Second Language Learning and Teaching

Weronika Szubko-Sitarek
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Piotr Stalmaszczyk *Editors*

Language Learning, Discourse and Communication

Studies in Honour of Jan Majer

Springer

Second Language Learning and Teaching

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We are also grateful to Prof. Krystyna Droździał-Szelest (Adam Mickiewicz University, Poland), who kindly agreed to review the articles.

Contents

Introduction

The essential human act at the heart of writing is the act of giving.
P. Elbow

The authors of the papers collected in this volume wish to dedicate them to Prof. Jan Majer of the University of Łódź, Poland, a renowned specialist in the fields of applied linguistics, teaching English as a foreign language, and teacher training.

Jan Majer graduated from the University of Łódź and defended his Ph.D. dissertation at Adam Mickiewicz University in Poznań. His further professional life has been connected with his alma mater, where he obtained his post-doctoral degree (doktor habilitowany). Prof. Majer's academic interests include psycholinguistics, educational discourse analysis, learner language development, and teacher talk. He has lectured at Universities of Glasgow, Manchester, and Pittsburgh. His academic output comprises numerous articles and book chapters, as well as two books; he has edited a number of collective volumes. He is Associated Editor of the Journal *Research in Language*, and has served on the editorial board of the State School of Higher Education in Włocławek.

With his erudition, perfectionism, and subtle sense of humor, Prof. Majer is an exemplar Teacher Trainer. He devoted a significant part of his professional life to the University of Łódź Teacher Training College, which he organized in 1990 and directed for 14 years. He has been involved in international projects aiming at implementing world standards in foreign language training not only in Łódź, but also in the region, and co-authored a teacher training manual. Presently, as head of the Department of Psycholinguistics and English Language Teaching, he remains a steady compass for prospective teachers at all types of schools.

For his colleagues and advisees, Prof. Majer is not only a respected academic, but also an exceptional person. His extensive knowledge, transparent values, and remarkable kindness have been the source of admiration and inspiration for anyone who has worked with him. Let this collection be a token of our gratitude for Jan's presence in our professional lives.

The volume falls into two parts: Part I, *Language Learning*, containing articles focused on second language classroom research, and Part II, *Discourse and Communication*, which tackles issues related to more theoretical study of language.

The first three papers are devoted to second language writing. In the opening article, **Mirosław Pawlak** thoroughly reviews the current studies into state of

affairs with regard to the effects of written error correction on the acquisition of different aspects of the target language system. The author presents the findings of studies exploring the effectiveness of specific feedback options, the mediating influence of individual, contextual as well as linguistic variables, and the impact of learners' behavioral, cognitive, and affective response as well as overall effects of written error correction. He concludes that further research of written corrective feedback is indispensable to offer insights into the conditions that have to be met for written error correction to produce tangible learning outcomes in different contexts and situations.

Donald Sargeant discusses the place and the role of model essays in language improvement classes for in-service teachers. He provides a comprehensive description of the tools used to help them improve their academic writing skills focusing on skeleton plans, model essays, analysis sheets, and written feedback. Referring to the results of his study, Sargeant convincingly argues that the use of model essays has a positive effect on the teachers' own writing.

Łukasz Salski focuses his attention on the nature of academic writing, arguing that while second/foreign language academic writing instruction naturally focuses on teaching to comply with the specific restrictions of academic genres and register, it too often ignores the needs and expectations of learner writers. The author attempts to reconcile the inevitable dependence of text on its social context with the importance of writer's voice.

Further in Part I, **Nicolas Hurst** investigates the symbiotic relationship that exists between language and culture. He argues that outside the classroom, the real world demands that language users are culturally competent to an equal degree that they are linguistically competent. The author observes that whereas teaching culture is an important element to consider, what that culture consists of and how to include this in the teaching-learning process remains less well defined.

Next, **Alice Henderson** highlights the importance of the interplay between the principles and goals of CLIL and the constructs of accent, comprehensibility, and intelligibility. She explores the main findings of studies into these three constructs in order to address one of the main challenges of CLIL: communicating field-specific content via effective, comprehensible language. Henderson concludes that the cooperation between language and content teachers is a condition *sine qua non* for CLIL to be successfully implemented.

Irena Czwenar reports on some methodological problems which researchers analysing spoken language data face. The paper discusses the main instruments of measurement of learner proficiency used in studies on CAF (complexity, accuracy, and fluency) worldwide, outlines psycholinguistic criteria underpinning the choice of the most appropriate data segmentation method, and describes a method of identifying and counting units of spoken discourse which—according to the author—can significantly improve the quality of learner language analysis.

In her article, **Danuta Gabryś-Barker** offers a critical insight into the value of introspection for researching multilingualism. She provides some guidelines for implementing introspective research methods when studying language learning processes. The article quotes examples of a number of studies in SLA, as well as

those in which think-aloud protocols were used in studying language processing of multilinguals. In conclusion, Gabryś-Barker recommends the use of introspection as a significant learning tool, which allows learners to become more aware of the idiosyncrasies in their own learning processes.

Weronika Szubko-Sitarek presents the results of her study concerning pre-service teachers' beliefs on teaching tertiary languages. The results of the research reveal that uninformed beliefs about L3 learning result in dependence on less effective strategies of L3 teaching leading to indifference towards exploiting of the L2 linguistic knowledge and learning experience. Emphasizing the fact that formal L3 instruction should be viewed as a different process from SLA, the author offers suggestions for pre-service second foreign language teachers training.

The main interest of **Anna Michońska-Stadnik's** article lies in gender-related distribution of direct learning strategies. The author reports on the research attempting to examine the distribution of direct language learning strategies related to learners' gender. She also investigates to what extent their usage may determine successful second language learning.

Anna Mystkowska-Wiertelak reports on the results of a small-scale qualitative study conducted among learners of English whose beliefs and opinions were analysed with a view to identifying factors, which might contribute to the development of a positive mindset that would promote rather than impede language learning.

Further, **Urszula Paprocka-Piotrowska** tests the validity of the hypothesis according to which reformulation is one of the key principles of acquisition. The author reviews some reformulation processes, traditionally known as late acquisition and presents the results of her own study, which clearly confirm the relation between the development of reformulation procedures and the stage of L1 acquisition by young and older children.

The second part of the volume, devoted predominantly to discourse and communication, opens with a paper by **Ewa Waniek-Klimczak**, who explores the relationship between the production of the elements of the rhythmic structure of English and language proficiency. The results of the study lead the author to the conclusion that rhythm not only matters for proficiency ratings, but also develops with language proficiency and language experience.

Anna Niżegorodcew presents a case study in which, basing on the *legitimate peripheral participation* model, she evaluates conference abstracts in applied linguistics and L2 learning and teaching. The paper aims at a re-evaluation of the negatively assessed abstracts in order to discover the author's subjective reasons for their negative evaluation and finding the minimum criteria of acceptability.

David Singleton and Agnieszka Skrzypek analyse the link between Phonological Short-term Memory (PSTM) and collocational transfer between L1 and L2, which to date has been relatively unexplored. They report on an empirical study that gives a broad support to the hypothesis that in L2 learners with lower PSTM capacity L1 transfer may be more discernible than in those with higher PSTM capacity.

In her article, **Barbara Lewandowska-Tomaszczyk** discusses the place of emotions in human competence and processes, which can be identified at the interface of two languages when emotions are experienced and expressed. She presents the place and function of *emotions* in a given culture and discusses possibilities for non-native speakers of L2 to effectively raise emotional awareness in L2 didactic contexts. The place and position of L1 and L2 materials generated from monolingual and parallel language corpora in enhancement of emotional awareness in FL classroom are exemplified and discussed.

Piotr Stalmaszczyk and Wiesław Oleksy offer a comprehensive overview of the most important turns in contemporary philosophy of language and the study of language, with special emphasis on the communicative turn, and its more applied implications such as communicative language teaching.

Jan Zalewski traces some major developments in the history of cognitive science leading to the emergence of the so-called *third or middle way*. In his discussion, he points to the similarities between the new experientialist epistemology of cognitive science and the Buddhist tradition of Madhyamika (literally *middle way*).

In the closing chapter, **Aleksander Szwedek** analyses the meanings of *even* and *only* in terms of categories of inclusion and exclusion, which leads to an attempt to solve Beaver and Clark's problem with the antonymous nature of the particles.

The present volume touches upon a variety of subdisciplines of linguistics and does so from diverse theoretical perspectives. As the editors of this volume, we hope that the studies presented here will provide an incentive both for further theorizing as well as empirical research for scholars and practitioners.

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Part I
Language Learning

The Role of Written Corrective Feedback in Promoting Language Development: An Overview

Mirosław Pawlak

Abstract The provision of corrective feedback in instructed second language acquisition has always remained a highly controversial issue, both with respect to spoken and written foreign language production. When it comes to writing, this is evident in the fact that while there are specialists such as Truscott (1996, 1999, 2004), who call into question the effectiveness of this kind of pedagogic intervention, others (e.g. Chandler 2003; Hyland and Hyland 2006; Sheen 2010a, b, c; Ferris 2012) provide convincing evidence that it can have a positive contribution not only to foreign language development but also to learners' motivation. The present paper is intended as an overview of research into the effects of written error correction on the acquisition of different aspects of the target language system, an area that has been explored to some extent, but is clearly in need of further empirical investigation. In accordance with the model proposed by Ellis (2010), it focuses both on the findings of studies exploring overall effects of written error correction, the effectiveness of specific feedback options, the mediating influence of individual, contextual as well as linguistic variables, and the impact of learners' behavioral, cognitive and affective response. It also considers future directions of research into the role of written feedback in language development as well as the methodological challenges that such empirical investigations inevitably face.

1 Introduction

When discussing the conditions indispensable for successful acquisition of second and foreign languages, Gass (2003) stresses the need for the provision of positive evidence, negative evidence as well as opportunities for output production.

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As regards the first of these, it "(…) refers to the input and basically comprises a set of well-formed sentences to which learners are exposed" (2003: 225), and it takes the form of authentic or modified samples of the target language. The second is related to "(…) the type of information that is provided to learners concerning the incorrectness of an utterance" (2003: 225), and it may vary with respect to its explicitness, with direct rule explanation constituting one end of the continuum and increased exposure to instances of the targeted structure in meaningful spoken or written texts (i.e. input flooding) forming the other. The third is connected with performance in the target language (TL), preferably of the more spontaneous type, which can occur in the spoken and written mode, requires syntactic processing, and constitutes a crucial means of testing hypotheses and fostering automaticity (cf. Swain 2005). Even though the key role of positive evidence cannot be denied as "[o]ne must have exposure to the set of grammatical sentences for learning to take place" (Gass 2003: 226), negative evidence is now also regarded as facilitative or even indispensable for language development (cf. Pawlak 2006; Ellis 2008; Larsen-Freeman 2010; Nassaji and Fotos 2011). An important way in which such information can be conveyed is the provision of oral or written corrective feedback (CF), which is only possible when learners engage in target language production of one kind or another.

The focus of the present paper is on the contribution of written corrective feedback and in particular on its effect on the acquisition of specific linguistic features, a line of inquiry that has been pursued vigorously in recent years but is clearly in need of much further empirical investigation, specifically such that would be conducted with greater methodological rigor. At the outset, the definition, role and scope of corrective feedback will be presented, opposing views on its contribution will be outlined, and theoretical support for its provision will be discussed. This will be followed by the comparison of the main features of oral and written error correction as well as the consideration of the pedagogical concerns that are involved in responding to errors in learners' written output. Subsequently, a framework for research into written CF will be presented, methodological issues related to such research will be tackled, and the key findings of studies in this field will briefly be presented, both with respect to the effectiveness of different techniques of error correction, the influence of mediating variables and learners' response to the corrective information with which they are supplied. The paper closes with an evaluation of the existing research into the effects of written feedback on the acquisition of the TL system, a consideration of the future directions of such research, and a discussion of the methodological challenges that these empirical investigations must grapple with.

2 Corrective Feedback in Instructed Second Language Acquisition

In the words of Sheen and Ellis (2011: 593), "[c]orrective feedback refers to the feedback that learners receive on the linguistic errors they make in their oral or

written production in a second language (L2)". Such pedagogic intervention can be employed to address problems in the use of different target language subsystems, such as grammar, vocabulary, pronunciation (only oral CF), spelling (only written CF), or pragmatics, but most of the studies carried out so far have explored the first of these areas. What should also be emphasized is that corrective techniques can be drawn on to deal with a whole gamut of errors committed by learners, both those that are not immediately relevant to such a focus but are perhaps particularly serious or irritating to the teacher, and those that are involved in the use of TL forms that are currently the focus of instruction. In the latter case, they are applied in order to aid the accomplishment of specific pedagogic goals pursued in a lesson or a series of such lessons, thus becoming an integral part of form-focused instruction (FFI). While both approaches have an important role to play in foreign language pedagogy, the second appears to be more beneficial on theoretical, empirical and practical grounds since, as will be illustrated below, theoretical support for the value of CF derives in the main from theories and hypotheses seeking to account for the role of FFI, the vast majority of studies of CF have been inspired by the need to identify the most efficacious ways of teaching TL forms, and drawing students' attention to inaccuracies in the use of linguistic features taught in a given lesson is likely to be more efficacious than reacting to various errors in a random way. As Pawlak (2012: 52) notes, "[g]iven the ubiquity of error correction in the classroom and the importance attached to it by theoreticians, researchers, methodologists, teachers and learners, there is a clear need to stop considering it as an isolated phenomenon that just happens to be an inherent component of language teaching and to place it within a broader framework with a view to accounting for its contribution to the acquisition of the linguistic features which are the focus of pedagogical intervention".

