

CHAPTER 3

Foreign language instruction from a dynamic usage-based (DUB) perspective

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Abstract

In this chapter we combine ideas of usage based linguistics and dynamic systems theory to argue that language is a dynamic usage based system and L2 learning is a dynamic process. Two teaching approaches based on Dynamic Usage-based (DUB) principles with mainly implicit attention to form – a movie approach and the Accelerative Integrated Method – were compared with two more traditional teaching approaches. The results show that if effectiveness is operationalized as gain in general proficiency, both in spoken and written production, and if the intervention is at least one semester long, the DUB approaches are more effective than their traditional semi-communicative counterparts. We also argue that effects of such methods should not be measured in one-off interventions because implicit learning may take longer than explicit learning.

Introduction

Usage-based (UB) theories on language and language learning have changed our views on what language is and how it develops in first and second language learners. According to [Langacker \(2000\)](#), a usage-based view of language is very much in line with Complex Dynamic Systems Theory (CDST) in that language is viewed as emergent through use with different sub-systems interacting over time. We have combined insights from both theories and will refer to it as a dynamic usage based (DUB) approach.

From a DUB perspective, first language (L1) and second language (L2) learning are not based on the acquisition of a set of grammar rules but of a large array of conventionalized constructions ([Goldberg, 1995](#)). All constructions at all levels – at the morphological, lexical, phrasal, sentential, and discourse levels – are meaningful units of language that also include a pragmatic sense. The majority of constructions are unique and very specific, such as words, phrases, formulaic sequences, sentence stems, or even whole sentences. Others are schematic, like a frequently occurring morpheme or a regular sentence pattern, which later may be generalized to new situations. Because specific, lexically based constructions have to be learned one by one, a DUB approach to L2 instruction must involve a great deal of repeated exposure to these constructions in a meaningful context. It is assumed that most of the schematic patterns (traditionally called grammar and syntax) can be discovered implicitly through the input. Therefore, a structure-based approach focussing mainly on grammar – still very popular in the world today ([Lightbown & Spada, 2013](#)) – is not optimal in learning every day constructions in the target language. Indeed in many foreign language contexts, including the Netherlands, the belief is strong that explicit teaching of forms (often explained in the L1) is a prerequisite for learning an L2 accurately ([West & Verspoor, 2016](#)). Structure-based programs take focus-on-form or forms ([Long, 1991](#)) as a starting point and several research reviews such as [Norris and Ortega \(2000\)](#) and [Lightbown and Spada \(2013\)](#) have reported that some focus on form is indeed more effective than no focus on form and that explicit treatment seems to be more effective than implicit treatment. However, as was pointed out by [Norris and Ortega \(2000\)](#), most studies are based on short term interventions, test mainly grammar items, and are often biased in favour of explicit methods in that they concern discrete items. After

a careful consideration of all the factors involved in studies comparing explicit and implicit conditions, [Doughty \(2003\)](#) also concludes that the apparent advantage for explicit instruction is “an artefact of cumulative bias” (p. 274) and suggests that what researchers seem to have overlooked is that acquiring a second language “requires a return to a discovery mode of processing, that is perceiving clues to L2 structure found in the input” (p. 299), very much in line with Van Patten’s processing instruction ([VanPatten, 2002](#)).

With the important role of input and processing in mind, combined with ideas of usage based linguistics and dynamic systems theory, we empirically tested two teaching approaches which emphasize meaningful input and repeated exposure. These approaches are compared to the semi communicative approaches used in FL classes in the Netherlands and Vietnam, which do have input and meaningful interaction, but which also rely heavily on explicit grammar teaching in the L1. Our experiments have shown that if effectiveness is operationalized as gain in general proficiency, both in spoken and written production, rather than as control of explicit grammar knowledge and if the intervention is at least one semester long, teaching approaches based on DUB principles are as effective or more effective on productive performance than the semi-communicatively oriented methods that we tested.

The chapter is organized as follows. After presenting the theoretical underpinnings of a DUB approach, we will explain what in our view DUB teaching should contain and present evidence of the effectiveness of two different DUB methods on oral and written performance.

Theoretical underpinnings for a dynamic usage based (DUB) approach to language development

From the viewpoint of usage-based linguistics, it is reasonable to say that the mechanisms involved in language learning do not revolve around grammar rules but involve the association of language forms with meanings in the appropriate context, so-called form-meaning mappings ([Goldberg, 1995, 2006](#)), which we would like to call form-use-meaning mappings (FUMMs) for short, where “use” stands for the pragmatic sense in which the construction is used within a given context.

