READING PROFICIENCY IN LATIN THROUGH EXPECTATIONS AND VISUALIZATION

The frustration that often accompanies the learner's reading of Latin is only partially due to lack of experience. This paper addresses an often neglected part of the frustration, namely the incomplete understanding of the reading process itself and the unrealistic goals that readers and students have as a result of that. We explore a perspective on reading and a pedagogical alternative to translation that helps students invoke the processes of visualization and expectations while reading the Latin text in its original order. First, we discuss visualization on the level of aesthetically and semantically meaningful word-order patterns, also called "word pictures," which are an essential component of Latin poetry and rhetorical prose. Secondly, we discuss expectations on the level of syntactic relationships in the process of reading the text left to right. This is applicable to both narrative and nonnarrative (e.g., abstract, philosophical) texts. Thirdly, we discuss the visualization of an unfolding series of events as applicable primarily to narrative readings which contain speeches and actions. We explore how reading with conscious visualization and expectations enhances students' success in reading and comprehension in Latin.

I.A. Visualization in Oral Performance: The Ancient Audience

According to Suetonius, "Iulius Montanus used to say that he was going to plagiarize certain Vergilian verses, if he could appropriate also his expression and acting skill. According to him, the same verses sounded well when Vergil was reciting them, but were empty and mute without him." In a peculiar letter, Pliny the Younger seeks the advice of a friend as to whether to read his own verse aloud to an audience himself or to hire a freedman to do it while "accompanying his words with low voice, eye, and gesture (murmure oculis manu) as many people do." He admits, however, that he is no better at mime than he is at reading. This suggests that Roman audiences enjoyed visual cues when listening to poetry being read aloud.

Aids to visualization were important for the performance not only of poetry, but of rhetoric as well. Pliny extols the advantages of live delivery of a speech over reading from a scroll due to the fact that holding a scroll occupies the hands which can be better used for accompanying gestures. Ancients recognized that the best type of writing is the one that aids visualization the most. Quintilian requires from the orator to present his information in a way that facilitates the process of visualization in the listener: "For oratory fails its full effect and does not assert itself as it should, if its appeal is merely to the hearing, and if the judge merely feels that the facts on which he has to base his decision are being narrated to him and not displayed in their living truth to the eyes of the mind." Quintilian gives Cicero as an example for the ability to turn his

¹ Vit. Verg. 29.

² Ep. 9.34.2.

³ sed puto me non minus male saltare quam legere, Ep. 9.34.2.

⁴ Plin. Ep. 2.3.10; 4.5; 5.7.6; 5.12; 5.20.3; and 7.24.7.

⁵ Quint. Inst. 8.3.60.

listeners into spectators. Aper, the defender of the ornate style in oratory in Tacitus' *Dialogus* describes the ornate style as something that should delight the sight and the eyes (*quod visum et oculos delectet*⁶) and should include in its arsenal "gold and gems" (*sit in apparatu eius et aurum et gemmae*⁷). He also draws an analogy between the use of elaborate rhetorical figures and the use of eye-catching materials in architecture.⁸

Directing the reading process towards active visualization on the part of the students even in the elementary and intermediate stages of language proficiency provides a much needed motivation for mastering grammatical structures and patterns.

I.B. Visualization in the Realm of Latin Word Order and Style

Readers in antiquity have used visually appealing metaphors of stone and jewel to describe the aesthetics of literary prose and poetry. As Michael Roberts notes, the author strove to "replicate or outdo effects that he saw in the world around him." The monumentality of Latin "as an expressive medium that is like both granite and diamonds" accounts for much of its allure up until our modern day. This monumental feature does not preclude ancient authors from depicting a vivid action and turning their readers into spectators. A teacher can make word-order patterns more accessible by using metaphors from architecture and jewelry, backed up with color transparencies and PowerPoint presentations with architectural or decorative elements that resemble word-order patterns. This proves to be a more eloquent and attractive way of teaching phrase-recognition at sight than dry rules. At a later stage, students can learn to attend to word-order patterns as signposts for marking closure or transition as marked today by punctuation. 12

Parallels with architecture visually drive home the aesthetic aspect of the word-order patterns and word pictures. Sometimes the syntactically related elements bracket and enclose the rest of the sentence, forming an "arch" as in *Caesar loquendi finem fecit*. In the sandwich, the elements on both ends of the arch modify the element in the middle (equestris ordinis pars melior et maior); in the interlocking structure, the syntacti-

⁶ Dial. 22.4.

⁷ Dial. 22.4.

⁸ Dial. 20.7.

⁹ M. Roberts, *The Jeweled Style: Poetry and Poetics in Late Antiquity* (Ithaca 1989) 65. Roberts, although working with mediaeval texts, is right in seeing the roots of this phenomenon in the classical period. This way of viewing the embellished, poetic, and highly rhetoricized style of literary poetry and prose coincides with the sensitivities of ancient readers/audiences.

¹⁰ J. Farrell, Latin Language and Latin Culture from Ancient to Modern Times (Cambridge 2001) 117; see also 114–23.

