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Language learning through adaptive graded readers

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Declaration of Authorship

I hereby declare that I am the sole author of this MA thesis and that I have listed all sources used in the bibliography and identified as references. I further declare that I have not submitted this thesis at any other institution in order to obtain a degree.

I have no objections to the MA thesis being borrowed and used for study purposes.

Prohlášení

Prohlašuji, že jsem diplomovou práci vypracovala samostatně, že jsem řádně citovala všechny použité prameny a literaturu a že práce nebyla využita v rámci jiného vysokoškolského studia či k získání jiného nebo stejného titulu.

Souhlasím se zapůjčením diplomové práce ke studijním účelům.

V Praze 10.8. 2023 podpis

Abstract AJ

The present thesis deals with graded readers and their contribution to L2 acquisition, more specifically their potential in connection with interactive fiction and adaptive learning mechanisms. For the purposes of this study, an adaptive graded reader was written in three levels of difficulty (based on vocabulary) and programmed as an interactive script in the form of a visual novel. Its effects were then tested on a group of Czech learners of English and on a control group. The experimental subjects could access the more demanding levels of the material by passing an assessment at the end of each chapter. The subjects in the control group, on the contrary, were given a non-interactive version of the reader with no checking for readiness. The results of the experiment revealed no statistically significant differences between the two groups, with both versions of the task leading to similar overall results. Despite this, the subjects in the experimental group reported greater satisfaction and considered the material more effective compared to the control group. The implications of the study suggest that while both versions of the reader were effective in vocabulary instruction, the adaptive graded reader was better received by the subjects and, therefore, could lead to greater motivation and more consistent learning in the future. More research is needed to compare the adaptive graded version with more conventionally employed digital media.

Key words: Graded Reader, Interactive Fiction, Adaptive Learning, Computer-assisted Language Learning, Vocabulary Acquisition

Abstrakt ČJ

Tato práce se zabývá zjednodušenou četbou a jejím přínosem pro osvojování cizích jazyků, konkrétněji jejím potenciálem ve spojení s interaktivní fikcí a adaptivním vzděláváním. Pro účely této studie byla vytvořena adaptivní zjednodušená četba ve třech stupních obtížnosti (dle slovní zásoby), naprogramována jako interaktivní skript ve formě vizuálního románu a její efektivita byla testována na skupině českých studentů angličtiny v porovnání s kontrolní skupinou. Experimentální skupina mohla postoupit do náročnějších úrovní materiálu za podmínky, že na konci každé kapitoly získala dostatek bodů v hodnocení. Kontrolní skupina dostala neinteraktivní verzi četby bez ověřování připravenosti nutnému k postupu do další úrovně. Výsledky experimentu neodhalily statisticky významný rozdíl mezi dvěma skupinami. Účastníci výzkumu uvedli větší spokojenost s adaptivní verzí četby a ve srovnání s kontrolní skupinou považovali materiál za efektivnější. Implikace studie naznačují, že ačkoli obě verze byly při výuce slovní zásoby efektivní, adaptivní zjednodušená četba byla subjekty lépe

přijímána, a proto by mohla v budoucnu vést k lepší motivaci a soustavnějšímu učení. Je třeba provést rozsáhlejší šetření, které by porovnalo adaptivní verzi zjednodušené četby s běžněji používanými digitálními médii.

Klíčová slova: Zjednodušená četba, Interaktivní fikce, Adaptivní vzdělávání, Učení se jazyků s podporou počítače, Osvojování slovní zásoby

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List of Abbreviations

AL – Adaptive Learning

AGR – Adaptive Graded Reader

CALL – Computer-Assisted Language Learning

ELT – English Language Teaching

ER – Extensive Reading

GR – Graded Reader

IF – Interactive Fiction

IR – Intensive Reading

LA – Language Acquisition

LT – Language Teaching

L1 – First/Native Language

L2 – Second Language

MALL – Mobile-Assisted Language Learning

TBLT – Task-Based Language Teaching

VN – Visual Novel

ZPD – Zone of Proximal Development

1 Introduction

The present study explores the didactic potential of interactive fiction, more specifically graded readers with adaptive learning features. For the purposes of the study, a graded reader was created as an instructional material for nouns of low frequency, and its contribution to second language acquisition was tested in an experiment. The aim of the study is to establish whether there is any statistically significant difference between language learning with adaptive graded readers and regular graded readers. In addition, the study further investigates the suitability of adaptive graded readers (such as the one created, presented and tested here, but also other similar projects – e.g., *Headsprout, ReadTheory, Reading Plus* etc.) as a viable alternative to regular graded readers and their employment in second language teaching.

The study consists of two main sections – the theoretical part is composed of an introduction to the topic of (second) language acquisition in connection to reading. The main theories and research findings concerning reading acquisition and the psycholinguistic processes which take place during the act of reading. Literature on the effect of reading on the overall second language acquisition is also reviewed and the pedagogical implications influencing the design of the graded reader are discussed. Furthermore, vocabulary acquisition as a result of reading is explored from both the psycholinguistic and didactic stance. The subprocesses taking place during the initial acquisition of a lexical item and its subsequent fixation and recall are elaborated upon, and didactic literature is consulted in outlining the most promising strategies for vocabulary teaching/learning. Next, graded readers are introduced as a medium of teaching, which promotes vocabulary enrichment. The method of adaptive learning is discussed in connection to the available language teaching (LT) tools employed for lexical learning (e.g., *Quizlet*). Lastly, interactive fiction, especially visual novel, is presented as a form of entertainment and examined as a means of language instruction.

The practical section first outlines the design of the graded reader's individual parts and justifies the choices that shaped the construction of the graded reader. Attention is given to the reasoning behind the selection of lexical items to be taught, and the vocabulary tier system adapting the input based on the results of assessment at the end of each chapter. Importantly, this part also shows how the rationale behind the design choices relates to and is informed by the theoretical part. Further, the engine chosen for the adaptive graded reader's development is presented, and the various features of the reader are demonstrated. The reasoning behind the data collection method employing experimental design is laid out in the next subsection. The

criteria for the selection of study subjects and their variables are outlined along with the decisions regarding the organisational concerns (the time and place) of the experiment. The pre-assessment and re-assessment format are employed on a group of teenage subjects with language proficiency between B1-B2 of the CEFR levels. This section, moreover, describes the conduct of the experiment and the process of data collection. Results of the experiment are reported, and the subjects' performance quantitatively analysed. The results are also scrutinised in a brief qualitative analysis, especially in relation to the subjects' guessing strategies in the pre-assessment, and the sources of their errors in the re-assessment. Finally, the last chapter incorporates the discussion of the analysed results and how they relate to the theoretical framework of the first part, and conclusion, which reflects on whether the aims and objectives of the research have been successfully fulfilled.

2 Theoretical background

Unlike other language skills, reading does not come to humans naturally. In this regard, native speakers and non-native speakers alike need a degree of support to achieve reading mastery. Despite this fact, the ways in which native and non-native speakers acquire literacy skills are far from analogous; each group of learners need to overcome a dissimilar set of obstacles under discrepant conditions. The following chapters of the theoretical part outline this process from the perspective of a second language learner, seldom contrasting this with that of a first language learner. The goal of the following section is to lay theoretical foundations which are reflected in the design of the *adaptive graded reader* (AGR), an instructional material created specifically for the purposes of this thesis.

2.1 Language acquisition

Prior to delving into reading itself, it is important to establish the theoretical standpoint on language and how it is acquired. To clarify the terminology adopted in the current review, *language acquisition* (LA) is to be understood in a broad manner. Some academics make a distinction between the subconscious process of naturalistic LA in case of the *first language acquisition*, or in *second language acquisition* (e.g., as a consequence of immigration) and the intentional one of *language learning*. Others see acquisition and learning as superimposed and interdependent (Pinter, 2011). Another distinction can be made between second language acquisition and *foreign language acquisition*, the difference between the two being in the context of acquisition. Whereas second language acquisition takes place in naturalistic environments where the target language "is generally the dominant language" (e.g., immigrants/exchange students learning English in England), foreign language acquisition transpires in the learner's L1 environment with limited access to the target language (e.g., learning English in the Czech Republic) (Hummel, 2014, p. 2). For the sake of brevity, LA in the present study serves as an umbrella term for first, second, and foreign LA, and no special attention is paid to the distinction between 'learning' and 'acquisition', as learning is seen as part of the greater whole of LA.

In comparison to first language acquisition, second language acquisition leads to sequential bilingualism. It differs from early bilingualism in one critical aspect: while early bilingualism involves the simultaneous development of two grammar systems, in second language acquisition the child has already acquired their L1 grammar system when presented with another language. Researchers disagree on what is the cut-off age for early bilingualism and second language acquisition, with some advocating for the age of four (arguing that the

child needs to have developed the most essential parts of L1 phonology and morphosyntax for the other LA to be considered second language acquisition), while others propose the age of two (stating that the L1 grammar system is already sufficiently developed and, moreover, infants are exposed to L2 at two years of age "already rely on their L1 as a resource, as evidenced by code-switching") (ibid. p. 51).

While processes underlying second language acquisition are in part analogous to first language acquisition (particularly regarding the morphosyntactic development), there are different factors at play during second language acquisition. The main distinction can be made in the end-product: first language acquisition results in the acquisition of a native language mental system, whereas second language acquisition in the construction and attainment of *interlanguage*. The definition of interlanguage is "the mental system developed by L2 learners that enables them to produce and understand utterances of the [target language]"(Eckman, 2013, p. 95). The evidence for L2 being reliant on the speaker's interlanguage is that there are patterns in the L2 production which can be ascribed neither to the learner's L1 system, nor the target language system (Myles, 2012).

The present study investigates acquisition of selected lexical items through the channels of L2 in late sequential bilingual speakers of English. The nature of the linguistic system of L2 thus influences this process and should be considered in the assessment of the subjects' performance (discussed in Ch. 4)

2.2 Reading

Reading is an intricate process involving retrieval of different kinds of knowledge from different types of memory, decoding of the visual stimuli, syntactic parsing, semantic processing, making sense of discourse, and incorporating all this acquired information into one's preexisting knowledge (Nassaji, 2011). In the context of second language acquisition, reading, being one of the four main skills, has long been considered conductive in advancing various linguistic areas (e.g., vocabulary, grammar, spelling, etc.) (Harmer, 2015). Unlike speaking, reading is not a skill naturally acquired through exposure, it requires thorough and explicit training even in one's L1. Children learn to read in elementary school, when their L1 is already highly developed in terms of phonology, morphosyntax, vocabulary etc. The first challenge posed by reading in transparent orthographic systems is to link "arbitrary visual symbols" with the corresponding phonological form and meaning of the already acquired item (ibid. p. 8). For instance, the orthography of Czech is transparent in its reliance on grapheme-phoneme conversion, which may introduce interference when a Czech learner encounters irregular grapheme-phoneme correspondences in the English semi-opaque system. The frequency effect plays a role in reading, with the strength of the "symbol-to-sound, as well as symbol-to-morpheme, mapping" correlating with the frequency of exposure (Koda, 2013, p. 318). Readers can access lexical items stored in their mental lexicon through visual and audial stimuli and activate the correct representation with increasing reliability and ease as they are exposed to more and more meaningful input. In languages with alphabetic orthography (such as both Czech and English), this may lead to acquisition of more so-called "sight words" – highly frequent words easily recognised by speakers which promote "automatic processing" (Grabe & Yamashita, 2022, p. 27). Once they have acquired a sufficient amount of single words, readers graduate to analysing more complex units of phrases by employing their syntactic knowledge.

The *self-teaching hypothesis* asserts that after having mastered the sound-to-symbol mapping, syntactic parsing, and established lexical access with a sufficient number of items, L1 learners (and early bilinguals) enter a stage of swift progression in both learning the printed versions of previously known lexical items as well as learning new items, which were previously not orally known. These processes usually occur implicitly and significantly improve the reader's level and are further promoted by *inferencing*. This general cognitive faculty allows humans to draw connections between their long-term memory and the phenomenon they are currently trying to comprehend (Grabe & Yamashita, 2022). Reading in

L2 relies on similar processes, there are, however, differences important to mention in the framework of the present study.

2.3 Reading in L2

Reading in another language requires a number of additional "L2-specific processes" which differentiate it from L1 reading (Nassaji, 2011, p, 173). Although the self-teaching hypothesis framework can be extended to L2, bilingual readers significantly differ from their monolingual counterparts in many areas, which plays an important role in their performance. Grabe (2014) outlines the primary challenges of L2 reading development: insufficient L2 linguistic proficiency, limited practical experience, a lack of exposure, cognitive demands on processing in two languages simultaneously, L1 interference, variations in general background knowledge, and unfamiliarity with the socio-cultural presuppositions embedded in L2 texts. The following section expands on the most important factors affecting L2 reading development:

Interference and transfer

L2 readers approach tasks in another language through the filter of their mother language. The reliance on one's L1 system in the acquisition and use of L2 leads to *language transfer*: the transfer of features from one language system into another. The degree of language transfer can be observed in the errors L2 learners commit, most apparently in phonology, where the adaptation of L1 phonemes, rules, or prosody results in non-native-like accents (Fromkin et al., 2011). This difficulty often manifests in the early stages of L2 reading, especially in orthographic systems with different degrees of transparency (e.g., the transparent sound-to-spelling processing of Czech vs. an opaquer lexical route of processing of English). A study by Kim et al. (2016) using functional magnetic resonance imaging during a rhyming judgement task found that the neural connections responsible for L2 reading exhibit similar activation when L1 and L2 are close in orthographic depth, and differ significantly when L2 is less transparent than L1. Due to historical factors the relationships between signs and sounds of English are obscured and irregular (Birch, 2007). Despite being an alphabetic system, English orthography thus may initially prove difficult to navigate for L1 and L2 learners alike.

While it might be tempting to attribute all second language acquisition obstacles to interference, the reality is not as simple. Previously, it was thought that language transfer occurs because L1 habits interfere with second language acquisition and thus need to be eradicated during second language acquisition. This assertion gave rise to the *Contrastive Analysis Hypothesis*, which upholds that in order to eliminate the negative interference of L1 in second

language acquisition, a structural analysis of both L1 and L2 needs to be carried out to "determine the areas of linguistic contrast" (Hummel, 2014, pp. 61-62). Consequently, the areas which are similar should be easier to acquire (positive transfer), whereas the contrasting features of the two languages should pose a challenge in second language acquisition (negative transfer). Later studies, however, refuted the idea that all errors stem from language interference, and showed that learners may struggle with both areas which are different from their L1 and areas which are basically identical (ibid.). Interference, while presumably impactful in the process of second language acquisition, thus cannot be the sole predictor of the demanding areas of L2, as not all errors can be traced back to the differences between the languages.

Making sense of the input

LA is influenced by individual learner variables with reference to cognitive faculties, "such as intelligence, working memory or aptitude", and regarding the learner's "(socio-)affective factors", e.g., the nature of the learner's motivation – extrinsic/intrinsic, anxiety, temperament, learner's beliefs, strategies employed by the learner, etc. (Myles, 2012, p. 60). While the "underlying cognitive processes involved in L1 and L2 reading are generally the same" (Grabe, 2014, p. 11), there are transfer effects in the processing of reading input. All readers generally employ a host of strategies and component skills when reading for different purposes (e.g., skimming, scanning, etc). Studies have shown that L1 readers are able to switch between these modes of text processing more readily than L2 readers, which affects overall comprehension (Grabe & Yamashita, 2022). What is more, cognition can predict one's reading ability. A study by Jang (2009) investigated the validity of cognitive diagnostic assessment as a predictor of L2 reading comprehension ability. The results support the use of this measure to obtain a more comprehensive insight into reading competence levels compared to the conventional scoring method.

Grounded in cognitive linguistics*, usage-based theory* maintains that the acquisition of language systems is possible mainly through exposure. The integration of cognitive and social-cognitive skills is a requirement for the formation of the complex system and its subsequent acquisition (Tomasello, 2009). This is especially true in the case of reading, as reading requires extensive training and plentiful input in both L1 and L2. The L2 learner is then seen as being exposed to all kinds of input (not merely linguistic), cognitively processing it, analysing and systematising its structure, and retaining the important pieces of information in their size-restricted memory stores (short-term memory, long-term memory – "declarative and procedural" (Myles, 2012, p. 61). The process of *automatization* of both the declarative and

procedural knowledge alike then depends on the frequency of retrieval (ibid.). In addition, the amount and the complexity of input correlates with *intake* (i.e., the processed input which leads to LA). Consequently, if the reader is required to work with material which is cognitively too demanding (e.g., it includes too many unknown lexical items, the syntactic structures are too complex, etc.) the resulting decrease in cognitive faculties, such as attention and motivation, affects the intake. This increased *cognitive load*, contributes to anxiety, which inhibits the learning process and hinders academic achievement (Shadiev & Huang, 2020).

Nature and amount of input

Although opinions on the nature, functionality, and intensity of input vary across the theoretical spectrum, it is, nevertheless, agreed upon that input is an irreplaceable component of LA. Unlike their generativist colleagues, the proponents of *Usage-based theory* advocate for input as the main ingredient of any LA (Tomasello, 2009). Because of the difference in exposure and experience, L2 readers have a less extensive knowledge of oral language, which affects their reading development. Generally, L2 readers have a smaller size of L2 lexicon and weaker command of morphosyntax. As a consequence, L2 learners exhibit weaker abilities in recognizing words, decoding phonological patterns, orthographic processing, and associating word forms with their meanings, assuming the learners are even familiar with the meaning of the lexical item (Grabe & Yamashita, 2022). In terms of syntactic parsing, L2 readers differ from L1 readers in their overt reliance on metalinguistic information in place of naturalistic input, which has been shown to be a better indicator of their "reading abilities than vocabulary knowledge" (Grabe & Yamashita, 2022, p.41). This *metalinguistic awareness* can be helpful in substituting the lack of natural exposure and explaining the innerworkings of the L2 language system in a more straight-forward and logical manner (Hummel, 2014).

The requirements for the nature of L2 input have been a matter of a debate for years. Stephen D. Krashen's proposed *comprehensible input* suggests that input which can be at least partially understood by the learner at their current proficiency level promotes second language acquisition. This concept has been instrumental in opening discussions about the significance of the pacing of the input to fit the learner's current needs (Hummel, 2014). In connection with L2 reading, comprehensible input helps avoid cognitive overload, and increases the degree of intake. Additionally, studies have shown that the better the reader's vocabulary proficiency, the better their inferring skills are. Comprehensible input with fewer unknown items can thus help readers employ their inferring skills more readily, and result in better reading comprehension (Prior et al., 2014; Verhoeven, 2000). Comprehensible input is used in many L2 teaching

materials such as simplified literature (discussed in Ch. 2.4.3) to promote the readers' understanding of the text, and positively affect other learning processes.

Environmental factors

In the recent years, the long-held debate over nature vs. nurture has mellowed with theorists supporting the interface of the biological groundwork along with the requirement of socio-cultural exposure. For example, the *interactionist* and *social interactionist theories* reconcile the innate predispositions for LA and the utmost importance of the "social and linguistic environment". The proponents of interactionism advocate for the principality of environment and social interactions, which allow for the interaction between cognitive faculties and contextualised linguistic structures. Language then is considered to be "a communicative act" within the "dynamic system" consisting of "the language environment" and the individual (Hummel, 2014, p. 15). Two concepts, often mistakenly interchanged or conflated together, have been the most influential in the socio-cultural framework, that is *scaffolding* and *zone of proximal development* (ZPD). Vygotsky's ZPD concerns the "educational development": ZPD denotes the gap between the maturing psychological functions of a learner and the state of matured development of the individual, which can be assisted by instruction or student collaboration (Xi & Lantolf, 2021, p. 31). On the other hand, scaffolding relates to the process of learning, subsuming the various methods of (teachers or peers) supporting the learners at their current level of language proficiency (ibid.).

In the matter of L2 reading, the environmental factors play a significant role in the readers performance. In the sociocultural perspective, L2 readers cannot escape the underlying cognitive processes of "mental translation", i.e., they process the L2 input in both the L2 and their mother tongue (Upton & Lee-Thompson, 2001, p. 470). However, the tendency to translate L2 texts into L1 (consciously or subconsciously) decreases as the learners' proficiency improves – their "cognitive reliance on L1" drops to a minimum while their "'supportive' use of L1" increases (ibid., 488). In the light of these considerations, L2 reading ought to be seen as a bilingual affair with the readers experiencing interference from their L1, as well as synthesising the information from the L2 text into their L2 and L1 background knowledge. The learning environment should be adjusted to these realities and facilitate the L2 learning process.

Implications

Applying these considerations to the context of this study, L2 readers have to tackle obstacles, such as their imperfect knowledge of L2 (in terms of lacking vocabulary coverage

and unfamiliar phonetic contrasts), the interference of their L1 system (especially in phonetics), as well as the need for development of new "low-level processing strategies" to read efficiently (Birch, 2007, p. 12), and high-level processing to comprehend the information in the text. In learning how to read English texts it is thus advised that L2 learners receive abundant practice in L2 reading and spelling in order to better link the orthographic and phonological forms. Reading practice should also be tailored to the learners' proficiency level, include audio support, recycling of the material, and raising morphological awareness to bring better results (ibid.). The amount of practice can foster reading skills and assist readers long-term; the more skilled readers get, the more automatised their reading becomes. Practice and repetition can thus advance the automatization of the reading process by gathering more sight words throughout the readers' lives (Grabe & Yamashita, 2022). Automatization results in the lessening of the cognitive load, which in turn increases the intake of vocabulary, syntax, morphology, etc. The takeaway then is straight-forward: the more one reads, the better reader they become.

To conclude, L1 reading acquisition is comparable to L2 in that both processes need explicit instruction. L2 reading processes, however, require additional support in overcoming a dissimilar set of linguistic and processing challenges. The present study explores acquisition of lexical items through the channels of L2 and the aforementioned factors thus need to be considered. The synthesis of various theoretical approaches has informed the design of the adaptive graded reader (AGR) in its insistence on plentiful comprehensible, yet challenging input as the principal component of second language acquisition. Cognitive factors have further foregrounded the importance of repetition promoting automatization, the dangers of cognitive overload, and the supportive role of L1 in the input processing, all of which facilitate the transformation of input into intake. Further, environmental factors have also shaped the final product in that the teaching material is not intended to be used in a vacuum, but that interaction with peers ought to be encouraged by accompanying activities. The subjects of the experiment (discussed in Ch. 3.2) are Czech L2 learners of English. Their reading capabilities are, therefore, shaped by this reality, and their processing differs from their L1 counterparts. The design of the study material intends to reflect the more explicit route necessary to foster the creation of lexical access for the newly acquired items through self-teaching by providing plentiful orthographic and phonological form repetition, and awareness raising.

