Computerising and Intellectualising an Action-Based Approach for University Language Courses

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Abstract

The article addresses the benefits and flaws of an action-based approach in language didactics and offers solutions based in linguistic knowledge, rather than only in communicative tasks. This new, intellect-centred approach to language teaching was implemented for three years in intensive, beginner-level French university courses through an e-platform, games, and ICT assignments. The author shares the findings, compares them with available research, and argues that a solid understanding of language form and structure will regain popularity thanks to the availability of AI tools that make it obsolete to aim for fluency at the expense of accuracy in university language courses.

Keywords: *linguistic awareness, action-based approach*

1. Re-evaluating the action-based approach for university

Two recent events—the COVID-19 pandemic, which forced us explore more of ICT (information and communication technology) for teaching, and the popularisation of AI (artificial intelligence), which forces us reconsider our assessment schemes—call for a large-scale re-evaluation of teaching methods in general, and of an action-based approach to language, in particular. The pandemic produced a panoply of new teaching tricks but also revealed the gaps in students' knowledge; AI urges us to reconsider the importance of writing, now well performed by machines, as an indicator of language proficiency. Both issues concern the proportion of theory to practice in language teaching at the university level.

Until now, research in didactics has held that when it comes to language proficiency, managing somehow, even with many imperfections, beats focusing on language structure without being able to communicate [4]. In the age of AI, especially with respect to writing, we may have to abandon this dated view. It is now extremely easy to type any text in a first language (L1) and get an imperfect text in a second language (L2). Thus today, the ability to customise and improve machine translation appears a more important skill than the ability to produce a written text. What is the point of spending time learning a language incidentally (which means without having any real compass by which to judge the accuracy of one's own output), as the action-based approach (ABA) encourages, when a machine translation of the same dubious quality is always available at one's fingertips? Wouldn't it be more profitable to gain a solid understanding of language form and structure to be able to spot the problems both in machines' and one's own writing?

The pace of progress with ABA is too slow for university programs. The Alliance française, for example, where language classes rely on ABA, prescribes the following hours to reach each level of CEFR: A1—80h, A2—+160h, B1—+160h, B2—+240h, C1—+240. Based on this calculation, no university student could even reach the B1 level (80+160+160) after four years of study in Canada (3h/week x 24 weeks x 4 years = 288h). Worse, ABA textbooks do not allow much deviation from the course set in them: for example, when in 2017, wondering whether the knowledge provided would be worthy of a university credit, I supplemented *Alter Ego* [1] with more materials, class progress remained tied to the textbook's slow pace. Besides, the close monitoring ABA requires to be successful proves impossible in university class sizes. It is also extremely difficult to consistently evaluate student progress with an approach that focuses on fluency instead of accuracy.

Other scholars of pedagogy have voiced similar concerns about ABA: Ellis [2] raised the question of its appropriateness in different instructional contexts, while Long [3] found that the purely incidental and implicit adult learning promoted by the ABA proved highly variable and largely unsuccessful. Moreover, in a recent compilation of language didactics research, *Research-Driven Pedagogy* (henceforth *RDP*) [4], most authors concluded that explicit teaching provides comparatively faster and

more solid results. These findings, the availability of new ICT tools, and the problems described above led to my experiment with a new approach to university beginner French that I will describe below.

2. A call for more awareness in language learning

After experiments with *Alter Ego*, the need to teach students language form and structure to help them with their language progress was obvious to me, but returning to the traditional presentation-practice-production was out of the question: despite all its flaws, the ABA has shown us that students benefit from learning through activities. My answer was the task-based actualisation of the presentation stage: my students still learn through activities, but these activities involve and build linguistic knowledge first, then reinforce it through e-exercises with ICT, before they then proceed to action- or task-based assignments in which both fluency and accuracy are assessed. My students thus become aware of the three main components of linguistic form: in phonetics, the main prosodic particularities of French and all its phonemes, including their articulatory specificities and corresponding reading rules, as well as all the signs of IPA used in French; in lexicon, the ability to recognise cognates and beware of false friends; while in morpho-syntax, the terminology and patterns for all phenomena taught in the high school curriculum. Below, I will outline my novel practices for each component while comparing them with the research results stated in *RDP* [4] and supporting my account with the results of an end-of-term survey from my last Introductory French course in the fall of 2022. The survey had 98 participants, but its results exhibit the typical percentage for the past three years.