The following script from *A Cinderella Story* ([Goodman, Lowry, Sellers, Werber, & Rosman, 2004](#)) illustrates the relatively great number of conventionalized FUMMs (underlined), related to fairy tales in this context, often ignored in current teaching approaches, that may have to be learned as whole units rather than single, separate words. This text shows that if we look at type-token ratios, verb forms (small caps), which usually receive a great deal of explicit attention in traditional semi-communicative approaches, are relatively more frequent and more regular than all the item-based constructions that have to be learned one by one.

*Okay . It WASN't that long ago.
 And it WASN't really a faraway kingdom.
 It WAS the San Fernando Valley.
 It only lookED faraway...
 ...because you COULD barely see it through the smog.
 But to me , growing up,
 the Valley WAS my kingdom.*

Because UB theories see language as a dynamic, complex adaptive system ([Langacker, 2000](#)), they are in line with complex dynamic system theories (CDST) on Second Language Development ([de Bot, Lowie, & Verspoor, 2007](#); [Larsen-Freeman, 2011](#)). CDST views language learning as a complex process in which interconnected variables

interact with each other over time, creating change in a constantly self-reorganizing system. CDST holds that a learner's resources (such as cognitive processes including attention) are limited and that various sub-systems may compete for attention until they have become coordinated and synchronized (van Geert & Verspoor, 2015). An individual's language resides in patterns of neurological activity and therefore language learning is a matter of individual processing (Langacker, 2000). The moment a construction with its meaning and its use is activated in the mind, the neurological connections between form, meaning and use are strengthened (Rumelhart & McClelland, 1988) and through many activations the connection will become entrenched. In other words, using is learning. Similar activations in psycholinguistic terms refers to iteration in CDST and frequency effects in UB theories. Multiple studies on frequency effects – see Ellis (2002) for an early review on frequency effects and language acquisition – have validated these assumptions, and it is safe to say that frequency of occurrence drives the entrenchment process. Learners need repeated exposure to consolidate, schematize and automatize FUMMs and Doughty (2003), in line with Schmidt (1990), would argue that learners need to find their own focus on items to be able to learn them.

Following Langacker (1987) both entrenchment and conventionalization should be seen as dynamic processes shaped through repeated use. Entrenched and conventionalized levels of representation or inventories of constructions coexist and do not convert from one to the other or replace one another (e.g., Achard, 2007; Langacker, 2000; Tomasello, 2003). Schmid (2015) provides a schematic overview of how entrenchment and conventionalization are linked.

Figure 1.

The entrenchment and conventionalized model (Schmid, 2015)

Figure 1.

The circles in the model show the connection and interaction of various components. In the middle are repeated usage events that involve all senses and skills: sensory, cognitive, motor and social. On the left is entrenchment, which takes place in the individual, who routinizes and schematizes patterns of association from the usage events by means of cognitive and emotive forces. On the right is conventionalization, which takes place in a group of speakers through pragmatic and social forces, resulting in utterance types that may at first be innovative, co-adapted, diffused and normalized.

Of course, the learner will have to be exposed to similar usage events repeatedly before entrenchment of a construction and schematization can take place. Let's take an example of a learner of French as a second language in the French classroom listening to a fragment in the L2, and the teacher asks "Qu'est-ce qu'il se passe?" (Literally "what is taking place" but idiomatically "what is happening"). Through the specific context of a teacher looking at her, the learner may very well be able to understand what is meant and answer appropriately. However, it would only be through repeated exposure to similar events and perhaps through violating the expectation by answering with yes or no, the learner would know that "Qu'est-ce qu'il se passe?" is the conventionalized form to ask someone what is happening. The correlate of this view is that novice learners may first overly depend on a few isolated fixed chunks that they have been able to pick up from the ambient language and these are rarely immediately creative (eg. *Comment tu t'appelles? J'habite à Paris*) (Tomasello, 2000; Eskildsen, 2009). This has been shown by Myles, Mitchell, and Hooper (1999) for classroom settings. With enough time and exposure to even more complex real usage events, they will hear and be able to use more creative language. For example, the learner may generalize the specific question construction "Qu'est-ce qu'il se passe?" to "Qu'est-ce qu'il y a?". Early on, the learner who has been implicitly taught may use more non-target or non-conventionalized expressions

than the explicitly taught learner, but as [Tilma \(2014\)](#) has shown in a longitudinal case study of two beginning learners of Finnish, the explicitly taught (Kim) and implicitly taught (Andrea) both abruptly decrease in the number of errors (in this case the relative number of case errors) around the same time about half way during the 10 month course.

