Using Morphological Analysis to Teach Vocabulary

In English and French Classes

By

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Foreword

Vocabulary instruction via morphological analysis requires syntactic knowledge and an awareness of the multiple levels of cognitive ability whether the target vocabulary is in English or in a second language. In this project, we will posit several strategies for accomplishing this task in order to facilitate the acquisition and maintenance of new vocabulary for our high school students in English and in French.
English Vocabulary Acquisition through Morphological Analysis

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According to the research of Baker, Simmons and Kameenui of the University of Oregon on “Vocabulary Acquisition: Synthesis of Research” new learning builds on what the learner already knows. Critical factors that contribute to vocabulary development include generalized linguistic differences, memory deficit, differences in strategies for learning new words, differential instructional procedures and depth of word knowledge. Through depth of word knowledge is association, comprehension and generation.

Research suggests that after the age of seven the ease in which a student gains vocabulary levels off. Thus vocabulary growth varies among students and as a result the vocabulary gap grows increasingly larger over time. The question that comes to mind is “What happens at the high school level when the study of vocabulary is part of the curriculum?”

High School students, (a group I call the “entertain me generation”) today have had access to computers and the Internet since they were in first or second grade. Because of this the study of vocabulary is considered boring if it is not accompanied by an activity. There are two ways to pursue this; the first is through an interactive student/computer program complete with bells and whistles. The second is through student group participation in the classroom.

The Program

The purpose of both programs is to develop and enhance vocabulary by using morphological analysis. In order to do this the student, the student must be armed with the knowledge that a morpheme is the smallest meaningful unit of grammar (Glossary of Linguistic Terms.) In addition the student must know the differences between a root word, suffix and prefix.

In order for a computer based or classroom-based program to be successful it is important to keep in mind that learning does not occur in a vacuum, (Baker, Simmons and Kameenui). Therefore just listing words for a student to analyze may not be interesting.

Computer Based Activity (activity time approximately 20 minutes)

As this is a student – computer based activity the student loads the vocabulary program and is welcomed to the program with music. The computer displays a series of sentences highlighting the word to be analyzed and defined.

Example:

The young girl’s behavior was unladylike.
Un lady like
Un – not (prefix)
Lady – well behaved female (root word)
Like – having the characteristics of (suffix)
Should the student be unfamiliar with either a prefix or suffix they would be able to obtain the meaning by striking the appropriate box on the screen.

If the answer is correct the computer would give the student a point and a puppy might bark, “you’re right” to the student.

**Classroom Based Activity (activity time approximately 20 minutes)**

The classroom setting offers students an opportunity to work in groups with immediate human feedback. Taking the same example of “unladylike” the activity would play as follows.

1. Each student in the class would represent a root word, prefix or suffix
2. Each student would have a listing of prefixes and suffixes to use as a reference.
3. The sentence is written on the board by a teacher or student

   Example:
   The Young girl’s behavior was *unladylike*.

4. A student would write the word on the board in morphological units.
5. For example *un lady like*
6. Each student representing the prefix, root word and the suffix would then represent the word and give the meaning of each segment
7. Student in the classroom would respond if the analysis and definition were correct.
8. Points given.

Whether the program is computer based or classroom based it is important that feedback take place immediately.

**Reference Material**

Vocabulary Acquisition: Synthesis of Research
Scott Baker, Deborah C. Simmons, Edward J. Kameenui
University of Oregon

Morphemes
Kristin Mills
University of North Carolina at Pembroke, 1998

Glossary of Linguistic Terms

Breaking Words into Morphemes
[www.ohiou.edu/-linguistic/soemarmo/1270/Exercises/morpheme.html](http://www.ohiou.edu/-linguistic/soemarmo/1270/Exercises/morpheme.html)
Gleitman (1981) makes a strong case that learning the meaning of words requires syntactic knowledge. There are steps in the syntactic analysis that shouldn’t be glossed over. Approaching vocabulary instruction from the point-of-view of the student, the teacher must do her best to analyze the multiple levels of cognitive ability in hopes of gaining “partial access” and thereby bringing the student as close as possible to his universal grammar (UG), to which she may then add data from the second language, French (L2).