2.4 Relevant language teaching theories

As with any discipline, the field of *language teaching* (LT) has been paved by trial and error with theoreticians in pursuit of finding the optimal way of instructing language learners. Richards & Rodgers (2014) offer a detailed overview of the past and current LT trends, many of which have not withstood the test of time. However, not all methods and techniques should be fully discarded, for their usefulness and applicability may be a question of reframing their underlying theoretical bases in the light of new discoveries. The past few decades have seen a reintroduction of diverse concepts, many of which had been previously deemed ineffectual. The present study assumes the *Eclectic approach* to the LT theory, which re-examines and combines all the tried and tested components of the precursory and contemporary methods and approaches (Azim et al., 2020).

An example of this is the comeback of translation into L1 as the vehicle of LT (popular in e.g., *Grammar-Translation Method*). Once seen as outdated and artificial, translation in LT has been re-evaluated in the context of plurilingualism as natural for human cognition, enabling receptive and productive social, cultural and "cross-linguistic mediation" (Pintado Gutiérrez, 2019, p. 29), and contributing to metatextual awareness. As discussed in Ch. 2.3, mental translation of L2 texts into L1 is one of the earliest cognitive strategies for beginner readers. Moreover, translation can be seen favourably in multi- and plurilingual contexts by the current communicative approaches (e.g., *Task-based Language Teaching*) which promote the LT via activities modelled on real-life situations (ibid.). Recent studies support the fact that correctly employed L1 can enrich LT as a source of knowledge in vocabulary instruction, it can lower the affective filter, and offer a degree of scaffolding (Hassane, 2023).

In the same vein, explicit and deductive explanations of rules, previously deemed manufactured and inefficient by the proponents of natural methods, have found their way back into classrooms, albeit markedly revised and amended. Communicative LT strands of the 1980s rejected explicit learning techniques rooted in behaviourism (e.g., "paired-associate learning involving repeated retrieval of the form and meaning of a word") in favour of implicit language instruction, which foregrounded contextualisation of meaning as well as "learning through meaning-focused instruction" (Elgort, 2011, p. 367). Many believed that explicit learning leads strictly to *declarative knowledge* (i.e., knowing a rule but not how to use it), and, analogically, implicit acquisition translates into *procedural knowledge* (i.e., using a rule without knowing it). The debate over *interface* between these two types of knowledge has been a point in question for decades, with researchers disagreeing over the degree of which explicit learning can inform procedural knowledge (if at all) (Gascoigne, 2018). In recent times, many have assumed the

opinion that LT through usage-based input is not sufficient for acquisition of L2 areas (especially vocabulary), and deliberate *form-focused* learning along with metalinguistic teaching approaches ought to be added for better results (Elgort, 2011). Furthermore, the *noticing hypothesis* contends that explicit treatment of the study material can facilitate the implicit acquisition of those linguistic features which tend to be overlooked due to their low degree of salience (Hurd & Lewis, 2008). With reference to reading, learners can acquire lexical items incidentally (through inference and self-teaching route discussed in Ch. 2.2) from a naturalistic input. Select pre-planned and non-naturalistic practices, however, have been shown to promote noticing and thus convert input into intake. Strategies such as *input enhancement* (i.e., making certain parts of input more salient by drawing the students' attention to them visually (highlighting, underlying, etc.) or audially (intonation, slower pronunciation, etc.)) can assist in making the input easier to navigate, and highlight the desirable parts and aspects the learner should acquire (Bakhshandeh & Jafari, 2018, p. 14).

Another similar example of such reframing can be found in repetition and reinforcement practices, rooted in behaviourism and championed by the *Communicative Approach* (e.g*., the Audiolingual Method*) (Richards & Rodgers, 2014). While it would be reductive to restrict LT to mere drilling and habit formation, correctly administered repetition and frequent recycling of language material can be conducive to automatization and thus promote second language acquisition. Approaches based in cognitive theory (e.g., *Presentation-Practice-Production*), which see learning as processing, consolidating, storing, and retrieving information, accentuate the importance of "meaningful practice" (ibid. p. 26). Vocabulary *recycling* (i.e., deliberately reintroducing the same material to consolidate knowledge, retention, and automatise recall) along with offering plentiful context together lead to complex understanding and deeper processing of the lexical items (Azim et al., 2020). Regarding vocabulary acquisition through L2 reading, the frequency of retrievals of a particular lexical item (be it full or partial retrieval) can facilitate the formation and development of lexical representations of the item (Barcroft, 2015).

Most of the recent LT methods employ the tested and proven mechanics of learning along with new interdisciplinary discoveries and diverge mainly in the foregrounded aspects. An example of this trend is *Task-based Language Teaching* (TBLT), a method which employs various 'tasks' – activities modelled on real-life situations – to create a learning experience that actively engages the learner on multiple fronts ("comprehending, manipulating, producing or interacting in the target language" (Nunan & Nunan, 2004, p. 4)). In such context, reading activities require a clear objective and outcome. This can be achieved by including activities

prior and after reading (e.g., comprehension, noticing, awareness raising, practice exercises) to contextualise the text within the ELT framework (Green, 2005).

Competency-Based Language Teaching is another recent approach, which incorporates cognitive processing along with the "functional and interactional perspective on the nature of language" (ibid. p. 155). This integration promotes automatized language processing by developing language skills together, based on pre-planned and explicitly formulated LT objectives. Its advantages lie in the adaptability and individualisation of the "student-centered" instruction to fit the needs of the learner, and in the "continuous and ongoing assessment" to evaluate the learner's progress (ibid. p. 153). Additionally, assisted learning (reminiscent of scaffolding and zone of proximal development) can help the learners with cognitive overload; an example of this is offering translation on demand as a means of lowering the cognitive load and promoting better attention in students (Shadiev & Huang, 2020, p. 302).

To summarise, this by no means exhaustive literature review serves to inform the theoretical background of the present study. The theoretical framework combines the assorted influences and insights from various language theories, LA and LT theories, and LT approaches and methods in the design of the teaching material. To list a few, the following concepts shaped the final composition of the adaptive graded reader, its administration, and the experimental design:

1. the insistence on plentiful input (both visual and audial),
2. comprehensibility and enhancement of the input (tailored to the current proficiency level, highlighting the salient lexical items),
3. lowered affective filter (no negative repercussions for incorrect use of LT),
4. available assistance (scaffolding, translations, explanations, the occasional use of L1 for the sake of economy),
5. student-centred individualisation of the instruction,
6. both deliberate and incidental learning modes (e.g., pre-teaching),
7. the interface of inductive and deductive instruction (e.g., pre-teaching vs. contextualisation of the lexical items)
8. the repeated exposure to and the recycling of the material as a means of automatization,
9. a semi-realistic task as the unit of LT (e.g., dialogue options)
10. continuous assessment at the end of each chapter, and more.

2.4.1 Instructed reading

Reading in second language acquisition can promote various skills and language knowledge depending on the instruction. To facilitate L2 reading acquisition, the instruction should attend to the following:

1. include an individualised approach to reflect learners' needs in accordance with internal and external factors, such as the learners' age, their L2 proficiency, environment, etc.
2. promote phonological and structural metalinguistic awareness (in L1 and L2 alike) as an imperative part of the recognition and automatization of patterns frequently recurring in the input.
3. provide plentiful "input exposure and experience" of sufficient quantity and quality to the learner to train and consolidate the acquired reading subskills (Koda, 2013, p. 314).

Different types of reading can be employed to promote the targeted development of various areas of L2. Depending on the activity at hand, reading can expand lexical knowledge, grammar, improve spelling and punctuation, and contribute to metalinguistic awareness. The two main types of reading activities are:

1. *intensive reading (IR)*: shorter reading exercises, usually supplemented by comprehension exercises, designed to train the skills of reading for specific purposes, e.g., "*skimming"* (reading to acquire general understanding), "*scanning"* (localising specific information in the text), or "*inference"* (reading 'between the lines' of a text) (Harmer, 2015, p. 314).
2. *extensive reading (ER)*: longer reading 'for pleasure' with the objective of gradually expanding L2 lexicon, improving grammar knowledge, revising spelling, and punctuation (ibid.). This type of reading allows for greater amounts of input to be experienced by the reader.

Both ER and IR employ texts designed or adapted to the learner's current level of proficiency, thus providing the learner with comprehensible input. Examples of IR activities can be found in almost any textbook in the form of a short text, which is usually accompanied by audio support, preceded and followed by comprehension activities, and practice gap-fill exercises. Thanks to their short duration, accessibility, and easily assessable results (in the form of answered comprehension questions and filled-in exercises), the incorporation of IR activities

into the curriculum poses no challenge. Moreover, the modularity of this IR makes the reading and its accompanying activities easier to divide into discrete tasks with straight-forward objectives (Harmer, 2015).

The implementation of ER, on the other hand, is considerably rarer to come by; ER usually takes place outside of school (as "holiday reading" or as part of an "individual reading programme" (Graded Readers Handbook, n.d., p. 32)) with learners reading books of their choice at their own pace or even in their free time. ER has many benefits in terms of individual motivation, personalisation of the LT material, and promotion of learner autonomy (Ramonda, 2020). Interestingly, results of a study by Yamashita (2008) suggest that the effect of ER may be observable first in the general reading ability and only later appears to influence the L2 proficiency. Therefore, although it may be frustrating for some learners trying to improve their language proficiency in a short timeframe, engaging in ER may help them become better readers in the meantime. Ramonda (2020) argues that the guiding principle of ER, that is "students should be able to freely select what they want to read" (p. 2) is one of the greatest pitfalls of the ER programs. Although this congenial fundament of ER may be conducive to the motivation of the learners, it usually increases the difficulty of connecting ER to the curriculum.

The *class reader* approach presents a more accessible alternative to short IR texts and large-scale ER programs by combining the accompanying pre- and post-reading activities characteristic of IR with reading longer passages of continuous text. As with IR, the class reader approach has learners read the same book, which lends itself to implementation more readily. In this way, the readers are not only able to enjoy the book for its content, but they can also immediately apply the newly gained information to the exercises, and to share their opinions in class discussion with their peers (Ramonda, 2020). This widespread mode of reading in the context of LT usually consists of multiple in-class reading sessions in a serialised fashion over the period of one semester at most (Graded Readers Handbook, n.d.). A study by Mart (2015) found that learner performance improves when instruction includes both extensive and intensive reading activities. In accordance with these results, class readers support the interface of ER and IR in that they employ the IR activities to promote accuracy, while the aspects of ER lead to increased language fluency.

To summarise, both extensive and intensive reading activities benefit the readers in their LA journey. There are, however, disadvantages to each of these approaches. ER relies on the learner's motivation to read in their free time and takes longer to show improvements. On the other hand, IR offers short texts mostly suitable for the classroom environment, which does not

promote the formation of the reading habit. Class reader combines the two approaches to reap the benefits of both. For these reasons, the present study employs the class reader configuration in its experimental part.

2.4.2 Vocabulary acquisition and reading

Reading has long been established to be conducive for vocabulary acquisition and retention. While uninstructed reading alone can foster vocabulary gains as a by-product of the endeavour, research in LT has yielded invaluable insights into how to boost the acquisition of lexicon. According to the *Involvement-load Hypothesis*, students preferentially learn those lexical items which seem relevant to them, i.e., vocabulary acquisition is driven by "need" (motivation), "search" (looking for the meaning), and "evaluation" (comparison to/combination with other words) of the individual lexical items, the retention of which is correlated with the "amount of task-induced involvement load" (Hulstijn & Laufer, 2001, p. 539). The depth of knowledge of different lexical items varies along with the strength of retention, as the process of learning engages different memory types. First, an item is consciously and temporarily stored in short-term memory, which is limited to a small amount of information. Second, the item, deemed salient/important enough to the learner, is transferred into long-term memory with the help of repetition (audial, visual, etc.) and conditioned by the learner's attention (Takac, 2008). In the context of reading, this suggests that frequently repeated words with a high degree of salience presented in various contexts have a greater chance of acquisition and retention (Azim et al., 2020).

To complicate matters, exposure to a target vocabulary item and its subsequent recall does not always guarantee the knowledge of the said item. There is a difference between receptive (passive) knowledge involving "form recognition" in the input vs. productive (active) knowledge involving "form recall" (Nation & Hunston, 2013, p. 47). However, the distinction is not clear-cut: while receptive knowledge can only be elicited by outside stimuli, productive knowledge can be unprompted but also primed by the contexts and associations surrounding the production. The three main dimensions of "knowing a word" are the production and recognition of form, meaning, and use. Learners might be able to recognise the word from one channel (e.g., written form) while having difficulty with another (e.g., in speech, unable to analyse morphology, etc.) (ibid. p. 59). What is more, lexical items are not equal in their *learnability*, i.e., the ease of acquisition, due to a number of factors. Easily acquirable lexical items are those which are short, simple in pronunciation, spelling, morphology, do not have synforms or multiple meanings, have a more general and concrete meaning, and are not

restricted in use by their register (Takac, 2008). In case of vocabulary acquired through reading, the instruction ought to consider these components of knowledge and bring attention to each facet accordingly. The fact that lexical knowledge is not a unimodal phenomenon should also be remembered when assessing the learner's abilities.

In the process of LT, attention and the resulting intake can be influenced and directed by the mode of instruction; the modes of presentation have two dimensions – *implicit* vs. *explicit* and *incidental* vs. *intentional*. As discussed in Ch. 2.4, input can be presented in a naturalistic manner with no additional guidance offered to the reader. With this implicit instruction, the reader is then left to their own devices in inferring the meaning, localising the most salient parts, and processing the information from the text. Alternatively, input can be enriched by explicitly drawing the learner's attention to certain parts of the input and thus making them notice the target areas of L2. In relation to reading-facilitated vocabulary instruction, the other two dimensions of introducing a new lexical item in the text are:

1. *incidental*, also referred to as *focus on form:* a conscious and deliberate foregrounding of a certain aspect of language in naturalistic input at any point of LT sequence (connected to *noticing* of salient language items).
2. *intentional*, also referred to as *focus on forms*: a structured and planned focus on a specific language form from the very beginning of the LT sequence (such as pre-teaching) (Harmer, 2015).

Incidental learning has been shown to be a viable option for recycling of the already-known vocabulary, rather than introducing new vocabulary items (Waring & Takaki, 2003). When unsupervised, the employment of incidental learning may bring in undesirable outcomes, such as incorrect inferencing of the meaning, shallow knowledge of the introduced lexical items (e.g., polysemy, idiomatic speech, etc.), L1 interference (e.g., false friends), or insufficient input and thus insufficient exposure to the item, which affects the rate of forgetting (Hong, 2010). Furthermore, some researchers have deemed implicit incidental learning to be a slow and inefficient process, which may not necessarily bring about long-term retention (Takac, 2008). To mitigate these issues, supporting strategies (reminiscent of input enhancement mentioned in Ch. 2.4) may be engaged to advance the benefits of incidental learning. Using texts with high *coverage* (i.e., the learner is familiar with most words appearing in the text) (Nation & Waring, 1997) promoting better *readability* (i.e., ease of reading), and recycling the material along with "elaboration of lexical items lead to better understanding and retention" (Azim et al., 2020, p. 93). Using glosses in the instructional texts has been linked to better reading comprehension

as well as stronger retention. While the findings on the effects of L1 vs. L2 glosses and reading comprehension and vocabulary learning have been largely inconsistent (e.g., Yoshii, 2006), a study by Yanagisawa et al. (2020) found that multiple choice L1 glosses promote learning, possibly because the learners find it easier to establish links between unfamiliar L2 items and familiar L1 concepts. The bottom line of the research on glosses is that any gloss (be it L1 or L2) is better than no gloss.

Although intentional learning has been previously criticised for its reliance on rote memorisation, it has been proven to stimulate advancements in vocabulary acquisition, and is suitable especially for beginners (Takac, 2008). There is empirical evidence that retention rates are typically higher under intentional compared to incidental learning. Deliberate learning also allows for a degree of flexibility and personalisation, as it can be practiced outside of the classroom and customized to fit the learner's specific needs and goals. However, it is important to note that simply memorizing words through deliberate decontextualized learning may not necessarily result in vocabulary knowledge that is sufficient for real-life language use (Elgort, 2011). In the framework of reading, intentional instruction can be utilised in the pre-teaching of target vocabulary necessary for the completion of a task at hand. Such practice contributes to noticing of the foregrounded items, such as grammatical morphemes with low salience (Hurd & Lewis, 2008). Deliberate learning can also reinforce the acquisition of selected lexical items at the end of each chapter in form of a comprehension exercise.

To recapitulate, vocabulary gains resulting from reading can be influenced by factors, such as presentation (explicit vs. implicit), intentionality of learning (incidental vs. intentional), focus on form vs. meaning, repetition and others. In recent times, researchers have come to an agreement in that careful application of either mode of instruction can be beneficial to the learner when used in tandem with the other methods. The adaptive graded reader (AGR) presented in this study employs the enriched intentional route of explicit input presentation in that it pre-teaches target vocabulary and enhances the readability of the input by high vocabulary coverage, highlights, and glosses.

2.4.3 Graded readers

As has already been established, reading promotes various skills, competencies, and contributes to an overall improvement in language achievement. Not all learners, however, possess the ability to read the classics of English literature at their current level. Moreover, original works of fiction often include unsuitable input that could only confuse lower-level learners (e.g., invented words in the science fiction genre). To resolve this gap in ability, *graded*

readers (GR) are often used in and out of language classrooms. Going back to Krashen's idea of comprehensible input, graded readers offer an accessible alternative to books which are too difficult for the learner at the present. Their content varies from adapted literary works of well-known authors, such as Shakespeare, or Agatha Christie, to original texts written specifically for the purposes of LT. GR also are not restricted to works of fiction but also feature factual accounts of real events, scientific discoveries, historical materials, and so on.

GR are texts containing limited vocabulary, often based on the number of headwords, or according to word frequency bands. They also feature selected structures and simplified grammar. Publishers of graded readers usually classify their series of GR according to the number of headwords appearing in the individual books, the categorisation, however, unfortunately lacks uniformity across the market. *The Extensive Reading Foundation* offers a chart of corresponding levels across the most popular graded reader publishing houses ('Levels / Series', n.d.). Although graded readers are usually used in ER programs to help learners get into the habit of reading for pleasure, they can be used as class readers, or even in IR activities with a degree of adaptation.

Aside from restricted vocabulary and grammar complexity, GR abide by other principles and restrictions. For a reading activity to be successful and enjoyable, the learner needs to have at least 95 percent coverage (understanding) of the input, the exact percentage differs from author to author. A more challenging text would result in a loss of motivation and pose greater obstacles in inferencing of the meaning and incidental vocabulary learning (Harmer, 2015). On the topic of vocabulary, repetition and recycling of lexical items in different contexts are key in the acquisition, revision, and consolidation of linguistic knowledge. To be retained, a word needs to be recycled throughout the text – the exact number of repetitions necessary is a matter of debate with accounts ranging from seven to 17, with most estimates around 10 encounters (also depending on the word in question) (Uchihara et al., 2019). This poses a great advantage of GR over more 'authentic' materials, for, unlike literary works, GR can be customized for the specific purposes of LT. Allan (2008) argues that despite their limitations, graded texts offer input of sufficient lexical complexity which resembles authentic language use to learners at their current level. Graded readers can thus be used even in data-driven learning which relies on the use of corpora to acquire language items and structures. Although GR are agreed to be a great resource for LT, they need to be administered correctly in order to be effective. Waring & Takaki (2003), explored the long-term effects of GR vocabulary gains and concluded that although repetition facilitates retention, the newly

acquired vocabulary knowledge is susceptible to deterioration when left unelicited after the end of the reading programme. Their recommendations include integrating more GR in the curriculum as well as using GR for elaborating on the meanings and contexts of previously known lexical items.

Albeit not compulsory, comprehension exercises (before-, while-, and after-reading activities) have come to be an expected feature of the GR experience. *Black Cat Publishing* has led this transformation of GR from mere simplified texts to "text-based language courses" by including a variety of comprehensive activities in their books, and other publishers have followed suit (Hill, 2006, p.198). The activities vary from the traditional gap-fills, multiple-choice and open-ended questions, to more interesting exercises, such as crosswords, puzzles, schematic maps, or even interactive multimedia activities involving the use of computers or smartphones. Different GR publishers also take a heterogeneous approach to the presentation of the target lexicon; for example, books by *ELI Readers* include before-reading activities to warm up the four skills along with eliciting or even pre-teaching the target vocabulary. At the end of each chapter, there is also a set of post-reading activities to consolidate the knowledge. Another way is to include the comprehension activities at the end of the GR or to be accessed separately online, as a result of which the reading experience may seem less disconnected (Waring, 2012).

Most graded reader publishers customarily offer illustrations to prime the learners for the information to come in the text, engage learners' "interpretation strategies", such as inference, and thus improve reading comprehension (Graded Readers Handbook, n.d, p. 23). A body of research has been conducted on the visual aspect of narration in order to explore the influence of illustration in books, visual novels, comic books, and more. The findings were generally positive, showing that L2 learners' reading comprehension improved when including pictures/offering a visual novel version in comparison to identical bare text. The placement of the picture and text influences the effectiveness of processing, stating that "separating text and image consistently leads to worse retention and transfer performance" (Yum et al., 2021, p. 2). Integrating text within graphics, as in a comic book, thus enhances connections between the visual and textual information by facilitating accessibility and rousing interest in the understanding of the narration. However, Yum et al. state that incorporating pictures can often extend the reading time by generating greater interest in the readers without necessarily improving comprehension (ibid.).

With the advent of *Computer-Assisted Language Learning* (and in the last decade *Mobile-Assisted Language Learning*), LT materials and methods have been increasingly changing and evolving to match the technological advancement. Reading, being the easiest of the four skills to implement in the new-era multimedia materials, has been at the forefront of these developments. The use of glosses in LT reading (also discussed in Ch. 2.4.2) has received a lot of attention in relation with vocabulary acquisition; different forms have been tried and tested with researchers discovering that learners prefer simple L1 glosses over "multimedia glosses or other deep processing strategies" (Blake, 2016, p. 134). In the recent years, many publishers have started providing audio recordings along with their readers to enhance the experience and to simultaneously engage more language skills. Studies have shown that reading while listening fosters faster processing and lends support when decoding an unfamiliar word/recognising a not-yet fully familiarised lexical item. This in turn leads to improved reading fluency and comprehension, as well as vocabulary gains. Furthermore, learners themselves report a preference towards this dual input option when given an easy access to the audio recording. Interestingly, the investigation into eye-tracking and reading while listening has revealed that audio support reduces the cognitive load of the reading task and allows the reader to focus on the accompanying features of the reading material when listening, such as illustrations, footnotes, etc. (Serrano & Pellicer-Sánchez, 2022).