¹¹ In desribing Livy's style, M. Jaeger (*Livy's Written Rome* [Ann Arbor 2000] 82) notes, "The monuments offer direct but focalized views from the present to past and draw the reader into the dynamic action of the story's plot, even as they make him or her acutely aware of the act of observing."

¹² On the discourse-level meaning of word-order patterns, see P. McFadden, "The Discourse Function of Discontinuous Noun-Phrases in Latin: A Discourse-Pragmatic Approach to a Word Order Pattern" (Ph.D. diss., University of Michigan, 1999).

¹³ D. Hoyos, Latin: How to Read It Fluently: A Practical Manual (Amherst 1996) 34.

cally related elements alternate (saevae memorem Iunonis ob iram), much like the metope-trigliph sequence in architecture; parallel or chiastically arranged constituents can join phrases or sentences together in a relationship of contrast or similarity (Vox <u>audita</u> perit, littera <u>scripta</u> manet; Vox <u>audita</u> perit, manet littera <u>scripta</u>). Tricolon can be portrayed as a unifying principle of the sentence in the same way as the triglyphs are a unifying repetitive component on a temple's architrave (an excellent example is the series of multiple tricola that keep together the long second sentence in the opening of Cicero, Pro Caelio 1¹⁴). Clauses nested within each other resemble the weaving together that occurs in many floral decorations. All of these patterns are abundantly available in architecture.

II. Visualization vs. Translation: Achieving Comprehension

Cognitive psychologists who study the process of reading describe three stages that are necessary for comprehension to take place. All three are informed by visualization: 1. Integration, where "the skilled reader has integrated separate ideas in the text to form a complete and understandable picture. It is this picture that is the real meaning of the sentences." 2. Summarization where the reader forms a "picture of an entire passage rather than of just two or three propositions as in the integration process." One constructs a model of events or situations portrayed in the text. 3. Elaboration: the reader fleshes out the new information by adding old knowledge.¹⁵ These stages are often replicated by various approaches that teachers take to the reading of a Latin text in class: 1. discussion of individual syntactic and semantic units and helping students put the individual parts together and form a coherent picture (integration); 2. creating a summary of a complex passage in Latin (summarization); and 3. discussing contextual and extratextual information needed to comprehend the passage (elaboration).¹⁶

While reading a book in our own language, which we find easy to understand, our minds start to project a movie that rolls effortlessly as we turn page after page. The more technical the description, however, the more complex the interactions between characters, the more complex the ideas and the relationships between them, the more difficult it becomes to construct the mental movie. Under these circumstances we rely more on assistance from an experienced reader, on a picture, on a commentary, etc. For the reader in Latin, such visualization may be hindered not only by the complexity of the content (top-down information), but also by the complexities of the Latin grammar and word order. Finally, the interference

¹⁴ cum audiat nullum facinus, nullam audaciam, nullam vim in iudicium vocari, sed adulescentem inlustri ingenio, industria, gratia accusari ab eius filio quem ipse in iudicium et vocet et vocarit, oppugnari autem opibus meretriciis: Atratini ipsius pietatem non reprehendat, libidinem muliebrem comprimendam putet, vos laboriosos existimet quibus otiosis ne in communi quidem otio liceat esse.

¹⁵ See R. Hamilton, "Reading Latin," CJ 87 (1992) 169-71. Italics are ours.

¹⁶ Some of these approaches, described and illustrated in M. Minkova (*An Introduction to Latin Prose Composition* [London 2001] 128–36), include asking Latin questions; making summaries in Latin; changing a complex sentence into simple sentences; explaining a text in Latin using synonyms; rendering implicit dialogue explicit; and converting poetic language into prose.

of the reader's native language habits forms an additional barrier to direct visualization of unfolding events or related ideas.

Bypassing the native language and achieving vivid visualization by interacting directly with the target language is the ultimate goal, but educators need to confront the fact that students cannot always access complex ideas in the target language through a picture, ideogram, or pantomime and that their proficiency is still often being assessed through translation. The problems with translation as an assessment tool are well known.¹⁷ Every teacher is familiar with the type of student translation which represents mechanically moving a pile of (to the student) "meaningless" Latin words into a pile of equally meaningless English words. Therefore, if students are to produce a translation, it ought to be informed by the visualization of the structural relationships between individual segments (integration), by visualization of an entire passage (summarization), and by the visualization of background information that is explicitly or implicitly embedded in the text (elaboration). The road to an accurate comprehension reflected in such a translation, however, is a process which does not even end with recording the translation on paper.

In our view, translation is only one among a rich array of pathways that provide access to the meaning of a written text. The alternative modes of interacting with texts and of assessing comprehension that we discuss here include articulating expectations (see section III.A) and generating class discussions where the text is treated as a movie script (see section IV.B). Thus the movement from Latin to English is filtered through the intermediate stage of syntactic expectations and content visualization of language-independent universals. Only well-informed expectations lead to correct visualization, which in turn can produce accurate and vivid comprehension and if needed, translation. Translation only records on paper a stage in the process of content visualization. The gamut of the stages inbetween is familiar: lack of any visualization represented in a meaningless translation; visualization at odds with the content of the original text; and visualization which is accurate but may be misrepresented by the reader's ability or perhaps inability to render the image into correct and idiomatic English. If we look at translation as a process that sometimes can take several stages, then incomplete visualization based on sentence fragments is the first stage, and the refined English version is the last.