Suppose, for the purposes of this project, that I’ve selected the following L2 target vocabulary that I wish to inculcate in the lexicon of the learner.

- **porter**
- **porteur, porteuse**
- **portage**
- **portable**
- **portefeuille**
- **porte-monnaie**
- **portemanteau**
- **porte-parole**
- **prêt-à-porter**
- **apporter**
- **porte-bébé**
- **emporter**
- **emportement**
- **importer**
- **importation**
- **importateur, importatrice**
- **déporter**
**Step 1**

Keeping in mind that, in the early stages of L1 acquisition, babies focus on intonation, I would first construct simple sentences using some of the easier nouns, *e.g.*, *porte-bébé*, *porte-monnaie*, *portemanteau*, *portefeuille*. Repeating these sentences numerous times, I would see if the students could distinguish, say, the verb from the noun by intonation. Once we had isolated the nouns heard in each sentence, we would try to recognize the phoneme(s) in each noun. Which phoneme(s) do the nouns have in common? One could practice babbling it to hone pronunciation. Does the phoneme have meaning, *i.e.*, is it a morpheme? Having identified the morpheme, *port-*, and isolated the nouns, I would now demonstrate the actual objects (baby carrier, coin purse, coat rack, and briefcase) while pronouncing their noun names in a call/response exercise. If this morpheme is at the root of the noun and judging by the function of the objects we are studying, can we posit a meaning for this morpheme? Can we find positive evidence through analogy to English (*porter*, *import*, *portage*, *portable*) to support our hypothesis? Can we intuit the meaning of the words compounded with each root word?

The purpose of **Step 1** is to make contact with the learner’s universal grammar. He is probably aware of the meanings of “porter”, one who carries things as the porter at the airport; “import”, to bring to one’s native territory from a foreign source; and “portable”, that which is capable of being carried. Thus far, I have never failed to have a few canoe-kayak devotees, who proudly inform the group that “portage” usually means the act of carrying one’s craft over land where the waters are no longer navigable. What he may not be aware of are the morphological components of this knowledge. The knowledge that the student already has in his UG informs him of the likelihood that the L2 words we are trying to learn have something to do with carrying, bearing, or supporting the weight of something. Side-by-side comparison of the English words should apprise him of the fact that this meaning derives from their common root *port-*. He is empowered to begin to decode the L2 words. Furthermore, the frequent repetition of the L2 words will have begun the process of expanding his repertoire of phonemes to include the sounds that are unique to French. Because all work, to this point, has been oral, the student is not yet aware of the similarity of spelling and should not be drawn, therefore, to the English pronunciation.

**Step 2**

This step represents a condensed version of the process that occurs in a baby’s babbling phase. Students will try to orally produce the word when the object is demonstrated while the instructor intermittently models the desired pronunciation.
**Step 3** Give students the sentences in written form, but within the sentence, represent the target word with a picture. Ask students to select the correct word from a word bank to identify each picture.

Repeat Step 2.

**Step 4** Give students copies of the same sentences with blanks where the target words should be. Ask students to fill in the blanks using the word bank. Repeat Step 2.

**Step 5** Give students a picture of each object with the partially represented word beneath. Have students fill in the missing letters. Correct spelling.

Repeat Step 2. Isolate and practice pronunciation of phonemes.

**Step 6** Write complete word beneath unlabeled pictures.

**Step 7** Give students sentences to fill in blanks without word bank.

**Step 8** Review analogy discussion above. What does the morpheme *port-* mean in both English and French.

Proceed to cognates: *portable* and *portage*. The mastery of these two words should come rather quickly since they are precise cognates. The concept of portable can, of course, be easily demonstrated with numerous classroom objects. While dealing with this concept, one could easily insert a little comic relief from the tedium of vocabulary and also sneak in a review of negation and simultaneously confirm comprehension by choosing several huge classroom objects and posing a question such as: *Le tableau est-il portable?* To which the student would be expected to respond: *Non, il n’est pas portable.* Or, *Le sac-à-dos est-il portable?* To which the student would respond: *Oui, il est portable.* A photograph or slide could be used to illustrate *portage.*