2.2 Action-based methods for teaching phonetics

The chapter on pronunciation in *RDP* [4, 145–66], written by Laura Mahalingappa and Nihat Polat, states that “the ultimate goal of pronunciation learning and teaching is now considered to be intelligibility, not phonological accuracy” [4, 146], but it also reports the findings by Thomson and Derwing (published in 2015 and based on a survey of 75 studies on pronunciation instruction), which “showed that while there is an increasing focus on overall intelligibility and comprehensibility of speech, most studies have championed nativelike pronunciation as the ultimate goal of instruction” [4, 159]. My teaching experience confirms this contradiction between the declared values and actual strivings of teachers and learners: students are eager to learn the “correct” pronunciation, which they understand as the closest possible to the best examples of native French speakers. Thus, I do my best to teach them that and, while doing so, explain the most prominent regional and sociolinguistic varieties, which opponents of native-likeness often take as examples cancelling the notion of “native speaker” altogether (cf. “a farmer from Arkansas,” [4, 149]). I solve the goal problem by asking students whether they understand my English well although I am not a native speaker, and when they admit that it sounds clearer to them than some native varieties, I announce that this is our goal for French—to master the pronunciation of a linguistically educated native or non-native speaker aware of phonemic and phonetic particularities. In practice this is achieved through the following actions combining traditional, phoneme-based, and holistic, discourse-based approaches with linguistics.

Our phonetics classes usually start with a video or voiced example of a phonological phenomenon, requiring students to pay attention to a certain feature. For example, when, in accordance with the holistic method, the stress pattern, rhythmic groups, and long vowels are introduced, the students are asked to tap their hands on their desks whenever they hear a stressed syllable or a long vowel in the module text. Then, they cross out the silent and underline the stressed vowels on their worksheets in an attempt to formulate the rule for stress patterns, which they never fail to do while working in groups. The students also do online input-based activities (stressed/unstressed, short/long, French/English) before participating in group and individual tutorials with output activities. They get corrective feedback on their cued pronunciation readings, which they create themselves by marking rhythmic groups and intonation while shading silent letters, before they can record their first output assignment, in which the correct stress is a graded feature.

The words and phrases in the exercises are specifically chosen to avoid phonemes potentially problematic for absolute beginners and to include the ones already explicitly explained and practiced. The phonemic explanations include IPA (International Phonetic Alphabet) and linguistic terminology but are facilitated by illustrations of articulation with a Pictographic Phonetic Alphabet (PPA) I created to combine explicit and active learning [7]. For example, on slide 1 (fig.1), they help establish the relations among all vowel phonemes of the French vocalic trapezium, a rather cryptic feature without visualisation, but a helpful one concerning phonological features and phonemic differences with it.

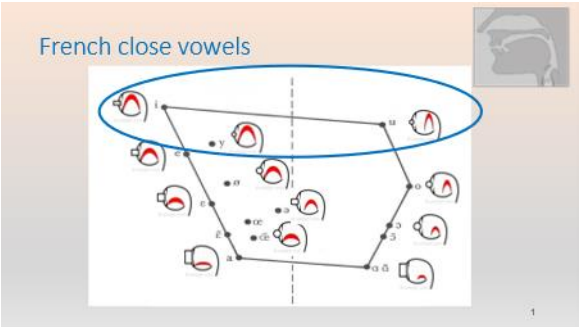

Fig.1. Vocalic trapezium and close vowels

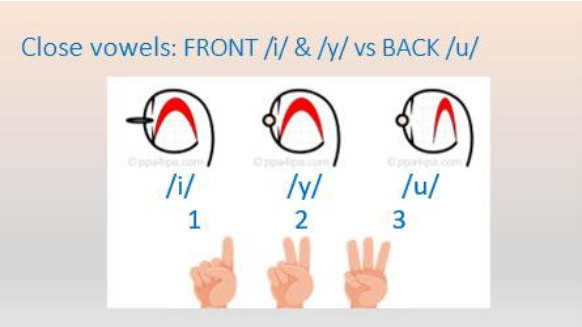

Fig.2. Articulation of close vowels /i/, /y/, and /u/

The second slide (fig.2) calls for various input and output actions: show the number of the sound you hear, repeat the word, show where your tongue is (when students pronounce a word containing /y/ or /u/, they need to sense their tongue and show its position—front or back—with their hands), show whether your lips are rounded, etc. Activities that may appear childish in fact prove more necessary for adult learners than for kids. According to the end-of-term survey, 46 percent of students found the pictograms "very helpful," 43 percent "quite helpful," and only 11 percent "not really helpful," while "visual scaffolding" and "enactment encoding" activities were confirmed as improving "recall and long-term memorisation" in the research by Smotrova & Lantolf [4, 136].