When we watch a movie, we anticipate, we expect things to happen in a certain way. If we have watched a lot of movies within the same genre, we can become expert at guessing how events are going to unfold. Similarly, students can be trained to form expectations on every turn, to read with informed expectations, and to revise those expectations in response to new data. This process does not necessarily involve translation because students may read an entire sentence/paragraph out loud before even attempting any translation. Depending on the control on syntax and vocabulary, this reading may be accompanied with various degrees of the visualization of the unfolding of events. In the initial stages, articulating syntactic and semantic expectations serves as a bridge leading to content visualization.

¹⁷ Hoyos, "Decoding or Sight-Reading? Problems with Understanding Latin," CO 70 (1993) 126-33.

III.A. Working with Syntactic, Semantic, and Structural Expectations for Accurate Visualization

Articulating expectations¹⁸ is a technique that allows a reader to make sense of incomplete sentence chunks by anticipating/predicting what the complete sentence may look like based on the full assessment of the morphosyntactic and semantic features of the fragment. The ability to do this depends on one's sense of syntactic completeness (see III.C). Formulating expectations bridges the discrepancies between the way in which Latin and English word order works. It allows the reader to handle Latin word order on the terms of English word order through the sharpening of the reader's sense of syntactic completeness and expectations in the target language (e.g., *utitur*: subject uses an ablative object). Word order is closely linked to visualization because an English speaker usually expects a noun in sentence-initial position to play the role of an agent (unless one reads certain types of poetry).

Students learn the rules of contextual predicting and the notion of completeness by practicing on isolated words in the following type of task: Assume that the sentence starts with the following word or group of words. What can you predict about the sentence from its beginning?

Omnem . . . : somebody acts upon (sees, asks) every thing/person.

Virum qui captus . . . : Someone acts upon the man who, having been captured, does something.

As the archaeologist can reconstruct an entire building from a fragment based on the laws of geometry, gravity, and familiarity with buildings, so students can make predictions about the complete sentence based on a sentence fragment and their knowledge of what a complete sentence looks like. If a noun in the nominative presents itself, it must be the subject/the agent of the action; it carries a main role. If an adjective in the accusative appears first, unless there is substantivization or gapping, it must be modifying a noun which probably functions as a direct object/ patient in the sentence. On this basis, the reader expects a transitive active verb. If a noun in the genitive presents itself, then in most cases it plays the role of a modifier to a noun, carries a secondary modifying role, and raises an expectation of a noun to modify. The fact that adjectives, genitive nouns, numbers, appositions, participial clauses, and relative clauses all function as adjectival modifiers is input for the activation of an expectation for a noun that these modify.¹⁹ The same is true for the category of adverbial modifiers which includes adverbs, prepositional phrases, adverbial accusatives, most dative and ablative nouns, ablative absolutes, and adverbial dependent clauses (see the Appendix for an extended menu of expectations). The knowledge that participles do not express a complete

 $^{^{18}}$ Also called metaphrasing by G. Seligson, "Rules for Metaphrase," $\it CJ$ 56 (1960) 61–63.

¹⁹ For more details on the linear processing of the text, see J. Muccigrosso and D. P. Ross, "Critical Thinking and Reflective Learning in the Latin Classroom," in M. A. Kassen, ed., *Language Learners of Tomorrow: Process and Promise* (Lincolnwood, Ill., 1999) 242. For more on the creation of higher-level categories which help one to link the form and function of words, see M. G. Knudsvig and D. P. Ross, "The Linguistic Perspective," in R. A. LaFleur, ed., *Latin for the Twenty-first Century: From Concept to Classroom* (Glenview, Ill., 1998) 29–30.

thought, forces the reader, upon seeing a participle, to expect a finite verb down the line. With a phrase *Virum qui captus*, the reader expects the following three sentence elements to complete the sentence: *virum* needs a subject and a transitive verb for completeness; *qui* needs a finite verb to complete its own clause.

III.B. The Value of Drills That Focus on Sentence Fragments

Drills similar to the ones quoted above can also be generated in context, in the process of reading a connected text by using a reading card which blocks out the end of the sentence from the vision of the reader and forces him/her to interpret short segments of the sentence as they unfold upon the page.²⁰ The practice of verbalizing expectations raised by sentence fragments either in isolation or embedded in a text raises the question about the value of forcing students to focus on sentence fragments. What follows is our argument for the need of providing some opportunities to students to practice the language in a environment where syntactic expectations are emphasized in favor of content and cultural background. This is not to say that we do not believe in maximizing the contextual and background information provided to the reader of Latin. But because the utility of decontextualized exercises is less obvious, the following is devoted to discussing that need.