The views on the role of error correction in foreign language pedagogy have undergone a considerable evolution over the last fifty years, which has been reflective of the dominant views on the nature of first and second language acquisition (cf. Roberts and Griffiths 2008). Thus, while behaviorists emphasized the need to avoid errors at any cost and to treat them as soon as they appeared, innatists were of the opinion that negative evidence was superfluous in view of the fact that exposure to samples of the TL was seen as sufficient to trigger internal processing mechanisms such as Universal Grammar, a position that found its reflection in Interlanguage Theory (Selinker 1972), Creative Construction Theory (Burt and Dulay 1980) or Krashen's (1981, 1982) Monitor Model, leading to the emergence of non-interventionist approaches to language pedagogy. The pendulum swung back once again with the revival of interest in form-focused instruction and the advent of interactionist theories, which view the provision of corrective feedback as an important tool in promoting language development and will be briefly discussed later in the present section. It is also warranted to take a closer look at the arguments for and against error correction, commonly advanced by its proponents and detractors, respectively. As for the former, Krashen (1982: 119) famously commented that "(…) even under the best of conditions, with the most learning-oriented students, teacher corrections will not produce results that will

live up to the expectations of many instructors". Such a stance is closely related to the assumption that error treatment is unlikely to affect learners' implicit L2 knowledge (cf. Schwartz 1993), the existence of orders and sequences of acquisition that have been shown to be impervious to instruction (cf. Larsen-Freeman and Long 1991), the outcomes of research into first language acquisition and naturalistic discourse (cf. Majer 2003), affective concerns, as well as purely practical considerations related to the inconsistency and limited effectiveness of CF (cf. Truscott 1999, 2004). When it comes to the latter, it is fitting to quote Chaudron (1988: 133), who argued that "(…) from the learners' point of view (…) the use of feedback may constitute the most potent source of improvement in (…) target language development", as well as Larsen-Freeman (2003: 126), who pointed out that "(…) feedback on learners' performance in an instructional environment presents an opportunity for learning to take place. An error potentially represents a teachable moment". Such opinions appear to be fully justified in the light of copious empirical evidence that form-focused instruction, including different forms of oral and written corrective feedback, works for the acquisition of different aspects of target language grammar and its positive effects are retained over time (Ellis 2001; Norris and Ortega 2001; Pawlak 2006; Larsen-Freeman 2010; Nassaji and Fotos 2011; Spada 2011). In addition, it has been argued that the provision of feedback may speed up movement through developmental sequences, erroneous utterances can serve as input for learners (cf. Lightbown 1998), correction may be necessary to highlight some L1/L2 contrasts (cf. White 1991), such pedagogic intervention may be indispensable in contexts which offer little in- and out-of-class access to the target language, and it is often in line with students' expectations (cf. Pawlak 2012).

The case for the beneficial role of feedback, whether it is provided in the oral or written mode, can also be made on the basis of a number of influential theories and hypotheses, both psycholinguistic and sociolinguistic in nature, that have considerably affected research in the field of second language acquisition (SLA) in recent years. One such theoretical position is the Noticing Hypothesis (Schmidt 1990, 2001), according to which language learning cannot take place without a certain degree of attention to linguistic features in the input to which the learner is exposed, as this allows him or her to make cognitive comparisons, and notice gaps and holes in the interlanguage system, processes which are indispensable for the restructuring of TL knowledge. Clearly, the provision of CF, irrespective of the form it takes, is one of the main ways in which such attention can be generated. This stance is adopted by the updated version of the Interaction Hypothesis (Long 1996) and the Output Hypothesis (Swain 1995, 2005), both of which emphasize the pivotal importance of reactive negative evidence as a way of getting learners to identify mismatches between their output and the target language norm, the key difference between them lying in the fact that the former favors input-providing CF, as exemplified by the use of recasts (i.e. corrective reformulations of an erroneous utterance or sentence that preserves its intended meaning), and the latter sets store by output-prompting CF, as implemented by different types of prompts (i.e. corrective moves intended to trigger self-repair). The positive contribution of

corrective feedback is also posited by Skill-Learning Theory (DeKeyser 1998, 2001), according to which such intervention, be it oral or written, assists the conversion of declarative knowledge into procedural knowledge, and connectionist theories (Ellis 2005), where error correction is believed to foster associative learning by, for example, sensitizing learners to the occurrence of specific linguistic features in the input, stimulating the noticing of non-salient and semantically redundant items, or ensuring the fine-tuning of the interlanguage system. Support for error correction also stems from the Delayed-Effects Hypothesis (Lightbown 1998), which is based on the assumption that, although not immediately visible, the benefits of such intervention can be reaped at a later time thanks to the priming effect (cf. Doughty 2001), and the Counterbalance Hypothesis (Lyster and Mori 2006), which claims that different types of CF may come in handy depending on the overall pedagogic orientation of language instruction (i.e. communicative or form-focused). Finally, the positive role of feedback is recognized by Relevance Theory (Niżegorodcew 2007), where it is regarded as a mechanism for ensuring optimal relevance of information about the formal aspects of the TL, and Sociocultural Theory (Lantolf and Thorne 2007), which stipulates that appropriately pitched correction, falling within a learner's zone of proximal development, can contribute to the processes of internalization and self-regulation.

3 Pedagogical Concerns in Written Corrective Feedback

Before taking a closer look at the pedagogical choices involved in responding to inaccuracies in learners' writing, several comments are in order on the similarities and differences between oral and written corrective feedback. As can be seen from Table 1, compiled on the basis of the discussion of relevant issues included in Pawlak (2006), Sheen (2010b), Sheen and Ellis (2011), this comparison can be conducted with respect to such key areas as the salience of the corrective force of the response to inaccurate output, the availability of feedback, the timing, type, explicitness, character and complexity of the correction, and the contribution of CF to the development of explicit and implicit knowledge. In the first place, while, depending on the corrective technique used (e.g. a recast or some kind of metalinguistic feedback), oral CF may not always be interpreted as negative evidence, such problems usually do not occur in the case of written CF, which is conspicuous to the learner by its very presence in a piece of writing. This issue is closely tied to the explicitness of the intervention, since, due to limited attentional resources, oral correction can be more explicit (overt) or implicit (covert), thus resulting in different levels of learners' awareness that they are being provided with corrective information, while written correction can only be explicit as the intervention is evident and permanent. Other differences are related to the fact that oral CF is typically available to other students in the classroom whereas written CF is limited to errors committed by a particular learner, the former can be both immediate and delayed while the latter can only be delayed, perhaps with the exception of

Table 1 Key differences between oral and written corrective feedback (based on Pawlak 2006; Sheen 2010b; Sheen and Ellis 2011)

Oral corrective feedback	Written corrective feedback
Corrective force may not always be clear	Corrective force is usually clear
The feedback is publically available	Feedback only on one's own errors
The feedback is provided online and offline (i.e. immediate and delayed)	The feedback is provided only offline (i.e. it is delayed)
Relatively straightforward focus (i.e. target language form)	Considerable complexity of focus (i.e. many aspects of second language writing)
Both input-providing (e.g. recast) or output-inducing (e.g. clarification request) corrective techniques are available	Both input-providing (direct correction) or output-inducing (indirect correction) corrective techniques are available
The feedback can be explicit (overt) as well as implicit (covert)	The feedback can only be explicit (overt) as the intervention is evident
The correction can be conducted by the teacher, the learner who erred, or a peer	The correction can be conducted by the teacher, the learner who erred, or a peer
Metalinguistic information possible	Metalinguistic information possible
Conversational or didactic	Mostly didactic
Possible direct impact on implicit, procedural knowledge	Only explicit, declarative knowledge affected in the main

synchronous text-based computer-mediated communication, and the focus of oral correction is much more straightforward when compared with written correction, which is often directed not only at TL forms, but also many other aspects of L2 writing. Additionally, oral corrective feedback can be both conversational and didactic, which means that it can be employed to respond to genuine communication breakdowns or with the purpose of drawing learners' attention to an erroneously used linguistic feature, and written corrective feedback mainly serves the second of these functions since, due to its timing, it is of little relevance to ensuring a smoothness flow of interaction. From a pedagogic perspective, perhaps the most crucial difference between CF supplied in the two modes is that while oral error correction, particularly when it occurs during communicative activities and lead to the processes of cognitive comparison and noticing the gap, can possibly trigger the development of implicit, procedural knowledge (i.e. such that can be accessed in real-time processing and underlies spontaneous communication), the contribution of written correction is confined to stimulating the growth of explicit, declarative knowledge (i.e. such that is conscious, rule-based and available only when there is sufficient time). As regards the similarities between oral and written CF, both of them can be input-providing and output-inducing, depending on whether the correct form is provided or self-repair is required, they can rely on metalinguistic information to a greater or lesser extent, and their source can be the teacher, the learner who has erred or another student.

Worth mentioning at this juncture is the study undertaken by Sheen (2010b) which is, to the best knowledge of the present author, the only attempt to date to explore the contributions of the mode of error correction, on the acquisition of a specific target language feature. More precisely, the research project sought to

compare the differences in the impact of oral recasts and direct written correction, as well as oral and written metalinguistic CF on the acquisition of English articles. The 177 participants, who were university-level ESL students, formed one control group and four treatment groups which differed with respect to the CF strategy used in response to errors when retelling a story in groups of three or in written summaries of this story, namely oral recasts, oral metalinguistic correction, written direct correction, and written metalinguistic correction. The data on the application of the targeted feature were collected on pretests, immediate and delayed (by four weeks) posttests, which involved a speeded dictation test, a writing test, and an error correction test, with the subjects being requested to fill out an exit questionnaire immediately after the last posttest which aimed to tap their awareness of the focus on the corrective interventions and the tests they had completed. It was found that: (1) written direct correction proved to be superior to oral recasts, which is related to the students' failure to notice the corrective force of recasts, (2) oral metalinguistic correction and written metalinguistic correction proved to be equally effective in promoting learning, which seems to suggest that the level of explicitness is more important than the timing of correction, and (3) irrespective of the medium, CF accompanied by metalinguistic information generated higher levels of awareness than feedback that did not contain information of this kind. On the basis of these findings, Sheen concludes that "(…) it is not so much the medium of the CF as the degree of its explicitness or the extent of information provided that is important" (2010b: 228), a comment which is a cautionary note against making too much of the differences listed in Table 1. In fact, as has been demonstrated above and will be shown in the remainder of this paper, there are many issues that are common to the study of oral and written feedback, such as the overall contribution of this type of intervention to second language development, the effectiveness of different types of corrective techniques, the role of individual, linguistic and contextual variables, the nature of learner response to the corrective information, as well as the choices made with respect to research methodology.

The common ground between oral and written corrective feedback is also evident in the fact that the decisions that need to be made in both cases are by and large the same and reflect the questions posed by Hendrickson (1978) well over three decades ago. They are as follows:

- *whether learner errors should be corrected*—on a more general level, it is reflective of the debate between Truscott (1999, 2007), Ferris (1999, 2004) as to the effect of CF on acquisition and subsequent writing, but, more narrowly, it is related to the decision as to whether a particular error in a particular piece of writing should be treated or left uncorrected because the learner is not familiar with the structure or it is not relevant to the pedagogic goals of a given lesson;
- *when learner errors should be corrected*—although, with the exception of synchronous computer-mediated communication, written CF is almost always provided offline (i.e. it is delayed), the issue of timing becomes relevant in the case of process writing as errors can be treated at different stages of drafting and redrafting (cf. McGarrell and Verbeen 2007);

- *which learner errors should be corrected*—there is a clear preference for *selective CF* rather than responding to every single error; although it is possible to propose a number of criteria that could inform the decision which inaccuracies should be reacted to (e.g. errors vs. mistakes, global vs. local errors, simple vs. complex structures), particularly promising appears to be *focused error correction* (cf. Sheen 2010c), in which a specific category of errors, such as articles, the past simple tense or passive voice, is the target of pedagogic intervention; many studies have also drawn a distinction between *treatable* and *untreatable* errors (cf. Ferris 1999), or such that occur in a pattern and can be easily related to specific rules (e.g. subject-verb-agreement, articles, pronouns), and such that cannot be accounted for in a straightforward way and their occurrence is idiosyncratic (e.g. prepositions, word choice);
- *how should learner errors be corrected*—a distinction can be made here between *direct corrective feedback*, in which case the correct version is provided by the teacher, with or without metalinguistic information (e.g. crossing out the unnecessary element, inserting the missing element, writing down the correct form above or near the error), or an entire sentence or paragraph is reformulated, and *indirect corrective feedback*, where the error is highlighted for the learner and this indication is often accompanied by metalinguistic information as well (e.g. underlining, circling, highlighting, indicating inaccuracies in the margin, introducing a correction code) (Harmer 2007; Bitchener and Knoch 2010);
- *who should correct learner errors*—although *teacher correction* is the most common in the majority of general foreign language classes, in many cases it is possible to increase learner involvement through reliance on *self-correction* or *peer-correction*, particularly when entire courses are dedicated to developing writing skills and the process approach to writing can be implemented; what should be taken into account, however, is the fact that learners cannot be expected to self-repair errors on TL features they are unfamiliar with and weaker ones might even experience difficulty in fixing problems in the use of forms that are currently focus of the instructional agenda; also of great relevance here is students' marked preference for being corrected by the teacher rather than other learners (cf. Hyland and Hyland 2006).

