

# Shadowing as a language teaching technique: a case study<sup>45</sup>

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## 1. Introduction

The connection of the idea of the fluent L2 speaker with L2 proficiency has made the complex notion of fluency, the ultimate goal of the language learning process, an important word in communicative language teaching. Fluency has been defined by Lennon (2000, 26) as “the rapid, smooth, accurate, lucid and efficient translation of thought or communicative intention into language under the temporal constraints of on-line processing”, but there are several other definitions as well (Fillmore 1979, 2000; Hasselgreen 2005; Segalowitz 2010).

Segalowitz (2010) differentiates between three types of fluency from a cognitive perspective: *cognitive fluency*, the ability of the speaker to mobilize and coordinate the underlying cognitive processes necessary for speech production; *utterance fluency*, that is, features of the utterance itself, such as pausing, hesitation and repair; and *perceived fluency*, that is, the listener’s impression of the previous two fluencies when listening to a speaker. Levelt’s (1989, 1999) model of speech production helps gain more insight into cognitive fluency. The model features three main modules: the conceptualizer, the formulator and the articulator. The conceptualizer puts out a preverbal message, which, if appropriate, is conveyed to the formulator where three stages of encoding take place: lexico-grammatical encoding, morpho-phonological encoding and phonetic encoding, with the final component being the articulator generating sounds that the listener and speaker hear.

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Conceptualization is never an automatic process, but formulation and articulation are almost subconscious in L1. As opposed to this, L2 learners have to make a cognitive effort and concentrate during the latter processes (Kadota 2019).

The necessary cognitive effort, along with the temporal constraints and the on-line nature of processing make fluent L2 speech a difficult goal to achieve. Rehbein suggests that fluency could be viewed in terms of being able to handle “routinized complex speaking plans” (1987: 104), which, however, may often compete with each other resulting in disfluent speech. In order to overcome this problem, handling the speaking plans needs to be automatized, which increases the efficiency of processing and contributes to fluent speech.

Based on the difference between how a native speaker and how an L2 speaker uses language, McLaughlin and Heredia (1996) argue that at the beginning phase of language learning learners are only able to process a limited amount of information. Responses and language use happen through controlled processing, that is, the speaker needs to pay close attention to formulating their message, which demands processing capacity. Through practice, however, learners are gradually able to assemble chunks, which eventually leads to automatic processing: a rapid, more effortless processing of the elements of language.

Information-processing models such as Anderson’s ACT (1980) regard language learning as skill learning. Knowledge is represented as declarative skills (rules, forms, the knowledge of ‘what’) and procedural (knowledge of ‘how’). In terms of language knowledge, declarative knowledge is present in the form of chunks, which are small, independent patterns of information, whereas procedural knowledge consists of production rules (steps of cognition). Production rules are triggered by a goal and retrieve one or a few declarative chunks in order to achieve that goal. The various production rules and the chunks compete with other chunks and rules, and the strongest one, the one that is the most often or most recently used, will be triggered (De Jong & Perfetti 2011). It can therefore be seen that the retrieval speed of words and phrases is strongly tied to repetition (Anderson 1983; Anderson et al. 2004), and practice. If a word is often retrieved together with other words, new chunks may be created and eventually strengthened to the point where they can be called formulaic sequences. An important process to help achieve the goal of fluent L2 speech is proceduralization. By performing a task, proceduralization replaces interpretation with production (Anderson 1983). Eventually, proceduralization contributes

to faster speech that will increasingly resemble the speech rate and pause patterns of a native speaker.