Schema, or previously acquired knowledge accessed in the comprehension process, is often understood to represent only cultural background knowledge. Schemata, however, can be also formal (relating to one's knowledge of the rhetorical discourse structures of different types of texts)21 and procedural (used to interpret incoming sensory information, retrieve information from memory, and guide the sequence of processing).²² In order simultaneously to formulate syntactic expectations and visualize the unfolding events or the relationships between ideas, the reader needs to come to the process not only with a certain level of knowledge of grammar and syntax, but also with strategies and procedures on how to use that knowledge. An example of a reader operating with procedural schema would be the one who can make predictions and can deal with ambiguities by taking into account all the preceding words in the process of the unfolding of a sentence. The reader trained to read with syntactic expectations is able to interpret the prepositional phrase in a sentence beginning with Gallos ab Aquitanis as expressing separation rather than agent because the accusative noun Gallos raises an expectation of a transitive active verb. Since a/ab can express agency only with a passive verb, the option of ab expressing agency is eliminated even before the reader reaches the verb. It was not sufficient for the reader to recognize the grammatical fact that Gallos is in the accusative and therefore a direct object. The reader also needs to know how to use this knowledge in order to resolve the semantic ambiguity of ab. Two procedural schemata were activated in

²⁰ For more drills aimed at teaching students to read in the Latin word order, see W. Hansen, "Teaching Latin Word-Order for Reading Competence," *CJ* 95 (1999) 173–80.

²¹ A. O. Hadley, Teaching Language in Context (Boston 1993) 134 and 137.

²² A. M. Colley, "Text Comprehension," in J. R. Beech and Colley, eds., Cognitive Approaches to Reading (Chichester and New York, 1987) 116.

the decision that ab here expresses separation: the knowledge that accusative nouns (other than place names) pattern with a transitive active verb and certainly never pattern with a passive verb; the knowledge that a/ab expresses agent ("by") only in a passive clause-type and separation ("from") in the environment of a transitive active clause-type.

According to verbal efficiency theory, context-free word recognition is the most salient characteristic of reading ability. An important development in reading ought to be a decrease in dependence on context.²³ The overemphasis on world knowledge can generate a reader who is too "top-down" in his/her comprehension and who can fail to incorporate information within the text that deviates from the activated world-knowledge schema.²⁴ Giving a lot of contextual information up front may inadvertently develop weak readers in absolute terms although the goal is to develop independent and sight readers. We do not deny the importance of background knowledge and pictorial/visual cues which, research shows, are extremely effective,²⁵ but we advocate making room for practice in which, instead of giving students a picture of the story, the teacher prompts the students to develop their own mental pictures/movies. Otherwise students may not learn to read independently.²⁶

III.C. Framing Syntactic Expectations through a Sense of Completeness

One of the most frustrating aspects of reading for the intermediate reader of Latin is the sense that the text can spin out of control at any moment and become utterly meaningless. It is refreshing for the learner to know that although the text may place heavy demands on the reader, the reader also has the right to expect certain things from the text. Certainly, the expectation that Latin should function like English (naively held by many students) can never materialize, but still there are a significant number of facts or truths which the reader can legitimately expect from the text. For instance, every subject raises an expectation of a verb. There is no complete thought, no sense of completeness without these basic, obligatory elements. Every transitive verb raises an expectation of

²³ K. E. Stanovich, R. F. West, and D. J. Freeman, "A Longitudinal Study of Sentence-Context Effects in Second-Grade Children: Tests of an Interactive-Compensatory Model," *Journal of Experimental Child Psychology* 32 (1981) 185–99. See also C. A. Perfetti, *Reading Ability* (New York 1985) 157. As Stanovich, West, and Freeman ("Attentional and Automatic Context Effects in Reading," in A. M. Lesgold and Perfetti, eds., *Interactive Processes in Reading* [Hillsdale, N.J., 1981] 247) more elaborately explain, "We now have open to us a possibility that has been inadequately explored in the reading literature—namely that a deficiency in a lower-level process may lead to a greater reliance on higher-level knowledge sources. Thus, a reader with poor word recognition skills may actually rely more on contextual factors because these provide much needed additional sources of information. It is just this phenomenon that is suggested by the growing body of research showing that the word-recognition times of poorer readers are more affected by prior context."

²⁴ Perfetti (above, n.23) 77.

²⁵ Hadley (above, n.21) 138.

²⁶ For the Latin reader, there is certainly a valid form of reading where the reader comes to the text not only with strong background preparation, but also after having read a translation of the passage, as suggested by B. Campbell ("Reading with Meaning," *CJ* 83 [1988] 245–50). In order to prepare students for sight-reading of original texts, however, the acquisition of a procedural schema is crucial.

a subject and direct object (three elements). A sentence with an intransitive verb, on the other hand, is complete with two elements only (subject and verb).²⁷

Textual expectations need not be limited to structure, but can be extended to the realm of meaning/semantics. It is legitimate to expect that the subject of a verb like "read" will be animate or that an ambiguous noun in the dative/ablative will more likely be dative, if animate.²⁸ The fact that the text cannot offer us complete surprises, that it is bound to function in a predictable way according to certain ground rules is an important psychological reassurance.