By now, the fundamental morpheme, *port-*, should be well established, and the lesson can follow several avenues over several days. Consider, for example, the verbs: *porter, apporter, déporter, exporter, importer, emporter, comporter, se comporter.* One can through mime, demonstrate the act of carrying. The teacher might orally model the imperative by commanding a student to carry the books (*Porte les livres!* ) and then describing the action the student is performing (*Elle porte les livres.*) This accustoms the auditor to the fact that the verb inflection in both functions sounds the same. Now is the time to tap back into the UG. What does the prefix *im-* mean? How would the meaning of the word change, if we put *im-* in front of *porter?* It would be helpful to create a list of prefixes.
im- “into” This happens to correspond exactly to the English prefix.

dé- “from” In English, if we “decommission” a ship, we remove it “from” service. Note that in French the prefix has an acute accent.

ex- “away from” When one exhales, he lets out breath, “away from” his body. When one “exports” a commodity, he ships it to another country.

a- “to” The preposition “to” in French is spelled “à”. It may be useful to show derivation from the Latin “ad”, but high school students are usually unimpressed. We could look at English words such as “advocate”, “To lend one’s voice to the support of a cause or idea.”

com- “with” A variation of con-. “To conspire”, to hope with someone that a certain goal may be accomplished, hence, to plot together. “To comply”, to bend with, therefore make one’s behavior match the requirements of a rule, regulation, or request.

em- “from/with” The most difficult prefix to define and convey. Larousse defines emporter in this manner: « prendre avec soi et porter hors d’un lieu (qqch. ou qqn. qui ne se déplace pas par soi-même). » (Larousse, )

By simply employing these prefixes that he already knows, the student can begin to expand dramatically his vocabulary and can almost immediately readily intuit a close approximation of the target verbs. Let’s take a look first at importer and exporter. A little dramatic play, a few props, some maps, a few Power Point slides and we’ll easily have a lesson which will quickly incorporate these verbs into the student’s lexicon and slip in a subliminal lesson on prepositions with geographic locations, a lesson in geography, and the names of citizens of different countries. Picture this: A map of France. Superimposed vineyards. Characters in blue work clothes. A ship being laded with bottles of wine bearing the French flag. A directional arrow pointing towards the United States. Hear this: Les Français exportent des vins aux États-Unis. Next slide: We see Americans unloading the French wines. We hear: Les Américains importent des vins français. Next scene, a Canadian ship full of wheat going to Japan. We hear: Les Canadiens exportent du blé au Japon. And, on the other side: Les Japonais importent du blé du Canada. One could perform auditory evaluation by having the student circle the prefix he heard, im- or ex-. These same scenes could also be used later in the process of evaluation by incorporating them into an interactive computer exercise or game in which the student would have to put the correct prefix on the root word to convey the meaning depicted. Such a game would be ideal for individualized instruction, make-up work, substitute plans, or homework.

A subsequent lesson could deal with suffixes. For example, the student knows how in English to convert a verb to an adjective by adding a suffix, as from “import” to “imported”; from “export” to “exported”. He has accomplished
this transformation by adding the suffix “-ed”, thus making it a past participial adjective. The French equivalent of the “-ed” for the class of verbs in question would be “é”. By removing the infinitive marker “-er” and adding the “-é”, the student now has a past participle that can be used as an adjective. *Les vins importés sont très chers.* Another suffix lesson could point out the use in English of “er” and “or” that, when attached to a verb, mean “one who performs this action, as “sailor”, one who sails; or “baker”, one who bakes. The French has comparable suffixes, usually with an additional inflection which shows the gender of the one who performs the action. Examples are: -eur, -euse; and –eur, -rice to form nouns such as masseur, a man who performs massages, and masseuse, a woman who performs massages; or acteur, a man who acts, and actrice, a woman who acts. A good exercise in distributional analysis would be to examine a series of noun pairs in this category to determine whether one can predict when the feminine suffix will be –euse and when it will be –rice. The suffixes –ation and -ment, on the other hand, transform our root into a noun. In my class, we frequently model combinations such as these physically. I like to think that some kinesthetic learning occurs, and, besides, the physical activity alleviates the fatigue and restlessness that will inevitably occur in an 80-minute class. Each student dons a placard bearing some component of the list words, im-, -eur, dé, -ation, port, etc. They will then link up to form a word which fits a definition I dictate. I take special care to be sure that all word groupings ending in –ation be all girls to represent that all –ation words in French are feminine. Through this exercise we would be demonstrating numerous transformations, changing the verb to a noun or an adjective or to another verb.