In the survey, 17 percent of beginners chose phonetics as the "most important aspect of the course," compared to 4 percent selecting vocabulary and 9 percent grammar, while 69 percent included it in the "all aspects are equally important" answer. The results of the final reading test always show that most students master stress patterns, reading rules, and articulation of all French phonemes in one semester. The high proficiency results achieved by most students align with the findings summarised in *RDP*, which affirm that students learn faster and better from "explicit pronunciation training" [4, 153], "targeted pronunciation instruction" [4, 154], "effective formal language instruction" [4, 160], and even "traditional instruction" [4, 155], than from simple exposure to large amounts of language data. The psycholinguistic study by Joanisse & Desmeules Trudel [6] also confirmed the necessity of emphasising phonemic differences for learning non-native phonemes, without which the learners could not distinguish the French vowel /y/ even after learning words that contained it.

2.3 Linguistically informed activities for mastering vocabulary

The research on vocabulary summarised in *RDP* by Ardasheva, Hao, & Zhang indicates that although much of L1 & L2 vocabulary learning happens "through environmental exposure to new words, primarily through reading and listening" [4, 125], implicit and incidental learning also requires multiple exposures and long periods of time. Therefore, "effective vocabulary programs need to provide both explicit instruction on the selected and critical items and opportunities for incidental and extended vocabulary learning through multiple exposures" [4, 128]. According to *RDP*, "high-quality word knowledge includes knowing the word's phonological, orthographic, morphological, semantic, and syntactic properties; knowing the word's multiple meanings across different contexts; and understanding its relationships to other words" [4, 126-7]. We can achieve almost all these parameters with intentional instruction involving knowledge from several linguistics fields and numerous activities involving guessing, matching, and paying attention to the nuances of form and meaning.

As with phonetics, we start the module observing the material to learn, but this time we look first at the orthographic form of several new words belonging to the same semantic field. Volunteers can try to read correctly, and groups guess the meaning, most often with the help of visual scaffolding. The next task is to find the English cognates or French words containing the same stem or suffix. Then morphology comes into play: What is the gender of the word if it has the suffix *-tion*? What other words with this suffix do you know? Can you pronounce English words that end with *-tion à la française*? Finally, my Kahoot games invite students to find synonyms, antonyms, or cognates.

In class we focus on the most important and trickiest words, the rest are dealt with through the e-exercises involving cognates and false friends; sorting of the words or typical expressions according to the nuances of meaning; and finally, translating after working with sound texts and videos. These

activities all aim to facilitate word acquisition, retention, and usage accuracy through a conscious association of new words with known ones. The subsequent output assignments—online discussions and written-and-recorded compositions—invite developing more individualised vocabulary and learning to use a dictionary to improve machine translation.

A few didactic tricks favouring incidental learning also come into play: e.g., spaced repetition (e-exercises offer many tries), engaging games (Kahoot and Jeopardy), and mind mapping (worksheets provide pictures and tables to connect words within sematic fields). However, students genuinely appreciate the opportunity to understand the logic of morphology or phonetic change observed in cognates: 52 percent found it "very helpful," 42 percent "quite helpful," and 6 percent "not really helpful." They also like to learn historic facts that tell them how French and English are related: 38 percent found historical and cultural facts "very helpful," 57 percent "quite helpful," and 5 percent "not really helpful." Although the benefits of such linguistic training have never been investigated, most studies outlined in *RDP* confirmed the beneficial role of "intentional instruction" [4, 128], and that "with limited classroom time, explicit vocabulary instruction—both integrated and isolated—may be preferable to incidental vocabulary learning" [4, 132].

2.4 Explaining grammar or morpho-syntax

In the chapter on the role of explicit instruction in task-based language teaching, Rod Ellis invites us to reflect on "how detailed grammatical explanation needs to be," noting that most educators prefer simplified over "full linguistic descriptions" [2, 113], but he also quotes Lantolf and Thorne who "argue that technical descriptions that reflect 'scientific concepts' are essential for ensuring that learners develop a full understanding of a target feature" [2, 113]. Ellis notes the absence of research on the effectiveness of such metalinguistic explanation—but I hope my experimentation with linguistic rationalisations, which, I believe, resembles the direction suggested by Hannah Valenzuela for teachers of English as L2 [8], may shed some light here.