In the past, several studies were carried out to see what characterizes L2 speech and what factors make a speaker sound more fluent in the target language. It has been demonstrated that L2 fluency can be improved over time (Dechert 1980; Hansen, Gardner and Pollard 1998; Lennon 1990a, Towell 1987) and that temporal variables and pauses are two important factors in deciding whether somebody is fluent or sounds fluent in their L2 (Freed 1995; Lennon 1990a, 1990b; Riggenbach 1991; Deschamps 1980; Raupach 1980). Some of the first investigations into the temporal variables pointed out the importance of speech rate (Towell 1987; Freed 1995; Towell, Hawkins & Bazergui 1996), others the number and location of pauses (Dechert 1980; Lennon 1984; Deschamps 1980; Riggenbach 1991), suggesting that people who are perceived as fluent make fewer pauses. The location of the pauses also influences how fluent the speaker is perceived (Riggenbach 1991; Freed 1995). It has been observed that native speakers pause at sentence and clause junctures, whereas L2 speakers may pause at other places, making the speech sound disfluent. Another measure of fluent speech is the length of runs between pauses. Möhle (1984) highlights that L2 speakers produce shorter runs between pauses than L1 speakers. Length of runs, however, can be improved (Towell 1987; Lennon 1990b; Towell et al. 1996), which, in turn, helps increase fluency. This happens through the improved skillfulness in blending “automatized chunks of formulaic strings and frameworks of speech together with newly assembled strings of words” (Wood 2001: 578). In her overview of the research on measures of fluency, Kormos (2006: 163) lists the most frequent temporal variables that are used, highlighting speech rate and the mean length of runs as the best predictors for fluency. Taking the overview further, Segalowitz (2010) traces the advancement of fluency research up to 2010, looking at how computers brought about changes in analyzing speech samples and measuring fluency through research done by Cucchiarini, Strik, & Boves 2000, 2002 and De Jong, Schoonen, & Hulstijn 2009. However, despite the extensive research on the topic, there is no “universally applicable, objective measure of oral fluency” (Segalowitz 2010: 39), as definitions of oral performance variables, methods of elicitation and the very definition of fluency still differ.

As previously mentioned, fluency is based on several factors connected to time and pauses, and the use of prefabricated chunks. Another important aspect of fluency is *perceived fluency*, defined by

Segalowitz as “fluency ascribed by a listener to a speaker, based on impressions drawn from hearing speech samples produced by a speaker” (2010: 48). Perceived fluency brings back the initial problems of the definition of fluency, as it is unclear whether a speaker is perceived fluent because of certain characteristics of their speech, or because of the impression of the listener (Segalowitz 2010).

When it comes to perceiving speech on the part of the listener, an impression of fluency often goes hand-in-hand with an impression of pronunciation, the assessment of which is just as problematic as that of fluency. Munro and Derwing’s (1995a, 1995b) *foreign accent*, *intelligibility* and *comprehensibility* constructs are also important perceived factors while listening to an L2 speech sample (for an overview of the definitions and measurement of these terms, see Thomson (2017)). It is difficult to decide what is perceived as ‘good’ pronunciation, and to what extent pronunciation affects intelligibility, not to mention the plethora of cultural, stereotypical and personality-related factors that influence listeners when they are listening to L2 speech. It has been demonstrated that when listeners rate accent, phonological features such as rhythm and segmental and syllable structure play a role (Trofimovich & Isaacs 2012) showing that aspects of pronunciation may also influence how well someone is understood.

Although this area is not as researched as the previously mentioned assessment of fluency and pronunciation, how L2 speakers perceive their own pronunciation and fluency (see e.g. Dłaska & Krekeler 2008) might give further insight into the already complex picture of how language learners perceive fluency, accent, and pronunciation. Investigating the self- and other-assessment of accentedness and comprehensibility of L2 learners in Canada, Trofimovich et al. (2016) found that the relationship between the objective measures and self-assessment performances were weak, both from speakers of the lower and upper end of the accentedness and comprehensibility scales, with the former overestimating and the latter underestimating themselves. The study emphasizes the importance of awareness of one’s skills in what speakers focus on in the input as well as what learning experiences and activities they choose for further development.

In an attempt to gain further insight into what aspects of pronunciation and fluency L2 learners are actually aware of when they speak, after a brief description and research history of a technique called shadowing, based on insights gained from previous related studies and our own teaching experience, we are going to investigate how students doing the shadowing feel about the activity, and how they perceive the

activity to affect their language learning process and their language skills.