Clearly, as is the case with oral corrective feedback, all of these decisions are intertwined in intricate ways and the availability of some options hinges upon the previous decisions made, a good case in point being self-correction, which can only be attempted when the teacher falls back upon indirect corrective techniques.

4 Investigating Written Corrective Feedback

As can be seen from a framework for investigating corrective feedback, both oral and written, put forward by Ellis (2010) and presented diagrammatically in Fig. 1,

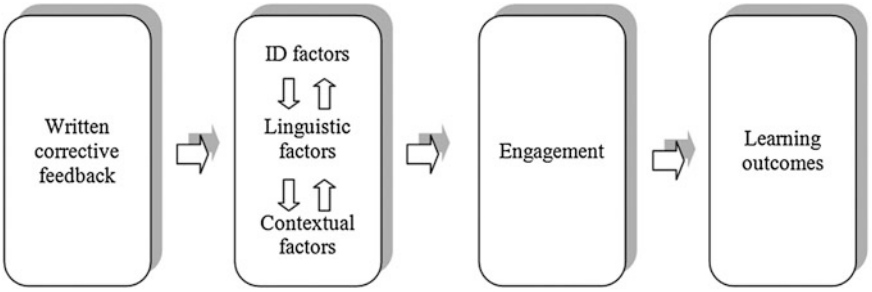

Fig. 1 A revised framework for investigating corrective feedback (adapted from Ellis 2010: 336)

four aspects of error correction can become the object of empirical inquiry, with the crucial caveat that interfaces between them are also of considerable interest for researchers. The first of these is connected with the *effectiveness of different written CF techniques*, with researchers channeling most of their energies into comparing the contributions of different types of *direct* and *indirect options* as well as various constellations thereof (see the discussion in the previous section). Whatever form the response in learners' written output may take, the effects of this response are bound to be impacted by a wide range of *moderating variables*, which can be reflective of *individual differences between learners* (e.g. age, aptitude, attitudes, anxiety, motivation, learning style), *linguistic factors* (e.g. developmental readiness, complexity, the extent to which a particular TL feature is treatable), and *contextual factors* (e.g. the specificity of the instructional context, the presence of previous instruction, the stage in the instructional cycle). Equally significant is *learners' engagement* with the feedback they are provided with, the third component in the framework, which can be investigated with respect to the *behavioral response* (i.e. self-repair of the errors indicated by the teacher), the *cognitive response* (i.e. interpreting the teacher's feedback in the correct way or understanding the nature of the correction), and the *affective response* (i.e. learners' attitudes towards being corrected or the type of written CF employed). Finally, studies of written corrective feedback also have to address the critical issue of how to measure learning outcomes in order to offer insights into the contribution of different types of such pedagogic intervention. Even though tapping learners' implicit knowledge may not be of primary concern in the light of the fact that written CF is expected to mainly influence explicit knowledge, it is of paramount importance to go beyond looking only into immediate revisions of the same texts and to determine improvement in students' ability to apply what they have learnt to new pieces of writing, composed some time after the provision of feedback, which, in effect, boils down to reliance on pretest–posttest-delayed posttest experimental designs. The following subsections provide an overview of key issues in the methodology of research into written CF and outline the most important findings of empirical investigations of this kind.

4.1 Methodology of Research into Written Corrective Feedback

When discussing methodological issues involved in empirical investigations of written CF, a key distinction has to be made between *L2 writing research* and *second language acquisition research*, as they pursue quite disparate goals, which has a bearing on the ways in which they are designed and conducted. As Sheen (2010b: 204) explains, "(…) whereas SLA researchers have been primarily concerned with CF in relation to how it affects learning processes and outcomes, such as noticing and changes in linguistic competence, L2 writing researchers have been primarily concerned with how CF can improve writing performance". As a consequence, the former, who are mainly preoccupied with demonstrating that corrective feedback can aid language learning in general language classrooms, opt for experimental or quasi-experimental designs which are currently the norm in research in oral CF (e.g. Sheen 2007). The latter, in turn, are mainly preoccupied with the realities of composition classes, and are fully content with showing that feedback on different aspects of writing has the immediate effect of eliminating the accuracies from the original text (e.g. Ashwell 2000), an approach similar to that adopted in descriptive research on oral CF, where success is measured in terms of uptake and repair (cf. Ferris 2010; Pawlak 2012). Such differences notwithstanding, it has to be admitted that the methodology of research into written error correction has undergone an evolution that is reminiscent in many respects of the transformation that has affected empirical investigations of the effects of oral corrective feedback. This is evident in a gradual shift of emphasis from examining learners' ability to introduce modifications into their texts in response to CF on a variety of features, both linguistic, content-related and organizational in nature, to exploring the impact of error correction, frequently confined to one or a clearly defined set of items (i.e. focused), on their ability to compose new texts, also some time after the errors are treated.

As is the case with oral error correction, there are different approaches to the study of written corrective feedback, which are reflective of the specific goals that researchers wish to accomplish. When the goal is to tap into teachers' and students' perceptions of the provision of CF (e.g. its presence, timing, source, or the ways in which it is supplied), it is only natural to rely upon different types of *surveys* generating *self-report data*, which can take the form of *more of less structured questionnaires* or *interviews* (e.g. Hedgcock and Lefkowitz 1994; Lee 2008). In cases, in which the aim is to determine the effectiveness of written error correction, both in general terms and with respect to specific CF techniques, researchers can carry out (cf. Hyland and Hyland 2006; Pawlak 2012):

- *revision studies*, which focus upon students' ability to edit their pieces of writing on receiving expert CF (e.g. Ferris and Roberts 2001); the main drawback of research of this kind is that it fails to provide conclusive evidence for the mastery of the targeted features over time;

- *experimental studies*, which seek to appraise the value of different types of written CF; while *early experimental research* did so without the inclusion of a true control group or delayed posttests and focused primarily on the broad distinction between direct and indirect correction (e.g. Landale 1982; Semke 1984), *recent experimental studies* are carefully designed, include a control group, examine the durability of treatment gains, and typically look into the effects of various subtypes of the direct and indirect CF options (e.g. Bitchener et al. 2005);
- *reformulation studies*, in which students first compose a text, individually or in pairs, the piece of writing is revised by a proficient language user, who makes sure that it complies with native speaker norms but at the same time preserves the original ideas expressed by its authors, which is followed by the discussion of the changes among the learners and subsequent revisions of the first draft (e.g. Sachs and Polio 2007).

There is also a possibility of complementing research aimed to establish the value of different CF types with self-report data, thereby gaining insights into how learners perceive different corrective techniques and determining the extent to which they fit in with their preferences, a good example being the study by Lee (2008), who augmented the analysis of revisions with the perceptions of the participants. When it comes to the impact of mediating variables on the effects of different types of written CF, it is necessary to opt for much more complex research designs, draw upon instruments needed to obtain data about a factor under study, and often employ more advanced statistical procedures or some kind of combination of quantitative and qualitative methodologies, which perhaps accounts for the paucity of studies in this area. One example of such an investigation is the study conducted by Sheen (2007), who explored the interfaces between the efficacy of written corrective feedback, with or without metalinguistic information, and language aptitude in the acquisition of English articles. Learner engagement with written error correction has mostly been investigated in terms of the behavioral response (i.e. the presence or absence of a revision) and the cognitive response (e.g. the occurrence of noticing and the depth of awareness), and this has mainly been done within the framework of reformulation studies, such as that carried out by Sachs and Polio (2007). Similarly to oral CF, there is a marked paucity of studies examining the affective response, a notable exception being the research project conducted by Storch and Wigglesworth (2010), who compared the contribution of direct and indirect CF, but at the same time adopted the analytical apparatus of Sociolinguistic Theory (Lantolf and Thorne 2007) to look into interactions between learning outcomes, the nature of engagement with correction, and students' beliefs and goals, thereby forging a crucial link between products, processes and learner-related factors.

4.2 Main Findings of Research into Written Corrective Feedback

Since a detailed discussion of the findings of research into written corrective feedback cannot be accommodated within the confines of this paper, the present section only highlights the most important tendencies identified by researchers, focusing on the perceptions of this type of pedagogic intervention, the overall effectiveness of written CF, the value of particular corrective techniques, the influence of mediating variables, and learner engagement with the corrective information. As regards teachers' and learners' views on the need for written error correction, most of the available research indicates that students want to have inaccuracies in their writing corrected and they may even manifest frustration when they are deprived of such assistance. This is well evident, for instance, in the studies conducted by Leki (1991), which showed that the majority of learners display a strong preference for teacher correction, and Hedgcock and Lefkowitz (1994), who identified similar beliefs among learners of English as both a foreign and second language, an additional finding being that the former preferred to be corrected on grammar, lexis and mechanics of writing, while the latter favored feedback on content and organization. The empirical evidence also indicates that many learners are in favor of comments dealing with specific difficulties, concrete suggestions for improvement, indirect ways of responding to errors which foster greater involvement, and a combination of CF with other sources, such as individual conferences (e.g. Hedgcock and Lefkowitz 1994; Leki 1991; Saito 1994; Hyland 1998). Similar findings have been reported for practitioners, with the studies by Lee (2004, 2008) demonstrating that, similarly to their students, teachers in Hong Kong manifest a predilection for comprehensive correction (Lee 2004), and that they tend to focus on grammatical errors, and their decisions are impacted by a myriad of contextual factors, related, among others, to their beliefs, knowledge, institutional policies, etc. (Lee 2008). Also of interest is the research project conducted by Montgomery and Baker (2007), which proved that there was a gap between teachers' perceptions and their actual practices, but also showed that there was much overlap between the way learners perceived feedback and teachers' self-assessments of how they conducted error treatment.

These positive reactions to written correction, although frowned upon by some theorists and researchers (see the discussion above), can be regarded as extremely welcome in view of the fact that there is abundant empirical support for the overall effectiveness of written CF. For one thing, this support derives from revision studies, such as those undertaken by Ferris and Roberts (2001), Chandler (2003), or Ferris (2006), which showed that error correction has a positive effect on learners' ability to eliminate inaccuracies in their writing on being supplied with feedback on a wide spectrum of errors, with the caveat that although studies of this kind may be important for the development of writing strategies and processes, they provide little evidence for long-term acquisition of the targeted features (cf.

Sheen 2007; Ellis et al. 2008). The positive effects of written error correction have also been demonstrated in the outcomes of experimental studies, both the early ones, afflicted by methodological flaws (e.g. Landale 1982; Frantzen 1995), and those more recent, characterized by far greater rigor in their design (e.g. Sheen 2007; Bitchener 2008; Sheen 2010b). It should also be emphasized that the latter have mainly explored the effects of *focused feedback*, limited to a single linguistic feature or a set of such features, which seems to indicate that this kind of correction is particularly beneficial, an assumption that has been corroborated by Sheen et al. (2009), who provided evidence for its superiority over unfocused CF, which targets a wide range of TL features.

As far as the value of different types of written error correction is concerned, it has been shown that, on the whole, *direct feedback* is more effective than *indirect feedback* (Bitchener 2008; Bitchener and Knoch 2008, 2009, etc.), although the latter has been found to generate greater engagement on the part of learners (e.g. Ferris 2006). Irrespective of whether the CF is direct or indirect, its effectiveness also seems to be enhanced when learners are provided with metalinguistic information concerning the nature of the errors they commit, a finding that was reported, among others, by Bitchener (2008), Bitchener and Knoch (2010), and Sheen (2010b). In addition, somewhat in line with the preferences expressed by some learners, particularly effective may be combining different types and sources of written correction, as is evident in the study conducted by Bitchener et al. (2005), who demonstrated that it was direct feedback complemented with one-on-one conferencing that turned out to be the most beneficial. Attempts have also been made to compare the contribution of corrective feedback and reformulation, and it was found that the former is usually more effective than the latter (e.g. Qi and Lapkin 2001; Sachs and Polio 2007). Even though there is much theoretical justification for reliance upon peer-correction, stemming, for example, from process writing and collaborative learning approaches, as well as Sociocultural Theory and Interaction-based Theories (cf. Liu and Hansen 2002; Hyland and Hyland 2006), the evidence for its usefulness is tenuous. As Hyland and Hyland (2006: 90) write, "[s]tudies have questioned L2 students' ability to offer useful feedback to each other and queried the extent to which students are prepared to use their peers' comments in their revisions", a situation which they account for in terms of students' unfavorable perceptions of peer feedback (e.g. Nelson and Carson 1998) and serious reservations concerning the quality of such correction (e.g. Leki 1990).

The vast bulk of research on written CF has ignored the impact of individual, linguistic and contextual factors, on the effects of the intervention, giving priority instead to determining the value of specific corrective techniques (cf. Ellis 2010). Nonetheless, there is empirical evidence that the effectiveness of correction in the written medium is a function of such *learner-related variables* as motivation (e.g. Goldstein 2006), language aptitude (Sheen 2007), beliefs (Storch and Wigglesworth 2010), as well as the level of proficiency (Ferris and Roberts 2001). As to *linguistic factors*, they have seldom been included as a separate variable in

research on written CF and they have typically been interpreted in terms of the distinction between treatable and untreatable errors (Ferris1999; see Sect. 3 above). It has been found, for example, that learners are much more successful in eliminating the former than the latter, although there are different levels of difficulty within these two categories (Ferris and Roberts 2001), and that direct correction might be more beneficial for untreatable errors while indirect feedback for treatable errors (Ferris 2006). The least is known about the impact of contextual factors, two important exceptions being the research projects undertaken by Bitchener and Knoch (2008), and Given and Schallert (2008). The former investigated the macro level and found that there existed only minor differences in the utility of different CF options between international and migrant students in New Zealand, whereas the latter focused on the micro level, providing evidence that the *rapport between teachers and students* may play a pivotal role when it comes to the actual use of written CF, because mutual trust translates into faithful employment of the suggestions made in revisions, thereby leading to greater improvement.