Figure 2.

Case error rate by Kim and Andrea (with permission from [Tilma, 2014](#), p. 139)

Figure 2.

Also [Rousse-Malpat, Verspoor, and Visser \(2012\)](#) showed that learners in the implicitly taught program made more errors in gender marking after one year, but after two years, there were no differences in the number or these errors made.

To summarize, explicit learning may seem to be more effective in the short run, but given enough time on task the implicit learner is equally successful in achieving accuracy.

DUB approach to second language instruction

An L2 teaching approach based on DUB principles should thus promote high exposure and repetition of FUMMs so that they become entrenched in the L2 learner. The focus, especially for novice learners, should be on providing appropriate input, scaffolding to help understanding, and repeating or imitating rather than giving learners activities to produce creative utterances. For intermediate learners, repeated exposure is still important, but activities with some creative language use are recommended to avoid boredom later on; still the focus should remain on FUMMs rather than on grammatical form. When classroom activities focus on FUMMs rather than on grammatical form this does not mean that there is no attention to form, but form is defined in a much broader sense in that it includes the way words are spelled, pronounced, combined and used. Moreover, the learner decides him or herself what s/he focusses on.

A DUB approach is basically a communicative language teaching approach in that it focuses on meaning, but it crucially differs from current practice in The Netherlands and in other parts of the world in that the role of input is emphasized again and interaction and output are not considered to be the main driving forces of language development ([Verspoor & Hong, 2013](#)).

A DUB approach includes imitation and repetition, which may be reminiscent of the behaviouristic audio-lingual methods that have been rejected, but the crucial difference is that FUMMs are given within a coherent, meaningful context instead of in a structure-based program devoid of meaning. It also has a lot in common with Krashen's comprehensible input approach ([Krashen, 1982](#)) in that the emphasis is first on input rather than output. The DUB rationale is that cognitive resources (in this case attention) are limited and that trying to develop both listening and speaking or both speaking and writing at the same time in the early stages of L2 development may go at the expense of each other ([Verspoor, de Bot, & Lowie, 2008](#)). The main difference between the comprehensible input approach and a DUB approach is that the input is made not only comprehensible by means of scaffolding in the form of gestures, visuals, paraphrases, translations or anything else that helps to understand the input but also becomes entrenched (at least receptively) by means of multiple exposures and revisiting the same language forms in various activities.

There are many different ways to implement a teaching approach based on DUB principles as long as they include a great amount of authentic input, made comprehensible by providing only short utterances at the time that

can be processed for meaning and scaffolding, include a great deal of repetition of FUMMs, and more than anything else, use the target language as much as possible. In the following we will present two teaching approaches in line with DUB principles, which we tested for effectiveness. The first one is the Movie Approach, which we developed ourselves. The second one is called the Accelerative Integrated Method (AIM) and was developed in Canada by Wendy Maxwell..

The movie approach

The movie approach is in line with a DUB approach because the learners are exposed to scripted but relatively natural, authentic usage events (i.e., contextualized language that was not created for pedagogical purposes). They can see and hear how speakers interact, with their gestures, eye gaze, body movements, and utterances. From the utterances, they can pick up the pronunciation, intonation, the conventionalized expressions within appropriate contexts. Moreover the storyline and visuals in the scenes can help form associations. With enough repetition, the learners can make strong FUMMs.

The movie approach was developed by Verspoor and Hong (2013). It is based on multiple exposures to a single, carefully selected movie in the target language. For her experiment, Hong (2013) selected *A Cinderella Story* (Goodman, Lowry, Sellers, Werber, & Rosman, 2004) as it contained humour, lots of visuals and was felt to offer an appropriate balance between using language the participants were already familiar with and unfamiliar language. The learners were first year university students of different majors at a university in Vietnam. Despite five years of high school English instruction, they had very low TOEIC scores (200 points or lower on a scale from 10 to 990 points; see < www.ets.org/toeic >) and could be considered false beginners. The learners received four hours of instruction per week over the course of one semester. The whole movie was cut into very short segments of at most 2 minutes and inserted in a PowerPoint Presentation. Each scene was shown in sequence and the learners saw the entire movie in the end. The goal was to expose the learner to the language used in each scene about 8 times, either by watching the scene, hearing the teacher say the words, or repeating the text. The language was made comprehensible through scaffolding with visuals, paraphrases, L1 translations and giving cultural background information to understand the language. Table 3 describes a typical lesson step by step.