## **2. Shadowing**

Shadowing is a technique defined by Lambert as “a paced, auditory tracking task which involves the immediate vocalization of auditorily presented stimuli, i.e. word-for-word repetition in the same language, parrot-style” (1988: 266). Shadowing was a technique initially used in simultaneous interpreting. Its greatest asset (and its greatest difficulty) lies in the fact that it leaves no time for explicitly thinking about grammar or meaning while one is carrying out the task (Kadota 2007 in Hamada 2016). Its effects can be explained through Baddeley’s (1974; 2003) multi-component memory system consisting of the phonological loop, visuospatial sketchpad, episodic buffer and central executive. The phonological loop consists of a phonological store and an articulatory rehearsal-component, with the former processing and storing incoming information a short amount of time, and the latter refreshing it. The phonological loop is especially important from the point of view of phoneme perception, since this can be problematic for lower-level speakers of a foreign language, especially if the native language and the target language are from different language families. If an incoming word is not recognized, the phonological loop is not as efficient as it could be, which also affects the working memory and thus hinders language acquisition. However, with shadowing, the efficiency of the phonological loop can be strengthened. With the simultaneous reproduction of the speech one hears, phoneme perception is improved, increasing, in the long run, the information absorbed and stored as well as leading to improved listening performance (Hamada, 2016).

The positive effects of shadowing go well beyond its original use, interpreting. Many Japanese studies have been published with the purpose of testing the effectiveness of shadowing in language learning. It is assumed that shadowing practice is the most effective at the phonetic encoding and lexico-grammatical encoding stages of speech production and articulation (Kadota 2019), shown to be facilitating the encoding or pronunciation of lexical accents in L2 Japanese, increasing Japanese articulation speed and pitch range (Mori 2011). Although no research to date has conclusively shown that shadowing in and of itself plays an effective role in enhancing the L2 phonetic encoding and L2 lexico-grammatical encoding stages of L2 speech production, the

studies published on oral reading show that used alongside other techniques, the efficiency of shadowing is noticeable.

According to Kojima's model (in Kadota 2019) of aural word repetition routes, it is possible to differentiate between aural repetition (a route used in repeating L2 sounds that we are unfamiliar with), phonological repetition (perception of vowel and consonant phonemes), lexical repetition (dividing the heard speech into words) and semantic repetition (repetition and processing and understanding the meaning). Based on the multiple pathways to repeating aurally input words as proposed by Kojima, it is suggested that there are also several routes to L2 speech shadowing with the first two being acoustic and phonological repetition, where there is no understanding of meaning yet. However, when speech becomes more automatic, repetition becomes lexical and semantic, and the cognitive load that the shadowing task requires is reduced, making way for multitasking: speech production with semantic processing. As the listening, speaking and thinking come together – that is, the person doing the shadowing understands the meaning of what is being shadowed and heard –, the shadowing process arrives at the stage where it helps develop accurate and fluent speech (Kadota 2019).

Shadowing has been previously researched in academic context (Li-Chi 2009; Bovee & Stewart 2009) with people of different levels and L1s, showing that doing the task for several weeks, the participants felt improvement and gained confidence, and it has also been demonstrated that the task has been useful in improving comprehensibility, fluency and the ability to imitate a speech model in the course of 8 weeks (Foote & McDonough 2017). Exactly how shadowing works to improve certain skills, for example, listening, is still not fully understood. Also, it is not sufficiently researched whether the positive effects of shadowing are truly limited to low-proficiency learners (Hamada 2016) (for an effect of Shadowing of Advanced learners in ESL context, see Foote & McDonough 2017). Contrary to assumptions that shadowing promotes fluent speech, Muraoka's study (2017) suggests that shadowing alone does not seem to promote fluency and proceduralization. Combined with oral reading, one of the positive effects of shadowing is that it helps phonetic encoding, articulation and prosodic production by helping learners acquire the rhythm of the language, but more research is needed to find out in what ways students can benefit from regularly or casually practicing shadowing.