In reading in our native language, our ability to infer relationships which are not explicitly stated is crucial to comprehension.²⁹ The beginning reader of Latin, however, may be baffled by the number of words that Latin is allowed to leave out in comparison to English. "Some of the main differences between English and Latin occur in the requirements for completeness of expression."³⁰ Latin, as every language, follows specific gapping rules: it tolerates many more gaps/deletions than English does.³¹ Again, one can explicitly use and teach procedural schemata for dealing with this linguistic difference because

they [procedural schemata] embody a prototype, which is a typical category member or event. When incomplete information concerning an event or object is given, more detail can be filled in using this prototype. Schemata can therefore be used to guide inferences. They can also be used to guide the encoding of incoming information by generating expectations for features that are normally present for a given category.³²

When one sees the ruin of an arch of which only half of the curve is preserved, the reconstruction of the arch is possible with the help of the person's mental prototype of what arches in general look like. Based on this prototype, one formulates expectations about the way the curve should continue and as a result, one mentally reconstructs the arch. The land-scape of a Latin text is often littered with such ruins, each embodying a complete thought in the garb of an incomplete expression. The reader needs procedural schemata as much as background/cultural schemata to reconstruct the deletions/gaps.

Let us look, for example, at the sentence *Multi famam, conscientiam* pauci verentur. The reader expects a transitive verb to complete the meaning of *Multi famam*. Instead, the reader encounters a comma and still another accusative noun, so the expectation of a transitive verb is still held. At the point of reaching pauci, however, the reader must activate several procedural schemata in order to be able to comprehend the sentence. First,

²⁷ For more on reading with expectations, see Muccigrosso and Ross (above, n.19) 239.

²⁸ Knudsvig and Ross (above, n.19) 29.

²⁹ Colley (above, n.22) 114.

³⁰ Seligson, "The Structural Approach, the First Decade," *CW* 58 (1964) 98. For the specific rules of gapping in Latin, see D. Panhuis, "Gapping in Latin," *CJ* 75 (1980) 229–40.

³¹ For more on the differences between the gapping rules in English and in Latin, see Knudsvig and Ross (above, n.19) 31–32.

³² Colley (above, n.22) 116.

the reader must recognize the presence of an incomplete thought due to the presence of the comma and must be prepared for the possibility that the comma connects two clauses despite the incompleteness of expression up to the comma. Second, in order to recognize multi and pauci as subjects of the two separate clauses and famam and conscientiam as the direct objects, the reader must be familiar with the frequent parallelism of conjoined clauses in Latin. Thirdly, the reader must be familiar with the ability of Latin to delete the verb in the first of two conjoined clauses when the extant verb is in a sentence-final position (backward gapping/ deletion).33 The reader must also be aware of the fundamental differences between Latin and English gapping rules and the absence of this backward gapping pattern in English. Only with these procedural schemata would a reader be able to realize that the comma in this sentence connects two clauses rather than two direct objects and that the verb in the first clause is the shared element of the two parallel clauses, in the first of which verentur is deleted/gapped.

III.D. Examples of Formulating Expectations with the Help of Procedural Schemata in the Process of Reading A standard description states that a strong reader

skipped inessential words, guessed from context, read in broad phrases and continued reading the text despite lack of success in decoding a word or phrase . . . drew on as much of the surrounding text as possible, was prepared to tolerate uncertainty, used a wide range of textual cues in predicting what comes next, and generally was flexible in his/her response to texts.³⁴

The "strength" manifests in having sophisticated ways to deal with "incompleteness," whether the incompleteness is inherent in the text or is a result of the reader's own incomplete knowledge of the facts of the language.

To illustrate how the strong reader "drew on as much of the surrounding text as possible, was prepared to tolerate uncertainty, [and] used a wide range of textual cues in predicting what comes next," let us look at the first three words of the sentence, Multi Trojanorum donum fatale Minervae dedicatum et magnitudinem equi mirabantur... Many of the Trojans acted upon, did something to the gift. Because multi is undoubtedly nominative (first position, followed by genitive noun), therefore donum (formally ambiguous accusative or nominative) must be accusative direct object. On this basis, the verb that the reader expects is a transitive verb. This expectation will help the strong reader down the line, when he/she encounters the passive form mirabantur. Even if his/her morphological/vocabulary knowledge does not contain the information that miror is a deponent verb, he/she is in a strong position to infer it.

Students can be explicitly taught to read Latin continuously from left to right by formulating expectations and making informed predictions. This involves training the mind to react to syntactic information by activating

³³ The rules according to which Latin omits verbs have been defined by Panhuis (above, n.30) 229.

³⁴ C. Wallace, *Reading* (Oxford 1992) 58–59. For more on the attitudes of the strong learner and the teacher attitudes which encourage critical thinking in the learner, see Muccigrosso and Ross (above, n.19) 238–48.

the "fill in the gaps" instinct based on a pretaught concept of completeness. The student arrives at a structural translation that captures the various stages of the linear process as it unfolds. Linear processing also allows for going back and reevaluating decisions based on new information. After all, reading is a dynamic process which involves continual reconsideration of previous decisions and expectations. This is a function not only of the way in which the reader processes information, but also of the way in which the text was written. The text itself changes: for example, the referent of the same pronoun can change from sentence to sentence or from paragraph to paragraph; there is much in a text that is implied, inviting the reader to read between the lines.