Table 1. Movie approach classroom procedures

The example scene given here is the first scene of the movie in which a fairy tale castle fades and the San Fernando valley comes in view. Sam, the main character, narrates how her father raises her as a single parent.
Step 1: To activate some knowledge, the teacher presents a few key words or phrases from the scene in the PPT (e.g., San Fernando Valley; kingdom). Visuals, paraphrases or translations are used to make the meaning of these words clear.
Step 2: The learners watch the scene and are asked a general question about the scene to see if they generally understand what is happening. Because of limited resources, learners are asked to focus on the event rather than on the language first. The idea is that if they first understand the gist of the event, they can focus more on the language in a subsequent viewing. If needed, the teachers or students can use the L1.
Step 3: The learners watch the scene again and are now asked to listen carefully to the language. They are asked what words or expressions they were able to pick up. Usually they cannot pick up many words, but that does not matter. The main goal of this step is to have the students listen carefully.
Step 4: The teacher now presents the whole movie script of the scene on a PowerPoint slide. Each line is read by the teacher, who makes a point to articulate clearly and also to pronounce each unstressed part to aid noticing. The reason is that in natural speech (as presented in the movie) unstressed parts may not be salient enough to be noticed. The teacher points out chunks where applicable. Then the teacher explains the meaning of the lines within the context by means of gestures, visuals, L2 paraphrase or translation. An example from <i>A Cinderella Story</i> is the complex sentence in which the young girl says: “Although being raised by a man put me behind in the make-up and fashion departments,...”. This sentence is too long and complex to be processed adequately by beginners and explained by taking the sentence apart as follows: The father raised her (= educated her) He does not know about make-up. (visual or gesture to explain make-up) He does not know about fashion. (visual of fashion) He “put her behind” in these areas. (explain literal sense with visuals and figurative sense with “she knew less than her girlfriends about this”).
Step 5: The teacher shows the segment again and asks if the students understood what was said. The students usually respond by nodding.
Step 6 (optional depending on the proficiency level of the learners): In our study with beginners, the teacher shows the text on a PowerPoint slide again and may ask the students to repeat after him/her or ask individual students to read the lines. This step is again for students to notice not only the main words but also the less salient parts.
Step 7 (optional again depending on the proficiency level of the learner): The teacher shows the segment again and asks if students were able to understand everything. To motivate the learners to listen again, students may be asked to fill in a cloze test with some key words missing.
Step 8: After a few scenes, for change of pace, the teacher devises a small group activity such as role-playing in pairs; for example, the students receive the text and read out the lines. If they can, they can re-enact or recount the scene without text. With this low proficiency group, the goal was to remain close to the original text so that words and phrases were repeated again.
Note: For further viewing, the movie scenes and PowerPoint presentations are made available on the electronic learning environment and if students want to they can go over the scenes again.

In a semester-long experiment with 163 students in 7 groups, **Hong (2013)** and **Verspoor and Hong (2013)** found that the DUB inspired movie approach proved to be more effective than the task-based approach used at the same university in Vietnam. This was clearly a Foreign Language setting as there is very little English in the students’ everyday life. The learners were exposed to the English in class and while doing homework.

The experimental groups received instruction through the movie approach and although the plan had been to use the target language in the scaffolding, Hong reported that the L1 was used about 50% of the time in helping students understand what was said. The control group used a task-based book called *Learning Breakthrough 1* (Bui, Nguyen, Ly, & Truong, 2010) which is built around topics such as “A day on campus” or “Live it! Love it!”. The approach is a communicatively based program with texts to be read, fragments to be listened to, cooperative learning tasks with interaction, and explicit grammar in each chapter. Grammar is first explained and then practiced by the students. Even though the program was supposed to be communicative, Hong found that teachers also spoke Vietnamese about 50% of the time.