To our knowledge, so far two studies have reported how students evaluated shadowing (Bovee & Stewart 2009; Foote & McDonough 2017). Doing a pilot study for laying the groundwork for further

research of shadowing in the Hungarian context, our goal was to implement shadowing into the learning process of two EFL learners in a non-academic EFL context to see how full-time employees, who are only able to dedicate a limited amount of time to language learning in general - a scenario that is characteristic of many adult language learners in the world who study English for business and work purposes - evaluate the activity, and what difficulties and successes they report while engaging in it.

### **3. Methods**

#### **3.1. Participants**

The participants of the present study are two adult learners of English. They both have undertaken to improve their English in order to meet the requirements of their respective jobs. They are experienced language learners considering the length of time they spent learning English at certain points of their lives (school education, private lessons). They are eager and motivated learners, willing to invest efforts into increasing their current language proficiency.

Participant 1 is a female adult language learner of English. At the time of the start of the data collection, her general language proficiency is an approximate B1 according to the CEFR, with reading and writing skills slightly above, and listening and speaking skills slightly below B1. Participant 1 works in a multinational work environment, therefore her superiors at her workplace expect her to improve her English. She uses English in written communication with both native and non-native speakers of English almost every day. As regards her language learning, she participates in 3-4 language classes a week, prepares homework, studies on her own every second day, and practices oral communication on her own. In order to improve her speech rate and pronunciation, she agreed to engage in shadowing as an extra activity beyond her language classes. This scenario was changed in the middle of March, when - under the pressure of the circumstances caused by the COVID-19 outbreak - Participant 1 had to give up her regular lessons, but continued shadowing.

Participant 2 is a male language learner. At the time of the start of the data collection, his general language proficiency was approximately B2 according to the CEFR in terms of all the four main skills. Participant 2 works for an IT company, where he uses English on a daily basis in his job. He uses English in written and spoken work-related

communication with native and non-native speakers on a weekly basis. He currently participates in one language class a week, watches TV series and communicates with native speaker co-workers, does homework and spends an average of 2 hours weekly on studying English. He agreed to do shadowing as an extra activity to engage with English when he was on a hiatus from actively attending English classes.

### **3.2. Procedure**

In the course of the data collection period (December 2019-April 2020), Participant 1 received a total of 11 texts, 7 longer ones (3-4 minutes) and 4 shorter ones (1-1:30 minutes). The texts were selected in a way that they matched the participant's proficiency level, consequently, with practice, the difficulty of the task was gradually increased. The texts were monologues and dialogues produced by speakers of different native varieties of English in order to familiarize the participant with a set of different native accents.

The data collection period for Participant 2 was somewhat shorter (December 2019 – March 2020). During these months he received a total of 3 texts: 1:00, 1:27 and 1:50 minutes long respectively. Given that Participant 2 was known to the researcher as a fluent speaker, the recordings he received for shadowing were 1-2 minute extracts from interviews from a *YouTube* talk show, where the guests usually talk uninterrupted for longer stretches of time. Knowing the level and speaking skills of Participant 2, the researcher assumed that assigning him ungraded, authentic, spontaneous and unrehearsed speech that is not primarily targeted at language learners would not cause him any problems, on the contrary, he might view them as a challenge. All three speakers were speakers of American English because that is the variety the participant had been most exposed to, the one he uses for work, and what his accent resembles the most when speaking in English.

When engaging in the task, both participants were asked to follow the same procedure in the case of each text: first, they were asked to listen to the text as many times it was necessary for them to be able to transcribe the text of the recording. They were free to decide how many times and how often they listened to the text, and after how long they stopped the recording in order to take it down. The participants worked on their own and at their own pace. After transcribing the texts to the best of their knowledge, they were presented with the actual script which they studied carefully, while comparing their own transcribed versions with it. Second, the participants were asked to engage in the task of



shadowing. They were free to decide how much practice they needed. In all the cases, the participants were asked to produce two voice recordings of their performance: the first one when they read out the text for the first time and the second when they felt that they had practiced enough in order to read out the text to the best of their ability. In a later study, the authors are planning to present the analysis of these recordings as well as the results and conclusions they yield both for the field of language teaching methodology and for the study of second language acquisition and learning.