In sum, graded readers are a wonderful resource for LT in that they support and cultivate the target language in various domains. GR have evolved from their original text-based form, having assumed different modes of input and output in form of audio support, glosses, illustrations, and accompanying materials. Comprehension exercises in particular promote the intersection of both ER and IR as well as explicit and awareness raising along with incidental vocabulary learning and/or recycling.

2.5 Differentiated instruction

The material featured in the present thesis aims to provide a tiered design of instruction tailored to the individual students' specific needs. To better understand the reasoning behind this decision, one first needs to be acquainted with the current situation in ELT classrooms. It comes as a no surprise that different learners need different means and modes of language instruction; Tomlinson (2005), among many others, stands by the fact that there are no two learners identically aligned in terms of language proficiency, cognition, aptitude, or motivation. The diverging individual characteristics contribute to heterogenization of (language) classrooms with learners requesting a more diverse instruction.

Heterogeneous/mixed/mixed-ability/mixed-level classes are those classes which consist of learners with varying learner variables in relation to their personal and language background, acquired proficiency level, cognitive capacities, aptitudes, and preferences in learning styles. Furthermore, the motivation for and desired end product of the learning process may vary across these students. As a result, ELT classes are implicitly composed of individuals with mixed abilities (Al-Shammakhi & Al-Humaidi, 2015). Mixed classes are often considered as more demanding of the teacher in respect to curriculum planning, finding suitable materials and/or adapting them, and managing the classes. A survey conducted by Zakarneh et al. (2020) reported that UAE university teachers of English found it more challenging to adjust their instruction to the needs of mixed classes, and they perceived mixed class students as less cooperative, motivated, and engaged, with more advanced learners getting disinterested.

Differentiated instruction addresses the heterogeneous dynamics of mixed-ability study groups by considering individual learner needs and realising their full potential. Differentiated instruction is concerned with providing students with equal opportunities for learning while also supplying the material depending on the students' readiness and current level of skill. *Tiered activities* are often used to fit the requirements of individual students and provide appropriate challenge to foster their development. The idea behind tiered exercises is that all students receive similar material which, however, varies in quality rather than quantity depending on their learner profile. As a result, instead of doing more work of the same difficulty level as their less advanced peers, the advanced learners receive more demanding tasks (Nusser & Gehrer, 2020). The effectiveness of tiered activities depends on implementation – the instruction ought to be tiered to "correspond to the learning profile of the students" (ibid., p. 12). Another hallmark of differentiation is the dual use of assessment – used both as continuous tracking of students' progress as well as the outcome measure of learning (Tomlinson, 2005).

The implementation of differentiation is versatile in that it can enrich both individual, pair-work, and group activities, promote autonomy in selection of the material, or provide different degrees of scaffolding and teacher's guidance (Harmer, 2015). Ideally, differentiation should go hand in hand with *individualisation* and *personalisation.* Individualised learning concerns instruction of students individually to attend to their specific needs, e.g., by offering student-teacher consultations, giving the student individual assignments, or by supporting the learner in becoming more independent (ibid.). Personalisation, on the other hand, foregrounds the learner's specific preferences, needs, personal objectives, avocations, as well as their rate of progress (Bray & McClaskey, 2013). Together, these three dimensions of student-centred

instruction foster students' motivation, autonomy, commitment, and academic achievement (Kamarulzaman & Zahidi, 2017).

Circling back to the instructional material presented in this thesis, differentiation, personalisation, and individualisation are all displayed in the adaptive graded reader's (AGR) design. The material reflects the needs of the increasingly common mixed classes by providing more levels of difficulty for each student. Additionally, the AGR supplies the learners with individualised input based on their speed of learning and rate of acquisition. Continuous assessment is employed as a means of adjusting the input. Lastly, the material can be personalised based on the interactions within the reader, as it is considered to be interactive fiction (more in Ch. 2.6.2).

2.6 Computer and mobile-assisted language learning

Computational technologies have changed the realm of LT forever with options teachers in the past could only dream of. *Information and communication technology* has proven to be useful in education and became essential especially during the Covid-19 pandemic for teachers and students alike as a means of remote instruction. *Computer-assisted language learning* (CALL), i.e., any LT activity employing computers or "computerised resources" has seen a rise in the last few decades (Hummel, 2014, p. 128). There is a greater variety in tasks available to students both online and offline, which can offer a degree of interactivity, differentiation, personalisation, and autonomy in one's learning. Learners can choose between a seemingly endless supply of interactive materials introducing new language areas, targeting their weak points, advancing selected skills (e.g., for a specific exam), or reflecting their interests (ibid.). Computer-based learning can also make it easier to gather data analytics of the individual students and let teachers monitor and assess their pupils' progress more comprehensively.

More recently, mobile devices have entered the classrooms and have been gaining popularity among educators with a flood of *mobile-assisted language learning* (MALL) activities and applications. The advantages of smartphones in comparison to computers are obvious; it is estimated that 68% of the world population owns a smartphone, the percentage rising up to 79% in Europe (Laricchia, 2023). It can thus be assumed that most ELT students have access to and are comfortable with using mobile devices in their day-to-day lives. As such, smartphones can be seamlessly incorporated in the instruction, especially in task-dependent structures of TBLT (Blake, 2016). Various studies have reported on the use and effects of smartphones in language instruction favourably; for instance, a meta-analysis of 13 MALL studies by Taj et al. (2016) discovered significant effects on ELT in the area of vocabulary

acquisition. Sathya (2021) lists the advantages and disadvantages of MALL and CALL; while the novel tools offer a "learner-centered" (p. 8) approach to LT advancing differentiation, autonomy, individualisation, decreasing learning anxiety, providing immediate formative feedback, and more, there is also a downside to these technologies. The price of the equipment can be detrimental to underprivileged students, and the allocation of the school budget towards the purchase of such equipment may negatively impact the funding of other sectors. Furthermore, CALL and MALL often fail to target all language skills comprehensively resulting in unbalanced instruction (ibid.).

As discussed in Ch. 2.4.3, technology-assisted reading has received a lot of attention with advancements in interactive glosses, audio support, visual imagery, as well as comprehension exercises. E-books have become a widespread medium, often partially or completely replacing the paper versions of study materials. Although one's decision for either medium tends to be shaped by individual preferences, the recent trend of online textbooks and learning platforms (e.g., Moodle) in education seems to point in favour of digitalised reading. Research on the efficiency of reading from screen vs. from paper has been inconclusive with studies pointing in either direction. Clinton (2019) offers an overview of the existing research on the subject, focusing on reading comprehension, metacognition, variations in text genres (narrative fiction vs. non-fiction texts), and the relevance of background information (which aids the reading process). Some previous studies cited in Clinton's literature review have reported that reading from screen is more cognitively demanding and leads to worse reading comprehension, while others argued that the effects of the mediums are comparable. According to Clinton's meta-analysis, reading from paper is less cognitively taxing and appears to enhance the subjects' efficiency in inferring and literal performance. Regarding reading comprehension, a significant positive effect of reading from paper was found in the case of informational texts. The same effect was not consistently observed in reading comprehension of narrations. Digital reading can thus be considered a viable medium for reading of less informative texts, as is the case of fiction-based graded readers. Further, the accompanying audial support, glosses, and illustrations (mentioned in Ch. 2.4.3) may mitigate the greater demands on cognition imposed by screen reading, and help with the processing of the text.

To recapitulate, the prominence of CALL and MALL activities over the past years has influenced ELT practices and brought many changes. To this end, the presented study material falls into this category, as it requires technological support to accommodate its design (discussed in detail in Ch. 3.1). Although it can be argued that paper would be a more suitable

medium for graded readers in general, as they can cover virtually any topic, paper does not allow for the implementation of adaptive features, seamless audial support, and more. Furthermore, as the AGR is of a narrative character, the effects of reading from screen compared to paper should be mitigated.

2.6.1 Adaptive learning

Technological advancements have introduced changes in education and opened new avenues for personalisation and individualisation of the learning process. *Adaptive learning* (AL), "also known as assistive scaffolding", is an approach to learning which tailors the learning content according to the learner's specific needs within the framework of differentiated instruction (Muñoz et al., 2022, p.222). Any learning relies on the resources previously available to the learner. This is reflected in concepts intrinsic to AL, such as scaffolding and Vygotsky's zone of proximal development (discussed in Ch. 2.3), where the learners' current knowledge informs the difficulty level of the instruction and sets the milestones in the curriculum. AL relies on the student's data which is analysed to determine the future direction in the individual's learning journey (Harmer, 2015). AL can be categorised into four types of commonly used tools: "(1) adaptive learning systems, (2) learning apps, (3) teaching methods and (4) adaptive design solutions" (Muñoz et al., 2022, p. 229). The adaptability of each material also varies in complexity of the underlying features – whereas some materials are merely guided by a predetermined framework of rules, others rely on "complex systems with self-learning algorithms" (p. 223).

Research on AL implementation into LT instruction has reported positive effects in many areas. For instance, a study by Wang (2016), which compared incidental vocabulary acquisition through an extensive adaptive reading system vs. regular reading with no additional adaptive support, found that the experimental AL design significantly improved the acquisition and retention of new lexical items. An example of a well-known AL learning tool is *Quizlet*. The principle is simple; the learner is exposed to a set of lexical items in the form of flashcards. Then they test their knowledge of the introduced items, and the platform adjusts their future exposure to items they have not mastered yet based on their score. In terms of L2 reading, there have been exciting developments with learning platforms, such as *ReadTheory* or *Reading Plus*. Another example is *Headsprout,* an online program for younger learners, which offers adaptive texts with interactive elements (*Adaptive Individualized Reading Instruction*, n.d.). These platforms employ formative assessment to identify the learner's current level and assign suitable texts and targeted practice based on the learners' performance. The gathered data can

also be accessed by the teacher to manage the individual students' progress. To keep the learner engaged and motivated, these platforms also utilise *gamification* elements (i.e., elements native to games implemented in other media) in varying degrees, such as levelling up, adding puzzles, minigames, awarding achievements, etc.

Learning platforms have the potential of taking the learning outside of the classroom and leading the learners to greater autonomy in incorporating these activities in their daily routines. Although these new LT tools may seem promising, Harmer (2015) cautions against overenthusiasm, stating that "self-learning" materials often fail to motivate the learner long-term and should be used in conjunction with regular class instruction (p. 106). The instructional material presented in the current study follows this suggestion; while being essentially a self-learning material with adaptive features, it strives to be used complementarily with other classroom activities.

2.6.2 Interactive fiction and visual novels in language teaching

Reading is usually seen as a matter of opening a book and reading a narrative laid out by the author. This linear form of literature consumption is, however, not the only way to experience a story. In fact, branching narratives have been around for decades, having enjoyed the peak of their popularity in the 70s and 80s in the form of *gamebooks* (also called "choose-your-own-adventure books"(Hahn, 2020, p. 62)). Written from the second person perspective, the story told by these gamebooks relies on the reader's decisions to continue, the ending of the story being determined by the reader's choices along the way. However, printed gamebooks slowly became obsolete with the arrival of digital technologies and were mostly replaced by computer games with multiple storylines (ibid.). Nevertheless, text-based iterations of gamebooks have persevered, mostly in the form of *interactive fiction* (IF). Interactive fiction can denote a number of different types of text-based narration which relies on the reader's participation, such as e-books with interactive features (also called g-books), hypertextual/hypermedia narratives, role-playing games, visual novels, and more (Cover, 2010). Although text-based IF seems to excite readers as "an interesting new medium", the stories often appear disjointed and perplexing to readers, demanding excessive effort to comprehend and follow. Possibly for this reason, IF has not been able to enter the mainstream and with a few exceptions remains confined within its community of dedicated supporters (Pope, 2010, p. 81).

IF materials have found their way into education thanks to their interactive features, such as easy accessibility to the content and ability to personalise the story. Digital-based IF as

an educational material can expose the learner to different modes of input simultaneously in different forms. Hahn (2020) lists IF features and their advantageous effects:

- *gamification* (also discussed in Ch. 2.6.1) – the IF material can motivate the learner and make the learning more fun. The game can, moreover, be re-played (often with a different ending) and the material is thus recycled.
- *illustration* (also discussed in Ch. 2.4.3) – the IF material can help the learner visualise and contextualise their L2 knowledge.
- *microlearning* – the IF material can target a specific area of L2.
- *personalisation* – (also discussed in Ch. 2.5) the IF material is highly customisable and can thus reflect the learner's personal preferences,
- *accessibility* – the IF material (especially its online version) can be used on-the-go and can thus entrench the reader's learning habits (ibid.).
- Other IF features worth noting include *immediate personalised feedback, formative continuous assessment, self-regulated learning, task-based nature of the material*, and more.

Research on implementations of IF in education has been proliferating in the past few decades with researchers testing both commercial and educational IF resources specifically built for educational purposes. For instance, IF was used in the remote training of health professionals during the Covid-19 pandemic. To hone their decision-making and problem-solving skills, students were presented with a battery of online interactive scenarios with 'good' and 'bad' endings dependent on their answers (Morningstar-Kywi & Kim, 2021). In LT, interactive fiction has been used for reading and vocabulary activities in hopes that IF would be more immersive and accessible to students who do not enjoy conventional reading. As with any game-based educational materials, however, students may perceive IF as less educative/effective. Returning to Clinton's meta-analysis (2019) (discussed in Ch. 2.6), which compared screen vs. paper LT materials, paper-based materials may hold an edge over modern digital ones in part due to the association with studying on paper and consuming entertainment on screen.

Visual novels (VN) are well-to-do successors of the IF tradition, having attracted the attention of readers and gamers alike. Combining the features of text-based narration, audial support, and computer games, VNs convey stories through their branched storylines, conversational interactions with characters, and (optional) minigames. The reader navigates the plot by answering multiple choice questions and/or interacting with the game through point-

and-click sequences. This interactivity and conversational properties have led game developers and educators alike to create VNs for educational purposes. A few off-the-shelf examples of a VN intended to advance language knowledge include the *Learn Japanese to Survive!* (a series of adventurous games focusing on the Japanese orthographic system), or *Love Language Japanese* (a dating game which requires the learner to learn the language to succeed with the ladies). Some have raised concerns about the mixture of education and entertainment potentially diminishing the experience of both aspects, resulting in a boring game with little didactic value. Perhaps because these VNs do not aspire to be considered as a serious means of instruction, they were able to escape this fate and have been well received, as evidenced by their positive ratings on the Steam platform.

Studies mapping the use of VNs in class report favourable results in language instruction. For example, a study by Faizal (2016) explored the potential of a custom-made VN as learning tool for conversation gambits in comparison to printed material. The results of the study show a significant difference in the performance in favour of the experimental group. On another front, advancements in the realm of virtual reality have allowed for exciting developments in the creation and implementation of VNs. In a research conducted by Lai & Chen (2023), a virtual reality and a computer-based versions of the same commercial VN were compared in terms of their impact on vocabulary gains. It was revealed that although both versions were successful in incidental vocabulary instruction, the virtual reality version was significantly more effective as observed in the re-assessment translation. The implications of these results are tentative for although virtual reality can enhance the immersive environment of L2 learning, wider-scale adoption of the virtual reality technology is constrained by monetary concerns.

To conclude, the emergence of digital technologies has changed LT and reading. As a result, interactive fiction has been employed in language instruction with varying success. Visual novels are a popular alternative to traditional reading activities in that they combine their audio-visual properties with gamified features. The material presented in the current study is a visual novel designed to take advantage of the VN medium along with its adaptive features in the instruction of selected vocabulary items. The effectivity of the material in comparison to the printed version is experimentally tested in the practical part of the present thesis.

2.7 Conclusion

The current section introduced the topics, theory, and research relevant to the project at hand. First, language acquisition concepts in connection with reading were explored to further map the L2-specific processes influencing not only reading in a non-native language, but also

other areas of second language acquisition. Mechanisms specific to L2 reading were discussed to identify the challenges faced by L2 learners of English. Namely, learners may struggle with pre-existing L1 system interfering with the L2 reading processes. The nature and processing demands of the input can also add to the difficulty; it is advised that input be comprehensible yet challenging for the learner to result in higher intake. Supporting strategies, such as scaffolding and input within the zone of proximal development (ZPD) may also be implemented to aid the learner.

Second, reading was approached through the lens of language teaching, and an eclectic approach to L2 reading instruction was assumed. To name a few, the use of L1 in LT, both explicit and implicit modes of instruction, pre-planned and incidental exposure to target language, plentiful and comprehensive input along with input enhancement, noticing, and vocabulary recycling were practices influential in the creation of the present material. In respect to vocabulary acquisition through reading, the Involvement Load Hypothesis was introduced as a framework of vocabulary learning driven by the learner's need. The concept of learnability was also mentioned to guide the selection of lexical items (Ch. 3.1.1) to be taught through the AGR material.

Third, graded readers and their different types were evaluated, and the class reader approach was further detailed as a viable option for extensive reading with intensive features within the English lesson. For this reason, the class reader approach was adopted in the study design in place of the extensive method, as it was in line with the means and options available to the researcher.

Fourth, differentiation in language classes was discussed, as heterogeneous levels of proficiency within the study group inherently influence the requirements for instruction. The correct implementation of tiered exercises was inspected in order to inform the design of the AGR in its insistence on the differing quality rather than quantity of the respective tiers. Individualisation and personalisation in tandem with differentiation were concluded to be necessary to provide an engaging study material, which would consider the individual needs and preferences of the learner at their current level.

Lastly, the use of digital media in LT was examined. A review of research conducted on the effects of adaptive reading in LT was compiled, with the implications supporting its use in vocabulary teaching as a means of differentiation and individualisation. Interactive fiction and its many forms were investigated, and research on its employment in language classrooms

was reviewed. It was found that while there are advantages to the novel media of instruction, the use of screen-based materials may not be ideal in all areas of education. It was, however, determined that the resulting material needs to be digital to accommodate the adaptive features, as well as audial support. Moreover, the supporting strategies offered in the AGR were adopted to aid the reader's cognitive capacities during the screen-based read-through. As the following section details, the adaptive graded reader was created in accordance with the aforementioned theoretical considerations.

3 Material and Method

The following sections build upon the theoretical foundation established by the previous chapters and introduce the current project. The objective of the project was to combine the properties of a graded reader, interactive fiction, and adaptive language teaching tool into a single resource. This adaptive graded reader (AGR) was then tested on an experimental group and on a control group to explore any differences between the AGR and the conventional printed version of the material. The following chapters thus provide the research questions, outline the reasoning behind the AGR's design, and supply information regarding the format and a detailed account of the experiment.

The research questions to be answered within the course of the present study are:

1) Can the adaptive graded reader significantly enhance the acquisition of selected lexical items through reading as compared to the traditional printed version?
2) Are there any additional benefits in the adaptive version as opposed to the printed version?
3) Do subjects prefer the adaptive version over the printed version?

3.1 The material

The intention behind the presented LT material is to offer a more personalised and differentiated instruction of new vocabulary items in place of traditional graded readers, since graded readers usually work better for consolidating knowledge, rather than introducing new language (Waring & Takaki, 2003). The design of the AGR follows the recommendations set forth in the theoretical section. The following subsections elaborate upon the reasoning behind its various features.

3.1.1 The selection of target lexical items

The aim of the AGR was to employ adaptive learning in vocabulary instruction. To this end, three sets of low frequency were selected from the 14-25k belt of the BNC/COCA lists (Smith, 2023). The infrequent lexical items were used instead of non-words because of ethical concerns. Teaching the learners something they would never employ in their future language use was deemed as going against the purpose of creating a teaching material. Further, the subjects might have found it demotivating to learn non-existing words, in which case the

uselessness of the non-word items would have decreased their drive and possibly negatively influenced the overall performance.

Table 3.1 shows the selected items along with their translations as presented in the AGR and its printed version along with the number of their appearances throughout the material:

Set 1	*Set 2*	*Set 3*
Compeer = kamarád (62x)	Doddle = brnkačka (16x)	Abysm = propast (14x)
Theurgy = magie (38x)	Beldam = babizna (39x)	Tiff = hádka (13x)
Pelf = peníze (22x)	Gadabout = tulák (31x)	Oojah = věc (14x)
Gaper = zrcadlo (21x)	Vesture = oblečení (20x)	Bilker = podvodník (12x)
Chow = jídlo (24x)	Bothy = chatka (20x)	Avocation = koníček (12x)
Hawkshaw = detektiv (33x)	Lowdown = důvěrná informace, intel (16x)	Calaboose = vězení (12x)

Table 3.1: Sets of the selected lexical items

The items were chosen to fit the storyline and to be seamlessly repeated all throughout the text. The rate of repetition of individual items was adjusted to ensure that each item was encountered in the text at least ten times, as recommended by the literature review in Ch. 2.4.3. This amount of input recycling was employed to further the retention and noticing of the items. Because the material had a narrative structure, the numbers of encounters were dictated by the story, with some expressions being easier to implement because of their meaning (e.g., *compeer* = friend*, theurgy* = magic, etc.). According to the Involvement Load Hypothesis, the need to learn these items to understand and follow the story was intended to be the driving force behind their acquisition.

The rationale behind choosing nouns dwells in the concern with learnability (discussed in Ch. 2.4.2); firstly, nouns are salient enough to be easily noticed by learners. Secondly, the morphological complexity of the selected nouns is limited, as they all have regular plural forms. Thirdly, all chosen nouns have relatively transparent spelling and pronunciation, which was reflected in the selection, so that the items were distinct enough from one another. The differing depths of Czech and English orthographies (discussed in Ch. 2.3) were considered in the choice of the items, as reflected in their rather simple spelling. The length of the selected items, moreover, does not exceed three syllables (except for *avocation*). To avoid language transfer,

the items do not resemble Czech expressions (perhaps apart from *chow*, similar in pronunciation to *čau* = hi). Lastly, the selected items have concrete meanings. The multiplicity of meanings was also accounted for in the presentation of the items, where only one meaning per item was listed (except for *lowdown*, which was further specified, as the learners might have struggled with its meaning). To simplify the acquisition and make the performance measurable, the matter of register was avoided by not letting the subjects know the intricacies and constrains in the use of the items.

In conclusion, the items were chosen to pose the same degree of difficulty. Their learnability was similar in the aforementioned factors, which in return contributed to the readability of the overall text. Having taken all these factors into account, the writing process could ensue.

