc. Aspect is marked not only by grammatical items but also by lexical, morphological, syntactic, phonological items, etc. It has a phasic structure. In narrating a story, aspectual devices may be used to express anteriority, simultaneity, succession, etc. Aspectual operators are massively present in human discourse. In a Bantu language like Chibemba, for example, the notions of past and future are gradable. Indeed, there is immediate past and immediate future; near past and near future, and remote past and remote future. These instantiations of tense and time contribute to widening the scope of the notion of aspect. A partial conclusion is that aspect is a concept that blends other concepts such as action, grammar, lexicon, syntax, tense, motion, potentiality, actualisation, progressivity, iteration, permanence, gradation, phase, terminatively, aterminativity, pragmatics, etc. The scope of the concept needs further investigation.

REFERENCES

AFRICAN UNION. (2024). DISCOURS DE S.E. MOUSSA FAKI MAHAMAT 47ème REUNION ORDINAIRE DU COMITE DES REPRESENTANTS PERMANENTS ADDIS ABEBA (ETHIOPIE)

Akpaca, S.M. (2023). *Analyse linguistique des problèmes de traduction - Une étude de cas*, Generis Publishing (www.generis-publishing.com)

Akpaca, S.M. (2015). A Discussion on the Phases, Semantics and Syntax of Aspect in the Translation of "*Transformation structurelle, Intégration régionale et Mobilisation des Ressources*" by ITUC. Revue du CAMES, *Littérature, langues et linguistique* N° 003

Akpaca, S.M. (2014). A Study of Tense, Aspect and Modality in the French Translation of The Economists' Warning by The Financial Times, REVUE DU CAMES *'Littératures, Langues et linguistique'*

Aristotle. 1929-34. *The Physics.* Trans. Philip H. Wicksteed and Francis M. Cornford. London: Heinemann, and Cambridge, Mass.: Harvard University Press (Loeb Classical Library). Vol. 1 revised, 1957.

. 1932. *The Poetics,* with Longinus, *On the Sublime,* and Demetrius, *On Style.* Trans. W. Hamilton Fyfe. London: Heinemann, and Cambridge, Mass.: Harvard University Press (Loeb Classical Library).

. 1933. *The Metaphysics,* I-IX. Trans. Hugh Treddenick. London: Heinemann, and Cambridge, Mass.: Harvard University Press (Loeb Classical Library).

. 1934. *Nicomachean Ethics.* Trans. H. Rackham. London: Heinemann, and Cambridge, Mass.: Harvard University Press (Loeb Classical Library).

. 1938. *Organon I: The Categories. On Interpretation.* Trans. Harold P. Cooke.*Prior Analytics.* Trans. Hugh Tredennick. London: Heinemann, and Cambridge,Mass.: Harvard University Press (Loeb Classical Library).

. 1957. *On the Soul, Parva Naturalia, On Breath.* Trans. W. S. Hett. London: Heinemann, and Cambridge, Mass.: Harvard University Press (Loeb Classical Library).

Bible TOB. (2004). *TRADUCTION OECUMENIQUE DE LA BIBLE*, Société Biblique Française – Le CERF

Binnick, R. I. (1991). *Time and the Verb A Guide to Tense and Aspect, Oxford University Press, New York Oxford*

Bybee, J. L., Perkins, R. D., & Pagliuca, W. (1994). *The evolution of grammar: Tense, aspect, and modality in the languages of the world* (Vol. 196). Chicago: University of Chicago Press.

Chuquet et Paillard (1987). *Approche linguistique des problèmes de traduction.* Anglais/Français. Editions Orphys, Paris.

Comrie, B. (1976). *Aspect.* Cambridge: Cambridge University Press.

Comrie, B. (1985a). Derivation, inflection, and semantic change in the development of the Chukchi verb paradigm. *Historical semantics and historical word formation*, 85-96.

Comrie, B (1985b). *Tense.* Cambridge: Cambridge University Press.

Dahl, O. (1985). *Tense and aspect systems.* Oxford: Blackwell.

Diogenes L. (1925). *Lives of Eminent Philosophers.* 2 vols., trans. R. D. Hicks. London: Heinemann, and Cambridge, Mass.: Harvard University Press (Loeb Classical Library).

Friedrich, P. (1974). On aspect theory and Homeric aspect. *International Journal of American Linguistics* Memoir 28.

Grevisse, M. et Goosse, A. (2008). *Le bon usage Grammaire française*, 14e édition, Éditions De Boeck & Larcier s.a., Université rue des Minimes 39, B-1000 Bruxelles

Jerusalem Bible. (1968). *THE JERUSALEM BIBLE*, Alexander Jones, Darton, Longman

Sonnenhauser, B. (2008). Aspect interpretation in Russian – a pragmatic account. *Journal of Pragmatics*, 40 (12), 2077–2099

Vendler, Z. (1957). "Verbs and Times." *Philosophical Review* 66.143-60. Revised in Vendler (1967), 97-121; reprinted in Schopf (1974), 213-34.1967. *Linguistics in Philosophy.* Cornell: Cornell University Press.

Weinrich, H. (1973). *Le temps*. Collection Poétique aux Editions du Seuil, Paris.

Websites

Aristotle, "Book 8." *Physics*. Lit2Go Edition. -350. Web

 <https://etc.usf.edu/lit2go/98/physics/1671/book-8/>. January 15, 2024

La Bible de Jérusalem : http://moniteurs.billings.free.fr/bj/jon3.htm

https://saintebible.com/lsg/ezekiel/47.htm

Bible   Sainte   Louis   Second   https://www.sdhs.co.uk/wp-content/uploads/2012/03/LOUIS_SE.pdf