During the entire length of the data collection, both participants were in close contact with their language teachers, who are the respective co-authors of the present article. The participants continuously reported on their perception of their progress, their experiences with the tasks, their struggles and their successes.

## **4. Results and Discussion**

### **4.1. Participant 1's perception of the task achievement and her learning success**

As mentioned above, Participant 1 is a B1 level learner of English. When she was first presented with the task, she immediately became very enthusiastic and willing to engage in it. Her efforts and occasional struggles were regularly reported to and reflected upon by one of the authors, therefore the participant's perceptions can be thoroughly documented.

The first impression of the participant was that the tasks - both taking down the text of the recordings and then trying to keep pace while reading aloud - were much more difficult than she expected. She claimed that although the first text did not contain more than five unknown expressions, she still found it extremely difficult and time-consuming to write down the text. She committed lots of mistakes, because of not being able to understand the exact words that she heard. Also, she needed almost forty practice sessions to feel that she can make her second recording. Her accompanying comment was: "Inside I can feel and hear it much better, but when I compare what I hear inside to the actual recording, I hear that it is not good enough yet". This means that the first week of shadowing already caused Participant 1 to feel that there is an improvement going on 'inside'.

By the fourth week and the fourth set of texts, Participant 1 reported for the first time that she was satisfied with her performance. As

mentioned earlier, Participant 1 took part in regular language instruction along with shadowing. On week 5 of the data collection period, she was required to produce a piece of written text. She commented that she was pleasantly surprised while producing the composition, because “there were a lot of expressions finding their way to the surface” and she could “write as quickly as the thoughts were coming”. This was a great breakthrough for her, since she claimed “not to have experienced anything like this before”.

Until the middle of the data collection period, Participant 1 continued to make solely positive comments on her task achievement. Despite the gradual increase in the level of the shadowing tasks she had been set, she kept reporting gradual and linear progress. Her performance during the lessons reflected the same: the researcher-teacher observed improvement in her general performance, both her oral and written accuracy improved and her listening skills soared.

By approximately week 10-12, however, Participant 1 experienced a short period of fallback. She reported not to feel as successful as before and she started to question her improvement. She seemed to have experienced a plateau, a phenomenon typical in language learning. Due to her hard work and perseverance, she managed to move on after two or three weeks. The COVID-19 outbreak caused a significant change in Participant 1’s work schedule, making her unable to attend lessons for a whole month, which caused a major decrease in her exposure to English. She still carried on with shadowing, though, in order to maintain her English. She claimed that she needed to make a decision about how to improve her English in the little time she had, and found shadowing to be the most effective way.

Having followed Participant 1 through five months of shadowing and having kept track of the feedback she provided, we can conclude that according to her perceptions, shadowing is a highly efficient way of improving one’s listening skills, pronunciation, fluency and retrieving vocabulary. Although there has been no systematic data collection made of the oral and written performance of Participant 1, these self-perceived achievements can be underpinned by the observations that the researcher has made and recorded in the lessons during the data collection period. They also run parallel with Participant 1’s answers to what she enjoyed the most about the task, which is as follows: “I really like and enjoy these types of tasks. I learn words, I am listening to and speaking in English, and I write in English. I really like it because I do not need another English book. And I like the topics, you can choose casual, specific, or interesting texts with a lot of accents.” In brief, she

comments on the activation of a variety of skills while experiencing an exposure to a variety of topics and accents. In her own perception, the area where she improved to the greatest extent is her speech production: she feels more comfortable using English, claiming “I am braver when I have to start a conversation, and I can use more words.”

The spontaneous speech samples produced by Participant 1 at the beginning and at the end of the data collection period seem to confirm some of the above self-perceived reflections. While the first sample contains very basic vocabulary with a lot of grammatical errors, many false starts and hesitations, the second sample contains higher-level vocabulary and more correct and consistent grammar. Surprisingly, her speech rate and mean length of runs did not seem to improve (speech rate: 153 syllables per minute in the first sample, and 147 in the second; mean length of runs: 6,65 syllables per run and 5,93 syllables per run), which contradicts earlier research on shadowing, but may be attributable to the decrease in time spent with practicing English due to the circumstances caused by the virus epidemic, as explained above.