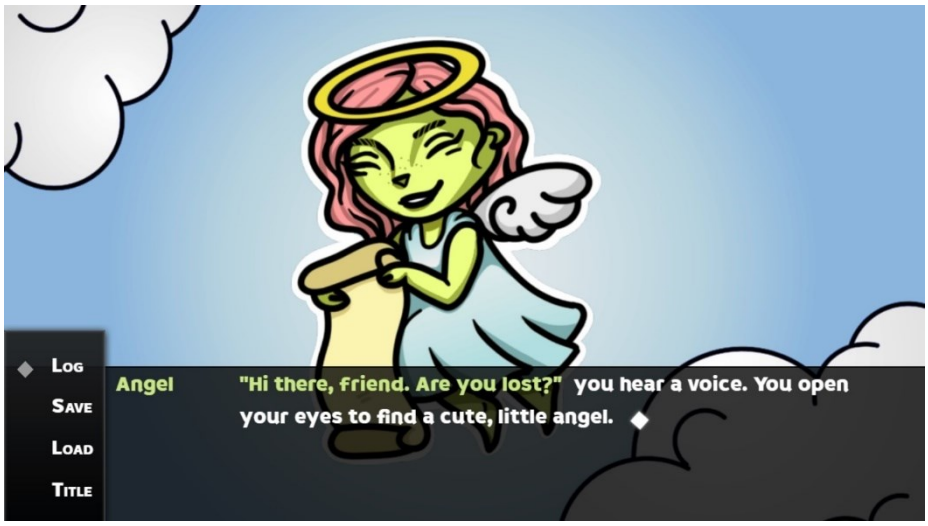
3.1.2 Story

As previously discussed in Ch. 2.4.3, graded readers can be either adapted existing works of literature, or original simplified texts. The decision to proceed with the latter was determined on the grounds of the following reasons: 1) the original text made it easier to incorporate the selected lexicon, 2) interactive features, such as custom dialogue options, could be more readily embedded in the original text, 3) the original text was controlled for appropriateness of language level and suitability of the topics. Furthermore, writing authorial text prevents any possible copyright infringement issues that might arise in adapting a more recent work. As is customary of graded readers, the present AGR was simplified in several ways. Firstly, the narrative structure was uncomplicated, with a limited number of characters, settings, and plot points. Secondly, the topics discussed in the text were of a tangible nature, concerning the events happening/having happened in the story. Thirdly, the language complexity was simplified, which impacted the use of literary devices (e.g., advanced metaphors, irony, etc.)

The selected genre of the AGR was fantasy specifically to pander to Czech learners, as a survey from 2022 revealed that fantasy was the most popular genre of reading materials in the Czech Republic (Fleck, 2022). One of the widely popular subgenres of fantasy in VNs is the so-called *isekai* (translated from Japanese as “other world”), which refers to stories featuring characters transported into a different world (Price, 2021, p. 58). In recent times, the isekai genre has experienced a surge in popularity across different forms of media as a way of escapism. As an emerging genre, isekai has differentiated itself from other kinds of fantasy literature and has acquired a number of specific characteristics and subtypes. The present story

is a case of ”portal-quest” isekai (p. 62), in which the character (i.e., the reader of the AGR) tries to return to their original world after having transmigrated. The full version of the story along with all possible dialogue options is available in Appendix C.

As is common in the isekai genre, the reader is inserted into the narrative having woken up in an unfamiliar world. They quickly realise that they have swapped souls with another person – a character named Lexi. They are aided by an Angel, who helps them by pre-teaching them some lexical items to be able to survive in the new world (as shown in Picture 3.1). More screenshots and graphic materials are included in Appendix E.



Picture 3.1: Angel helps the reader fit in the unfamiliar world

Picture 3.2: Dialogue options and the first encounter with Compeer

After a brief pre-teaching session, the reader wakes up in the middle of a street with a hooded figure overarching them (as seen in Picture 3.2). This mysterious character later reveals herself as ‘Compeer’ – Lexi’s best friend – and acts as the reader’s guide throughout the story. Immediately, the reader and Compeer are chased by a group of flying monster-like detectives called hawkshaws, which results in their entering Lexi’s house and meeting their family. Later

that evening, Compeer confesses that she is the reason behind the soul swapping and promises to help the reader return home. The reader goes to sleep and chapter one ends in the Angel administering the assessment of the set 1 items in the reader's dreams. Once the assessment is finished, the reader receives a pre-teaching of the following lexical item set based on their acquired score (as shown in the tier system in Ch. 3.1.3).

Chapter two begins with the reader and Compeer deciding to earn money by selling the reader's 'know-how' about their world. They find a customer – the witch of the forest (beldam) – who invites them into her cabin filled with objects from the reader's world (e.g., a broken computer, some old magazines, etc.). The witch then proceeds to ascertain the reader's identity as a true transmigrator and another dream assessment and pre-teaching sequence ensue, this time accompanied by a tiny Devil. Once the reader's identity as a transmigrator is verified, the witch connects them with Lexi, who refuses to swap back. The detectives (hawkshaws) break into the witch's cabin and arrest the reader and Compeer for having practised magic without a licence. While the witch manages to escape, the reader is put in a prison cell along with Compeer. Finally, through a magic ritual – assessment – they are able to go back to their original world, and the AGR ends.

To conclude, the story in the AGR was a fantasy based on the popularity of the genre in the Czech Republic. The short story was intentionally written in a simplistic manner to fit within the designated timeframe and to avoid cognitive overload leading to decreased uptake of the input. As such, the story was then adapted into a format of visual novel, the features of which are discussed in the following section.

3.1.3 Material design

Language complexity

As with any simplified literature, the AGR abided by several previously set constraints, which were in correspondence with the theoretical framework. As mentioned in Ch 3.1.2, the story was limited in both narrative and linguistic complexity to offer comprehensive input. The reading material was composed of short sentences, which mostly consisted of a maximum of two clauses. The readability of the text (discussed in Ch. 2.4.2) was assessed through the *Web FX* readability tool (*Readability Test*, n.d.), which combines most commonly used readability measures. The score for the text was 85.6/100, which suggests that the text should be comprehensible to 10-11 years old native speakers. To ensure that there were no mistakes and

the language used in the text sounded natural, the material was proofread and edited by a native speaker.

In terms of language difficulty, the text was designed to include B1 lexical expressions, which were checked against the *English Vocabulary Profile* wordlist (accessible at http://www.englishprofile.org). All words above the B1 level were translated into Czech and placed at the top of the screen as glosses to avoid the negative effects of the students' imperfect L2 knowledge (discussed in Ch. 2.3) and provide scaffolding. As a consequence of the B1 level and the presence of L1 glosses, the coverage of the text was also increased. The cognitive burden was thus lessened, and the learners could focus their cognitive resources on acquiring the selected lexical items. The grammar was also adjusted according to the *EAQUALS* guidelines for the B1 level (North et al., 2010). This meant that advanced constructions, such as complex tenses (mostly perfectives – *future perfect),* most *mixed conditionals*, some *modal forms (can't have, needn't have),* most *passives*, advanced *phrasal verbs*, expressing wishes with *wish*, and more complex uses of *relative clauses* were seriously limited, or avoided (ibid. p. 19).

The selected engine

The AGR was created using the *Visual Novel Maker* software. This engine employs a drag-and-drop visual editor which requires little to no programming experience. Among other platforms, *Visual Novel Maker* also supports deployment to web browser, which made it possible to distribute the AGR online without any downloads or pre-installations. The finished product was then uploaded to *itch.io*, a website hosting a community of independent creators and enthusiasts in disparate areas of game development, game assets creation, music composition, comics drawing, (interactive) fiction, and more. The game was easily accessible to learners at https://darniela.itch.io/ and could run directly in the browser on any device supporting internet connection. The material was tested several times on various devices, ranging from Android smartphones and tablets to iOS smartphones, to desktop computers, to laptops (old and new). As will be discussed in Ch. 3.3, despite this vigorous beta testing some older devices were discovered to struggle with the demands of the AGR during a pilot study. Therefore, the users experienced a slowdown in loading as a consequence of these technical constraints.

As visual novels are considered to be on the boundary of game and literature, the text was gamified in a number of aspects. The literary influence on the contents of the book was a popular VN genre of *isekai*, which features stories of characters being transported into another world (discussed in Ch. 3.1.2). Regarding the influence of games, the material strongly resembled the conventional mould of most VNs. Firstly, there was a user interface, heavily reminiscent of a regular game. Secondly, the text was accompanied by a side panel with options to allow readers to save their progress, load a different file, change their settings (e.g., music/voiceover volume), check the log (i.e., review the text that had already appeared on screen along with their choices), and access the main menu. The text was displayed in the ADV style, i.e., at the bottom of the screen. The proximity of text to the accompanying visuals supposedly strengthens the links between the visual and textual input (as mentioned in Ch. 2.4.3), which informed the placement of the text window. Thirdly, the results of the formative assessment were accessible to the reader/players in the form of level-up screens (shown in Picture 3.3), which let them know whether they had graduated onto another level or not. Finally, the readers were presented with dialogue options, which influenced the reactions of the characters in the novel. These options served as scaffolding for the dialogue as well as contributed to personalisation of the material for the individual learners. It is noteworthy, however, that all alternative answers feature the same amount of target items, so that all subjects were exposed to the same degree regardless of their dialogue answers.

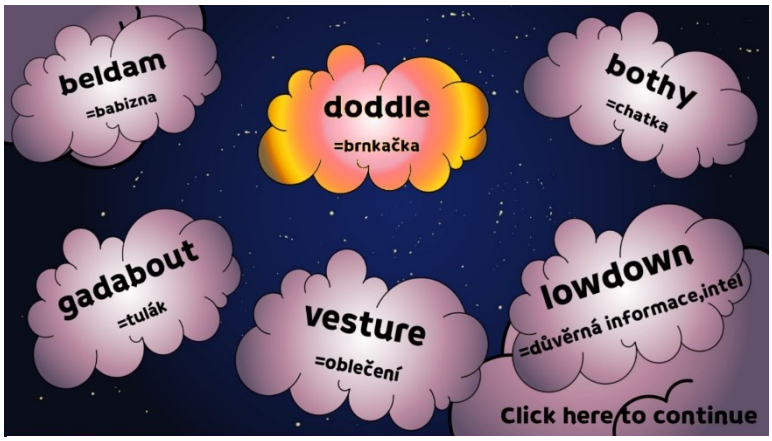
Picture 3.3: Level-up screen as an example of gamification

Material organisation

The AGR was divided into three chapters, each of which started with a pre-teaching sequence and ended with assessment. Although the pre-teaching was done explicitly to make use of the intentional route of vocabulary instruction (discussed in Ch. 2.4.2), it was always contextualised as part of the story. As opposed to the implicit mode of incidental vocabulary

learning, the learner was led to notice the selected items in the subsequent text more readily. The learner was first introduced to each item individually along with a translation and audial support (as shown in Picture 3.4) and was able to review the entire set at the end of pre-teaching with the audio available by clicking on a specific item (Picture 3.5).

Picture 3.4. Pre-teaching of an individual item



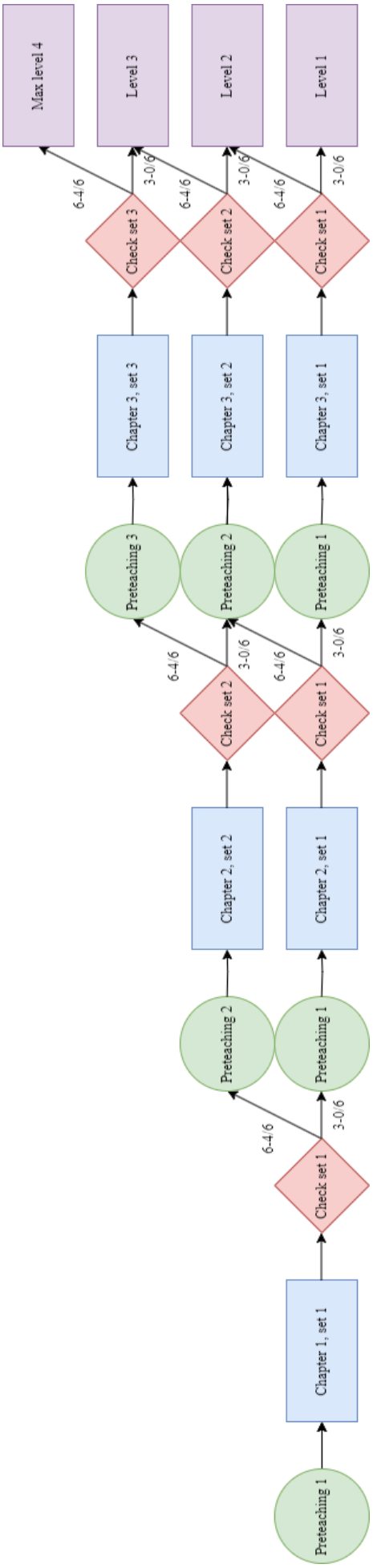
Picture 3.5: Revision of all items in the set

Once the learner was prepared to continue, they clicked the button in the lower right corner to start a new chapter. The target vocabulary was highlighted throughout the chapter in accordance with the idea of input enhancement (discussed in Ch. 2.4). At the end of the chapter, the reader's acquisition was assessed by a multiple-choice test (shown in Picture 3.6). The resulting score determined whether the reader was ready for another set, or whether they needed to revise the previously introduced set. Picture 3.7 offers a flow-chart of the process. The adaptability feature of the reader was implemented based on a tier system which featured three main levels of difficulty. In chapter one, the learner started on the first and base level of the system. Their upward mobility was conditioned by their responses in the assessment (labelled as 'Check' in the schema), with a maximum of two mistakes committed in order to graduate onto another level. If conditions for the promotion were not met, the reader would remain at the

same level of difficulty and receive a recapitulation of the previously introduced set. This led to recycling of the material, which is imperative in vocabulary acquisition and retention. The following chapter was then adjusted to the acquired level along with the audial support. What is more, this formative assessment was applied in accordance with differentiation and individualisation practices discussed in Ch. 2.5. Both the pre-teaching and the multiple-choice assessment sections could also be perceived as low-intensity comprehension exercises accompanying the text. Moreover, the pre-teaching and assessment format of the AGR clearly communicated the outcome of the teaching sequence, which is fundamental in the TBLT approach (discussed in Ch. 2.4).

Picture 3.6: Assessment of the reader's performance

The reasoning behind awarding scores for whole sets instead of focusing on individual items as, for example, in Wang's study (2016) where item mastery was tracked by interactions with the said item, was irreconcilable with the inclusion of audial support. The audial support was employed to foster stronger 'sound-item' connections, to enhance the repetition of the selected items, and to lessen the cognitive load imposed by reading without audio (as discussed in Ch. 2.4.3). The voiceover was recorded by a native speaker of the American English variety and (with few exceptions, e.g., in dialogue options) was available throughout the entirety of the reading experience. The AGR featured different audio recordings for each level of difficulty at each tier – recording additional versions dependent on the acquisition of individual items would thus be a massive undertaking, and would contribute to the already large size of the AGR deployment file. A way to include both the individual item tracking and audial support features would be to provide an automatized text-to-speech feature, which was beyond the scope of the thesis.



Picture 3.7: Tier system

After finishing the read-through, the readers were instructed to fill in a re-assessment and a questionnaire administered by the Google Forms platform.

Visual aspects

As text-based reading is done through the visual channel, the visual aspects of the material were attended to in a few ways. The font was purposely chosen to allow easy reading thanks to its round shapes and evenly spaced letters. Further, the selected lexical items were coloured blue to enhance the input and draw the reader's attention. Expressions above the B1 level were highlighted purple and translated on top of the screen to lend support to the learner. As for illustrations (discussed in Ch. 2.4.3), all visuals were drawn specifically for the present material to accompany the story and link the textual to the visual information happening on screen. The total of drawn materials includes 17 backgrounds (including the title screen) detailing the story locations, 19 sprites with different facial expressions of the story's characters, 13 objects appearing in the material, seven level up screens, 18 graphics used for pre-teaching of the individual items (as shown in Picture 3.4), and three review graphics of the entire sets of items (Picture 3.5). The graphic elements were animated to move around the screen in reaction to the progressing narrative, which provided additional visual support and further promoted the reading comprehension of the story.

Printed version

The paper version featured the same story with a few exceptions due to the lack of interactivity in the medium. The appearance of the material was similar to any printed medium, the text was printed along with colourful illustrations on sheets clipped together to create a booklet. The pre-teaching was done by offering a list of lexical items along with their translations without any audial support. Interactive dialogues were rewritten to include the most neutral dialogue options, which contained the same number of target items as the AGR version to control for the degree of exposure. The text followed the same input enhancement strategies as the AGR version: the target items were underlined to promote noticing, and the text included L1 glosses of all above B1 level expressions at the bottom of each page. The multiple-choice assessment at the end of each chapter did not contribute to the adaptability of the text, it was included as a comprehension exercise to consolidate the acquired knowledge. Therefore, the reader was exposed to all item sets regardless of their readiness. Finally, the questionnaire was placed at the end of the booklet for the reader to fill in after having finished their read-through. The script of the printed version is available in Appendix C.

3.2 Methodology

Subjects

The adopted sampling design was convenience sampling, as the subjects were students from a local grammar school. Since the target audience for the AGR were Czech learners of English with a B1 level of proficiency, the material was tested on a population of 44 16–17-year-old grammar school subjects. The final number of subjects was 42 because two subjects had to be excluded; one was not present for the second half of the experiment, the other did not manage to finish the material. The subject selection criteria consisted of having Czech as their L1 and attending the same year of a four-year grammar school program. The choice of the age group was the result of a consultation with the teachers involved in the study, who recommended second-year students based on the difficulty level of the text, as well as the textbook the students were using in their regular English lessons (*English File Pre-intermediate*). Since English classes are commonly divided into smaller groups of approximately 15 students in Czech secondary schools, the testing had to be done in three groups to ensure that the number of subjects was sufficient. The subjects were divided into experimental and control groups at random, with the former reading the AGR and the latter reading the printed version.

Study design

The study followed a mixed-method approach encompassing both qualitative and quantitative measures. The quantitative aspects involved the pre- and re-assessment scores along with Likert-like scale ratings reporting on the satisfaction with the material (available in Appendix A and the supplementary material). The qualitative analysis then delved deeper into the subjects' decisions in the pre- and re-assessment, exploring not only their scores but also the types of choices they made, and their underlying origins. The questionnaire answers, moreover, provided insights into the subjects' experiences with the project.

3.3 Pilot study

A pilot study was conducted prior to the experiment. The subjects consisted of a group of Czech learners of English between the ages of 15-16. Convenience sampling was employed as the selection technique, as the subjects were available to the researcher. Since some of the subjects had to be excluded from the study (because they were absent for one of the sessions, or did not submit the GDPR form), only eight subjects were presented with the adaptive version and four subjects read the printed version. The experiment took place in a span of three English

lessons. In the first lesson, the subjects were first required to attempt to translate the selected items in a pre-assessed to ensure that they had no previous knowledge of any of the items. The pre-assessment lasted for approximately five minutes, as none of the subjects was familiar with any of the items. In the second lesson, the subjects were required to read either version of the study material. The third lesson was dedicated to finishing up the reading and administering the re-assessment. The pilot study revealed several shortcomings to be ameliorated in the actual experiment:

1) Although the AGR had been tested on multiple devices to ensure that it would run smoothly (different laptops, both Android and Apple smartphones, and tablets), the computers used in the pilot study were extremely old and the AGR started to slow down. As a result of this, the experimental subjects became increasingly bored while waiting for another section to load. Although the AGR was estimated to take around 35-40 minutes to finish, none of the subjects managed to enter the second chapter within the first experimental session. For their second session, the subjects were able to use different computers and did not experience any technical issues. In comparison, the control group experienced no such hindrance, one of the subjects even having finished the reading during the first session.
2) The researcher failed to instruct the subjects in a detailed manner, some of the participants were not effective in their time management. One of the participants (P13 – excluded from the study because they did not finish the AGR) wrote in the questionnaire that they had wasted time by memorizing the presented items in the pre-teaching stage only to realise that they would encounter them in the text multiple times.
3) The distribution of the AGR vs. printed versions proved to be unfortunate, as some of the subjects had to be excluded from the study because they were absent for the either part of the experiment. The results of the remaining four printed-version instructed participants were insufficient for any generalisation of the effects.

The average score in the AGR group was 16, whereas all subjects reached the maximum of 18 points in the control group. While the experimental group showed a progressive decrease in their average performance over the sets (set 1 = 0.958, set 2 = 0.854, and set 3 = 0.792), the control group's score remained at the maximum of points. Marginal differences in satisfaction were observed with the control group expressing slightly higher level of satisfaction, and greater inclination towards using a similar material in the future. However, the results of the pilot group could not be statistically analysed because the conditions of the experimental group had to be

changed in the middle of the experiment. The piloting thus proved useful in uncovering the technical difficulties that might arise in the testing session. However, its results in favour of the printed version should not be regarded as informative in answering the research questions. These results are only a reflection of the technical difficulties encountered with the computer version. Nonetheless, the gathered data is available in the supplementary material.

3.4 Experiment description

The testing took place over the span of two English lessons at the end of June 2023 at a grammar school in the town of České Budějovice. The subjects received a GDPR form prior to testing via Teams/in print by their teachers, so that they could bring it to school before the beginning of the testing. The subjects were first presented with a pre-assessment to check for any previous knowledge of the 18 selected items (the form is available in Appendix B). It ought to be noted that two thirds of the subjects filled in this pre-assessment one day prior to the reading session in printed form, while one third did so via Google Forms at the beginning of their first reading session. This difference in the treatment of subjects was caused by time constraints in one of the groups, with Google Forms being employed to save as much time as possible. The contents and other conditions were the same, the data was thus assumed to be comparable among all three groups. Out of all subjects (even the excluded ones), only one subject knew one expression. The selected items were thus successfully verified as unknown to the subjects, and the second stage of experimenting could take place.

The subjects received instruction as to the rationale of the experiment, and the aim of the material. The experimental group was shortly introduced to the controls of the AGR material, which they seemed to find intuitive and straight-forward. The reading time of both the AGR and paper-based material was assessed to take approximately 35-40 minutes to finish. This timeframe later proved to be too short, as all subjects needed two lessons to finish their read-through, most of the control and experimental group subjects alike having finished two thirds of the material by the end of the first session. The subjects finished the reading during the second session and were assessed directly after through a re-assessment. They also filled in a questionnaire mapping their experience with the material. All data gathered is available in the supplementary material.