As mentioned above, most of the research on learner engagement with written CF has focused on the behavioral and cognitive response to the corrective information, although it has to be admitted that the distinction between the two may often be blurred, particularly in cases when learners are requested to discuss and reflect on the direct or indirect feedback they receive on their writing or the reformulations of their initial texts, a task that is an integral part of reformulation studies. This is because the occurrence, nature and outcome of a language-related episode (i.e. a segment of interaction with an explicit focus on linguistic items) can be viewed both in terms of a behavioral response, since a particular issue is raised and dealt with, and a cognitive response, as the ways in which learners interact and go about collaboratively solving the problem is indicative of the level of noticing and awareness of a specific linguistic feature. Moreover, in such cases, the behavioral and cognitive response may merge or at least interact with the *affective response* as well as individual and contextual factors on account of the fact that the depth of processing is likely to vary depending on the attitudes towards the interlocutors, personality and learning styles, or the conditions in which the reflection occurs (cf. Pawlak 2012). Qi and Lapkin (2001), for instance, demonstrated with the help of think-aloud protocols that *substantive noticing*, in which the rationale for particular decisions is articulated, is superior to *perfunctory noticing*, where no justification is provided, because it has a bearing on the quality of the revisions later made by learners, with this finding having been corroborated by the research projects carried out by Sachs and Polio (2007), Brooks and Swain (2009), and Storch and Wigglesworth (2010). As regards the affective response, Storch and Wigglesworth (2010) provided convincing evidence that uptake and retention of CF as well as the ensuing improvement in writing skills are a function of learners' attitudes, beliefs and goals.

5 Future Research on Written Corrective Feedback

As can be seen from the foregoing discussion, the last two decades have witnessed an increase in the number of studies addressing the effects of written corrective feedback on second and foreign language development, which has been the corollary of the changing views on the role of form-focused instruction and, in particular, the contribution of oral error correction. As a result, our knowledge has considerably been extended in such areas as teachers' and learners' perspectives on written feedback, the contribution of specific corrective techniques, and even the ways in which their effects are shaped by mediating variables as well as the presence and nature of learner engagement. Looking at the available empirical evidence, though, it becomes obvious that researchers have barely begun to scratch the surface in some areas and further research is necessary to offer insights into the conditions that have to be met for written error correction to produce tangible learning outcomes in different contexts and situations, thereby providing a basis for clear-cut pedagogical recommendations. In particular, it is necessary to conduct studies that would continue to explore the value of different types of written CF, not only in relation to the distinction between direct and indirect error correction but also various subtypes thereof, also taking into account the different contexts and populations in which they can be provided. Given the scarcity of research in these areas, equally important are research projects that would tap the impact of mediating variables and the role of learner engagement, also paying attention to the intricate interactions between the types of written CF, as well as various constellations of individual, linguistic and contextual factors. It would be interesting to see, for example, how learners representing different characteristics (e.g. age, motivation, aptitude, anxiety, learning style, proficiency) respond to different CF options within the direct and indirect categories, the extent to which the value of such options is affected by linguistic factors (e.g. treatable vs. untreatable errors, level of difficulty in terms of explicit and implicit knowledge), and the likelihood that their use will trigger the desired level of engagement in terms of the behavioral, cognitive and affective response.

Although major strides have been made with respect to the methodology of research on written error correction, further improvement is clearly indispensable in this respect. More precisely, there is a need to involve larger numbers of participants, extend the duration of the instructional treatments, isolate the contribution of separate feedback variables, and devise more innovative ways of examining the impact of individual, linguistic and contextual factors, as well as the nature of learner engagement. It is also advisable to place greater emphasis on exploring the longitudinal contributions of pedagogic interventions, trace learners' progress through developmental stages, and perhaps include outcome measures that would tap both explicit and implicit knowledge, particularly in the long term. Without doubt, there is also a place for *process-product studies* that would connect what transpires in a lesson, individual learners' interactions with feedback or collaborative discussions of the possible revisions, and the impact of different CF

techniques. Of particular interest is also the proposal put forward by Ferris (2010), who argues that L2 writing research and SLA research should be viewed as complimentary rather than mutually exclusive, and thus distinctive features of their design could be combined to provide more valuable insights into the contribution of written CF. This would involve investigating the effects of different written feedback options, first, on learners' ability to revise their initial texts and, second, the impact of such correction and revision on the composition of entirely new pieces of writing. Ferris (2010: 194) writes that "(…) analysis of response, revision and subsequent texts could be roughly compared to an experimental pretest-posttest-delayed posttest design that would thus be both contextualized and longitudinal". What is of particular significance, the adoption of such *blended research designs* would allow researchers to gain a more differentiated and multifaceted perspective on the effects of different types of written error correction, to establish the value of focused or unfocused feedback on various types of errors, and to consider the influence of moderating variables. This does not mean of course, that other research designs should be abandoned, as it is clear that questionnaire, revision, experimental and reformulations studies also have the potential of providing us with important pieces of the puzzle concerning the impact of written corrective feedback on the development of different aspects of second and foreign languages. The more of those pieces fall into place, the easier it will become to offer feasible guidelines for classroom practice.

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Using Model Essays to Create Good Writers

Donald Sargeant

Abstract Teachers need to be able to write academic articles to further their professional development. This chapter demonstrates how in-service teachers in a in-service programme in the Sultanate of Oman were helped to improve their academic writing skills by analysing model essays. This chapter will show the procedure that was used in several language improvement classes for teachers. In these classes, the teachers were given skeleton plans, model essays, analysis sheets for the essays and feedback to help them improve their academic essays. Results on the use of these materials are given for one group of teachers and the findings are discussed and suggestions made for the future.

1 Introduction

The idea of using model essays to improve novice writers own writing abilities and style can be traced back to antiquity according to Smagorinsky (1992). In our own time recognition that the skills needed to be a good writer are acquired from reading is acknowledged by Krashen (1984) who claims that 'The ability to write is hypothesized to be the result of reading' (p. 23). Spack (2001) backs up this view by stating that 'to become better writers, then, students need to become better readers' (p. 101).

The use of model essays to teach writing is not confined to the EFL classroom, but according to Bagheri and Zare (2009) is commonly used by teachers instructing native English speakers in writing classes. This view is supported by Abbuhl (2011) who reports that models are commonly used in both L1 and L2 classes to assist novice writers. At the very least most writing teachers would probably agree that

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learning writers must be given the opportunity to study examples of the genre they are trying to write in and so for this reason Hillocks (1986: 154) states that 'the writer must be familiar with examples of the type and know the parts of the type and their relationships'. Bagheri and Zare (2009) see the use of model essays as an example of the product approach to essay writing which according to Hedge (2000) has its roots in the teaching of rhetorics. Hirvela (2004) quoting Greene (1993: 34) points out that reading plays an important part in the writing class 'because we believe that students can learn about writing through imitating models of well wrought prose'.

The product approach to teaching writing has fallen out of favour and so too has the use of models. Abbuhl (2011) points out that the practice is not without its critics; especially the way they were used in the 1960's when students were encouraged to slavishly imitate the model essays they were given. The main charge against their use, according to writers like Zamel (1983), is that students were generally not informed of the processes involved in their production and that this encouraged mindless imitation, which she links to the influence of audio-lingual methodology which saw writing as a habit-formed skill (Zamel 2001).

Another objection voiced by Hirvela (2004) is that in a second language context 'confusion may result from students juxtaposing their native language schema about written texts against what they are learning from target language models' (p. 128). Today the approach is less to encourage passive imitation but rather to emphasize the importance of studying different genres (Swales 1990). This view on the importance of genre is supported by Crinon and Legros (2002) who claim that it helps the student writer to create a mental model of the genre, while Macbeth (2010) claims that their use can alleviate the apprehension associated with learning to write a new genre. Further support for their application in writing classes is provided by Hyland (2004) who advocates their use for raising the visibility of rhetorical conventions. While academics and teachers may be divided in their opinion of the usefulness of models to teach writing, it would appear that students are more enthusiastic in their support for this approach. A quick search on 'model essays' in Google will come up with thousands of sites, some free and some commercial, where students can find examples of essays in many different genres. Of course, many of these are unfortunately run by unscrupulous people out to make money even if they know that some if not many of these essays will be copied and submitted as the students' own work and this highlights one of the great risks of the use of the 'model essay', which is that it encourages plagiarism.

Despite these dangers, more reputable authors, like Ann Strauch (1997), while following a process approach to writing, warn of the dangers of excluding organizational patterns and believe that instructors must help their students 'by making basic organizational patterns explicit' (p. 8) and this is done by including short models. Reid's (1994) 'The Process of Paragraph Writing' has a similar approach.

An important feature of the use of models in writing classes now is their application in the analysis of texts. According to Bagheri and Zare (2009: 3) by 'analyzing the text of model essays, L2 writers become aware of how particular grammatical features are used in authentic discourse contexts'. Abbuhl (2011: 2)

believes that this analysis fits in with the genre-based approach to writing instruction and that by analysing texts for their 'organizational, lexico-grammatical, and rhetorical features, students are sensitized to the genre's social context'.

In this chapter, I will tell my story about my experience of using model essays on in-service courses with teachers. I will explain how and why I used model essays and the problems I and my colleagues encountered and how I tried to solve these issues and finally, I will give results on my work with the class. I will then discuss the findings and give some ideas about future plans for work in this area.

2 My Story

I have called this section 'My Story', because here I will explain how I came to use model essays with teachers on some of the in-service teacher courses that are taught in the training centre in North Batinah. I am the Regional Teacher and Adviser at the Teacher Training Centre in North Batinah Governate in the Sultanate of Oman. This chapter is based on the teaching of academic writing on a language improvement course for teachers. The materials used on this course were designed and prepared with the help of my colleagues who teach similar courses in the training centre.

2.1 Background to the Study

It all began when the English trainers at the Sohar Training Centre were asked by the Central Training Department in Muscat in 2010 to run language development courses for teachers in the North Batinah region. As part of the courses we were asked to conduct academic writing seminars on four different topics, all of which were connected with the professional life of a teacher. The topics were:

- What makes a good teacher?
- A good language learner. Are you one?
- Managing learners. Is it easy?
- Continuing Professional Development: What can I do to develop my practice?

After we started to teach the seminars we soon realized that we had several problems. First, our teachers freely acknowledged that they did not like writing and we soon discovered that one reason for this was because they had little idea on how to organize an academic essay. Their essays besides from being in most cases organizational disasters were also full of language mistakes. Our first approach had been to follow a process method whereby we first of all gave the teachers the title and then did a brainstorm and asked them to construct a plan in groups and then write a draft which we corrected and returned for them to rewrite. The problem with this approach is that the teachers had in most cases no idea of the genre of an academic essay. It is

true that we were conducting reading seminars on articles from professional journals, but these articles were far longer than what we required from them in these essays and they also were generally based on research findings. The participants constantly asked us to provide them with a model and after some deliberation we decided to do so. As we had no bank of essays on the topics we agreed that we would have to write our own. While reading, as Krashen (1984) points out, is important in preparing writers according to Smagorinsky's (1992) study 'reading models alone is insufficient to improve writing' (p. 173). There was also an additional problem here in that we discovered that many of our teachers have not developed the reading habit and do not read extensively which Eskey and Grabe (1988) see as important because it envelops the reader in the written form of the language, which Krashen (1984) sees as essential to learning the discourse rules for writing. Abbuhl (2011: 2) also provides support for the view that reading models alone is not sufficient and believes the teacher must 'include consciousness-raising activities to draw learners' attention to the target rhetorical features'. Therefore, if we were to use models we decided the participants had to do more than just read them.

When we started the courses we were conscious of some of the dangers of using models, the chief one being the risk of teachers slavishly imitating the essays, which was mentioned by Zamel (2001), Hyland (2004) and Hirvela (2004). One way we tried to minimize this was to follow advice given in an article published on line by Texas A and M University (2008) and use models for all four essays. This did not strictly follow the article's suggestion which was that the students should be offered multiple samples, because we felt we did not have time to either prepare or study more than one example for each essay. However, we believe that by providing them with examples for each essay we were able to reduce the chances of unthinking imitation.

2.2 The Materials

We gradually developed our materials over the three times we have taught the courses. During the first course we developed the skeleton plans, in the second course the model essays and the analysis sheets, and in the final course a feedback sheet for the essays which the participants could use for self-assessment. Examples for all of these for the first essay can be found in the Appendices: Skeleton Plan (Appendix I), Model Essay (Appendix II). Analysis sheet for model essay (Appendix III) and finally the feedback sheet (Appendix IV).

2.3 The Courses

Three years ago, the English Trainers started to teach several English Language Courses for Teachers (ELCT). On these courses, we were supposed to teach the

teachers the language skills and as a part of the course we had to develop the teachers' writing skills. In the course outline it stated that that the participants should write essays on the four different titles mentioned above.