Even though the movie approach focussed on receptive skills mainly, the goal was to see to what extent the approach was effective for both receptive and productive skills. The groups were compared on gains on the same battery of tests at the beginning and end of the 15 week course. The receptive test had controlled production tasks with 49 multiple choice items on reading, listening, vocabulary and grammar. The productive test had free production written assignments on topics such as “My best friend” or “My goals and dreams in the future” and oral interviews according to the Student Oral Proficiency Assessment (SOPA) procedures (Thompson, Kenyon, & Rhodes, 2002). The following tables (2–3–4), all from Hong (2013) show the results. Controls are the students taking the traditional CLT classes and the experimental ones classes with the movie approach.

Table 2. Mean and standard deviations of pre-test, post-test, and receptive GEP gain scores of control and experimental groups

Condition	N	Pre-test	Post-test	GEP gain
		Mean (SD)	Mean (SD)	Mean (SD)
Control	69	11.94 (5.33)	17.88 (6.42)	5.94 (5.37)
Experimental	94	14.04 (5.51)	23.86 (6.66)	9.82 (6.33)

Paired Samples t-Tests showed a significant difference between the pre-test and the post-test of the Control Group, $t(68) = -9.19$; $p < .001$, and of the Experimental Group, $t(93) = -15.04$; $p < .001$. These results show that each group improved during its relevant program. The Independent Samples t-Test revealed that the difference in gains between the groups was significant, $t(161) = -4.12$; $p < .001$.

Table 3. Mean and standard deviations of pre-writing, post-writing, and writing gain scores of control and experimental groups

Condition	N	Pre-writing	Post-writing	Writing gain
		Mean (SD)	Mean (SD)	Mean (SD)
Control	69	1.17 (.84)	2.23 (.87)	1.05 (.97)
Experimental	94	1.05 (1.01)	2.43 (.77)	1.41 (1.00)

Paired Samples t-Tests showed a significant difference between the pre-writing and the post-writing of the Control Group, $t(68) = -9.03$; $p < .001$, and of the Experimental Group, $t(93) = -13.46$; $p < .001$. The Independent Samples t-Test revealed that the difference in the writing gain score between the groups was significant, $t(161) = -2.31$; $p = .02$.

Table 4. Means and standard deviations of pre-speaking, post-speaking, and speaking gain scores of control and experimental groups

Condition	N	Pre-speaking	Post-speaking	Speaking gain
		Mean (SD)	Mean (SD)	Mean (SD)
Control	27	1.77 (1.32)	1.99 (.97)	.22 (1.05)
Experimental	44	1.54 (1.17)	2.24 (1.05)	.70 (1.02)

Paired Samples t-Tests showed that the difference between the pre-speaking and the post-speaking of the Experimental Group was significant, $t(43) = -4.57$; $p < .001$, but the difference between the pre-speaking and post-speaking of the Control Group was non-significant $t(26) = -1.12$; $p = .28$. The Independent Samples t-Test analysis revealed that there was a trend towards significance in favor of the Experimental Group ($M = .70$, $SD = 1.02$) over the Control Group ($M = .22$, $SD = 1.05$) in regards to the speaking skill, $t(69) = -1.90$; $p = .06$.

We may conclude that the low proficiency students exposed to the movie approach, which was highly input based and contained no explicit grammar instruction, gained more than their CLT counterparts on both receptive and productive skills after a six months intervention, albeit without a delayed post-test. Although it is impossible to explain why exactly without more controlled laboratory experiments, we feel that the main reason is in the dynamics of processing of meaningful input. A dynamic perspective would argue that every time we hear the same input (Verspoor, de Bot, & Lowie, 2008) the input is different. Learners have limited resources and cannot focus their attention on different aspects of a scene and its language at the same time and therefore repetition is crucial. The first time they see and hear the scene, learners get an idea of what the scene is about and the visual cues may aid understanding. The second time, learners can focus more on what is said, even though they may not actually understand the words or phrases. The written text, carefully pronounced by the teacher, helps the learners to detect word and phrase boundaries and notice less salient parts of the utterance. The scaffolding for meaning with visuals and gestures provides meaningful elaboration, which aids retention (Verspoor & Lowie, 2003). Another important aspect, we believe is the UB view in presenting FUMMs (such as “put her behind”) as a whole, so they can be focussed, practiced and retained as a whole. All in all, the movie scenes and the utterances, all elaborated upon meaningfully by the teacher to aid understanding and noticing, provide enough input to help learners focus on those aspects of language they themselves are able to learn from.