4 Analysis

Qualitative analysis

To ensure that the subjects had no knowledge of the selected lexical items, a pre-assessment was administered. Out of all subjects, only one participant (E8) was familiar with the item *avocation* (correctly translated as *koníček*) prior to being exposed to it via the graded reader. While none of the subjects were familiar with the other items, their educated guesses on the meaning of the items show several tendencies. Subject E7 in particular employed all of the strategies discussed below in their pre-assessment.

1. **L1 phonological/orthographic proximity** – in terms of L1 transfer, subject E7 relied on the similarity of the English word *doddle* (=easy task) and translated it as *dudlík* (= pacifier). Subject P2 from the pilot study employed the same strategy in translating *hawkshaw* (=detective) as *hák na auto* (=car hook), *hook* being similar in both sound and form to *hák*.
2. **L2 phonological/orthographic proximity** – an example of the influence of L2 lexicon is the translation of *avocation* (=hobby) as *evokovat* (=to evoke). It could be argued that the translation can be motivated by the Czech word, since *evokovat* is a borrowing, the English version is, however, closer in phonological form. Another example of formal proximity is *tiff* (=argument) translated as *zloděj* (=thief), or *doddle* translated as *kreslit, čmárat* (=to doodle) or *náčrt, skica* (=a doodle). Both these translations may be motivated by both phonological and/or orthographic proximity to the L2 lexical items. Subject P6 from the pilot study made use of the similarity of the L2 phonological form in translating *tiff* as *špičák* (=canine tooth), the similarity being in the plural form *teeth*.
3. **morphological analysis** – an example of the subjects analysing the lexical item morphologically can be found in *lowdown* (=information, intel), which was creatively translated as a *místo dole* (=low place) or as *podložení* (=underlayment, wedging). This attempted analysis of the word parts shows advanced understanding of morphology in being able to identify the morphemes and trying to find meaning by approaching them individually.
4. **source unknown –** although the previously mentioned guesses offered a more straight-forward explanation, a few guesses were not as easy to explain. An example of this is *beldam* (=old woman, witch) explained as *blázinec* (=asylum). While there is a similarity in the ending sound /əm/ in both *beldam* and *asylum*, such conclusion can be

seen as too far-fetched. No such conjecture could be provided to an even more puzzling translation of *doddle* as *párátko* (=toothpick).

Overall, most of the pre-assessment guesses were explainable by L1 or L2 influence. The mistakes in the re-assessment were of a different character. Provided that the conditions for acceptance of the correct answer were very lenient, the mistakes stemmed from mixing up the new lexical items (e.g., C1 mistaking *gadabout* for *calaboose* or E21 mistaking *gadabout* for *bilker* and *bilker* for *oojah*). Again, some unexplainable mistakes arose from the re-assessment answers, such as *doddle* translated as *hloupost* (=rubbish), or *gadabout* as *lehké učení* (=easy learning). Not all subjects were able to recall the exact translations offered by the teaching material and became creative in describing the meaning. Some subjects translated *bilker* (=cheat) as *lhář, zrádce* (=liar, traitor) which was accepted because these variants were in line with the item's use in the graded reader. *Bothy* (=cabin) was translated as *bouda, budka, chajda, chalupa, chata, chatka* or *chatrč*, all of which denote a small building. *Lowdown* (=information, intel) was also translated in several different ways, e.g., *důležitá informace* (=important information), *důvěryhodná informace* (=trustworthy information), *tajná informace* (=secret information) or *vzácná informace* (=rare/valuable information). Despite their varying meanings, all these variants were accepted because they included *information*, and they fit in the story of the graded reader. These findings suggest that the subjects learned the meaning of the items from both the definitions and pre-teaching activities, but they also linked these lexical items to more general concepts (e.g., a small building, a bad person, information, etc.), which they employed in the recall of the meanings.

Quantitative analysis

The gathered data from Google Forms, paper assessments, and questionnaires was unified in form, digitalised, and analysed in Excel. The two-factor ANOVA With Replication test was selected to compare the scores of the experimental and control group. Table 4.1 shows the summary of the ANOVA test:

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Group	0.190	1	0.190	0.069	0.794	3.960
Testing session	6,035.048	1	6,035.0478	2,181.343	<.001	3.960
Interaction	0.429	1	0.429	0.155	0.695	3.960
Within	221.333	80	2.766			
Total	6257	83				

Table 4.1: Two-factor ANOVA With Replication

The p-value of the testing session comparing the scores of pre- and re-assessments is <.001 which suggests that there is a strong significant effect of the learning material. In other words, the graded reader was successful in teaching new lexical items to the subjects. However, there is no significant difference between the results of the control and experimental groups, as evidenced by the sample p-value being > 0.05. This result indicates that the two groups, overall, do not differ significantly. In addition, the p-value of the interaction, > 0.05, indicates that the improvement from pre- to re- assessment is not significantly different among the two groups. Considering these values, the outcome of the analysis indicates that the version of the graded reader had no significant effect on the subjects' performance in the re-assessment: the subjects acquired the new lexical items equally in both conditions.

Delving deeper into the gathered data about the individual lexical items, the number of repetitions contributed to the retention of the items. Although all items were repeated at least 10 times throughout the text, the first set appeared in all three chapters of the graded reader. The other two sets depended on the score awarded in the assessments (as discussed in Ch. 3.1.3). All subjects qualified for all three sets and thus were exposed to all lexical items. This suggests that the criteria for levelling up might have been too lenient, or the number of new lexical items was too small to pose a challenge for the subjects. The adaptive feature was, therefore, not used, as all subjects were able to complete the reader at the highest level of difficulty. Consequently, both versions featured basically the same text, apart from interactive dialogue options. Figure 4.1 shows the students' performance in re-assessment across the sets of items. Unsurprisingly, the first set proved to be the easiest to acquire, likely due to the items repeating all throughout the text. The experimental group outperformed the control group in the second set, the scales, however, shifted in the performance in the third set. The implications of these measures suggest that the amount of repetition of the lexical items throughout the text was likely linked to the

subjects' performance in the re-assessment, with the first set being by far the most repeated throughout the material.

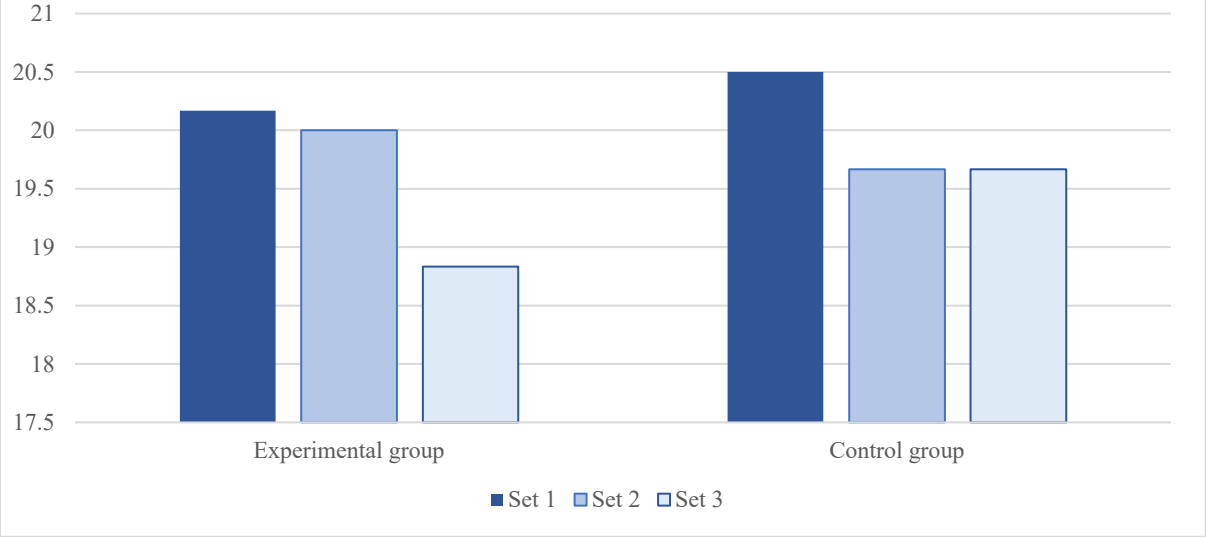


Figure 4.1: Score averages for sets

A comparison of the sets in the re-assessment was conducted by using a Single Factor ANOVA in the experimental and control groups. Table 4.2 provides the results of experimental group compared to the control group:

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Experimental group						
Between Groups	6.333	2	3.167	4.071	0.039	3.682
Within Groups	11.667	15	0.778			
Total	18	17				
Control group						
Between Groups	2.778	2	1.389	1.289	0.304	3.682
Within Groups	16.167	15	1.078			
Total	18.944	17				

Table 4.2: Single factor ANOVA comparing the re-assessment scores between the sets

As can be seen from the results, the p-value of the experimental group is < 0.05, which suggests that there were significant differences between the results of the induvial sets in the experimental group. The same is not true in the control group, where the p-value is not smaller

than 0.05. The control group thus did not experience significant differences in the difficulty of the subsets. A likely explanation, which is supported by the questionnaire answer of subject C11, is that some of the control group subjects would return to the pre-teaching page to check the translations when they struggled with some of the target items while reading. Therefore, the differences between sets in the print-based medium, which offered access to all target items at any point of the reading assignment, were levelled across the sets. This revision during the course of reading the chapter was not available to the experimental group subjects, however, who performed in accordance with the rate of repetition of the sets. The first set was featured in all chapters and thus was better retained than the second and third sets, which appeared later in the material.

Figure 4.2 lists the subjects' performance on individual items. Whereas the experimental group struggled the most with *bilker* and *tiff*, the same tendencies were not observed in the control group, where *abysm* and *calaboose* proved to be the most difficult to acquire. There are no commonalities in terms of learnability, as all items are concrete, relatively short (possibly with the exception of *calaboose*), and have distinct forms not to be confused with other items. All these items belong to the third set, which supports the previous conclusion that repetition played a significant role in the students' performance.

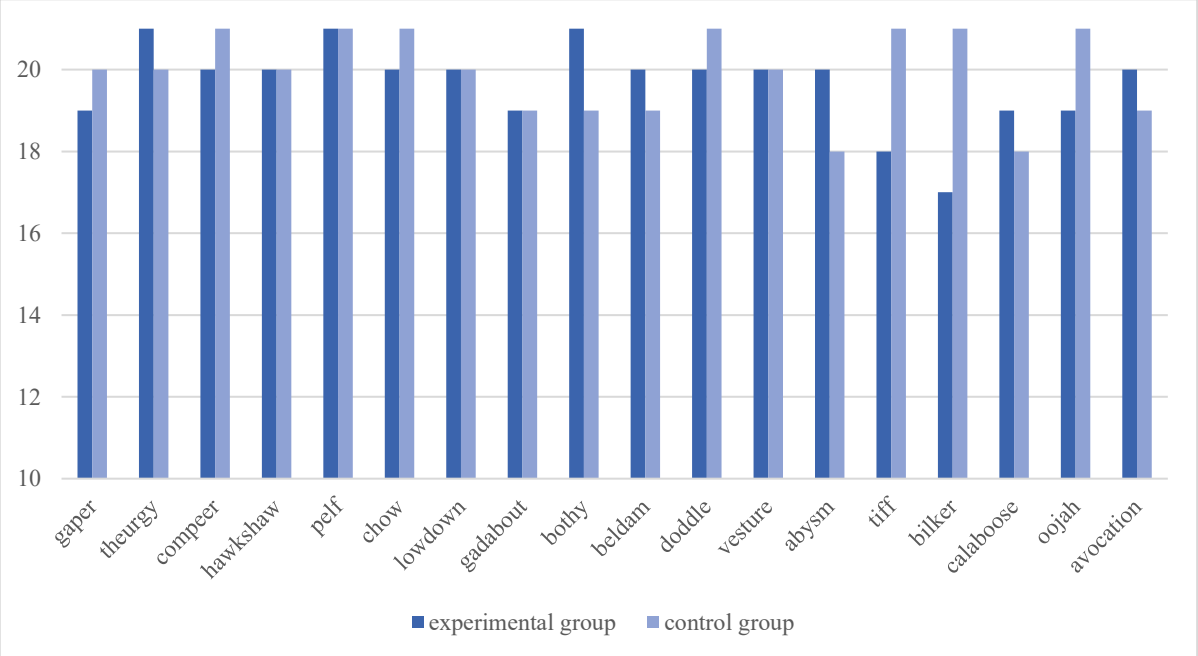


Figure 4.2: Scores of individual lexical items

Questionnaire

Although the scores do not speak strongly in favour of either of the versions over the other, the answers from the questionnaire offer a closer insight into the learners' experience

with the instructional material at hand. While the subjects' acquisition did not differ significantly in the two groups, the experimental group reported greater satisfaction with the material they were presented with. The subjects were asked to rate their experience on a Likert-like scale (1=strongly agree, 2=agree, 3=not sure, 4=disagree, 5=strongly disagree). The questionnaire answers can be found in the supplementary material. Table 4.3 shows the averages of questions mapping the learners' attitudes towards the material:

Question	*Control group*	*Experimental group*
	Average	*Average*
Did you like the material?	2.096	1.429
Do you think you have learned something?	1.667	1.429
Would you like to encounter more materials like this graded reader in the future?	2.095	1.380

Table 4.3: Attitudes towards the material

The rule of thumb to read these results is simple: the lower the number, the better satisfied the subjects were. As can be seen from the comparison, the experimental group enjoyed their experience more than the control group. The experimental group, moreover, expressed greater degree of trust in the material's positive effects on their learning. Finally, the experimental group seemed more inclined to working with similar materials in the future. Consequently, the data shows that despite the effectiveness of the materials being the same, the subjects enjoyed the AGR version more. It can thus be supposed that the AGR version would be used more consistently and contribute to more learning over time.

The perceived difficulty of the material was similar in both groups with the majority of subjects reporting that the difficulty of the material was appropriate (19 in the control group and 18 in the experimental group). Only four participants (two in each group) rated the material as too easy, and only one participant (from the experimental group) deemed the material too difficult for their current level. While three out of four participants who deemed the material as too simple reached 18/18 points, subject C16 received a below average 12/18 points. Perhaps then the subject considered the overall text complexity as too low, not the task of acquiring the 18 lexical items.

5 Discussion and conclusions

The objective of the present thesis was to create a digital reading material with adaptive features. This material was developed in accordance with the contemporary research in the fields of L2 reading, vocabulary acquisition through reading, simplified literature, differentiated instruction, computer and mobile-based language learning techniques and materials, adaptive learning, and interactive fiction. To this end, an adaptive graded reader (AGR) was created, its design combining the body of research to provide an instructional material targeted at vocabulary teaching of 18 lexical items of low frequency. The aim of the theoretical section was to anchor the AGR within the many concepts and methodologies fundamental for the topic. The nature of input, its cognitive processing, and the resulting intake in L2 readers influenced the design of the AGR in its insistence on easy comprehension and lowering of the cognitive load by offering additional support (glosses, translations, audio, highlighting). Language teaching strategies contributed to the enhancement of the input, both implicit and explicit routes of instruction, promoting noticing, and recycling of the input. The Involvement Load Hypothesis in particular was most influential in the material design: the target lexical items were implemented with respect to their perceived usefulness. Combining both extensive and intensive reading, the material was employed as a classroom reader. The adaptive nature of AGR was reflected in its tiered system dependent on the learner's readiness, which was in agreement with differentiated instruction guidelines. Lastly, the cognitive load imposed by the digital nature of the medium was lowered by the supportive features of the material (audial support, glosses, explicit instruction, highlighting to promote noticing, and so on).

To determine the effectiveness of the AGR material and to answer the research questions of the study, an experiment was conducted. The results of the experiment suggest that there was no significant difference in the effectivity of the digital AGR in comparison to its printed version. In both conditions, the subjects acquired most of the lexical items presented to them in the course of their reading, all of them having reached the maximum level. The adaptive feature of the reader was thus deemed redundant. A possible explanation for such outcome is that the number of items was too low, the students' level of proficiency too high, or the material was too short to show any significant differences in exposure. Although the scaffolding strategies of glossing and L1 pre-teaching likely lowered the challenge of the material for some subjects, they were well received by others, as they underscored their usefulness in the feedback. Nonetheless, all subjects were able to convert input into intake, fulfil the previously declared objective of the material, and acquire most of the target items.

In respect to the performance in individual sets, the medium likely influenced the subject's results in favour of the paper-based group. The experimental group performed differently in between the subsets as opposed to the control group, which performed consistently. Therefore, it can be argued that the additional supportive features offered by AGR were insufficient in negating the effects of the screen. The easy access to the pre-teaching section in the paper-based version could have enabled the control group to revise the new lexical items multiple times as opposed to the experimental group. Both groups received the highest scores in the first set which can be explained by the rate of repetition of the items, as the first set was featured in all three chapters of the text. This discovery marks a limitation of the study: the AGR was a narrative (as opposed to informative) text designed to accommodate for the negative effects of screen-based media on reader's cognition by offering additional support. However, the comparison with the paper-based medium was unnecessary, as it introduced another variable aside from the use of adaptive features in AGR. Instead, the control group could have been instructed by a material closer in nature to the AGR, such as an e-book or a PDF file, to avoid any possible arising differences. It is worth noting that, based on the questionnaire answers and the conglomerate scores from the re-assessment, the AGR version was as effective as the paper version in teaching the selected lexical items.

The subjects' satisfaction with the material was in favour of the adaptive graded form, which was considered more enjoyable, pedagogically sound, and better suited for future materials. Although further research would be necessary to support this interpretation, the questionnaire data suggests that while there was no significant difference in the paper vs. digital version in the students' performance, the AGR version was received more positively. Therefore, it can be tentatively assumed that the digital version would likely be utilized more consistently, leading to improved learning outcomes long-term.

Returning to the research questions:

1) Can the adaptive graded reader significantly enhance the acquisition of selected lexical items through reading as compared to the traditional printed version?
    a. Yes, the AGR proved to be an effective material, which was successful in vocabulary instruction. However, the print-based version of the material was equally as effective.
2) Are there any additional benefits in the adaptive version as opposed to the printed version?

a. Yes, according to the questionnaire answers, the subjects liked the AGR medium more and believed in its effectivity. This may lead to more consistent use and a boost in motivation. The AGR was also more interactive with the learners being able to personalise the story by selecting dialogue options. Although the material's influence on other dimensions of 'knowing a word' (discussed in 2.4.2) was not explored in the study, the AGR version also features audio, which could have contributed to improvements in pronunciation and audial recognition.

3) Do subjects prefer the adaptive version over the printed version?
    a. Yes, the subjects favoured the AGR version in comparison to the paper-based version both in terms of 'liking' the medium and finding it educationally sound. This positive reception of the material can boost motivation and foster further engagement with the material.

To conclude, the present study endeavoured to create an original adaptive reading material targeting vocabulary instruction. While the idea of employing adaptive elements in L2 reading is not novel (as evidenced by *Headsprout, ReadTheory, Reading Plus* and other existing platforms), the execution differs from some of the predominantly IR materials in that it features a continuous narration in the class reader form (i.e., combining ER and IR). The AGR version was compared to a print-based version of the text to evaluate the functionality of the former in juxtaposition with the more conventional printed medium. The analysed data revealed that there were no significant differences in the subjects' overall performance in either condition, as a similar number of items was acquired by the two groups during the session. Despite this overall similarity, the control group's performance with the print-based version was more consistent across the three lexical item sets, likely because of the possibility to revise items throughout the course of one's read-through. Further research thus could benefit from comparing two screen-based media against each other, as digital LT materials are prevalent in today's language classrooms. Nevertheless, the AGR material can be used in classrooms as a supplementary material either for larger groups of learners, to motivate reluctant readers into adopting the reading habit, or as an alternative to leisure reading.

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Resumé

Úvod

Tato diplomová práce zkoumá adaptivní prvky zjednodušené četby v kontextu osvojování slovní zásoby. Čtení je jednou ze čtyř základních jazykových dovedností, která na rozdíl od ostatních dovedností vyžaduje explicitní instruktáž a soustavný trénink jak v cizím, tak v mateřském jazyce. Zjednodušená/adaptovaná četba (graded reader) proto umožňuje studentům číst texty na jejich aktuální úrovni, přičemž přispívá ke zlepšení čtenářských schopností a ostatních dimenzí jazyka. Pro účely tohoto šetření byl vytvořen studijní materiál, který bere v potaz empirické výsledky výzkumů v oblastech čtení v cizím jazyce, jazykové didaktiky, akvizice slovní zásoby a implementace digitálních materiálů v procesu výuky jazyka. Výsledný design kombinuje adaptivní prvky, elementy zjednodušené literatury, podpůrné audiovizuální podněty a možnost personalizovat příběh v rámci interaktivní fikce. Práce si klade za cíl porovnat adaptivní zjednodušenou četbu s konvenční tištěnou alternativou a zjistit, jaká je efektivita tohoto materiálu pro akvizici 18 vybraných lexikálních položek nízké frekvence. První kapitola tedy uvádí do problematiky a nabízí přehled struktury práce.

Teoretická část

Druhá kapitola definuje pojem akvizice jazyka (language acquisition) jako široký termín, který zahrnuje jak podvědomý, tak cílený proces osvojení prvního, druhého či cizího jazyka. Poté se zaobírá mechanismy čtení jak v mateřském, tak v druhém jazyce. Čtení v druhém jazyce se sice podobá čtení v mateřštině, nese s sebou však specifické psycholingvistické procesy, které by měly být zohledněny ve výuce. Mezi důležité aspekty čtení v druhém jazyce patří nedostatečná jazyková vybavenost, omezené praktické zkušenosti v druhém jazyce, nedostatek lingvistických dat (inputu), kognitivní nároky na paralelní zpracovávání dat ve dvou jazycích, interference mateřštiny a rozdíly ve všeobecných znalostech a sociokulturních předpokladech zakotvených v cizojazyčných textech.