Written reflection on mental processes is usually not requested from students or not even considered as a necessary stage on the way to reading and visualization, but perhaps it should be. When confronted with a mathematical problem, we are often not capable of holding in our head all processes that will help us arrive at the final solution, so we write them down. Discussing not just what the passage says, but also how it says it, is important. One can discuss the various tensions and expectations that the author deliberately imposes on the reader at the various stages of the unfolding of a sentence. Certain junctions in the text, especially the ones where the reader tends to lose comprehension, are excellent places to reflect on three questions: what do I see up to this point? (parsing, recognizing the words' morphology); what do I have? (visualization of syntactic stuctures and relationships between words and groups of words); and what do I expect? (structurally and semantically).³⁵ This breaks down the process into more manageable pieces and ensures that the correct assignment of roles to each word and correct visualization precedes any form of oral or written translation. An excellent example of how to read long and convoluted passages with the help of expectations in the original Latin word order is given by William G. Hale in his 1887 essay, "The Art of Reading Latin: How to Teach It."36

For less advanced Latin students, the practice of linear reading with expectations can take the form of written drills which require the reader to project expectations related to each individual word in the order in which it appears. Bonos corrumpunt mores congressus mali is an example of a sentence with difficult word order for the English speaker because the adjective bonos is separated from its noun mores and because the subject follows the verb. Reading the sentence continuously left to right by describing one's expectations at every individual stage results in the following steps which lead the students' thinking, much like Ariadne's thread, to the correct comprehension of the sentence, leaving no room to go wrong:

Subject verbs good accusative nouns Subjects (pl) corrupt good accusative nouns Subjects (pl) corrupt good morals Associations corrupt good morals Bad associations corrupt good morals

The linear features of Latin word order require that the reader's expectation for an accusative noun agreeing with bonos be satisfied first. Therefore,

³⁵ See Muccigrosso and Ross (above, n.19) 247-48.

³⁶ Hale, *The Art of Reading Latin: How to Teach It* (Boston 1887). It is now published by A. Mahoney at www.stoa.org/~mahoney/teaching/hale_art.html.

mores, which satisfies the expectation for a noun that agrees with bonos, must be interpreted as the direct object rather than the subject of the sentence. When the reader encounters corrumpunt and starts expecting a plural nominative subject for this verb, the linear sequence of the sentence forces the reader to reject mores, as subject, despite the fact that it is a morphologically ambiguous noun which could be in the nominative plural case. The forces of linear word order require that the expectation for an accusative noun raised by bonos be satisfied first because bonos precedes corrumpunt. Therefore, it is the next noun, congressus, which satisfies the expectation for a subject of corrumpunt. The reader who observes the linear word order and formulates expectations does not even need to know the dictionary entry of congressus in order to conjecture that it is a fourth declension nominative plural noun. The linear unfolding of the sentence does not allow room for any other possibility, but in case of uncertainty, mali is there to clinch the matter.

Sometimes students are amazed at the richness of the visualized items that emerge solely on the basis of one to three words. The student trained to read with syntactic expectations knows that there are three actions or clauses needed to complete the sentence beginning with the phrase *cum capiens*: Subject verbs something when subject capturing something verbs something. The reader expects a main verb and a dependent verb for the *cum*-clause when looking at the phrase *cum capiens*.

Reading becomes much like playing chess where earlier in the game there are more possibilities for interpretation, and the possibilities get further and further reduced as one reads along. The strong reader will read through a sentence with an educated theory about what the sentence must include. In the case of *Multi Trojanorum donum fatale Minervae dedicatum et magnitudinem equi mirabantur*, after visualizing *Multi Trojanorum donum*, the reader wants to know what the Trojans did to the gift. If this is the first time in the passage that the gift is mentioned, he/she also wants to know "what sort of a gift?" The rest of the sentence answers both of these questions, but only the first is important to have a complete movie/action, the second is simply to inform the reader's ignorance. While the sentence must include an answer to the first question, the answer to the second is related to the participation of the sentence within the flow of a connected text³⁷ and is not part of the requirement for syntactic completeness.

Another quality of the strong reader in Wallace's terms is that he/she read in "broad phrases." One can think of these phrases as building blocks, or jigsaw puzzle pieces arranged logically in a linear sequence so that each piece carries not only its own meaning, but also contains clues about understanding the next piece. For instance, the presence of the direct object donum holds the key to the transitivity of the deponent verb mirabantur; dedicatum, besides acting as a modifier for donum, also holds the key to the ambiguous form Minervae. As do all verbs of giving, dedico governs a dative noun, which identifies Minervae as dative. Students learn to discover repetitive patterns in which cohesion between words and clauses is established through a syntactic as well as aesthetic relationship. As there

³⁷ On the cohesive devices which make a connected text a unified whole, see M. A. K. Halliday and R. Hasan, *Cohesion in English* (London 1976).