The movie approach experiment was replicated by Irshad (2015) in Sri Lanka with students of a significantly higher proficiency level in one control and two experimental conditions, teacher fronted and computer mediated. The same testing instruments were used as in Hong (2013). Although the teacher-fronted movie approach students scored generally higher than the control students, there were no significant differences between them. However, the computer-mediated condition was significantly more effective than both teacher fronted approaches. The reasons for these findings can be manifold. First of all, Sri Lanka students are exposed to English in all their university classes as it is the medium of instruction at the university, so the amount of exposure to English was less controlled than in Vietnam. Secondly, the Sri Lanka classes were large (50 students per class) and heterogeneous, so not all students may have needed all 8 steps as in Hong, which may have bored more advanced students as appeared from their reflections on the approach. However, in the computer-mediated condition students could work at their own pace by manipulating the number of times the scenes and explanations were presented and within the one-on-one intervention could decide themselves what to focus on.

The accelerative integrated method

The accelerated integrated method (AIM) was devised by Maxwell (2001) and has been used for the teaching of French, English, Spanish and Mandarin to young beginners. Instructional units are based on a story. Gestures are usually linked to words, which are mostly concrete (Pared-Down Language) but a few grammatical constructions such as feminine/masculine, word order, plural, and finite-verb markers have a specific gesture, too. Except for these few grammar gestures, there is no explicit attention to grammatical form. Focus is put on listening and speaking (mostly repetition) skills at the beginning of the learning process. Reading and writing skills are introduced after six months.

AIM is in line with a DUB approach because the learners are repeatedly exposed to the target language FUMMs in engaging pedagogically appropriate usage events as provided by stories. From the teacher's utterances, learners can pick up the FUMMs with the right pronunciation and intonation. Because the stories also include short dialogues, the learners are exposed to socially and culturally appropriate utterances within a context. A unique feature of AIM is that only the target language is used in class by both learners and teachers, which is very difficult to accomplish in foreign language contexts. This is possible because of the use of pared-down language, the use of visuals and most importantly the use of gestures. Almost every word in the story has a specific gesture that accompanies it, so learners do not only hear but also see the utterances. We believe the gestures help to form strong associations and to retain the FUMMs. During a school year, learners work on one or two stories. The teacher – who has to be trained for this method – is the main provider of the input, but there are also DVD's that learners can take home to practice the gestures and songs used in the lessons.

The story is told by the teacher in very small increments in pared-down language with visuals from the story and gestures that are repeated several times. The stories can be children's fairy tales (e.g., The three little pigs) or narratives written about the life of several teenagers in high school (e.g., Veux-tu danser?) with topics concerning the family, travelling, school, the school dance, and friends. Even though some stories are based on fantasy (e.g., "Comment y aller" in which the main character meets an alien), the topics are mostly related to the real world (in the case of "Comment y aller?" learners talk about different countries and nationalities, about travelling and about family). The lesson is fast paced with different classroom configurations. First, the teacher reviews words and expressions with their accompanying gestures, and then introduces new parts of the stories, all in small increments and with repetition. The learners sit in a half circle around the teacher so that s/he can maintain eye contact. Later, learners work in small groups of 3 or 4. Together they work on tasks developed around the topic of the story.

There is no explicit grammar teaching in the sense that learners are not taught grammatical rules which are practised afterwards but there is definitely attention to grammar. AIM has an inductive approach to grammar (as described in DeKeyser, 1995) and uses error analysis techniques to increase accuracy at three levels:

- Level 1: Grammar is not explained. Learners are provided with meaningful input (scripted-language) and repeat the routines. At this level, learners are asked to identify errors, but they are not expected to correct them.
- Level 2: After many repetitions of the routines, the grammatical rules become automatized. At this level, learners are asked to identify errors and correct them.
- Level 3: Once a grammatical rule has become automatized, it is named out loud by the teacher who makes sure that the learner has understood the rule. This can be done at the individual level if a learner is deemed ready by the teacher or at the group level when everyone in the classroom has automatized the rule. At this level, learners are asked to identify errors, correct them and describe the rule.

The error analysis technique is one of the key principles of grammar learning in AIM. It is never an activity in itself but emerges from the learners' needs. Teachers apply the techniques in several steps. They first give an alternative to the students by saying: *Do you say "she goes to bathroom" or "she goes to the bathroom"?*; then they give cues by performing a gesture, for example, and finally they draw the attention of the entire group to a couple of sentences written on the blackboard by asking: *"Does somebody see a mistake?"*. These steps are part of the AIM training that teachers receive.