Další část se věnuje didaktickým teoriím akvizice jazyka ve spojení s výukou čtení. Implikace těchto podkapitol spočívají například v kladení důrazu na srozumitelný vstup (lingvistická data), který je obohacen o pomocné prvky snižující kognitivní zátěž, využití jak induktivní, tak deduktivní výuky, recyklace výukového materiálu, průběžné formativní hodnocení a další. V další podkapitole se zaměřujeme na důležité koncepty instruovaného čtení,

jako je například rozsáhlé čtení (extensive reading), které spočívá v četbě dlouhých textů za účelem porozumění hlavní myšlenky, a intenzivní čtení (intensive reading), které naopak využívá kratší texty, ve kterých se soustřeďuje na dílčí informace a textové komponenty. Třídní čtení (class reader), neboli čtení v hodině jazyka, je představeno jako kombinace rozsáhlého a intenzivního čtení. Protože do čtecích aktivit je často začleňována výuka slovní zásoby, další podkapitola nahlíží na techniky akvizice lexika, jako jsou plánované i incidentní módy prezentace, dimenze znalosti lexikální položky a aspekty ovlivňující akvizici lexikálních výrazů (learnability). Charakteristiky zjednodušené četby (graded readers) jsou diskutovány v podkapitole 2.4.3, která pojednává o současné podobě těchto materiálů. V posledních letech adaptovaná četba stále častěji nabízí nejen možnost seznámit se s literárními díly ve zjednodušené formě, ale také zvukovou podporu, glosy a další doprovodné materiály.

Další oddíl pojednává o diferenciaci, personalizaci a individualizaci, které by měly být využívány v heterogenních třídách pro zkvalitnění a zefektivnění výuky jazyka. Tyto tři dimenze se odrážejí v designu adaptivní zjednodušené četby. Dále jsou představeny možnosti zařazení digitálních prostředků do výuky jazyka. Rešerše studií mapujících využívání počítačů (CALL) a smartphonů (MALL) v jazykových lekcích podporuje jejich adopci jakožto prostředku diferenciace a individualizace. Porovnání tištěných a digitálních materiálů poukazuje na klady a zápory těchto dvou médií, jejichž efektivita závisí na správně zvolené implementaci. Interaktivní fikce a její různorodé poddruhy jsou podrobněji popsány v souvislosti s jazykovou didaktikou. Pozornost je věnována zejména vizuálnímu románu, který byl zároveň pro svůj interaktivní a audiovizuální charakter zvolen jako médium pro materiál vyvíjený v rámci této práce.

Praktická část

Třetí kapitola se zaměřuje na tvorbu materiálu a na metodologii experimentu. Pozornost je prvně věnována výběru lexikálních položek, jejichž akvizice je testována. Jedná se o 18 anglických výrazů nízké frekvence, které byly vybrány podle kritérií snadnosti akvizice (learnability): tyto položky mají krátkou formu s jednoduchou výslovností, hláskováním, morfologií, konkrétním a jednoznačným významem a v materiálu nejsou limitovány rejstříkem. Další podkapitola představuje příběh adaptované četby a propojuje jej s fantasy žánrem *isekai* (přenesení do jiného světa). Detailní popis materiálu v další podkapitole se soustředí na čitelnost (readability) materiálu a jeho lingvistickou komplexitu na úrovni B1. Četba je organizována do tří kapitol, každá z nichž začíná prezentací setu šesti lexikálních položek (pre-

teaching) a končí průběžným formativním hodnocením, na základě jehož skóre se čtenář buď posune na další úroveň, či musí opakovat testovaný set. Následující kapitola se řídí výsledkem tohoto testování a adaptuje text i audio podle dosažení/nedosažení další úrovně. Tištěná verze obsahuje prezentaci setu na začátku a hodnocení na konci každé kapitoly, výsledky tohoto testu však nejsou zohledněny v dalším materiálu, takže se čtenář posouvá na další úroveň bez kontroly připravenosti (readiness).

Metodologie a průběh studie jsou nastíněny v další kapitole. Výběr vzorku byl proveden metodou výběrového šetření, neboť participanty studie bylo 42 studentů místního gymnázia na úrovni B1 ve věku 16-17 let. Výběr věkové skupiny byl konzultován s učiteli zapojenými do studie, kteří doporučili studenty druhého ročníku na základě učebnice, kterou studenti používali v běžné výuce angličtiny (*English File Pre-intermediate*). Participanti byli náhodně rozděleni do experimentální skupiny, která četla adaptivní zjednodušenou četbu v digitální podobě, a kontrolní skupiny, která obdržela materiál v tištěné formě. Výzkumu předcházela pilotáž, která odhalila nedostatky experimentálního designu a poskytla tak důležité poznatky, které byly brány v potaz při opravdovém experimentu. Hlavním zjištěním byla nedostatečná instruktáž a neuspokojivý stav počítačů, kterých využívala experimentální skupina. Průběh opravdového experimentu je popsán v další podkapitole. Subjekty byly nejprve testovány na předchozí znalost vybraných lexikálních výrazů, následně přečetly materiál, poté znovu vyplnily stejný test. Na závěr respondenti vyplnili dotazník spokojenosti.

Analýza výsledků

Jelikož byl zvolen smíšený design výzkumu, výsledky jsou dvojího charakteru – jak kvalitativní, tak kvantitativní. Stručná kvalitativní analýza mapuje strategie odhadování významů neznámých výrazů v předběžném hodnocení, a zdroje chyb v hodnocení po četbě. Chybné překlady před četbou lze ve většině případů připsat transferu z mateřštiny či morfologické analýze a následnému doslovnému překladu. Chyby po četbě materiálu vycházejí spíše ze záměny nově nabytých výrazů. Kvantitativní analýza porovnává účinnost digitální vs. tištěné podoby materiálu. Dvoufaktorový test ANOVA s replikací odhalil, že obě formy zjednodušené četby byly efektivní ve výuce vybraných lexikálních položek. Výsledek analýzy potvrzuje, že verze materiálu neměla signifikantní vliv na výkon subjektů: subjekty si osvojily nové lexikální položky stejně v obou podmínkách. Porovnání jednotlivých setů v hodnocení po četbě bylo provedeno pomocí jednofaktorového testu ANOVA. Ukázalo se, že experimentální skupina měla signifikantně rozdílné výsledky napříč sety, zatímco kontrolní skupina měla

konzistentní výsledky. Tento rozdíl může být vysvětlen tím, že kontrolní skupina měla možnost zopakovat si všechny položky v průběhu čtení, zatímco experimentální skupina tak mohla učinit pouze během instruktáže (pre-teaching).

Diskuse a závěr

Poslední kapitola nabízí diskusi analyzovaných výsledků a jejich vztah k teoretickému rámci prezentovanému v první části. Výsledky šetření ukazují, že digitální a tištěná verze materiálu měly srovnatelný účinek na koncovou performanci subjektů v testu. V obou podmínkách si participanti osvojili většinu lexikálních položek, se kterými se v průběhu čtení seznámili. Údaje z dotazníku naznačují, že ačkoli v účinnosti tištěné versus digitální verze nebyl ve výkonu studentů významný rozdíl, digitální četba byla nahlížena pozitivněji. Proto lze předpokládat, že digitální verze by mohla studenty motivovat k jejímu častějšímu užívání, což by mohlo v dlouhodobé perspektivě vést k lepším výsledkům. Tato zjištění implikují, že adaptivní zjednodušená četba je účinným materiálem, který může poskytnout vhodnou alternativu ke konvenční tištěné formě četby.

Appendix A – Assessment scores

Pilot group scores:

AGR VERSION		PAPER VERSION	
ID	pre/re	ID	pre/re
P1	0/18	P9	0/18
P2	0/18	P10	0/19
P3	0/10	P11	0/20
P4	0/12	P12	0/21
P5	0/16		
P6	0/14		
P7	0/18		
P8	0/18		

AVERAGE SCORES PER ITEM		
	AGR	PAPER
gaper	0.857	1
theurgy	1	1
compeer	1	1
hawkshaw	0.857	1
pelf	1	1
chow	1	1
lowdown	0.857	1
gadabout	0.571	1
bothy	0.857	1
beldam	0.857	1
doddle	0.857	1
vesture	1	1
abysm	0.571	1
tiff	0.857	1
bilker	0.714	1
calaboose	0.857	1
oojah	0.857	1
avocation	0.714	1

Experimental VS. control group scores:

EX. GROUP		CON. GROUP	
ID	Pre/re	ID	pre/re
E1	0/15	C1	0/10
E2	0/18	C2	0/18
E3	0/18	C3	0/18
E4	0/15	C4	0/18
E5	0/18	C5	0/18
E6	0/17	C6	0/16
E7	0/18	C7	0/18
E8	1/18	C8	0/18
E9	0/8	C9	0/18
E10	0/18	C10	0/16
E11	0/18	C11	0/18
E12	0/18	C12	0/17
E13	0/18	C13	0/18
E14	0/18	C14	0/18
E15	0/18	C15	0/18
E16	0/18	C16	0/12
E17	0/18	C17	0/18
E18	0/18	C18	0/18
E19	0/18	C19	0/18
E20	0/17	C20	0/18
E21	0/12	C21	0/18

AVERAGE SCORES PER ITEM		
	EX.	CON.
gaper	0.905	0.952
theurgy	1	0.952
compeer	0.952	1
hawkshaw	0.952	0.952
pelf	1	1
chow	0.952	1
lowdown	0.952	0.952
gadabout	0.905	0.905
bothy	1	0.905
beldam	0.952	0.905
doddle	0.952	1
vesture	0.952	0.952
abysm	0.952	0.857
tiff	0.857	1
bilker	0.81	1
calaboose	0.905	0.857
oojah	0.905	1
avocation	0.952	0.905

Appendix B– Assessment form

PRE/RE-Assessment

Name:

Class: ID number: _____

Translate any of these words (if you know any):

1. gaper_____
2. avocation_____
3. lowdown_____
4. oojah_____
5. gadabout_____
6. theurgy_____
7. compeer_____
8. calaboose_____
9. hawkshaw_____
10. pelf_____
11. bilker_____
12. chow_____
13. bothy_____
14. beldam_____
15. tiff_____
16. doddle_____
17. abysm_____
18. vesture_____

Appendix C – Script

PRE-TEACHING:
"Hi there, friend. Are you lost?" you hear a voice. You open your eyes to find a cute, little angel.
You notice the angel begins to frown as she is checking her scroll.
"Uh oh, you're not supposed to be here! This is not your world."
The angel starts to whisper, "I am not supposed to, but I can help you out a bit! Remember these words, you're going to need them!"

New words:

1. **compeer** = kamarád
2. **chow** = jídlo
3. **pelf** = peníze
4. **gaper** = zrcadlo
5. **hawkshaw** = detektiv
6. **theurgy** = magie

"Great! That's all I can do for you right now. Good luck, friend!" says the angel. Everything goes dark.

CHAPTER 1

"Oh my god. You scared me there, **compeer**! Are you okay, Lexi?!" you hear a girl's worried voice.

'Compeer? What a strange word,' you think to yourself…,'yet it surprisingly seems familiar.'

Also – Lexi? Whose name is that? Most certainly not yours. You open your eyes and see a stranger standing above you. Her face is hidden in the shadows of a purple cloak[1].

"Can you move? Can you get up? How many fingers do you see, **compeer**?"

'What is going on?' runs through your mind.

You reach for the hand offered by the stranger with too many questions...and too many fingers. Did you see that right? Was it really seven fingers on one hand? You try to get up. Your entire body is feeling weak, your ears are ringing, and your head hurts like crazy. If this is what it feels like to have one too many drinks, then you do not ever want to drink. Thank god you are a minor and such things do not concern[2] you.

What do you say?

"Who are you?" you ask her. ➔ SKIP
"Who am I?" you ask her. ➔ SKIP

[1] Cloak = plášť

[2] Concern = týkat se

"*Where am I?" you ask her*. ➔ SKIP
PRINT: "Who are you?" you ask her.

"There's no time for questions! We need to get out of here!" replies the stranger as she helps you up.

No time for questions - that's rich, coming from her. You follow the stranger, trying to match her speed. You hear footsteps coming closer behind you. You look back only to see two figures with bird-like masks moving quickly towards you. Again, you are at a loss for words. You can clearly hear their footsteps, yet the two figures seem to be completely still, as if frozen in the air. Are they flying? Huh, the bird masks are not just for show then. Your guide pulls you by your sleeve to make you run faster.

"It's the **hawkshaws**. They're after us!" she quickly explains. Again, such a strange word, but you must have heard it somewhere before. You run down a narrow street as fast as you can, trying not to think too much about what you have just seen. Your guide throws something behind you and it immediately blows up in the **hawkshaws'** faces. Was that a smoke bomb? Why, though, did it smell like strawberries? Just what is going on? Before you can get an answer to any of these questions, your guide takes a few sharp turns and then runs straight into a wall, dragging[3]you with her. You let out a cry of horror and cover your face with your hands - this is going to hurt! To your surprise, there is no crash. You open your eyes and slowly look around the room that you have just entered in such an unusual way.

"Phew! That was close, but we outran the **hawkshaws**! Not that it's too hard - they suck at making turns when flying," explains your guide with a nervous smile. Then she takes off her cloak[4]. At last, you see a girl with long black hair, green skin, and two little horns[5] sticking out of her head.

What do you say?

"..." ➔ "What's wrong? You don't want to talk to your best **compeer** in the entire world?"
"Who are you?" ➔ "Reeeally funny. I'm your best **compeer**, of course!"
"Why are you green?" ➔ "Now, that's just rude! You don't ask your best **compeer** why they're green!"
PRINT: "Who are you? Why are you green?" you ask her. "Now, that's just rude! You don't ask your best **compeer** why they're green!" replies the stranger.

"Are you sure you're okay? You didn't get scared by a few **hawkshaws,** did you?" laughs the girl uneasily. It is not the **hawkshaws**, but the fact that she threw a BOMB at them that has got you shocked. Is she a dangerous person? Should you be worried?

"You don't look too well. Here's a **gaper**, take a look." says the girl and hands you a pocket mirror, or, in her words, a **gaper**.

[3] Dragging = táhnout, vláčet
[4] Cloak = plášť
[5] Horns = rohy

You look in the **gaper** and see …nothing! Surprised by your reflection - or lack thereof[6] - you jump up and drop the **gaper**.

"What the heck…?" is all you manage to say.

"My **gaper**! It cost a lot of **pelf**!" cries your 'best **compeer'**.

She picks it up, looking as if she's going to burst into tears.

"I used up all my **theurgy** today, so I can't even fix it." Then she looks back at you worriedly. "You really don't look well…oh, I know, you must be hungry! Here, take my **chow**."

'Hungry? That is NOT the problem here', you think to yourself as you remember the reflection of NOTHING in the **gaper**.

Maybe you are a ghost…or a vampire! Still a little cautious of her, you cannot help but wonder what kind of **chow** she is offering. What does such a creature even eat? Could it be maggots[7]?

Worms[8]? At this point, nothing would surprise you. Oh. It is a sandwich. How unexpected. You could use a **chow**. It has been a while since you have eaten anything. You accept the sandwich and start eating. Hmmm, it tastes pretty good. You try to remember the last **chow** you have eaten. It must have been breakfast; you had a bowl of cereal. You poured the cereal into the bowl and then you added milk, which is the only right way to eat cereal, no matter what others say. Then you went to school - it was raining like crazy, and you had forgotten your umbrella. You could not see anything when you were crossing the road… it was too late when you heard the car honk[9] and saw the approaching car lights. Did you…did you really…di…?

"Hey!" your **compeer** interrupts your thinking, "If you're done with the **chow**, let's go meet your family. This is your house after all. Don't tell me you don't recognise[10] it here, heh heh," she laughs uneasily.

What do you say?

*"Thank you for the **chow**."* ➔ SKIP
*"I'll pay you the **pelf** for the **gaper**! How much was it?"* ➔ SKIP
*"Why were the **hawkshaws** after us?"* ➔ SKIP
*"You can really use **theurgy**?"* ➔ SKIP
PRINT: Again, your mind is filled with a lot of unanswered questions. Why were the **hawkshaws** after you? Can she really use **theurgy**? If so, maybe you should give her the **pelf** for the **gaper.** "Thank you for the **chow,**" is all you manage to say.

Your **compeer** just smiles anxiously and disappears further into the house. You have no choice but to follow her. The house is old, the wooden furniture looks washed out, and the floor is very dirty. Whoever lives here either does not care or does not have enough **pelf** to keep the place nice. Your guide leads you closer and closer to voices coming from behind a closed door. She

[6] Or lack thereof = nebo jeho nedostatek
[7] Maggots = larvy
[8] worms = červi
[9] Honk = troubit
[10] Recognise = poznat

stops before entering the door, takes a deep breath and, for a second, gives you a strange look. Maybe there's something on your face?

As she is opening the door, she whispers to you, "Try to act normal in front of your family. And not a word about the **hawkshaws** OR the **theurgy** I did."

'Normal'? What does she mean by that? Does she know you are not Lexi? And by **theurgy,** does she mean the strawberry-flavoured explosion she threw at the **hawkshaws**? Before you can process the information, the door opens. There is a lively group of interesting-looking people in the kitchen. There is a tall, blue-haired woman with a single horn[11] growing out of her forehead, sitting by the kitchen table along with a cute little, purple-faced boy. A curly-haired man with four arms is preparing some **chow** by the stove. The second the little boy sees you, he runs to hug you…or rather your knees, he is really small!

"Now now, little one. Be a good brother and give Lexi some space," says the woman in a caring but decisive voice, " Lexi, dear, take off your cloak and sit down. We are about to eat."

Just who are these…people…or creatures?

You think to yourself:

'I must be sleeping. This is a dream.' ➔ *You pinch yourself. The pain is real, ouch.*
'Somebody must be pulling a prank on me.' ➔ *You check for hidden cameras and find none.*
'I guess they must be Lexi's family. Let's meet them. ' ➔ SKIP
PRINT: 'I must be sleeping. This is a dream,' you think to yourself. You pinch yourself. The pain is real, ouch. These people must be Lexi's family. You have no choice but to meet them

"Here, have some soup, Lexi. It'll warm you up," says the man – Lexi's dad – as he hands you a bowl of soup. You say 'thanks', take the **chow** from one of his hands, and start eating. To your surprise, this is the best **chow** you have ever eaten!

"Wow, this is the best spider soup I've ever had! Thank you, uncle!" says your **compeer**.

Uhhh… what do you do?

Keep eating, it is just protein anyway. ➔ SKIP
Put down your bowl and try not to think about what has just happened. ➔ SKIP
Drop your bowl in horror. ➔ Lexi's little brother starts laughing. The woman – Lexi's mum – gives you an annoyed look and tells you to clean up the mess.
PRINT: You keep eating, it is just protein anyway. Then you put down your bowl and try not to think about what has just happened.

You cannot help but wonder what was in that sandwich from earlier.

[11] Horn = roh

"If you're done eating, we should go study in your room, Lexi." says your **compeer**. "We have a **theurgy** history test on Wednesday, remember?" she winks[12] at you.

"I like history but there's no future in it!" laughs the four-armed gentleman. Great, dad jokes exist even in this world. You leave the kitchen and go up the stairs into 'your' room. Your **compeer** quickly closes the door behind you and restlessly[13] looks around. Obviously, she knows that something is not right. She starts pacing around the room to calm herself down. Finally, she sits down on the bed and says: "You must be pretty confused. I imagine I would be, too, if I suddenly woke up in a different body. And in a different world." Your jaw[14] drops.

What do you say?

*"You know I'm not Lexi**?"***   ➔ "Of course I know! Lexi is my best **compeer**!" says the girl.
"I don't know what you are talking about."   ➔ "Oh please, I know you're not my best **compeer**!" says the girl.
"You knew and still let me eat spiders?!"   ➔ "It's my **compeer's** favourite!" says the girl.
PRINT: "You know I'm not Lexi?" you ask her.   "Of course I know! Lexi is my best **compeer**!" says the girl.

"You're definitely not Lexi," adds your **compeer**. "Lexi gave me the **gaper** you broke as a birthday present. It's an expensive **gaper**, Lexi paid a lot of **pelf** for it. And you threw it on the ground as if it were nothing."

For a moment, you feel guilty about the **gaper**. Maybe you could get a part time job and give her some **pelf** back…doing what, though? How can you, a human, make **pelf** in a fantasy economy? You have no skills, no qualifications, nothing. Maybe you could make **pelf** by … uh, robbing a bank? That went dark quickly. You are finding out a lot about yourself today. Before you can decide on your future career in organised crime, the girl interrupts you by continuing with her story.

"Lexi had an accident. We were sneaking around[15] the town after dark, as we often do. I wanted to prank them, so I tied their shoelaces together with **theurgy**. Lexi tripped[16] and started rolling down the hill…" she starts tearing up, "At first, it was funny, they kept rolling and laughing… then screaming…but…but then they stopped screaming…and then they landed. Hard."

She accidentally killed her **compeer** as a prank! That explains why you are feeling so sore.

Your **compeer** takes a deep breath and continues, "Lexi must have hit their head pretty hard because bubbles started coming out of their ears. So, I tried to heal[17] them with **theurgy**."

Why are you not surprised, of COURSE she used **theurgy** instead of CPR[18].

"I guess that's when I accidentally switched[19] your souls[20]."

[12] Wink = mrknout
[13] Restlessly = neklidně
[14] Jaw = čelist
[15] Sneak around = plížit se kolem
[16] Trip = zakopnout
[17] Heal = vyléčit
[18] CPR = masáž srdce
[19] Switch = vyměnit
[20] Soul = duše

Great, that explains everything. Wait, what?

"I thought that something was not right about you when you woke up. I wasn't sure whether it had to do with the brain damage …or not…and then we got chased by the **hawkshaws** because I had done **theurgy** without a licence…so I took you to Lexi's home," she finishes her talk.

Speaking of brain injuries, your head starts to hurt from all that information.

You fight the dizziness and ask her:

"So, what do we do about it?" ➔ "I don't know. Hit you in the head and hope for the best?"
"So, you accidentally killed Lexi?" ➔ "And then brought back to life! Don't focus on the negatives!"
"Bubbles?" ➔ "Right? Lexi has always been a bit of an airhead."
PRINT: "So, you accidentally killed Lexi?" "And then brought back to life! Don't focus on the negatives!" she replies.

"It's a beginner's mistake to switch[21] souls[22]. It happens all the time. But we'll be in trouble if the **hawkshaws** find you. And if they find out I did **theurgy** illegally. And I don't know how to undo this…" explains the girl.

You say:

"Okay, but how do I get back to MY world?" ➔ SKIP
"You mean YOU will get in trouble, not me." ➔ "Oh, trust me. We're BOTH in trouble."
"So, you're a killer AND a criminal?" ➔ "Well, yeah. But I'm ALSO the one helping you."
PRINT: "Okay, but how do I get back to MY world?" you ask her.

"Why do you think your soul got switched[23] in the first place? You're probably dead in your world – I would bet my **pelf** on it," says the girl uninterestedly.

What does she mean? Are you really dead?! Your dizziness[24] from a moment ago is back. You remember the car horn[25] and the lights quickly getting closer to you. "What a dirty car," you hear yourself say possibly your last words. The chances of you being alive and well are slim.