*Port* is especially rich in derivatives. But having begun this kind of grouping, one quickly discovers that the possibilities are endless. Indeed the teacher may find that creating these linguistic associations becomes a game that rivals the daily crossword in entertainment and stimulation value. Consider for instance what you could do with tenir or temps or parler, the intersections and cross-associations such as haut-parleur and porte-parole. Here’s another I especially like for it enables us to “make some fun” while connecting with products from daily life. Serve them some Jello, or, if you dare, have them make it. You can review the colors in the process. Before you allow them to eat their dessert, place before them a bowl of gelatin, a tube of gel toothpaste, and bottles or tubes of other gel products (hair styling gel, face washing gel, antiseptic gel, etc.). What do these products have in common? Of course, you want them to answer that they are all gels. One of the products, particularly toiletries, will likely have the product genre named in French in addition to English, e.g., gel démaquillant, that the teacher can point out. After attending to the slight difference in pronunciation, we can discuss the properties we associate with a gel. We can point out that we are waiting for the Jello we are making to gel. Do they notice that our noun just became a verb? What meaning does their UG now give it? Perhaps, to solidify, to harden, to set? Which morpheme do we typically add to a root word in French to create a verb of the first conjugation? -er. And when we add –er to gel-, we get geler which means to solidify, to harden, to set, to freeze. Now we’re off and running and ready to create and appropriate to our
working French vocabulary not just *gel* and *geler*, but also, *gelatine*; *gélatineux*, *euse*; *gelé* (adj.); *gelée* (n.); *gélifiant*; *gélifier*; *gélule*; *gelure*; *congeler*; *congélation*; *congélateur*; *décongeler*; *decongélation*; *décongelé*; *surgelé*; *surgeler*. When they’re dizzy with making combinations, settle them down in groups of two or three with some French magazines and newspapers to see how many uses of words based on *gel* they can discover. Finally, don’t forget to eat the Jello!

This morphological approach to language instruction empowers the student to acquire what I like to call an organic, self-generating vocabulary. If consistently practiced in L2 with a strong and logical nexus to the universal grammar of L1, this technique will equip the student with *le mot juste* for many occasions, and, best of all, when he finds himself in new circumstances, he will be able to recognize roots and adapt them through the use of morphemes to express himself clearly.
Bibliography


Author’s Note

This project is but the germ of an idea. The Teachers as Scholars Institute has inspired many more ideas than I can possibly bring to fruition in three short weeks, so I have chosen for the project to expand and modify favorite teaching strategies to more clearly reflect the principles of linguistics as they were cogently enunciated by Prof. Browning in class and by Steven Pinker in *The Language Instinct*, our principal text for the course. The resultant lesson plans will help me enliven, enlighten, and enable my students—enable them to use their first language which they have each mastered to boost themselves up to successful comprehension and production of their chosen second language, French.

One of the greatest joys of the Institute has been the use of Firestone Library, and I have used every available minute to explore its treasures. I list below my “finds”, some of which are pertinent to this paper and some which are relevant to other linguistic areas of interest of mine. (N.B. One or two of the titles are forthcoming volumes that are not yet available.) I feel that the Institute has revealed to me a vein, a vein whose richness I shall continue to explore and mine in the weeks and months to come.

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“Finds”

*A Developmental Bibliography*