When learners write assignments, teachers give feedback by giving the correct answer on the assignment. If the learner has a question, he/she asks the teacher in the classroom. The teacher will follow the levels of inductive grammar teaching to answer a learner asking about grammar.

Table 5. AIM classroom procedures

Step 1: The teacher starts by addressing questions to the entire class, which is seated in front of the teacher in a half circle. They rehearse the gestures, answer questions about the meaning, (not at all creatively at first), and learners are asked to repeat chunks to answer the questions. This is done in a fast pace, very actively and playfully, with the use of the gestures and a variety in types of questions. Sometimes one student answers the question, which is repeated by the group.
Step 2: The teacher continues telling the story using visuals and gestures. Then, the same part of the story is segmented and activities are designed around the vocabulary and the meaning of the story. For example, learners are first asked to repeat the sentences to each other (like in a play), but later they can be asked to invent a follow-up of the story.
Step 3: Students work in small groups doing activities around the meaning of the segment and practice the gestures. Activities are usually tasks called "feuille d'activité" with word puzzles or fill in the gap exercises. Other activities involve singing or dancing (based on the story) or playing games such as bingo. The first six months, learners will mostly listen to the story and repeat the chunks and the gestures. They learn the story almost by heart in order to perform a play it in front of their parents. After six months, they are also introduced to the written language.
Step 4: After each lesson, learners go to the teacher and say in French that they talked only French during the lesson "j'ai parlé seulement en français aujourd'hui" and if that is the case, the teacher gives a reward, which can be a treat, a card or extra points.
Step 5: At home, learners have a DVD in which the vocabulary of the lessons is repeated (with the gesture) and they are asked to repeat the gesture or the word that they still don't know.

Four published studies so far have investigated the effectiveness of AIM on communicative skills and accuracy. They have been all conducted in regular schools, without immersion programs. In Canada, **Mady, Arnott and Lapkin (2009)** compared the proficiency in French and perceptions of French language learning of 12 groups of Grade 8 students, 6 with AIM instruction and 6 with Non-AIM instruction, both after two years of instruction. They were tested with a four-skills French as a second language (FSL) test package (**Harley, Lapkin, Scane, Hart, & Trépanier, 1988**). Students were also interviewed and classroom observations were made. The results showed no significant differences in French proficiency nor attitude towards French between the groups. Despite the lack of significant differences between groups on the speaking section of the proficiency test, the authors pointed out that more French was spoken in the AIM classrooms and that the AIM students reported feeling more confident in French. Unfortunately, it is not entirely clear from the article what the Non-AIM instruction consisted of nor what kinds of test items were used.

Also in Canada, **Bourdages and Vignola (2009)** compared the proficiency of two groups of third graders both taught in French entirely in a core French program, but one with AIM and the other without AIM instruction. Data were collected during individual interviews and showed few significant differences between the AIM group and

the Non-AIM group in proficiency nor accuracy. However, the authors also pointed out that the AIM students were more willing to communicate in French, even with incomplete sentences and dared take more risks.

In The Netherlands, **Rousse-Malpat, Verspoor, and Visser (2012)** compared learners instructed with AIM and learners instructed with a semi-communicative method (Carte d'Orange), which contained texts, listening exercises, explicit grammar explanations, and activities. During these classes, the teacher usually speaks Dutch, especially to explain the grammar. They traced the development of 107 high school students (aged 12) for six months after they had had 6 months of instruction of French and found that the AIM students were significantly better on free-writing assignments, which were holistically scored on general proficiency on a scale from 0 to 5. A more detailed study tracing 12 students (six texts) showed that AIM students wrote longer sentences, used relative clauses earlier and used more different verb tenses. In the first four texts they made a higher number of errors, but towards the end, the number of errors dropped dramatically, but spelling errors remained frequent.

Rousse-Malpat and Verspoor (2012) further investigated 78 students (a sub-group from the previous study) during a period of 21 months and found that the AIM method was more effective on oral proficiency, vocabulary and oral comprehension assessed holistically by the Student Oral Proficiency Assessment (SOPA) developed by the Center of Applied Linguistics (see www.cal.org/ela/sopaellopa/) after 9 and 21 months of instruction. A group study on a subset of 15 students showed that AIM is as effective as traditional methods on accuracy, operationalized as the number of errors in present tense, negation and gender.