In 2010, all the trainers in our centre found that we faced problems in teaching our students the different aspects of writing like paragraphing, signposting, topic sentences, providing supporting details and using evidence, and referencing.etc. In fact we had to teach them all the basic features used in academic writing. Though we tried to use different materials to explain the writing aspects, their writing still did not improve.

The skeleton plans were first used in the Intermediate Language Course in 2010 and the model essays in the Intermediate Language Course in 2011. The feedback sheets were developed for the Cycle Two course in 2012. The results for both the Intermediate English Language Course in 2011 and the New English Teachers' Course in 2011–2012 were generally very positive with the participants making noticeable improvements over the course periods in the organization of their texts. As we were not intending to do formal research on the topic during the first three courses I did not keep detailed notes on the essays from these courses and so I will describe in some detail results for the Cycle Two course and in particular the changes that I noticed between the first and second drafts of the first essay on 'What makes a good teacher?'

This course began on the 19th of March, 2012 with 15 Cycle Two teachers, 6 males and 9 females, from the Suweiq region. In the second session, I asked the participants to brainstorm their ideas on 'What makes a good teacher?' I then presented them with the skeleton plan (See Appendix I) and asked them to prepare it for the next day. Next they read each other's plans and offered advice. For the next session I asked them to write the essay as a first draft, which I then collected. After examining the essays I gathered the following information about them, which can be seen in Fig. 1.

Figure 1 shows that the majority of these participants had already grasped the basic principle of essay organization in that 12 of the 14 divided their essays into paragraphs. Unfortunately, in two cases the essays were largely plagiarised. All had introductions, and all but one a conclusion. In the case of the two plagiarised essays, the introductions were the only part that was in their own words. In their

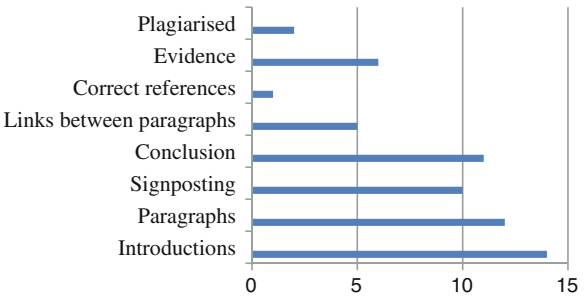

Fig. 1 'What makes a good teacher?' First draft

introductions, 10 signposted what they would do in the essay, but only 6 of these reflected that signposting in their paragraphs. However, in their conclusions only 8 gave their own opinions, while the remaining three just summarised what they had already said. It is in the area of providing evidence to support their arguments that the essays were weakest. As can be seen from the table only six had any evidence to support their views and of these 6 only three had evidence from the literature. Of the three who had referred to the literature only one had correct references.

After I returned the essays in the fourth session I handed out the model essay on 'What makes a good teacher?' (See Appendix II) and the sheet for analysing the essay (See Appendix III). The participants then read the essays and worked on the analysis, after which we discussed it in a plenary session. In their groups, they then discussed how they could improve their essays and they were then asked to redraft their own essays for the next session, which was to be held the following week, so they had over a week to prepare.

In the next session I collected the essays which I examined and made notes on the feedback sheet, which I used for the first time (See Appendix IV). The results of the second draft are shown in Fig. 2.

As can be seen from Fig. 2, there is a general improvement in those who resubmitted their essays. Unfortunately, four teachers were absent that day and never handed in their redrafted essays. All of the teachers now signposted what they would do in their essays in the introduction and more important all of them reflected this in their paragraphs. This shows a great improvement in organization. In addition the coherence of the essays was greatly improved by all having links between the paragraphs, though in some cases these were merely done by ordinal numbers, but most had some link between the last sentence of the previous paragraph and the first sentence of the next paragraph. For example teacher 4's second paragraph was on 'knowledge of the subject' and the third paragraph began with 'Good knowledge is not enough but the teacher must also …'.

Though most of the teachers had still not grasped how to do correct referencing, nine of them did use evidence to support their arguments, and seven of these used evidence from literature as well as from their own experience. All of the teachers gave their own opinions in the final concluding paragraph rather than just summarising what they had already written about. A completed example of the feedback given to the participants can be found in Appendix V.

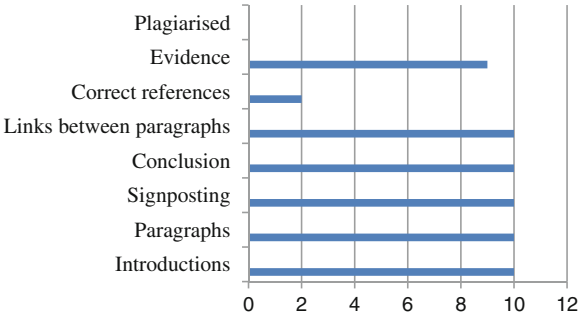

Fig. 2 'What makes a good teacher?' Second Draft

3 Discussion

I believe that my story clearly shows that the use of the model essays had a positive effect on the teachers' own writing. The story shows that participants on the course made considerable improvements in the organization of their essays. In particular they all seemed to have been able to write in paragraphs at the end and these paragraphs were themselves more internally organized around one major theme. In addition, the teachers improved their signposting of the essays in their introductory paragraphs and they then reflected this signposting in their subsequent paragraphs. Evidence of greater coherence in the essays is provided by the improved ability to link paragraphs.

However, the participants still had some problems especially with providing evidence to support their views. While, most were able in redrafted essays to provide evidence from experience, few gave any evidence from literature, and those who did supply literature references were unable to do this correctly. Perhaps this is another issue and all the trainers believe that this requires extra work on referencing which was not done on these courses. Another reason for this lack of references from literature may have been that the teachers did not have sufficient resources and we need to look into how we can help them find sources to back up their ideas. This could be done by identifying a collection of suitable books and journals and identifying key words for internet searches.

In this chapter nothing has been said regarding the language accuracy of the essays and the research merely concentrated on organizational features. However, there is evidence, according to Abbuhl (2011: 2) to show that novice writers also benefit in their 'discrete elements of language' by using models. We did not collect data on this, but it is worth noting that improved organization makes the identification of language mistakes easier.

4 Future Plans

The discussion has identified where we should go next with this research. In our next courses where the trainers will teach academic writing we need to adopt a far more rigorous approach to the collection of data. We also need to examine whether the use of the models has any impact on language accuracy as well as organization. We should also collect data on the participants' own views on the effectiveness of the models on their writing.

A.1 Appendix I

A.1.1 What Makes a Good Teacher?

Make sure that you divide your essay into _____.

First Paragraph: _____
Make sure you introduce the topic in the _____ sentence. Be specific.
Make sure you signpost what you are going to say in the rest of the essay. That is say what aspects of a teacher you are going to write about.
Aspects you will write about (Choose about 4):

Second Paragraph: What aspect of a good teacher will you write about here:

_____
What evidence will you use to support your argument? (Evidence can be from experience or literature)

Third Paragraph: What aspect of a good teacher will you write about here:

_____
What evidence will you use to support your argument? (Evidence can be from experience or literature)

Fourth Paragraph: What aspect of a good teacher will you write about here:

_____
What evidence will you use to support your argument? (Evidence can be from experience or literature)

Fifth Paragraph: What aspect of a good teacher will you write about here:

_____
What evidence will you use to support your argument? (Evidence can be from experience or literature)

Fifth Paragraph: _____
Sum up your argument. Try to relate it to the first paragraph.

References: If you have mentioned any books you MUST list them in your references.

Author's Surname, Initial. (Date of publication). Title of Book. Place of Publication Publisher.
Nunan, D. (2000) ***Language Teaching Methodology***. Harlow: Longman.

A.2 Appendix II

A.2.1 What Makes a Good Teacher?

When I think of the qualities that make a good teacher, I remember Miss Williams, my Grade 6 teacher. Though tiny, most of boys in the all male class towered above her; Miss Williams kept control over us by the force of her personality and her well planned, interesting and creative lessons. Before child centred learning became a fashionable buzz word, Miss Williams practised it and her classroom management skills ensured that we did pair work and group work as well as well paced more traditional whole class activities. Most important of all I think each boy felt that Miss Williams cared that we learnt. Each of these qualities: a caring personality, good management skills, focusing on the learner, and the use of a variety of techniques are the hallmarks of a good teacher. I will examine each one in more detail.

First, teachers need to care for their pupils. Miss Williams, like all good teachers, knew our names quickly and in this way showed that she cared for us. Knowing the names also helped her to keep control of the class. Vale and Feunteun (1995) point out that the caring teacher needs to play the role of parent, teacher, friend, motivator, co-ordinator and organizer as well as being good at his or her subject. The good caring teacher will know his or her pupils and so will be more able to meet any special needs any pupil may have and plan the lessons so that he or she meets these needs.

That is one reason why planning lessons in advance is so important. Scrivener (2005) believes that thinking about your lessons is the most important stage of this, so that you are clear about what your aims are and can plan the lesson in logical steps. Vale and Feunton (1995) agree and point out that it is important to have a variety of teaching techniques so that you can provide different learning styles for your pupils, because not all learning styles will suit all pupils. Miss Williams certainly did that for us. I remember her bringing in realia, getting us to do role plays and drama activities and using songs and poetry. She also took us on trips outside the school.

Today, from my own experience as a teacher, I see that many teachers prefer a more child centred approach to teaching. This gives students many more opportunities to work together and in TEFL to practice the language with each other. Teachers who use pair work and group work give students, as Nunan (2000) points out, more time to use the target language. Nunan also believes that such activities give students an opportunity to collaborate with each other and this improves the classroom atmosphere.

To control different types of classroom interaction the teacher must have good management skills. The good teacher will give clear instructions and will stage these and make sure that students can repeat them before starting a task. Ur (1991) states that research on students' opinions about teachers shows that 'learners see the ability to explain things well as one of the most important qualities of a good teacher' (16). Good classroom management in my experience is linked to good planning and a good plan will always have a variety of activities and classroom interaction patterns.

It is often said that 'good teachers are born not made', but this is really a myth for the good teacher needs to learn the skills of planning, classroom management and different teaching techniques. Enthusiasm for the job is important, but without careful preparation and thinking about the aims of the lesson and how to involve the students and assist their learning it is doubtful that any teacher will past the test of 'being a good teacher' and be remembered by her pupils as a good teacher as Miss Williams is remembered by me fifty years on as my model of a good teacher.

A.3 Appendix III

A.3.1 What Makes a Good Teacher?

In your groups compare what you found out about the model essay then make brief notes.

Paragraph One. How does the writer introduce the topic?

How does he signpost the rest of the essay?

Paragraph 2. What does the writer discuss here?

What evidence does he give to support his argument?

Paragraph 3. What aspect of a good teacher does the writer discuss here?

How does the writer link this paragraph with the last one?
What evidence does he give to support his argument?

Paragraph 4. What aspect of the good teacher does the writer talk about here?

Where does his evidence come from?

Paragraph 5. What aspect of the good teacher does the writer mention here?

What examples does he give?

Paragraph 6. How does the writer conclude his essay?

How does the writer link the introduction and the conclusion?
References: Are these correctly done?

A.4 Appendix IV

A.4.1 What Makes a Good Teacher?

Name:
Analysis of essay.

Paragraph One. How you introduced the topic:

How you signposted the rest of the essay?

Paragraph 2. Your theme here is

Your evidence to support your argument.

Paragraph 3. Your theme here is

Your link to the last paragraph:
Your evidence to support your argument.

Paragraph 4. Your theme here is:

Your link to the last paragraph:
Your evidence to support your argument:

Paragraph 5. Your theme here is:

Your link to the last paragraph:
Your evidence to support your argument:

Paragraph 6. Your theme here is:

Your link to the last paragraph or to other paragraphs if it is the conclusion:
References: Are these correctly done?

A.5 Appendix V

A.5.1 What Makes a Good Teacher?

Name: Teacher 3.
Analysis of essay.

Paragraph One. How you introduced the topic: You state that you will give your own views about what makes a good teacher and will take evidence from both your experience and literature.

How you signposted the rest of the essay? You say that you will discuss only four reasons and will give subtitles to them. You do not say what they will be.

Paragraph 2. Your theme here is: Heading: A good teacher. Really part of the introduction as you say you will discuss four reasons and say why you chose them because they are the ones that make a good relationship between teacher and student.

Your evidence to support your argument. Not really needed here. Just your opinion.

Paragraph 3. Your theme here is The teacher building his own activities. (A heading)

Your link to the last paragraph: No real link.

Your evidence to support your argument. You give examples from your own experience and link this to the writings of Halliwel.

Paragraph 4. Your theme here is: A good teacher designs activities based on learners needs and abilities.

Your link to the last paragraph: Your main link is the use of first, second etc.

Your evidence to support your argument: Once again you have used your own experience as a teacher of 16 years and have supported this with views from Baker and Halliwell. You need to comment more on literature references.

Paragraph 5. Your theme here is: Experience more important than qualifications.

Your link to the last paragraph: The link is the use of ordinal numbers.

Your evidence to support your argument: Strong personal views backed up with quotation from Baker.

Paragraph 6. Your theme here is: Good atmosphere in the classroom.

Your link to the last paragraph: You use the ordinal and though you don't explicitly state it there is a link to your second paragraph because atmosphere is so important. Once again backed up by Baker.

Paragraph 7. Conclusion. Here you very strongly express your own views and say what can interfere with a good teacher.

Link: To sum up.

References: Are these correctly done? Yes. This is well done apart from According to linked to another verb.

General Comment: This shows greater organization than the first draft.