#### **4.2. Participant 2’s perception of the task achievement and her learning success**

Participant 2 was very enthusiastic about a possibility to improve his language skills during the research period, as at the time his duties prevented him from attending lessons, therefore he agreed to do the task willingly. Using English in his work, he expressed a wish to be fluent, have a great range of vocabulary and accurate grammar. Although he deems a native-like accent important in being taken seriously when talking to a native speaker, he expressed being more concerned about his grammar when speaking, rather than sounding native-like. The only study-related activity he was doing in the course of the four months in question was shadowing, which makes any effects of the task on his language production easier to monitor. Participant 2 was corresponding with one of the authors of the present article regularly, asking questions and giving feedback often, in the form of informal emails and an Excel table, where he kept track of his practice sessions.

Upon being allowed to listen to the first recording as many times he wanted, he was very successful at writing a transcript of it, with only a few function words missing. Having received his transcript corrected (with the mistakes clearly indicated in red so that he could learn from it), he was allowed to start practicing. Working in the field of IT, he tried to discover digital methods that could facilitate his progress (“you know

we IT guys are very creative because we are very, very lazy”), so he started by opening the file in an audio software to look at the spectrogram of the recording, saying that ‘looking at’ the audio file is a much better way to mark the length of pauses during his speech, which was important since he was assigned a 2-minute-long monologue.

Having started his first practice session, his immediate reaction was that it was surprisingly and unexpectedly difficult, but at the same time he was enthusiastic about the addictive quality of the task, saying that he could not stop doing it. A week later, having shadowed the text 32 times over the course of one week, dedicating 20 minutes a day to the activity, one of the authors of the present article received his recorded first attempt, along with which he was also required to send the recording that he considered his best. Having listened to the recording as many times as necessary to write down the content resulted in his being able to shadow up to 3-4-second-long stretches without problems upon his very first try.

After practicing, he sent the recording as agreed, although he himself was not satisfied with his last version. He said it stressed him out, as he had expected to be able to shadow it without mistakes, and felt a little frustrated by the fact that he could not do it. It sounded as if he had underestimated himself, as there were actually only a few expressions he could not pronounce from the almost two-minute long recording. The parts that caused a problem in pronunciation were ‘it *might not necessarily*<sup>46</sup> mean’, ‘inner intention’, and ‘I’ve actually got the word’. The original speaker pronounces these expressions in one-two seconds with ease, but for Participant 2, the imitation of the flapping of /t/, correctly stressing the word *necessarily* while trying to quickly pronounce the fast sequence of the two fricatives in it, and keeping up with the speed at the same time proved to be challenging. In his email he claimed that his best attempt was the point where he gave up. Apart from a few exceptions, he was almost perfectly able to keep up with the fast pace of the speaker, but he was not completely satisfied with his own performance. Expressions he marked as problematic at his first attempt were ‘like *I’m going to make* a million dollars’, ‘*inner intention*’, ‘so *then they’re* against that worry’, and later more generally the long sentences of the speaker. His technique for working on the problematic parts was slowing the pace of the recording down and practicing it that way before going back to the original speed.

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<sup>46</sup> The italicized parts are the ones the Participant indicated as problematic.

In response to the frustration expressed by the participant at the difficulties which did not seem to completely disappear by the end of the one-week practice session, the researcher offered to send a recording with a slower speech rate, but participant B insisted on receiving recordings of the same difficulty, expressing his wish to improve, even if it meant challenging, fast speakers.

After a week of hiatus due to work-related duties, he received his second recording, in which there were more words that he could not understand while transcribing the assigned part. Despite the difficulties in transcription, his first try of the second task was almost flawless, and what he had to improve on was intonation and stress. After a week of practice, he recorded his best attempt, where there was an audible improvement of both stress and intonation, and he did not stop during the recording at all. The difficulties he pinpointed were the expression ‘one of my fondest memories was me and my mom sitting at the kitchen table’, and the overall speed of the speaker, which he tried to cope with by once again slowing down the speed of the critical parts and practicing them at a slower pace. Having practiced 45 times in only four (not consecutive) days with an average practice time of 18 minutes, he reported being satisfied with his final recording.