"Tell you what," says the girl, seeing how poorly you are taking your death, "I don't have enough **theurgy** to send you back to your world. But I will help you find a way home."

Her talking calms you down a little. There is hope for you after all.

"Do you have any **pelf**?" She continues, "We'll need **pelf** - to get you back...and to repair my **gaper.**"

Is she seriously thinking about that stupid **gaper** when you could be dead?!

[21] Switch = vyměnit
[22] Soul = duše
[23] Switch = vyměnit
[24] Dizziness = závrať
[25] Car horn = klakson auta

She gets up ready to leave. “I’ll pick you up tomorrow morning, before breakfast. Unless you’re a fan of bug cereal.”

CHECK #1:
You hear a voice in the distance.
"Greetings, lost soul[26]! How was your first day in another world?"
You open your eyes to the same tiny angel from before.
"Let's see how much you have learned so far! Can you translate these words?"
Pick only one translation for each word:

PELF	**CHOW**	**GAPER**	**HAWKSHAW**	**COMPEER**	**THEURGY**
kamarád	kamarád	kamarád	kamarád	kamarád	kamarád
jídlo	jídlo	jídlo	jídlo	jídlo	jídlo
peníze	peníze	peníze	peníze	peníze	peníze
zrcadlo	zrcadlo	zrcadlo	zrcadlo	zrcadlo	zrcadlo
detektiv	detektiv	detektiv	detektiv	detektiv	detektiv
magie	magie	magie	magie	magie	magie

⇨ **if the learner has progressed onto another level, otherwise they revise the first set**
PRE-TEACHING:
“Great work!" shouts the angel. "Now, let's learn some more words to help you on your journey."

New words:
1. **vesture** = oblečení
2. **doddle** = brnkačka
3. **lowdown** = důvěrná informace, intel
4. **gadabout** = tulák
5. **bothy** = chatka
6. **beldam** = babizna

"Good work, and best of luck surviving[27] another day!" wishes the angel.

You quickly agree to meet her before any **chow** of any kind.

“Get some sleep. You’re going to need it,” smiles the girl and leaves through the window.

You lie in bed and try your best to fall asleep. What a day.

CHAPTER 2

You wake up to a scream. Did you accidentally change your alarm tone? You reach for your phone, still half-asleep. As you are about to turn off the alarm, something bites your finger. You jump out of your bed and try to shake off the creature biting on your finger. Finally, you are able to get your finger loose and send the tiny biting animal flying across the room. It gets up and runs away. Safe to say, you are fully awake now. Turning the alarm off is no **doddle/not easy** in this world. With this, it is time to get ready to meet your **compeer**. You notice it is a

[26] Soul = duše
[26] Survive = přežít

little cold, so you look around the room for some **vesture/clothes** to wear. You find a few…interesting items in the wardrobe.

You pick:

*formal **vesture/clothes***   ➔ SKIP
*warm **vesture/clothes***   ➔ SKIP
*comfy **vesture/clothes***   ➔ SKIP
PRINT: There is a formal **vesture,** warm **vesture,** and comfy **vesture.**

You put on the **vesture/clothes** and look at yourself in the **gaper** on the wall…right. Ignoring the fact that you are not able to see yourself, the **vesture/clothes** look/s okay. Not really your style - it has too many sleeves and too few buttons - but it will do. You head out of the house to meet your **compeer**. You find her waiting for you in front of the house, looking around as if scared of something or somebody.

What do you do?

Jumpscare her   ➔ Your **compeer** jumps up and throws a strawberry bomb at your feet. The world starts spinning. You wake up after a few minutes. "I thought you were a **hawkshaw**! But it serves you right! Next time, I'll turn you into a toad!" she says angrily.
Greet her   ➔ Your **compeer** jumps up and throws a strawberry bomb at your feet. The world starts spinning. You wake up after a few minutes. "Oh my god, I'm so sorry, you surprised me! I thought you were a **hawkshaw**! I'm so glad I didn't turn you into a toad!" she says worriedly.
Start looking around, too   ➔ Your **compeer** notices you and greets you. "I am keeping an eye out for **hawkshaws**," she explains.
PRINT: As you are about to greet her, your **compeer** jumps up and throws a strawberry bomb at your feet. The world starts spinning. You wake up after a few minutes.   "Oh my god, I'm so sorry, you surprised me! I thought you were a **hawkshaw**! I'm so glad I didn't turn you into a toad[28]!" she says worriedly.

"An interesting choice of **vesture/clothing**," laughs your compeer,
"very…formal/comfy/warm. Are you going to a funeral later? / Is that your grandma's bathrobe? [29] / You'll be ready when the ice age comes."

She is the one to talk! Her **vesture/clothes** look/s like a cheap witch's Halloween costume!

"Anyway, we need to make some **pelf** today! What can you do?" she asks.

Uh, your brain completely freezes. It is no **doddle/not easy** to come up with anything so early in the morning. Sure, you know a lot of stuff, but you are not entirely sure how geometry is

[28] Toad = ropucha
[29] Bathrobe = župan

going to help fill your pockets with **pelf**. As you try your best to unfreeze your brain and think of something, your **compeer's** face lights up.

"We could do some **theurgy** tricks at the market - like street artists do! That would be a **doddle/easy**! What **theurgy** tricks can you do?" she asks you excitedly.

You gently remind her that you are pretty new to all of this - you literally[30] found out about **theurgy** yesterday! Plus, is it the smartest idea to do **theurgy** out in the open without a licence? She looks at you with disappointment, as if doing **theurgy** was a **doddle/an easy thing** even a baby could do. The second you think this, a flying baby passes you, its mother running after it.

"I bet that baby doesn't have a **theurgy** licence," is all you manage to say.

Your **compeer** seems to be lost in thought. You try to come up with something, when you suddenly notice a pair of bird-faced masked figures coming your way - it is the **hawkshaws**! You both quickly hide in the bushes[31] and watch the **hawkshaws** fly past you, the sound of their loud steps filling the air.

"I don't understand why they're faking[32] the sound of their steps. Wouldn't it be a **doddle/easy** to catch people when they can't hear you coming?" you whisper[33].

"Hah, that's typical of you **gadabouts/travellers**, you know nothing of our world." laughs your **compeer**.

You say:

*"Hey! Not all **gadabouts/travellers** are the same!"* ➔ "Suuuuure." she replies.
"If I had a penny for every time I've heard this, I would have one penny." ➔ "What is a penny?" she asks.
"Why DO they fake their steps then, hm?" ➔ SKIP
PRINT: "If I had a penny for every time I've heard this, I would have one penny. You should know that all **gadabouts** are the same." "What is a penny?" she asks

Then she jumps up with excitement, "That's it! You're lost when it comes to our world, but you know all the **lowdown/information** about YOUR world! There are some people who would pay good **pelf** for any **lowdown/ information** about the place you come from!"

"What kind of **lowdown/ information**?" you ask her, trying to think of anything you could actually sell. Your knowledge of pizza toppings would probably not interest many buyers.

"Any **lowdown/ information**! Come on, you'll think of something when we get to the buyer." She encourages you.

You both get out of the bushes[34]. Your **vesture** is /**clothes are** completely covered in leaves.

[30] Literally = doslova
[31] Bushes = křoví
[32] Fake = napodobovat
[33] Whisper = šeptat
[34] Bushes = křoví

"Looks better that way, if you ask me," laughs your **compeer**, "Come on, my favourite **gadabout/traveller**! Let's do this **doddle!** We'll make some **pelf**, get YOU out of here, and get ME a new **gaper**!"

You walk for a few minutes. Your **compeer** leads you into a forest. After a while, you start feeling hungry. It has been a while since you have had any **chow**. **Chow** with no spiders, that is. Before you can get too emotional thinking about pizza, your **compeer** stops in front of a **bothy**.

"Go up to the **bothy/cabin** and knock on the door," advises your **compeer**, "I'll wait here…where it's safe." She adds quietly.

Great.

You say:

*"Who lives in the **bothy**? Our buyer?"* ➔ SKIP
*"You do it. You said it was a **doddle/easy**. "* ➔ SKIP
*Do you think there's any **chow** there?"* ➔ SKIP
PRINT: You wonder who loves in the **bothy**. She said it was a **doddle**. Who is she so afraid of then? "Do you think there's any **chow** there?" you ask her.

Before you can get your answer, your **compeer** disappears in the bushes[35].

Hm, it didn't even take **hawkshaws** this time for her to jump into the bushes. Who lives in that **bothy/cabin** that she is so afraid of? You take a few steps towards the door. Deep breaths. Here goes nothing!

Knock, knock, knock.

"Go away, **gadabout/traveller**! I want none of your **lowdown/ information**!" you hear a woman's voice from inside the **bothy**.

Are **gadabouts/travellers** seen as door-to-door salesmen[36] in this world? Then again, you ARE trying to sell her your **lowdown/ information**.

"Try again!" you hear your **compeer** whisper[37] loudly from the bushes.

You will get **pelf**, they said. It will be a **doddle**/**easy**, they said. In any case, there is no time to feel sorry for yourself. You are doing this to get back home after all. Here goes round two…

Knock, kn- !

The door suddenly flies open and you get hit by a fireball. To your surprise, your **vesture/clothes** reflect/s the **theurgy** back into the **bothy**. The fireball explodes in the attacker's face. Still recovering[38] from the shock, you see an old woman sitting on the floor in front of you. Her hair is fried to a crisp, and her face and **vesture/clothes** are covered in dirt from the explosion. She is as confused as you are.

[35] Bushes = křoví
[36] Door-to-door salesman = podomní prodejce
[37] Whisper = šeptat
[38] Recover = vzpamatovat se

What do you say?

"Are you okay…lady?" ➔ She starts laughing. "Nobody has ever called me a lady! I am the **beldam/witch** of this forest." Are you here to sell me some **lowdown/ information**?"
"Did you just try to kill me?!" ➔ She starts laughing. "Maybe? I am the **beldam/witch** of this forest after all." Are you here to sell me some **lowdown/ information**?"
*"My **lowdown/information** is the best in town!"* ➔ She starts laughing. "You're either brave, stupid, or both to be selling it to me - the **beldam/witch** of this forest."
PRINT: "Are you okay…lady?" you say. She starts laughing. "Nobody has ever called me a lady! I am the **beldam** of this forest. Are you here to sell me some **lowdown**?"

She slowly gets up and takes a good look at you. "You don't look like a **gadabout/traveller**. You're not spying for the **hawkshaws**, are you?" she asks, narrowing her eyes.

"We are not with the **hawkshaws**! This one is a fresh **gadabout/traveller**, got here only yesterday!" shouts your **compeer.** She jumps out of the bushes[39] and rushes to the **bothy/cabin** entrance. The **beldam/witch** gives her a distrustful[40] look.

"Look - I don't know who you people are. You don't look like **gadabouts/travellers**, "she says. "Maybe you don't work for the **hawkshaws**, but you're trouble - hiding in the bushes, BLOWING people up…" she continues, as if SHE was NOT the one whose fireball blew up a second ago.

"But…but the **lowdown/information** we're offering will blow your MIND!" says your **compeer.**

Safe to say, your **compeer** is not the best salesman. Who in their right mind would let two strangers into their home after all that has just happened?

To your surprise, the **beldam/witch** thinks for a moment, and then lets you into her **bothy**. Right, she is probably NOT in her right mind.

"Sorry for before," says the **beldam/witch**, leading you to her kitchen table," There have been so many **gadabouts/travellers** recently who turned out to be fake[41]." she explains. "And the **hawkshaws** are always trying to find something to take my **theurgy** licence away. This **theurgy** business is no **doddle/not easy**."

"It's okay, we completely understand, Mrs. **Beldam/Witch**," your **compeer** answers quickly**.**

She is not the one who nearly blew up moments ago. You got lucky - if you had not been wearing this weird **vesture/clothing**, you would likely have a fireball instead of your head. Then again, even that would probably look more fashionable than your **vesture/ clothes.**

You sit by the table. Your stomach growls[42] so loudly that the entire **bothy/cabin** shakes.

What do you say?

[39] Bushes = křoví
[40] Distrustful = nedůvěřivý
[41] Fake = falešný
[42] Growl = zakručet, zavrčet

(Try small talk) "You have a lovely home." ➔ SKIP
(Lie) "That wasn't me." ➔ SKIP
(Tell the truth) "That was me." ➔ SKIP
PRINT: "You have a lovely home," you say, trying to hide your embarrassment[43].

The **beldam/witch** laughs.

"Want some **chow**? I was about to have some myself," she passes you some chips. Still not fully trusting the **chow** in this world, you take the bag and look for the flavour written on the label.

"Don't worry, there are no rats or spiders in it. Not in this bag, anyway," laughs the **beldam/witch**, "it's salted chips, just like you **gadabouts/travellers** like."

You take a single chip and carefully eat it. It is good - it is salty.

'What a weirdly normal **chow**,' you think to yourself as you look around the **bothy**.

There are shelves filled with things for **theurgy**, some old books, a large **gaper**, household items…wait! Is that a Coca-cola bottle on the shelf? There are also some magazines laying on the table. Look at that old computer in the corner! The entire **bothy/cabin** is filled with things from your world. Where did she get all this stuff?

"Ah, I see you like my **gadabout/traveller** things," says the **beldam/witch**, "I have paid a lot of **pelf** for them."

She looks so proud of her collection, that you decide not to tell her the real value of the items. They're trash.

"Before you sell me your **lowdown/information**, I need to make sure you really are a **gadabout/traveller**." says the **beldam/witch**. "It's really a **doddle/easy**. You just need to answer a few questions."

What do you say?

"Fine, ask away." ➔ "Yeah, ask whatever you need, Mrs. **Beldam/Witch**. My **compeer** will tell you everything. And I mean EVERYTHING!" she winks at you. You are not sure what she means by that.
*"You don't trust me?! No **lowdown/information** for you then!"* ➔ "Hah, you're funny, **compeer**! Of course we're going to cooperate, Mrs. **Beldam/Witch**." laughs your **compeer** and kicks you under the table.
*"Fine. But my **lowdown/information** is very expensive. Get your **pelf** ready."* ➔ "Yeah, we're offering the best, so it's only fair that it's expensive, Mrs. **Beldam/Witch**." explains your **compeer** with a nervous smile.
PRINT: "Fine. But my **lowdown** is very expensive. Get your **pelf** ready," you tell her. "Yeah, we're offering the best, so it's only fair that it's expensive, Mrs. **Beldam**." explains your **compeer** with a nervous smile.

[43] Embarrassment = rozpaky

The **beldam/witch** gives you a creepy[44] smile and says: "Okay, here we go."

Your head starts spinning. Oh no. Did the **beldam/witch** put something in the chips? Everything goes dark.

CHECK #2:
"Hello! What are you doing here?" you hear a voice which belongs to a tiny devil.
"Oh, the **beldam/witch** is testing you. Show her what you have learned, or she won't let you wake up!" warns the devil.
Pick only one translation for each word:

- ⇨ **if the learner has progressed onto another level, otherwise they are tested on the first set**

LOWDOWN	**GADABOUT**	**BOTHY**	**BELDAM**	**DODDLE**	**VESTURE**
oblečení	oblečení	oblečení	oblečení	oblečení	oblečení
brnkačka	brnkačka	brnkačka	brnkačka	brnkačka	brnkačka
informace/info	informace/info	informace/info	informace/info	informace/info	informace/info
tulák	tulák	tulák	tulák	tulák	tulák
chatka	chatka	chatka	chatka	chatka	chatka
babizna	babizna	babizna	babizna	babizna	babizna

- ⇨ **if the learner has progressed onto another level, otherwise revise the first/second set**

PRE-TEACHING:
"You did well – for a mortal[45]. Hmm…I'll teach you a few words. Not because I like you or anything!" says the devil. He probably likes you.

New words:

1. **avocation** = koníček
2. **oojah** = věc
3. **bilker** = podvodník
4. **tiff** = hádka
5. **abysm** = propast
6. **calaboose** = vězení

"Good job, I guess. See you around." says the devil.

CHAPTER 3:

"You're the real deal[46]! You know the **gadabout/traveller** talk!" shouts the **beldam/witch** excitedly.

[44] Creepy = děsivý
[45] Mortal = smrtelník
[46] Real deal = opravdová věc

You slowly open your eyes. Note to self: never take **chow** from strangers ever again. Your **compeer** helps you get up.

“Are you okay?” she whispers to you, “I tried to wake you up, but you wouldn’t move! I tried everything - shaking you, slapping[47] you…”.

Great. With her history, at least she did not experiment on you with any more **theurgy**. You tell her that you feel fine.

The **beldam/witch** starts showing you all the **gadabout/traveller** trash…or treasures? Who are you to judge.

"See, learning about **gadabouts/travellers** is my **avocation/hobby!** I've collected all these **oojahs/things** over the years." says the **beldam/witch** warmly.

The **bothy/cabin** is filled with all kinds of old and broken **oojahs/things**. Where did she get all of this? And how?

"That’s a nice **avocation/hobby**. Where did you get these **oojahs/things**? And how?" asks your **compeer**. It is official, you two really do share a brain cell.

"As a little girl, I got switched[48] over to your world. I woke up in the body of this old-school rocker. I spent a few days playing the guitar and crowd surfing," remembers the **beldam/witch** with a smile.

“That’s impressive[49]. I’ve never heard of a **gadabout/traveller** who was able to return home,” comments your **compeer**.

Your jaw[50] drops all the way to your **vesture/clothes**. WHAT!? Did she not promise you that she would help you get home yesterday?! This whole time, she had no idea what she was doing! What a b…**bilker/cheat**!

What do you say to her?

*“You said you would help me get home! You **bilker/cheat**!”* ➔”Yeah! Didn’t think it was possible but here we are! It’ll be a **doddle/easy** with Mrs. **Beldam’s/Witch’s** help!” she replies, clearly not understanding your point.
*“Why did you lie to me? You **bilker/cheat**!”* ➔ “I did not lie, I just didn’t tell you the whole truth,” she replies,” but It’ll be a **doddle/easy** to get you home with Mrs. **Beldam’s/ Witch’s** help!”
*(Say nothing to that **bilker/cheat**)* ➔ “Are you mad at me? I said I would help you, I never said I knew how,” she replies,” but It’ll be a **doddle/easy** to get you home with Mrs. **Beldam’s/ Witch’s** help!”
PRINT: “Why did you lie to me? You **bilker**!” you say angrily. “I did not lie, I just didn’t tell you the whole truth,” she replies,” but It’ll be a **doddle/easy** to get you home with Mrs. **Beldam’s** help!”

“Before you get into a **tiff/an argument** over who said what, you should know something.” sighs the **beldam/witch**.

[47] Slap = plesknout
[48] Switch = vyměnit
[49] Impressive = impozantní
[50] Jaw = čelist

A **tiff/ an argument**?! This **bilker/cheat** has been lying to you all along! This is not **a tiff/ an argument** about your hurt feelings. This is about getting home to your friends, family, … and **chow** without spiders.

"To return home is no **doddle/easy…**both switched [51]souls[52] - **gadabouts/travellers** - have to agree to switch back." says the **beldam/witch**.

This is just great! Not only is your **compeer** a lying **bilker/cheat**, but you also have to make nice with the other **gadabout/traveller**! Lexi, or whatever their name was! Just great!

"Oh, that's a **doddle/easy**! Lexi will be happy to go home! How can we talk to…?" wonders your **compeer**.

"Not so fast!" interrupts the **beldam/witch**. "I won't tell you anything more for free! Let's hear your **lowdown/information** first."

They both look at you. What lowdown/information can you share?

Tell her about the current political situation ➔You put your anger aside[53] and start talking.
*Tell her about your **avocations/hobbies*** ➔You put your anger aside and start talking.
Tell her about your favourite TV show ➔You put your anger aside and start talking.
PRINT: You put your anger aside and start talking about anything that comes to your mind. You tell her about your **avocations**, your favourite TV show, and even explain the current political situation to her. 'She is surely going to throw us out,' you think to yourself while explaining the difference between anime and cartoons to her. To your surprise, she finds your all of this fascinating.

"I had no idea! That's some good **lowdown/information**!" shouts the **beldam/witch** happily**.**

She thinks for a minute. Then she points to the **oojahs/things** around the **bothy/cabin** and says, "My **avocation/hobby** is collecting **oojahs/things**. I want to know what the most important **oojah/thing** in your world is!"

Huh? The most important oojah/thing… that is not a doddle/easy to answer.

*Cell phone, the most used **oojah/thing*** ➔SKIP
*Pizza, the best **chow** there is* ➔SKIP
***Pelf,** you can buy any **oojah/thing** with it* ➔SKIP
PRINT: You think for a minute. You could tell her about cell phones, the most used **oojahs**. Then again, maybe she would be more interested in pizza, the best **chow** there is. Finally, you decide to answer with **pelf,** because you can buy any **oojah** with it. Your answer IS a little materialistic[54], but she seems impressed.

[51] Switch = vyměnit
[52] Soul = duše
[53] Aside = stranou
[54] Materialistic = materialistický

"That's some interesting **lowdown/information** …I'll look for it next time I'm at the **gadabout/traveller** dump[55]." the **beldam/witch** thinks aloud.

"Can you use your **theurgy** to get us to the place called 'dump'[56]?" asks your **compeer**...I mean, the **bilker/cheat**. You are still mad at her.

"My **theurgy** is not that strong," confesses[57] the **beldam/witch**, "I can only get to that place once every blue moon. And I can only stay there for a few minutes - until my **theurgy** runs out."

"How were you able to come back from the **gadabout/traveller** world then?" asks the comp…**bilker/cheat**! You should not forgive her too easily even though she is asking good questions.

"I'll tell you in exchange for one more piece of **lowdown/information**." replies the **beldam/witch**. Oh boy, what is she going to ask now?

"I like collecting **oojahs/things.** But - as you can see from my **vesture/clothes** - my greatest **avocation/hobby** is fashion!" says the **beldam/witch**.

She is literally[58] dressed in rags[59]. Then again, maybe it WAS a nice **vesture** before she got hit by the fireball.

"What is the most stylish **vesture/clothing** for the fall season?" asks the **beldam/witch**.

You say:

(lie) "Whatever you're wearing right now!" ➔You feel a little guilty, but she looks so happy.
(be mean) "The opposite of what you're wearing right now!" ➔She looks sad. You meanie.
(be nice) "You can wear whatever makes you comfortable!" ➔She is very happy with your answer.
PRINT: You decide to be nice to her and say, "You can wear whatever makes you comfortable!" She is very happy with your answer

"That's all I need to know," says the **beldam/witch**, "Let's call the other **gadabout/traveller** and ask them to switch[60] back!"