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Demistyfying Academic Writing

Łukasz Salski

Abstract In this chapter I debate the nature of writing, and specifically academic writing. Relying on the concepts of knowledge telling and knowledge transforming, invention, and creativity, I argue that academic writing should be treated as all other forms of writing. Since any writing happens in a process, requires attention to audience, content, and form, teaching writing for the academe should focus on student writers, their interests, needs, and capacities. When academic writing is taught in a foreign language, instruction may tend to focus on formal aspects of language. Whenever this is the case, writing practice easily becomes decontextualized, which, as a consequence, may lead to resentment on the part of novice writers. In such situations, it is particularly important that the requirements of formal register and academic genres, rather than as limitations, are seen and taught as means of facilitating communication within the academic discourse community. I therefore conclude that the writing instructor's role is that of an experienced guide who establishes a learning environment in which his advice and feedback help the novice develop new writing, language, and critical thinking skills. In this way, even foreign language students can develop not only their formal knowledge of the target language and academic genres, but also skills and strategies of expressing themselves in writing.

1 Introduction

Judging by the number of divisions made in all sorts of academic and didactic publications, one could assume that second language writers hardly ever engage in first language writing, let alone foreign language writing. Or that the writing process has little to do with the writing product. Likewise, attention paid

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specifically to Academic Writing could suggest that writing in the academe is something completely different from any other form of written communication. As a writing instructor (or should I say EFL academic writing instructor?) I have been wondering about the nature of the subject I teach. Does teaching people to write academic texts mean insisting that they use "advanced grammar" or is it enough if they use "correct grammar"? Should they use "elaborate vocabulary" or will "precise vocabulary" do? (As long as it is spelled correctly…) And what about the reader? Should I, as so many authors suggest, make my students respect their audience, which—by the way—more often than not is purely hypothetical, as their texts get read only by myself and a couple of classmates? Or maybe I should follow Elbow's (2000) advice and just let them express themselves… Finally, is it fair to expect my students to produce perfect papers, or should my writing practice aim first of all at developing themselves as writers? This chapter is an attempt to answer some of these important questions. In my answers, I refer to the reading I have done in the field, but first of all to my writing experiences, the most significant of which was writing my Ph.D. dissertation. Thanks to my guide in that process, Professor Jan Majer, I learned and understood a lot, both as an academic researching the field of foreign language writing, and as a foreign language writer myself.

2 What is Writing

There have been many attempts to explain the nature of writing by comparing it to other experiences. Some authors see writing mainly as an act of creation (building, carving), for others it more like discovery (exploring, mining), yet others stress the waiting inherent to writing, as in surfing or hunting (Nordquist 2012). Probably the best known metaphor used to explain what writing is is the one which Elbow (1998) made the pivot organizing his seminal book *Writing without Teachers*—cooking. This one is really tempting because it involves both the process and the product as well as the social role food plays in our lives. Yet, to me writing is like traveling.

To set off on any journey we need a stimulus that not only spurs us to act, but also determines which direction we go and how fast we wish to reach our destination. Depending on that drive, we make other choices, related to who travels with us, what we want to take with us, or what means of transport to use. Then comes the travel itself, with all the uncertainty and unexpected events it brings about until we reach our destination. Finally, travel leads to change in people, which is one of the reasons why it has mesmerized writers for centuries. Similarly, writing starts with motivation and preparation of what needs to be packed in the text. Then, the writing process, like travel, involves choices, decisions, strategies, and leads to a destination—the product. Inevitably, just like travel changes the traveler, writing develops the writer. Our travels vary, depending on the distance, aim, company; likewise, we write differently for different audiences and purposes.

Granted, writing this text is different from writing an email message to a friend, or writing a poem for an unspecified readership, but is it so different that it should be deemed a totally different activity? Are these experiences really farther apart than going to a conference on my own is from going on vacation with my family? Is it all not merely a matter of relativity?

3 Invention

All writers engage in knowledge telling and knowledge transforming. Scardamalia and Bereiter (1987) see the former as consisting in generating text content. It leads to a text which is created in a natural flow, with little reorganization, and—as a consequence—control over the text content may be absent from the writing process. Such process of text creation is typical of writers who have a limited grasp of concepts of audience and purpose, which are basic to rhetoric. This spontaneous, or naïve, process of text creation is contrasted with knowledge transforming, in which a more experienced writer solves problems and communicates with the reader in a more conscious way. Clearly, it would be an oversimplification to assume that these two writing models are mutually exclusive; rather, they constitute two extremes of one phenomenon, and to some extent most, if not all, writers both tell and transform knowledge. What is characteristic of different kinds of writing is the unique balance between the two. While some writers tend to, or can, respond to their readers' expectations better than others, this also derives from the nature of writing they are involved in.

It seems evident that good academic writing relies on problem solving rather than spontaneity: it should abide by conventions familiar to the writer and the reader, and rely on schemata shared by both. On the other hand, this does not mean that scholarly writing is devoid of invention. According to Lauer (2004: 22) the rhetorical purposes of invention in ancient Greece included "initiating discourse with questions, issues, or contradictions, creating knowledge, reaching probable judgment, finding argument to support existing theses, communicating truths or supporting persuasive propositions." All these purposes are valid in modern writing, and even though, just like ancient rhetoric, academic writing is governed by conventions, the academic audience, like the gathering in the agora, expects to be enticed in the text by the author's skills of invention.

4 Creativity

Is *creative writing* the only kind of writing which allows creativity? McKee (1967) asserted that "all good writing is creative," and—generally—it is hard not to agree with him. As Adams-Tukiendorf (2011) observes, creativity has been viewed as a capacity to identify a problem, to produce and evaluate possible solutions, and finally to select one of them and verify its effectiveness. Understood in this way,

the concept of creativity applies to formal academic writing in no lesser degree than to poetry writing, and no-one could deny that the papers collected in this volume are creative in this way. Indeed, creativity approaches the notion of knowledge transforming. What good would any text do, whether a poem or a scholarly article, if it did not offer a new outlook on the topic it tackles? Again, it is a matter of balance, and doubtlessly, some texts require more creativity on the part of the writer, and some writers may be more creative by nature. There are chances that, thanks to their involvement in divergent thinking and knowledge transforming, readers will appreciate their texts as more creative and inventive.

5 Writing Process

All writing emerges in a process. Each writing process is different and its complexity depends on the nature of the text. Here, it matters how elaborate the text is, how much effort its creation requires from the writer. Even though different models of writing process have been proposed, which differ in the number of stages and their mutual relations (c.f. Murray 1972; Flower and Hayes 1981; White and Arndt 1991; Adams-Tukiendorf and Rydzak 2003), it seems that the simplest and the most universal one is a modified version of the original Murray model, which involves three general stages: pre-writing, writing, and re-writing, but also allows for their recursion, e.g. acknowledges the fact that a writer may not dutifully proceed from pre-writing to writing and then to re-writing, but sometimes may move in the opposite direction or even be simultaneously engaged in a number of activities assigned to different stages of the process.

There are no reasons to assume that academic texts are, or should be, born in any peculiar processes, varying in any significant way from the processes other, e.g. so-called creative, writers are involved in—the three-part model is easily applicable to all writing processes. The pre-writing stage may involve brainstorming ideas for a five-paragraph essay, freewriting for a short story, or analyzing data for a research paper. Of course, the "writing proper" stage will comprise making choices of precise vocabulary for a descriptive passage or using appropriate reporting verbs in a literature review. Respectively, revising may mean perfecting rhymes, or checking bibliographical entries. The differences result from the peculiarities of genres, registers, and strategies, but all writing processes can be equally demanding on the part of the writer, and may equally contribute to his development.

From the explanation provided by Scardamalia and Bereiter (1987), it can be seen that knowledge telling constitutes a simpler process in which the text is created in a smooth flow, while knowledge transforming requires more conscious interaction between the writer and the text, or in fact the audience. Knowledge-telling processes are, then, related to invention and creativity, and they can be characteristic of academic as well as of any other writing activity, the only limitation seems to be within the writer: his or her experience, involvement, and dedication to appealing to the reader.

6 Writer in (Con)text

Ivanič (1998), modifying Fairclough's (1989) social model of communication, explains the interrelations between language and the context in which it is produced. She assumes existence of three layers: first, text; second, processes of production and interpretation; and, finally, context, or social conditions of production and interpretation. Her rendition of the model stresses clearly how language, through its production and interpretation, reflects social reality of the context in which it is used. Ivanič further extends Fairlough's model to literacy and argues that written language, not less than speaking, depends on the social context in which it appears. A text is produced and interpreted in the context of interpersonal relations, then in the second layer, in *practices* and *discourse types*, and finally, in the third layer, it arises from *values*, *beliefs*, *interests* and *power relations*. It can be easily concluded that the main area where different kinds of writing vary is the second level of practices and discourse types.

For Ivanič, this model of language use, in which text is immersed in and dependent on social interactions, is the starting point for her discussion of identity in academic writing. Since every writer's identity is created within the discourse community he or she is part of, it is clear that academic writers are not only expected to abide by the language, genre, and social norms, but also, in spite of these limitations, there is scope for them to develop their unique style and personality, by which they contribute to the growth of the entire community and the field.

7 Academic Writing

A definition of academic writing is easy neither to find nor to formulate. Nordquist (2013) approaches the task from a textual perspective, and sees academic writing as

> [t]he forms of expository and argumentative prose used by university students and researchers to convey a body of information about a particular subject. Generally, academic writing is expected to be precise, semi-formal, impersonal, and objective.

This perspective characterizes academic writing through the prism of genres typically employed by the academic community. On the other hand, the word *writing* can also be read as referring to human activity, and in this sense

> the best academic writing has one underlying feature: it is deeply engaged in some way with other people's views. Too often, however, academic writing is taught as a process of saying 'true' or 'smart' things in a vacuum, as if it were possible to argue effectively without being in conversation with someone else. (Graff and Birkenstein 2007: 3)

However, it has to be admitted that academic discourse community does not only say "semi-formal, impersonal, and objective" things "in a vacuum"; its members engage in professional exchanges and discussions, often quite animated,

and sometimes even humorous and self-ironic (cf. publications on writer's block by Upper (1974) and Didden et al. (2007) in *Journal of Applied Behavior Analysis*).

The above quotes use *academic writing* as a term denoting either the writing product, governed by the norms existing in the academe, or the writing process, a way of communicating with other members of academic discourse community. This duality may have consequences in the approach to the teaching of writing. Instructors who see their role mainly in increasing their students knowledge of the language forms appropriate in the academic context may tend to employ the product or genre approaches to writing, whereas those stressing the communicative nature of *academic writing* are more likely to take a social constructionist stance.

The latter approach creates conditions for the development of the writer. Rather than imposing appropriate, but decontextualized, lexical and rhetorical forms, it allows "academic acculturation" of the student in the process of learning, and, in fact, in the process of writing.

Social construction of writer identity is only possible in interaction, regardless of the context or the type of writing involved. Therefore, effective teaching of academic writing must involve, like in developing any other kind of writing (in fact, like in any communicative classroom), practice immersed in linguistic interaction. This involves, first of all, information exchange in specific social contexts. Accurate use of language forms and following genre norms are important elements of good writing, especially of academic writing, but they are not ultimate goals for writing instructors, as they do not suffice to represent the writer in text. Additionally, as Hyland and Hyland (2006: 206) observe, the teacher's feedback has the function of "guiding the learner through the *zone of proximal development*."

8 Foreign Language Writing

Learning academic writing in a foreign language adds another layer of difficulty which student writers face—as often happens, with their limited writing experience, they are being simultaneously acculturated into a completely unfamiliar discourse community and into a foreign language speech community. This doubles the difficulty, and makes students pay more attention—whether consciously or not—to formal aspects of language (Piotrowski 2008). In such a situation the content of a paper may be seen as being of lesser importance, since learners are often used to being assessed on formal accuracy of their texts (Salski 2012).

In the special, and exceptionally difficult, case of academic writing instruction being combined with foreign language development, it seems particularly important that special attention should be paid to the content of the course and of the individual assignments. Such instruction must pertain to student writers' needs and interests, and evaluation must reflect how successful student writers have been at communicating with their readers (of course, abiding by the norms accepted in the discourse community). Failure to acknowledge the communicative aspect of

academic writing, or any kind of writing, equals ignoring the student as a person, together with the need to initiate her to the academic (discourse) community. Feedback in teaching writing must be directed at the learner as a person, not at the text (Hyland and Hyland 2006); needless to say, such feedback, referring both to form and to content, provides the students not just with evaluation of her (linguistic) performance, but also with a reader's reaction to the text which she has created.

9 Student Expectations

A discussion of what teaching writing involves cannot be complete without taking student perspective into account. This is particularly valid since my basic argument is that academic writing instruction should not be seen as setting limits to student writers' creativity, invention, or personality, but exploring new opportunities for communication between a novice and the professional community she is entering. It is important, then, to look into the expectations that the novice may have of the new learning experience.

It would be a mistake to assume that students have little expectations regarding a writing class, even though their experience in or awareness of writing may be limited. In an informal survey I asked a group of first year students to comment on their expectations about the writing class they were beginning. The responses I got helped me understand a lot about my students and what my class should give them. One of them wrote:

> To be honest I expect a lot. I hope I will be able to develop my writing skills and creative thinking. Imagination and crossing lines play a big role in my life. I expect rules and schemes that are compulsory in many kinds of writing, but I'm not going to deny that I'm more of a free-style writer. What comes first for me is expressing myself, what I think, my inner thoughts which I can't express in a different way. I deeply believe that my composition class will help me find a new approach to more informative writing because it's obvious that it is really important to write fluently about everything in many ways.