His third transcript contained only a handful of mistakes, otherwise being accurate. This was the most balanced recording in terms of intonation, stress, and pace as regards the first and last attempts. The regularity and frequency of the practice were the same as for the previous session. Sometimes he did not manage to fully pronounce words when they formed part of a fast utterance, three-four syllable words like “consciousness” or “experience”, but the pace did not prove to be an obstacle, he could seamlessly go through the recording once again.

His final comment when sending his last recording was that he felt that he improved a lot and his practice methods did, too, which is evident from the fact that he seemed to be able to reduce his practice time to four days, during the course of which he managed to produce a final recording with which he was satisfied.

Having completed the third round of shadowing, he commented that he thought the activity was interesting and useful, adding that he thought his listening skills improved, he gained more experience in paying attention to connected speech, and more conscious of his pronunciation and intonation. He concluded that it would be useful for him to do this type of activity at least every second week, as he felt it would help further develop his pronunciation, listening and speaking skills. Before

the experiment, on a scale from 1-6 on how fluent he considered himself to be, he gave himself a 3, having been out of practice with English for a while. At the end of the experiment he gave himself a 5, saying that he thought the shadowing helped him a lot.

From the feedback and comments of Participant 2, it is clear that he was enthusiastic about the activity and went through the three recordings which had been agreed to at the beginning of the period despite being busy with work and everyday life. The comfort of doing the activity at one's home makes it appealing, and the fact that one can do it when and where and as many times as they want makes it easier to stick with it even if the activity might be challenging at times, as reported by both the participants.

The speech samples provided by Participant 2 at the beginning and the end of the four months show a slight improvement in speech rate (from 157 syllables per minute to 162 syllable per minute), but the improvement in mean length of runs (5,2 syllables per run to 5,7) is almost negligible. It is important to mention here that during the recording of the second speech sample, Participant 2 was audibly exhausted and sounded unfocused during the first half of the recording. Although it is impossible to say whether the improvement in speech rate is a result of shadowing or merely attributable to external reasons, the shadowing activities might still have contributed to his speech becoming more fluent, taking into consideration the fact that he was not involved in any focused studying of English at the time.

## **5. Conclusion and limitations**

In the present paper we have reported on two adult language learners' experiences with shadowing as a task accompanying and complementing their regular language learning routine for a period of 4-5 months. During this time the participants' language skills evidently improved, however, because of the complementary nature of the shadowing task, it is hardly possible to isolate the role of shadowing in the increase experienced by the researcher-teachers in the different aspects of the learners' language proficiency. On the other hand, due to the constant feedback received from the participants on their own perceptions, it is safe to maintain that shadowing had a positive impact on their language development. In spite of the fact that there is no measurable increase in the participants' speech rate, the authors believe the experiment to be a promising complementary method to language teaching. They both reported that they did not only find the task

enjoyable (feedback which ties in with Foote and McDonough's observation (2017) that sticking with shadowing for a longer period of time results in learners appreciating the activity), but they felt that they had generally improved; they perceived raised consciousness and improvement in listening skills, pronunciation, fluency – all the beneficial effects previously described by the literature on shadowing –, furthermore, they reported improvement in word retrieval and the ability to pay attention to connected speech. Both participants perceive shadowing so useful that they are willing to carry on with it as long as they feel necessary.

The limitations to the present paper are numerous. We have worked with two participants at two different levels in the middle section of the CEFR scale, so our conclusions are limited to intermediate to advanced level learners. Also, in a world where free time is scarce, there is a tendency to strive to gain knowledge in the least time-consuming way, and shadowing certainly requires dedication and commitment. Our participants are enthusiastic language learners, who are ready to face challenges and experience with new techniques. They are also hardworking and willing to invest time and effort into their own development. A further limitation is that the role of shadowing cannot be separately accounted for. Future research is yet to invent methods for measuring the effects of shadowing solely, independent of other factors.

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