³⁸ Hoyos (above, n.13) 127. For many practical examples on how to teach students to process a text from left to right without losing comprehension, see Hale (above, n.36).

is a finite reservoir of possible syntactic relationships, so there is a finite reservoir of word-order patterns.

IV.A. Revising and Rehearsing the Movie: Visualizing the Events

As the manufacturing of a movie consists of constant acting and reenacting of scenes until the director brings out the best from his/her actors, so also, reading is a constant process of revisions and refinements. A situation even may arise where the larger meaning and content are pushed into the background while the reader is absorbed in the details, and the visualization is driven by structural expectations. The challenge consists in the fact that even though all words may be processed correctly, the text may still not "make sense" in that the pieces do not fit into a coherent and satisfying picture. Structural expectations have run their course, but along the way, the reader inadvertently has been formulating expectations about content and meaning which the text frustrates. It conjures up images that, to the reader at least, do not make sense. At this point students may succumb to panic and frustration. In fact, this is the most severe test of one's confidence in the truth and practical value of the rules. The student has followed them all and has come up with a "meaningless" sentence. Even students with strong background (top-down) knowledge often arrive at this stage. This is a place where a teacher needs to validate the students' achievements and to dispel their misconceptions and unrealistic expectations, namely that an ancient text must immediately make sense.

Students are rarely told that even professional classicists who have a considerable mastery over the language may have to embark on a research project in order to uncover the full meaning of a given passage or will have to consult extensive commentaries. We are not the primary audience for whom these texts were intended, so a post-reading stage which includes discussion of the larger meaning and historical ramifications of the text (the background schemata) is a vital part of the process. In fact, only heavily adapted or made-up Latin texts make sense on their own to a student who comes to the text with deficient background schemata. In the reading of most original texts, the stage of fuzziness, of revising and backtracking, is a perfectly normal part of the reading process and has to be validated as such. Even if the background knowledge necessary for the reading of the text was discussed in the process of pre-reading, revisiting the contextual information after the reading is essential. Rereading is a vital part of comprehension on all levels.

Let us illustrate the need for retrospection. Initially, it is very tempting for the reader to break up the sentence, *Multi Trojanorum donum fatale Minervae dedicatum et magnitudinem equi mirabantur*, by reading *Multi Trojanorum* as one phrase (substantive adjective + genitive noun as adjective modifier) and *donum fatale Minervae* (noun + adjective modifier + adjective modifier) as the next phrase. *Dedicatum*, however, calls for a reevaluation of the phrase: it is syntactically governed by *donum* because it modifies it as a participle, but it also has a strong associative power to attract *Minervae* into its syntactic sphere of influence because it is normally constructed with a dative of indirect object. Thus it forms a phrase of its own, *Minervae dedicatum*, as an intricate part of the larger phrase, *donum fatale Minervae dedicatum*.

Going down a garden path at first and then going back in order to reevaluate one's decision is a routine part of the reading process for native-tongue readers as well:

There is no empirical evidence that the human parser is immediately able to choose the "correct" structural interpretation of constituents in ambiguous sentences. Of course, it is able to do it eventually (i.e., by the end of the sentence). So, while the structural guess may occasionally be wrong at first, the parser must be free to abandon this preliminary hypothesis and move on to consider alternative interpretations of the material.³⁹

We do this guessing and retrospection constantly in reading in our native language, although the speed makes us less aware of it. Therefore, it is very important that this constant retrospection and reevaluation in order to confirm or change expectations be recognized not as a quality of a weak reader, but as a natural part of the reading process.

IV.B. The Sharper Picture: Visualization Informed by World-Knowledge Schemata

The most precise visualization occurs when all extralinguistic factors that have some bearing on the text are taken into account. The metaphor of the reader as an engaged movie viewer⁴⁰ works pedagogically well for visually oriented students. Because Latin itself presents students with so many linguistic structures and unfamiliar facts and realia that appear to be beyond their experience and grasp, they may inadvertently assume that visualizing and understanding the content of the text is also beyond their reach. Putting students in a position of a movie viewer elicits more interested engagement with the "script." It makes students aware of the value of morphosyntactic signals (e.g., understanding verb voice makes the difference between agency or victimhood). It also raises awareness of the oral performance dimension of ancient texts and opens the floor to more dynamic classroom interactions as students discuss their differing syntactic and semantic expectations, different visual interpretations of the same text conditioned by the differences in their prior knowledge.⁴¹

For most modern students, movies play a role equivalent to the role that books used to play in forming interpretive communities. Reliving and discussing a movie together is a common bonding conversation. Teachers can exploit this social habit by asking students to retell to each other in their own words the movie that they watched mentally while or after reading a Latin text. If students approach the text as a movie script, they will try to breathe life into it rather than engage in "translation," which is not backed up by true comprehension and active visualization. Correcting and modifying each others' interpretations not just from the viewpoint of grammar,

³⁹ D. C. Mitchell, "Reading and Syntactic Analysis," in Beech and Colley (above, n.22) 99.