Finally, you are getting somewhere. You and your **compeer** follow the **beldam/witch** deeper into the **bothy/cabin** in silence.

After a while, your **compeer** says, "Let's put this **tiff/argument** behind us. I know you're mad at me. But I'm not a **bilker/cheat**…I…"

Before she can finish, the **beldam/witch** stops before a large **abysm/hole in the ground**. You are surprised at how such a huge **abysm/opening** can fit inside such a small **bothy**…of course! The **bothy/cabin** is larger on the inside!

[55] Dump = skládka
[56] Dump = skládka
[57] Confess = přiznat se
[58] Literally = doslova
[59] Rags = hadry
[60] Switch = vyměnit

"Alright! We can contact the other **gadabout/traveller** from here. Do you have anything valuable on you?" asks the **beldam/witch**.

"Just this **gaper**. It's worth a lot of **pelf**, but SOMEBODY broke it yesterday." says your **compeer**.

"Great." says the **beldam/witch** and throws the **gaper** into the **abysm/gap**.

"Noooooooo…!" cries your compeer, "My **gaper**! Do you have any idea how much **pelf** it cost?"

"That's how my **theurgy** works. You give something to get something, "explains the **beldam/witch**, "But there's no time for **a tiff/ an argument** over a broken **gaper**. Listen."

You all listen for any sound to come out of the **abysm/gap**. Nothing. You wait some more.

"I can't believe we trusted you, Mrs. **Beldam/witch**! Is breaking people's favourite **oojahs/things** your **avocation**, too?" cries your compeer, "What a **bilker/cheat**! Let's go, **compeer**!"

As you are about to leave, the **abysm/gap** lights up.

"Uhh… hello? What **theurgy** is this! Why am I hearing **a tiff/ an argument** in my head?" says a voice coming out of the **abysm/gap**.

"Lexi! Is that you, my best **compeer**?" shouts your **compeer**, " Can you hear us?"

What do you say?

"Hey! Is my body okay? Did I survive the car crash?" ➔SKIP
"Hey! Let's switch back into our original bodies, I want to go home!" ➔SKIP
"Hey! Is my pet turtle okay?" ➔SKIP
PRINT: "Hey! Is my body okay? Did I survive[61] the car crash? Also, is my pet turtle okay?" you ask.

"Uhh, about that…," says the voice from the **abysm/gap**, "would you mind…staying like this? I like it here - the **chow**, the comfortable **vesture/clothes**, the internet…I don't want to go home!"

"But, but Lexi! What about your family? Your **avocations/hobbies** - you love doing **theurgy**, don't you?" says your **compeer.** She pauses for a second. "What about me?" she adds.

The **abysm/gap** stays quiet for a while.

"Say something!" shouts your compeer into the **abysm/gap**.

"Come on, let's not get into **a tiff/ an argument** here. Theurgy is your **avocation/hobby**, not mine. And it's dangerous without a licence - the **hawkshaws** can put us in the **calaboose/prison**. And you know what happens to illegal **theurgy** users and **gadabouts//travellers** in the **calaboose/prison**!" says Lexi from the **abysm/gap**.

What do you say?

[61] Survive = přežít

"But what about me?" ➔SKIP
*"This **tiff/argument** solves nothing!"* ➔SKIP
*"What happens in the **calaboose/prison**?"* ➔SKIP
PRINT: "This **tiff** solves nothing," you interrupt Lexi. "What happens in the **calaboose**?" you ask.

"Look, I have to go - mum says dinner is ready. I love this **chow** called 'spaghetti'! Bye!" the **abysm/gap** goes dark.

Did Lexi just hang up on you[62]? And hey! That's your mum, not this **bilker's/cheat's**!

Your **compeer** looks clearly upset about the **tiff/argument**…and, well, everything else. Before you can say anything, you hear a loud noise.

"It's the **hawkshaws**! You led them to my **bothy**!" shouts the **beldam/witch**.

"We did not! We were careful to-..." your **compeer** does not finish her sentence. The door flies open and the **bothy/cabin** gets filled with the **hawkshaws**.

"You're not taking me to the **calaboose/prison**! Not again!" shouts the **beldam/witch** and disappears in a fireball of **theurgy**. Your **compeer** tries to do the same with her strawberry bomb but her **theurgy** gets interrupted[63] by one of the **hawkshaws**.

Everything goes dark.

You wake up a few hours later.

"Oh my god, I'm so glad you're up!" whispers your **compeer**, "We're in the **calaboose/prison**. The **hawkshaws** locked us up."

You find yourself in a cell. The floor is stone cold and there is not much light coming in through the barred[64] window.

"We're in trouble - you're an illegal **gadabout/traveller** and I did **theurgy** without a licence. I am worried about you, **gadabout/traveller**. They'll let me go with a fine[65], but you…" she does not finish her sentence.

"I'm sorry about our **tiff/argument** earlier. I don't understand why Lexi doesn't want to get home!" she says.

What do you say?

*"I understand Lexi…I miss my family, good **chow**, and my **avocations/hobbies**."* ➔ "I guess you have a point. Lexi seems to like your world a lot." tears up your **compeer**.
*"Let's put the **tiff/argument** behind us. What do we do now?"*

[62] Hang up on somebody = zavěsit někomu (telefonát)
[63] Interrupt = přerušit
[64] Barred = zamřížovaný
[65] Fine = pokuta

➔ "I have no idea." tears up your **compeer**.
*"What are the **hawkshaws** going to do with us now? Why did they lock us up in the **calaboose/prison**?"* ➔ SKIP
PRINT: "I understand Lexi…I miss my family, good **chow**, and my **avocations**," you reply to her. "I guess you have a point. Lexi seems to like your world a lot." tears up your **compeer**. "Let's put the **tiff** behind us," you say, trying to be the bigger person, "What do we do now?" "I have no idea," sighs your **compeer** hopelessly. "What are the **hawkshaws** going to do with us now? Why did they lock us up in the **calaboose**?" you wonder.

"Once you get caught by **hawkshaws** and put into **calaboose/prison**, there's no way back. **Hawkshaws** turn illegal **gadabouts/travellers** into more of them...that's how **hawkshaws** are made." explains your **compeer**.

And you thought that yesterday was the worst day of your life! Now you are going to get turned into a flying monster whose **avocation/hobby** is to fake[66] the sound of their steps. Great.

You look around the **calaboose/prison**. There is nothing but a bucket[67] standing in the corner. You do not want to think about what it is probably used for.

What do you do?

(shout) "Hello? Is anyone there?" ➔SKIP
Use the bucket ➔SKIP
Cry ➔SKIP
PRINT: ➔SKIP

You wait for something to happen. Minutes slowly turn into hours upon hours of waiting. You wonder how your family is doing. Did they notice that there is a **gadabout/traveller bilker/cheat** living in your body? How would they even know? You seriously hope Lexi is not doing anything weird…like eating spiders off the wall in front of people or something. God, that would be so embarrassing.

"Can you hear me?" you hear a voice in your head, "Hey! Can you hear me!"

'I am officially going crazy,' you think to yourself.

"No, you're not, it's me, Lexi. I'm calling you telepathically[68]. It's so weird to talk through the **abysm/gap**. Oh, I had to throw in your favourite **oojah/thing** to be able to call you. Sorry." says the voice.

"Oh, great. Wonderful! What do you want?!" you sigh[69] in your mind.

[66] Fake = napodobovat
[67] Bucket = kyblík
[68] Telepathically = telepaticky, přenosem v mysli
[69] Sigh = vzdychnout

"The **beldam/witch** told me that you're in trouble. The **hawkshaws** want to turn you into one of their own." says the voice - Lexi.

What do you say/think:

'Yeah, and whose fault is that? Why didn't you want to switch back with me in the first place?! ➔ "Come on! I just wanted to stay in your world for a while… as a tourist!"
*What's so bad about becoming a **hawkshaw** anyway?* ➔ *"Uh, where do I start!"*
*How do we get out of the **calaboose/prison?*** ➔SKIP
PRINT: "Yeah, and whose fault is that? Why didn't you want to switch back with me in the first place?!' you blow up on Lexi. "Come on! I just wanted to stay in your world for a while… as a tourist!" Lexi tries to explain. You take a few deep breaths to calm down. "What's so bad about becoming a **hawkshaw** anyway?' you ask. "Trust me, it's bad," replies Lexi.

"I am sorry. I should have switched[70] with you. You wouldn't be in this mess now," sighs Lexi from inside your head.

'At least you know what you did was wrong. So, how do we get out of the **calaboose/prison**?' you ask Lexi.

"There's no way out of the **calaboose/prison**. When the **hawkshaws** catch an illegal **gadabout/traveller** like you, they freeze your soul[71]. Your mind turns blank, and your body becomes as cold as ice. Then you put on the mask and become one of them," Lexi pauses for a bit. Then they continue, "You know that sound they make? Do you know what it actually is? It's the sound of their teeth chattering[72]."

Oh no. Oh no! This is too scary! You cannot become one of them!

"Hey. Hey! Listen to me," Lexi tries to calm you down, "All we have to do is switch back to our original bodies. The **hawkshaws** won't be able to do anything to us as long as our souls are not switched[73]. They can only harm **gadabouts/travellers**."

That sounds like a plan.

"All I need you to do is help me with this **theurgy** ritual. Then we should be able to make the switch." says Lexi.

You close your eyes and focus on the **theurgy** ritual.

CHECK #3: "You're back!" you hear the angel's voice again, "Ready to face the last challenge and finally get home?"

[70] Switch = vyměnit se
[71] Soul = duše
[72] Chatter = drkotat
[73] Switch = vyměnit

"You have guts[74] to be returning for more!" joins in the devil. "Let's see how much you have learned!"

Pick only one translation for each word:

AVOCATION	**OOJAH**	**BILKER**	**TIFF**	**ABYSM**	**CALABOOSE**
hádka	hádka	hádka	hádka	hádka	hádka
věc	věc	věc	věc	věc	věc
vězení	vězení	vězení	vězení	vězení	vězení
koníček	koníček	koníček	koníček	koníček	koníček
propast	propast	propast	propast	propast	propast
podvodník	podvodník	podvodník	podvodník	podvodník	podvodník

"You did well! You are now free to go home!" cheers[75] the angel.
"I guess this is goodbye. I'm not sad to see you go or anything!" says the devil. He's probably sad to see you go.

ENDING:

You feel a wave of **theurgy** flow through your body. Your hands and feet start to feel heavy, and your eyes begin to close on their own. Your **compeer** notices what is happening and quickly rushes to you.

"I am going back home. Lexi agreed to switch[76] with me," you explain to her.

"Oh my, that's wonderful! I am so happy for you!" cheers[77] your **compeer**.

What is the last thing you say to your compeer?

"Thank you for everything." ➔She smiles, "It was my pleasure. Hope we never meet again, though, for both of our *sakes."*
"See ya!" ➔ She laughs, "I hope not! But it was nice meeting you. Get home safely!"
"What was your name again?" ➔ She laughs, "Took you long enough to ask. It's Morphologina. It was nice meeting you."
PRINT: "What was your name again? "is the last thing you say to your **compeer**. She laughs, "Took you long enough to ask. It's Morphologina. It was nice meeting you."

Everything turns white. You feel as if you were flying at an extremely high speed further into the white light. Then everything stops. You take a deep breath and slowly open your eyes.

You made it!

You are home 🙂

[74] Guts = odvaha
[75] Cheer = radovat se
[76] Switch = vyměnit
[77] Cheer = radovat se

Appendix D – Questionnaire

Tento dotazník je součástí magisterské práce plněné studentkou Filozofické fakulty Univerzity Karlovy, Danielou Markovou pod vedením doc. Luca Cilibrasi, Ph.D. Práce zkoumá využití alternativních výukových materiálů pro výuku cizího jazyka. Odpovědi v tomto dotazníku jsou důvěrné – veškerá data budou anonymizována a uchována za pomoci identifikačního čísla účastníka, jenž bude známé pouze badateli. Shromážděná data poslouží pouze účelům tohoto šetření. Výsledky tohoto výzkumu pak mohou být představeny na vybraných setkáních či publikovány v odborných spisech, identifikační údaje účastníků však zůstanou i nadále anonymizována. Cílem dotazníku je získat zpětnou na studijní materiál, proto neobsahuje otázky, které by se daly zodpovědět nesprávně.

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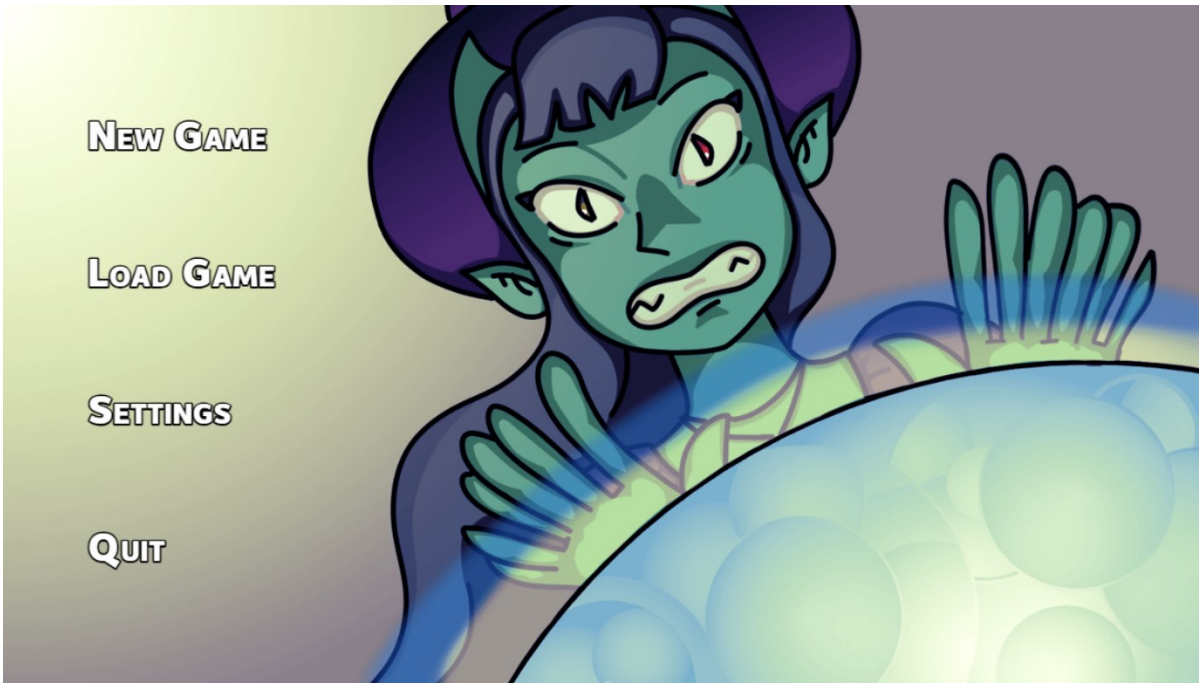
- email: danie.markova@gmail.com
- mobil: +420 732 939 106

<u>Zakroužkuj odpověď, s níž nejvíce souhlasíš. Pokud je otázka otevřená, pak odpověz stručně</u>:

1. **Dočetl/a jsi četbu?**
   a) ano b) ne (na kterou stranu ses dostal/a? str._____)
2. **Pokud jsi četbu nedočetl/a, pak z jaké příčiny?**
   _____
3. **Líbila se Ti četba?**
   ANO – spíše ano – nevím – spíše ne - NE
4. **Myslíš si, že ses při čtení něco naučil/a?**
   ANO – spíše ano – nevím – spíše ne - NE
5. **Jak obtížná se ti četba zdála – byla příliš těžká, nebo naopak příliš lehká?**
   a) četba byla příliš těžká
   b) obtížnost četby byla v pořádku
   c) četba byla příliš lehká
6. **Zdůvodni svou odpověď u předchozí otázky:**
   a) úroveň jazyka v četbě pro mě byla moc pokročilá/jednoduchá
   b) jiné:_____
7. **Setkal/a ses při čtení s nějakými problémy?**
   a) ne
   b) ano:_____
8. **Přál/a by ses v budoucnu setkat se více výukovými materiály podobnými této četbě?**
   ANO – spíše ano – nevím – spíše ne - NE
9. **Kolik let se již učíš anglickému jazyku?**
   _____
10. **Jakým jazykům se učíš? (pokud jen ČJ a AJ, pak nech pole prázdné)**
    Česky, anglicky a_____
11. **Pokud se chceš dozvědět, jak sis vedl/a v osvojování slovíček, napiš sem svou emailovou adresu**:_____

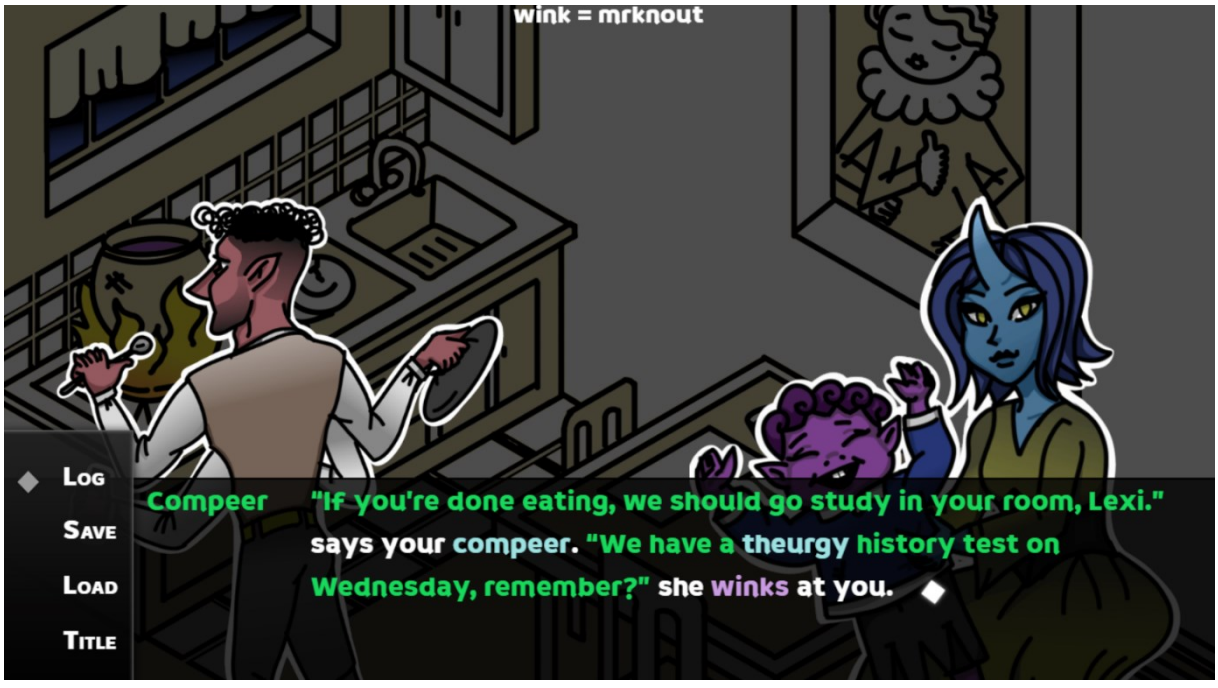
Appendix E – Examples of in-app screenshots



Appendix picture 1: Title screen

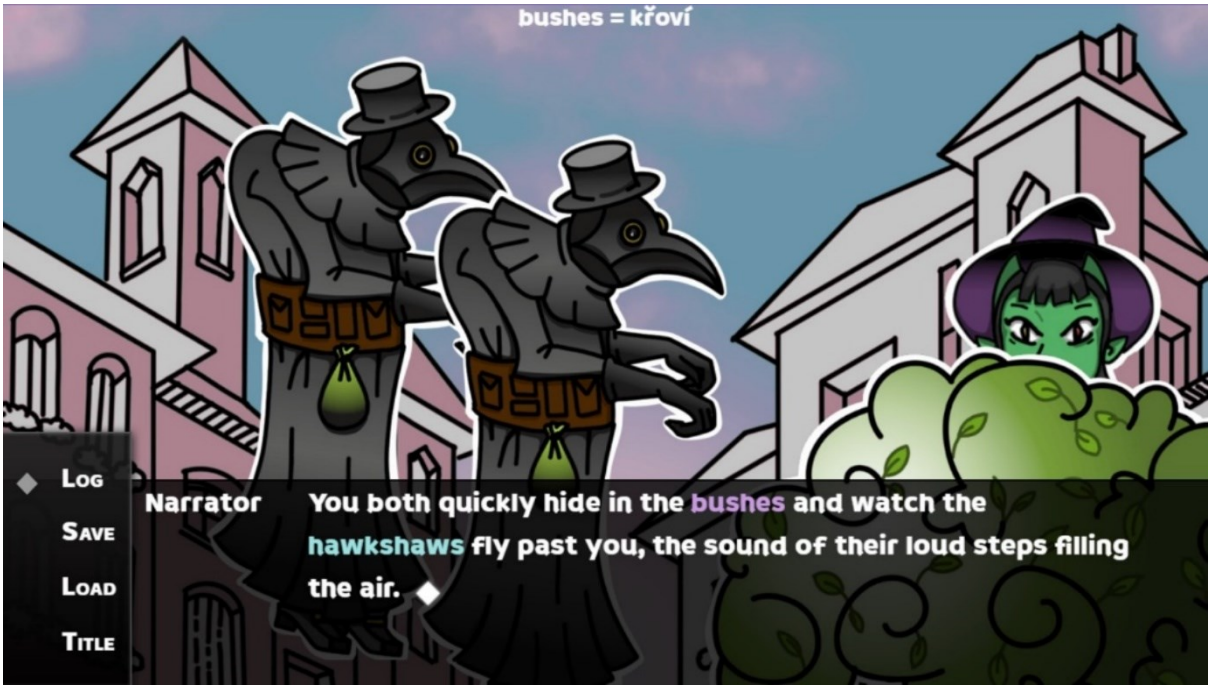
Appendix picture 2: Meeting Compeer

Appendix picture 3: Dialogue option example



Appendix picture 4: Meeting Lexi's family

Appendix picture 5: Waking up the next day - Ch.2



Appendix picture 6: Hiding from hawkshaws

Appendix picture 7: Meeting Beldam – the Witch of the forest

Appendix picture 8: Inside the bothy

Appendix picture 9: Communicating with the other gadabout

Appendix picture 10: Getting arrested by the hawkshaws

Appendix picture 11: Waking up in calaboose/prison

Appendix picture 12: Farewell