As **Table 6** illustrates, the proficiency levels of both groups in **Rousse-Malpat and Verspoor (2012)** were quite low (they would be all considered as A1 levels according to the CEFR, 2001), but because of the fine-grained rubrics, SOPA was able to discriminate between the AIM versus Non-AIM groups.

Table 6. Comparison of post-test scores for Non-AIM versus AIM groups in **Rousse-Malpat and Verspoor (2012)** after two instructional years

	Non-AIM (N = 40)		AIM (N = 38)	
	Mean	SD	Mean	SD
Oral fluency	1.15	0.43	1.80	0.98
Vocabulary	1.07	0.35	1.44	0.72
Oral comprehension	1.12	0.34	1.76	0.85

Note. Maximum possible score = 9 for Oral fluency, 9 for Vocabulary, and 9 for Oral comprehension.

On the whole, the results in the Netherlands are more positive than in Canada. We believe the main reason is that in the Netherlands (as in other parts of the world) instruction in the Non-AIM condition is not really communicative in that the learners are not exposed sufficiently to the target language. AIM instruction enables the teacher to use the target language exclusively. However, another explanation for the more positive results in our studies could be related to the fact that our learners were tested on free production tasks.

Of course, further research is needed to confirm these findings. Currently Rousse-Malpat is tracing the development of 308 students in the two conditions over a period of three years and preliminary findings are very much in line with those of the study reported here. Of course, as these are ecological classroom studies in which each class was observed only twice, it would not be possible to include systematic documentation of the input and interaction in the classrooms through classroom observation, and therefore we will never know for sure whether the effectiveness is due to the extra exposure to the target language or the specific method in line with DUB

principles. What we do know, however, is that the method enables the teacher to use the target language exclusively from the first day on, a feat that might be difficult to accomplish otherwise.

Conclusion

In this chapter, we have argued that language is a dynamic usage based system and L2 learning is a dynamic process. If we take a DUB perspective on language, we should see language as more than the sum of its parts in that the parts do not necessarily give rise to its meaning. For example, knowing the meaning of separate words in chunks like *but to me* and *growing up* do not help the L2 learner understand their respective meaning of *in my opinion* and *while I was young* within this context. They are FUMMs that need to be heard or seen sufficiently often to be remembered as a whole. The two DUB approaches we presented have put meaningful input back into the classroom and focus on all elements of the language, from pronunciation and intonation to words, formulaic sequences and sentence patterns, to gestures and body stance, in a meaningful and pragmatically correct context. Although there is no Focus on Form in the traditional sense (Long, 1991) in that it targets mainly grammar and morphology, we argue that there is actually a lot of attention to form in that all meaningful units (including words, formulaic sequences, and so on) are clearly articulated and spelled out so the learner is able to discern them. Also as learning is a dynamic process, learners may be able to focus on different aspects of the FUMM through repetition as they may pay attention to different parts every time they hear it.

We gave examples of two teaching approaches that are in line with DUB principles, the movie approach and AIM. Both approaches have proven to be more effective in improving general proficiency than more traditional semi-communicative counterparts in several studies conducted by teams of researchers at the University of Groningen. However, as Irshad (2015) showed for more advanced learners a self-taught program may be more effective than a teacher-fronted program. Also in Canada, no differences were found between AIM and Non-AIM groups, which may be due to the fact that the Non-AIM methods were also mainly communicative in nature as they were for younger groups and may have contained sufficient amounts of meaningful input and repetition. In Vietnam, where the traditional English method was focussed on grammar practice and interaction among learners, the movie method with its emphasis on repeated, meaningful input, was more effective. Also in the Netherlands, where the commonly used French teaching methods are still very much structure-based, AIM has given teachers and students a way to use French exclusively in the classroom with all students actively involved.

We have also argued that effects of such methods cannot be measured in one-off interventions because implicit learning of specific forms may take longer than explicit learning of such forms. In our movie method studies, we saw that about a semester was needed to see differences between groups to emerge. In the AIM studies, we saw that it could take more than a school year for differences in accuracy to resolve.

In conclusion, usage-based theories on language and language learning have changed our views on language. We hope to have shown that they also hold great potential to change our views on language teaching.

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