Since my own understanding of French grammar is grounded in linguistic knowledge, I teach form-meaning correspondence in morpho-syntax rather than grammar rules to my students, focusing on those aspects that prove relevant for practical language usage and the comprehension of language functioning. I often explain irregularities through historical linguistics, which students find helpful and entertaining. Linguistics also helps save time. For example, instead of imposing several rules of traditional grammar for participle agreement in the *passé composé*, I just teach the students to consider form-meaning correspondence and make the participle agree with the noun modified by it if this noun (or pronoun) precedes it. This is how we manage to go through all the grammar learned at school by university entrance in just two semesters. The order of tasks in each module resembles that in phonetics and lexicon instruction: start with a simple input task (observe—compare—make a hypothesis), then, after a linguistic explanation, do some focused input tasks (guess—analyse an authentic text—translate); and finally, do some holistic output assignments (discussions and compositions based on a video and often recorded on *flip.com*).

The survey reflects students' appreciation for explicit instruction: 57 percent found the explanation of linguistic reasons behind the rules "very helpful," 38 percent "quite helpful," and 5 percent "not really helpful." This aligns with the didactic findings presented by Diane Larsen-Freeman in *RDP*: most research, including her own study with Ellis in 2006, point out that for "older learners" there is a necessity of "conscious involvement" with "grammatical morphology" [4, 104], that there is a "gain in L2 performance that appeared to benefit from L1 knowledge, rather than being adversely affected by it" [4, 112], and that "the idea of learner awareness-raising or consciousness-raising, as it has been called, also makes a great deal of sense" [4, 119]. Of course, such consciousness-raising and linguistic-based activities involve instruction in L1, which proved beneficial in my language courses. A recent pilot-study by Hirata & Thompson [5] also confirmed the usefulness of L1 when it comes to instructions on how to identify language patterns and to recontextualise them in communicative activities.

3. Results of intellectualising and computerising a beginner language course

The methodology described above represents a middle path in the dichotomy of practical and intellectual approaches. It keeps the active role of the student advocated by practical approaches like ABA but adds a focus on linguistic knowledge, which allows students to acquire, remember, and utilise the practical aspects of the language faster and with a higher level of accuracy. It moreover builds a

solid understanding of language functioning necessary in an age of AI, as it makes possible to use machine translation wisely. Possibly, humans cannot be more fluent than AI, but they can have better judgement if they develop proper linguistic awareness. Most importantly, the students of the intellectualised approach become efficient self-directed learners because they have all the tools to improve their language skills.

In numeric values, out of 21 students who took the Evalang proficiency test after two summer semesters of my intensive French for the Smart, which means after 72 hours of class time, 11 students achieved the A2 level (which requires 240h in small groups of ABA), 4 reached the B1 level (400h of ABA), 2 reached the B2 (640h of ABA), 3 demonstrated an A1+ level similar to the achievement expected from ABA-trained students, and the only student who got A1 reported some technical trouble. These achievements resulted from the following redistribution of theory and practice: since the incidental learning was delegated to machines (spaced repetition in 500 e-exercises accompanied by authentic sound texts and videos for life-like language exposure of about 30 hours per semester), the lecture time was devoted to explicit and active work on the linguistic knowledge necessary for the acquisition of L2 through tasks and games (24 hours, ca. 100 students), while tutorials consisted of ABA-like communicative tasks levelling linguistic awareness (12h, 25 students) as well as of individual consultations providing corrective personalised feedback (ca. 1h per student). Throughout the semester, students could test and demonstrate their passive and active language skills in holistic assignments using ICT, in a cultural field trip, and, at the end, in a group video acted out in French (10h). Such redistribution allows for success in large language classes: most survey respondents evaluated their progress as great (49%) or sufficient (46%), while the majority found the course intensive (81%) and sometimes “too intensive” (12%) or “not enough intensive” (7%).

The course evaluations (107 respondents in 2021-23) also indicate a high level of satisfaction with the courses taught with this method: they are consistently higher than the divisional average with the component deviation up to 0.8 percent on a scale of 5. Thus, overall, the experiment proved successful. Moreover, in practice, it resulted in a new intensive curriculum for beginner French courses adapted to large classes and an electronic textbook, *French for the Smart*, comprising ca. 1,000 exercises with ten questions each. As for the theory of L2 didactics, it confirmed the efficiency of the explicit instruction and especially, of the instruction in L1, which is still not favoured in ABA even though the research did demonstrate that L2-L1 codeswitching is beneficial for language learning [4] & [5]. Most importantly, the experiment confirmed not only the effectiveness of deeper linguistic understanding for language learning but also its attractiveness to students. The survey indicates that most university students strive to understand the logic of language functioning (65%), and only one-third (35%) would settle for learning by repetition without comprehension. I interpret these numbers as an additional reason to develop and advance this intellectualised way of learning that, together with other linguists like Valenzuela advocating for joining theory and practice in language teaching [8], we could call the theory-and-practice, or TAP, approach.

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