It is amazing how easily the student captures the delicate balance between invention and self-expression on the one hand, and communication and genre requirements on the other. She appreciates writing as a way of voicing her ideas and hopes to maintain its personal and creative character. At the same time, she wants to make her writing more informative, which she seems to understand as easily appealing to different audiences. Simultaneously, she is aware of the context-specific principles and expectations that govern written communication. In this particular case, instruction insensitive to the student writer's individuality, limiting *academic writing* to a set of rules that have to be followed within specific genres, could prove discouraging and, as a result, counterproductive.

10 Teaching Implications

Unless we treat writing merely as a tool of self-reflection, self-expression without intention to address a reader, we need to acknowledge the fact that, just like speaking, it is a means of interaction. Academic writing, then, cannot be limited to interaction with sources, but has to be understood—just like other types of writing—as an intricate interrelation between text and context, production and interpretation, the writer and the audience. Teaching writing should, than, not aim merely at instilling scholarly standards, but rather at socializing students into academic discourse community.

The role of a writing instructor should be seen, in the social-constructivist sense, as that of a guide who is more experienced in the field and more proficient in academic writing skills. Such approach allows novice writers to develop, rather than to simply internalize new knowledge and skills. In this way novice writers develop genre competence and appropriate strategies, adapting to the norms functioning in the discourse community, within meaningful reader-writer interaction and without giving up their individuality, or need for self-expression.

Learning academic writing means development in two related areas. First of all, it should be understood as developing writing skills, strategies of text production and revision, as well as engaging in communication in and about writing; on the other hand, linguistic requirements are an important aspect of learning to write for the academic audience. This has been clarified by Leki:

> The novice writer needs instruction on the process that writers go through in order to produce texts: a process of exploration and generation of ideas on paper; of seeking out appropriate feedback; and of reworking and revising the presentation of these ideas. The novice writer also needs to learn how to meet the demands of the academy by attention to form, format, accuracy, and correctness. (Leki 2002: 3)

To prepare their students for these expectations, academic writing instructors must remember that they are introducing learners to a new culture. On the one hand, such approach is more complex than teaching new genres and appropriate language forms; on the other, it cannot ignore the role of the student writer: both as the student (providing her with meaningful and relevant practice), and as a writer (insisting that she claims the authorship of the texts she writes).

11 Conclusion

Whether we take into account the processes involved in texts construction, or how a writer becomes and functions as a member of a discourse community, writing in the academe is—in broad terms—a kind of travel. With very specific destinations and with quite demanding travel companions, it requires careful preparation and possibly unique strategies, but in fact, so do other trips. Like travelers, writers are

adventurous and inquisitive by nature, so teaching writing should be about showing students how to benefit from the discoveries and encounters inherent to writing, and how enriching an experience it can be. Instruction which stresses limitations, instead of opening new horizons, will not inspire students, especially those who apart from academic writing are also learning a foreign language. I wish that all those who think that being an academic contradicts being a writer would one day follow Elbow (2000: 382) saying, "damn it, I want my first year students to be saying in their writing, 'Listen to me, I have something to tell you.'"

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Core Concerns: Cultural Representation in English Language Teaching (ELT) Coursebooks

Nicolas Robert Hurst

Abstract Many learners of English view what they are doing as a means to an end: that end is to gain an advantage in our post-modern world, subject to the powerful influence of 'globalisation'. This advantage, this reward, is a result of their efforts to embrace a new language. The most frequently employed tool in any L2 teaching/learning process is a coursebook. It lies at the heart of many aspects of ELT planning and delivery and is a product of a huge, worldwide industry. Given the historical association of the English language with its various 'mother tongue' nation states it seems relevant to ask: just what does a learner receive when s/he buys an ELT coursebook? Along with the English language comes much, much more: explicit and implicit cultural content. Indeed, in certain L2 learning contexts (for example, Portugal) specific reference is made in the national programmes to the learning of language *and* culture. ELT professionals have exercised themselves greatly since the 1970s in re-defining what they understand the concept of learning a language to be, especially since the advent of the 'Communicative Approach'. But much less has been said about they understand the concept of culture learning to be. This paper is a modest attempt to redress that imbalance.

It is indisputable that anyone in the business of producing materials for the teaching of the English language must embrace some conception of the symbiotic relationship that exists between language and culture, as Kramsch[1] states:

> Culture in language learning is not an expendable fifth skill, tacked on, so to speak, to the teaching of speaking, listening, reading, and writing. It is always in the background, right from day one, ready to unsettle the good language learners when they expect it least,

[1] In "Language and Culture" (1998), Kramsch discusses the connection between language and culture in great depth according to an extensive range of linguistic criteria. Further more recent books by the same author have focused more on intercuturality.

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> making evident the limitations of their hard-won communicative competence, challenging their ability to make sense of the world around them. (1993: 1)

What can be derived from this statement is that, outside the classroom, the real world demands that language users are in some way culturally competent to an equal degree that they are linguistically competent and perhaps that one (language) cannot exist without the other (culture) and that this reality should therefore be mirrored in language teaching materials produced for the classroom context. It could be said that "… foreign language learning is foreign culture learning… What is debatable, though, is what is meant by the term 'culture' and how the latter is integrated into language learning and teaching." (Thanasoulas 2001: intro.) Thus, there exists a general consensus within the English Language Teaching (ELT) fraternity that teaching culture is an important element to consider, but what that culture consists of and how to include this in the teaching-learning process is less well defined.

Indeed, since the mid-1960s and especially in the 1970s many writers have sought to include a socio-cultural perspective into their definitions of language knowledge. More specifically, the notion of communicative competence, popularised by Hymes (1967, 1972) described language use beyond the more narrow confines of a Chomskian[2] approach which sees individual language users as having some kind of mental blueprint which enables them to process and generate language, using innate, implicit knowledge of principles, conditions and rules of their language system.

The ethnographic research data cited by Hymes focussed on language in use: language in the world rather than language in the mind and as such led to a definition of communicative competence that involves language, people, context and culture:

> … both the knowledge and the ability that individuals need to understand and use linguistic resources in ways that are structurally well formed, socially and contextually appropriate, and culturally feasible in communicative contexts constitutive of different groups and communities of which the individuals are members. (Kelly Hall 2002: 105)

Since the initial model (with its components of grammatical, sociolinguistic and strategic knowledge) proposed by Hymes, many developments and additions have occurred in the field of applied linguistics and curriculum design which have been reflected in the materials produced for language teaching.[3]

Celce-Murcia et al. (1995) propose a model of communicative competence with five different inter-related areas of competence: linguistic, sociocultural, strategic, discourse and actional. At the core is discourse competence, which includes both elements of linguistic and pragmatic (actional) knowledge and the ability to use these

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[2] Since the late 1950s (with "Syntactic Structures" in 1957) and 1960s (a series of published works), Chomsky's ideas concerning the innate capacity of all children to acquire language and the infinite capacity humans have to create language (through Transformational Grammar) have become highly influential in the theorizing of language teaching practices.

[3] Tseng (2002: 11–12) describes these developments succinctly: "From a sociolinguistic perspective, competence in language use is determined not only by the ability to use language with grammatical accuracy, but also to use language appropriate to particular contexts. Thus, successful language learning requires users to know the culture that underlies the language."

resources in both oral and written contexts, as well as knowledge of the socio-cultural norms, conventions and expectations involved in language as a communicative activity, i.e. as social behaviour. The inclusion of a top-down influence of socio-cultural knowledge and abilities is crucial. This model (and its subsequent revision in 2008) implies that successful communication must take into account the participants (their age, gender, social status and distance, their relations of power and affect), the existence of stylistic conventions related to genres, politeness strategies and registers and also background information related to the target language group, major language varieties and cross cultural awareness (1995: 23–24). When these insights are related directly to the topic of materials development for language teaching, the importance of the role of culture as content can be clearly identified:

> General knowledge of the literature and arts that are integral to the target culture should be part of language instruction as should basic knowledge of the history and geography associated with the target language community. The social structure of the culture should also be covered (e.g. family, kinship relations, child rearing, courtship and marriage, gender roles) especially if the target culture differs in important ways from the learner's culture. Political and educational systems should be introduced as should major religion(s) and holidays, celebrations and important customs. (Celce-Murcia 2007: 51)

Here then is a clear description of the kind of cultural content that language teaching should embrace as a means to facilitate the acquisition of communicative competence: content which would logically be reflected in the teaching materials and/or coursebooks designed to facilitate the L2 teaching-learning process.

Language and culture are social phenomena which are shared by all humanity and lie at the centre of our social life; as Risager (2006: 4) has stated "human culture always includes language, and human language cannot be conceived without culture. Linguistic practice is always embedded in some cultural context or other". Culture is a social context in which people live out their lives in the real world. From the point of view of language teaching any interest in the culture (and the language) is not derived from a desire to understand these phenomena as mental processes or abstract structures but rather to include an anthropological perspective within our understanding: culture is a "historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic forms by means of which men communicate, perpetuate, and develop their knowledge about and their attitudes toward life" (Geertz 1973: 89). The human and social aspects of the interrelatedness of language, culture and life can be equated to a highly complex network of significance that is real and meaningful: "Believing, with Max Weber, that man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretative in search of meaning." (idem: 5) Geertz, following Wittgenstein's stance on language,[4] believes that culture is not something

[4] Wittgenstein was concerned in his later work (Philosophical Investigations 1953) with "ordinary language" which he defined as a series of "language games" and how within this context the meaning of words is derived through their public use: the words are moves in a game and grammar is the rules of the game.

that occurs in the heads of humans; "Culture is public, because meaning is" (idem: 12).

English language learners across all possible learning contexts are being asked to deal with other people's meanings (cultural knowledge), they are participants in a diffusive process. Hannerz (1992) argues that this is social distribution where culture exists both at an internalised locus (ideas and modes of thought) and an externalised locus (different forms and ways in which meaning may be accessed and made public). In addition, it is true to say that knowledge or generating meaning is "constructed as a result of a transaction between an individual's conception of the world (individual culture) and the world outside that individual" (Tseng 2002: 11). Participation and diffusion are key words here. Our contemporary era of globalisation implies the need to understand how cultures may spread across languages (and vice versa: how languages may spread across cultures) and what changes this cultural complexity may provoke in the way individuals structure their personality and cognition.

Cognition can be described by largely the same characteristics throughout humanity while the symbols that people use to communicate are different. Symbols are not to be studied to gain access to mental processes, but as formations of social phenomena. These insights from the field of Anthropology find an echo in earlier work associated with the Centre for Contemporary Cultural Studies at Birmingham. In a clear break from any notion of the pre-eminence of 'high culture', Raymond Williams states culture is "a description of a particular way of life which expresses certain meanings and values, not only in art and learning, but in institutions and ordinary behaviour" (1961: 61). Social behaviour is conditioned by culture and language and it is both an agent of this dynamic and a component of it at the same time. In essence, culture controls and guides how the members of a social unit behave and provides the means how to make sense of the other members' (and outsiders') behaviour (including language). Language is construed as a vital socio-cultural practice.[5]

More recently, Bourdieu emphasized the importance of language not as an autonomous construct but as a system determined by various socio-political processes. For him, a language exists as a linguistic habitus (1990: 52), as a set of practices that imply not only a particular system of words and grammatical rules, but also an often forgotten or hidden struggle over the symbolic power of a particular way of communicating, with particular systems of classification, address and reference forms, specialized lexicons, and metaphors for politics, medicine, and ethics. Bourdieu also coined the term 'cultural capital' as part of his explanation for educational under-achievement. Parents and the family, schools and other institutions can impart knowledge and attitudes which make success more likely: this cultural capital can include ways of behaving or communicating

[5] Within this approach to 'Cultural Studies' an overriding concern is to examine the practices of everyday life and their meanings, how these meanings relate to objects and behaviours and particularly to explain relationships of power: subordination and resistance, production and consumption.

effectively (embodied), 'high culture' objects which are owned and understood (objectified) or qualifications obtained (institutionalized). In this context, adding a second linguistic and cultural code through the learning of a foreign language could provide these learners with enhanced "cultural capital" by providing them with a wider range of resources, both material and symbolic (Pierce 1995).[6] This may change both their expectations in life, their perspectives of life and their prospects in life.

The importance of the interplay between socio-cultural factors and cognitive factors in learning contexts is also at the heart of the work of Vygotsky (1978), more specifically in his concept of the zone of proximal development (ZPD) wherein the learner is not fully independent and requires non-intrusive assistance or 'scaffolding' to be provided. Variation in educational performance may be explained by the linguistic, social and cultural disparity between the learners' school and home environments. Here, the learning environment is the crucial factor, a learning context which has its own history, its own culture. These factors shape the learners' cognitive development. Language shapes cognition and at the same time cognition is a resource for language. Educational settings are not natural settings and associated educational structures and practices may not enhance effective learning unless their culture is recognised and valued.