⁴⁰ "Scripts" and "scenes" are technical terms in cognitive psychology to denote mechanisms and structures used in comprehension and in storage of information (for extensive bibliography, see Colley [above, n.22] 117). They are noted to be particularly relevant to the comprehension of narrative discourse either in a newspaper description of an event or a story.

⁴¹ Students can be asked to create their own texts, marked up for syntactic relationships and illustrated with images drawn from the Web as they reflect on the roadblocks that they have encountered as Latin readers. For some versatile ways for incorporating the resources of the Web into the reading process, see the issue of *CALICO Journal* 18.2 (2001) devoted to "Classics and Technology."

word-ending, and historical/cultural background, but also from the view-point of interpretive bias (literal, metaphorical, ideological, etc.) becomes an integral part of the reading process.⁴²

As a result of such interaction with the text, the meaning emerges from a process of negotiation, especially if the creation of the "script" is distributed among different students who are placed in charge of cast, of setting, and of action. Eventually, students realize that texts are there to be interpreted and their motivation is significantly enhanced if they are invited to become members of an interpretive community. Membership in this community can be only granted if a well-developed system of selfchecks is in place to make sure that the text's meaning is not distorted on the basic structural level while students try to make it mean whatever they want it to mean. Here the value of decontextualized drills becomes apparent. A reader with a strong training in procedural schemata will be less tempted to misinterpret the text when it seems to conflict with the background or world-knowledge schemata that he/she brings to it. After all, in real life, the correct linguistic interpretation of the ancient texts preceded our construction of cultural schemata related to the ancient world. We learned much of what we know about the world of the Romans from these texts, even though in the actual classroom we often flesh out the background and create content-related expectations through visual and verbal means before embarking on the reading process. This pre-reading is to be commended with the caveat that if grammar and its procedural implementation are weak, students will impose on the texts a meaning which is at odds with its linguistic structure.

Students' confidence can be bolstered by the fact that the difficulty of moving from linguistic control without accurate visualization to the stage of correct and vivid visualization is not necessarily the exclusive ordeal of contemporary readers. Ancient readers/listeners had this problem in some form as well. The original audience received a lot of help from the way in which the author or recitator acted out the text with voice, expression, and gestures.

V. Conclusion

Understanding the important part that visualization plays in the reading process can clarify much that is confusing and unduly frustrating in the reading process for students of Latin. Viewing the text as a script provides an alternative mode of assessing comprehension of both syntactic structure and content. Latin students need to invoke their imagination more often than students of a modern language because of the historical nature of the background (top-down) schemata and because of the intentionally visual or structural nature of Latin word-order patterns.

Articulating expectations and content visualization can lead to better comprehension and improved reading skills because they act as Ariadne's thread, which can guide students out of the labyrinth of confusion. Students actively engage with the text by creating, discussing, or even performing their visualizations of the Latin passages according to their comprehension grounded in grammar, procedural, and cultural schemata. In this fashion, they not only find the reading process more interesting, but they also find themselves in a new role as participants in an interpretive

⁴² Useful attention to contextual learning has been recently drawn by P. Hoover, "Contextual Learning and Latin Language Textbooks," *CW* 94 (2000) 56–60.

community. Thus a more satisfactory compromise emerges between the text as a tool to learn the language and the text as a platform for engaging in an interpretive culture. This enhances and maintains students' motivation to read ancient texts because these texts challenge their creativity in the area of visualization: the highly unfamiliar is encountered on more familiar terms within our contemporary culture of avid movie viewers.

Finally, we would like to recapitulate the pedagogical strategies recommended in the article:

- using architectural visuals, parallels, and metaphors to explain Latin style and word-order patterns (I.B)
- discussing syntactic expectations raised by sentence elements in their linear unfolding on the page either in the form of drills or in the process of reading a connected text by focusing on particular sentence segments (III.A-C)
- writing out the expectations raised by each individual word in a sentence as it unfolds in a linear fashion, reflecting in writing upon one's decisions in the process of reading (most applicable to points of difficulty) (III.D)
- using questions, summaries, paraphrases, translations, etc. to ensure correct comprehension (II)
- challenging students to describe and discuss the mental movies triggered by the texts (IV.A)
- refining and deepening the background knowledge necessary for in-depth understanding of the text and inviting students to become members of an ongoing literary interpretive community (IV.B).

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APPENDIX

Menu of Basic Expectations

A DIRECT OBJECT raises the expectation of an active verb and of a subject.

A VERB raises the expectation of a subject and possibly a direct object.

A SUBJECT raises the expectation of a verb and possibly a direct object.

A COORDINATING CONJUNCTION raises the expectation of a second syntactic equivalent.

A SUBORDINATING CONJUNCTION raises an expectation of a finite dependent clause in addition to the independent (main) clause.

An INFINITIVE raises an expectation of a verb that governs it.

An ADJECTIVE raises the expectation of a noun to modify in the same case, number, and gender.

A GENITIVE noun raises the expectation of another noun to modify.

A PREPOSITIONAL PHRASE or an ADVERB raises an expectation of a verb, adjective, or another adverb to modify.

A NOUN in the ABLATIVE or DATIVE raises an expectation of a verb, adjective, or rarely an adverb to modify or pattern with.