Cultural transmission is an inevitable result of the cultural contact always present in ELT classrooms and materials since it is the site of non-static negotiations of representations and meanings: they provide opportunities to "enter into other frameworks of understanding" (Risager 2006: 154). Foreign language learners' identities are challenged as their notions of the world and their relationships with it formed through time and space become modified by an 'other' culture. As Stuart Hall makes clear: "Identities are constructed through, not outside, difference" (1996: 4) and it is the target culture in ELT procedures which provides the most substantial point of reference in determining difference. In all learning contexts, coursebooks and other learning materials related to the English language play a role in the construction of the learner's self-identity as much as any identity associated with any English speaking community. Wang is perhaps not overstepping the mark by stating:

> To speak a language well, one has to be able to think in that language, and thought is extremely powerful. A person's mind is in a sense the centre of his identity, so if a person thinks in English way in order to speak English, one might say that he has, in a way, almost taken on an English identity [see for example Brown (1994) and Littlewood (1984)]. That is the power and the essence of a language. Language is culture (ibid. 2008: 59).

Investment in learning an additional language is also an investment in a learner's own social identity (Pierce 1995). Indeed, operating at both the local and

[6] For Bourdieu, symbolic power involves the use of concepts, ideas and beliefs to achieve goals. In society, symbolic power operates in a field called 'culture' whose logic, in turn, is such that it maintains class structures that are inherently iniquitous.

global levels, what happens at both the national and at the international level, with regard to individuals in classrooms and the production of coursebooks contributes directly to the influence of and role of the English language (and culture) as an agent in the construction of learners' identities around the world. Giddens, right at the outset of his discussion, makes this quite clear:

> The self is not a passive entity, determined by external influences; in forging their self-identities, no matter how local in their specific contexts of action, individuals contribute to and directly promote social influences that are global in their consequences and implications. (1991: 2)

Exposure to different ways of life (social and psychological meanings) in coursebooks will certainly affect younger learners' constructive process related to self-identity. Coursebooks are agents that enable social relations to be relocated across time and space, so, as Marcus has argued "local identity emerges as a compromise between a mix of elements of resistance to incorporation into a larger whole and elements of accommodation to this larger whole" (1992: 313). This is perhaps especially true when the English language given its dominant (hegemonic?) role it plays in the world population's need for an additional or second or foreign channel of communication (depending on your choice of terminology). Coursebooks may be the agents of bringing geographically distant cultures into a proximity with learners that borders on the intimate: either through private reading or participation in classroom related activities based on the coursebook.[7] The forces at work within globalization challenge the boundaries of national cultures and identities leaving no local context unconnected or independent and yet not creating a new global alternative. According to Bhabba the connections or relationships created may be both tense and temporary:

> We have entered an anxious age of identity, in which the attempt to memorialize lost time, and to reclaim lost territories, creates a culture of disparate 'interest groups' or social movements. Here affiliation may be antagonistic and ambivalent; solidarity may be only situational and strategic: commonality is often negotiated through the 'contingency' of social interests and political claims. (1996: 59)

Thus, all cultures become partial and subject to a process of "cultural hybridization" and characterized by their "baffling alikeness and banal divergence" (idem: 54). Our identity is established in relation to others (others who are different and these relations may be conflictual or contradictory) and as Woodward has rightly emphasized, identity is "given meaning through the language and symbolic systems through which they are represented… Representation works symbolically to classify the world and our relationships with it" (1997: 8–9). This is the heart of the matter: language is a representational system, using signs and symbols to convey concepts, feelings and ideas (meanings), allowing for

[7] And there can be few ELT classrooms in Portugal or Poland where there is not a strong reliance on the coursebook as the dominant teaching resource given the high number of contact hours that most teachers of English are currently expected to administer.

communication between participants on the basis of a shared understanding and vision of the world (Hall 1996).

Whether today's world is labelled 'post-modern' or 'high modern', these considerations are crucial to understanding our identity, our human experience: "In modernity, identity becomes more mobile, multiple, personal, self-reflexive, and subject to change and innovation. Yet identity in modernity is also social and Other-related" (Kellner 1992: 141). The current generation of English language learners could therefore be said to be 'open' to the significance and influence of different cultures in a way that was not previously true.[8] References to distant events throughout any local mass media mediate the local population's experience of everyday life and help form a reality which while being both virtual and phenomenal in some ways negates any notion of place: Giddens makes this very point in relation to the print media, describing what results from the juxtaposition and/or co-existence of stories and news items: "the 'separate' stories which are displayed alongside one another express orderings of consequentiality typical of a transformed time-space environment from which the hold of place has largely evaporated" (1991: 26). Something similar can be ascribed to coursebooks (which may also be categorized as a form of print media) if the term 'stories' is replaced with 'texts': the cultural content is disembedded from its original setting: this results in a kind of "collage effect" (idem: 26), an equally apt metaphor to describe how 'culture' is dealt with in ELT coursebooks which contain greater or smaller texts, illustrations and photographs, all of which represent elements of the target language/culture in a displaced learning context.

What constitutes the culture in the teaching materials of an English language teaching context requires particularly sensitive consideration given the connection that has traditionally been firmly established between the nation state of the United Kingdom and the culture and language most clearly associated with that political and/or geographical entity:

> Culture is a concept which needs to be handled carefully. Nowadays it is much used, often far too loosely. One of the problems is that the most common use of the word—as national culture—is very broad and conjures up vague notions about nations, races and sometimes whole continents, which are too generalised to be useful, and which often become mixed up with stereotypes and prejudices. (Holliday 1994: 21–22)

Within the context of research into any potential connection between nations and cultural characteristics, Geert Hofstede, the Dutch psychologist, designed and carried out extensive research into cultural differences and similarities of over 116,000 employees of International Business Machines (IBM) in over 50 countries and in 20 languages. The findings of his research were initially published in 1980. He identified four dimensions of culture and mean scores for each country on each dimension. The research relates to large, national groups working in a business

[8] The recent refurbishment of many Portuguese schools has further enhanced this 'open' door to other cultures by means of technologies such as the Interactive White Board and connections to the Internet.

context and not individuals. A consequence of the research is that the broad cultural tendencies of countries/nations can be compared. Hofstede used the metaphor of culture as the "software of the mind" with large groups sharing a collective "mental programming" (1991: 4). The four dimensions identified by Hofstede are described below. These descriptions represent extremes and it is more realistic to think of each country situated somewhere between, on a continuum (Ellison and Hurst 2007).

1. Power Distance: The degree to which a society accepts power may be distributed unequally. In educational terms power distance could be expressed in the relationship between teacher and student.
2. Individualism versus collectivism: The degree to which a society is individual or group-oriented. In education this may be reflected in the extent to which a teacher encourages individual ideas or group work and to the preferences of students to work alone or within a group.
3. Uncertainty Avoidance: This is the extent to which a society feels threatened by ambiguity and tries to reduce or prevent this by providing more structure, bureaucracy and explicit rules. In the classroom, a tendency to high uncertainty avoidance manifests itself in the need for specific information e.g., course programmes, detailed hand-outs, clearly defined objectives for tasks.
4. Masculinity versus femininity: This relates to the degree to which a society distinguishes between male and female roles. In the classroom, this relates to how competition, assertiveness, and success and failure are viewed.

While this kind of research could be seen as being somewhat flawed it does serve to show how the concept allied to 'national cultures' occupies a position of some power and influence in diverse fields. It could be said that the Eurocentric perspective encouraged by the various treaties and institutions of the European Union and its predecessors further emphasises this socio-cultural association: if we are dealing with the English language, then we need to deal with British culture.

In practical terms, the traditional location of ELT coursebooks was generally the U.K., for example, in 1988 it was possible to state that "globally designed textbooks have continued to be stubbornly Anglo-centric: appealing to a world market as they do, they cannot by definition draw on local varieties of English" (Prodromou 1988: 73). More recent developments in materials production in Portugal have broadened the cultural horizon to include North America and much more recently other varieties of English language (World Englishes), and therefore culture, from around the Anglophone world. This broadening of perspective is perhaps fruit of the greater, contradictory force of globalization:

> One result [of the present intensified phase of globalization] has been a slow, if uneven, erosion of the 'centred' nationalisms of the Western European nation-state and the strengthening of both transnational relations and local identities—as it were, simultaneously 'above' and 'below' the level of the nation-state. (Hall 1993: 354)

In this light, processes such as deterritorialization and fragmentation make it absurd to think of "British Culture" as existing as a unified, whole, identifiable,

geographically defined organism. This does not mean that 'culture' is no longer used as an instrument of national promotion or propaganda or that concepts of national identity and national culture are not present in encounters of an intercultural nature, both inside the classroom and outside in the 'real' world. However, studies in Sociology and Anthropology during the last fifty to one hundred years have re-conceptualized culture as being related to social practice and world construction and not a thing or instrument. Individuals, communities and nations are not situated in mono-cultural locations: "It has also become clear that single persons do not enact just 'one culture', but rather is influenced by, and participates in, a plurality of "cultural streams" (Thomassen 2008: 13). In no way is culture to be considered static: it flows and it shifts in ways which may create either greater coherence or greater diversity depending on its location, both in terms of time and in terms of circumstances: "If culture is not an object to be described, neither is it a unified corpus of symbols and meanings that can be definitively interpreted. Culture is contested, temporal and emergent" (Clifford 1986: 476).

Culture provides the reference system by which individuals make sense of the world in which they live: it provides rules and regulations at all levels of society: these are in turn shared and understood so that any individual behaviour may be evaluated as appropriate or inappropriate in accordance with the shared norms and values. Having this kind of cultural knowledge provides the society's members with a certain degree of comfort and stability. ELT coursebooks should be a two way bridge to connect the learners' world to the world of English (language and culture) remembering that:

> Accurate intercultural communication is built on fluency in the target language, insight into what people are imagining when they speak, and the ability to decipher non-linguistic symbols such as gestures and icons. Because people use language to aid and complement other behavioural purposes, language cannot be understood in isolation from a larger context of behaviour—all of which is culturally filtered and most of which is culturally originated. (Seelye 1997: 24–25)

Yet coursebooks can never be adjudged to be neutral in terms of their cultural content (Hurst 2008), their content will always communicate at least some attitudes, ideas, beliefs or values[9] related to concepts, at the macro level, such as individualism, egalitarianism, universalism and so forth. A more refined description would include aspects such as: how people are defined by their work or achievements, what motivates people positively, how people view the world in terms of problems and solutions, what value people give to common goals as well as other similar concepts (Dunnett et al. 1986, 153–154). Indeed, until recently, it has been true to say that "Traditional thought in foreign language education has limited the teaching of culture to the transmission of information about the people of the target country, and about their general attitudes and beliefs" (Kramsch 1993: 205). Here then is the heart of matter, the inappropriateness of accepting and

[9] Cunningsworth (1995: 90) refers to this phenomenon as the "hidden curriculum", it being interpreted as a crucial feature in many educational programmes.

reinforcing as natural and necessary a linkage between a language-culture and a particular country-nation. When referring specifically to culture, Holliday highlights this inadequacy: "One of the problems is that the most common use of the word—as national culture—is very broad and conjures up vague notions about nations, races and sometimes whole continents, which are too generalised to be useful, and which often become mixed up with stereotypes and prejudices" (1994: 21).

Learners of English are faced with the tasks of learning not only a linguistic code but also, simultaneously, a cultural code. For example, the "accepted" way for young women to dress in the U.K. or the U.S.A. may not conform to the dress code in different societies around the world: these cultural codes are representative of different opinions, beliefs or attitudes. The significance of this line of argument cannot be overstated, for example within the very recent political and legal developments related to the use of a hijab in various European countries:

> These dress examples, that symbolise deeply held beliefs, show how intensely emotional cultural tenets can be, and how much culture is a matter of the heart and not just the head. This explains why cultural misapprehensions can sometimes lead to argument, violence and, in extreme cases, the killing of individuals (Johnson and Rinvolucri 2010: 11).

And it is precisely this kind of cultural representation that is very likely to be found in ELT coursebooks, whether they are produced for the Portuguese, Polish or an international market. For example, contemporary ELT coursebooks are largely 'populated' by pseudo-real teenagers in various guises for various instructional purposes: both at the levels of illustrations/images and as the supposed authors of texts. Any kind of thematic content or 'topics' in the ELT classroom automatically implies a situation in which "… a multidimensional linguistic and cultural contact will, under all circumstances, be involved, one in which sex, social class, life experiences and mastery of the language will be able to play a role" (Risager 2006: 24). Each and every learner may construct and/or provide a different interpretation, a different representation of the cultural content in question. This is true across the whole spectrum of classroom language learning experiences, even at the most basic level of instruction, for example when teaching a vocabulary item of such apparent simplicity as the word 'breakfast'. From this cue a Portuguese or Polish learner will make various associations but would probably not include items such as 'tea' or 'eggs' or 'toast' or 'marmite' or 'marmalade' which someone from an Anglophone background might be more likely to associate. The point is that it is very often taken for granted that cultural correspondence exists when there is an apparent lexical correspondence. In addition, consideration needs to be given to further unstated or undisclosed meanings associated with the item 'breakfast' which here might include aspects such as economic power (How much can you afford to pay for a breakfast?), social class membership-relationships (Who prepares the food? Who is supposed to take

part in its consumption?) or even religion (Are there any limitations on what can be eaten?). Reference here should be made to the Sapir-Whorf Hypothesis[10] which identified two crucial attributes of language in that it "influences the way we construct our model of the world (determinism). And if this is so, other languages convey differing visions of the same world (relativity)" (Fantini 1997: 11).

In the realm of coursebooks, it is important to establish criteria for examining cultural content, in the light of nuances of the kind described above, and avoid resorting to binary distinctions of an 'us' and 'them' type, grounded in spurious notions associated with countries—nation states. At the forefront of this approach, in association with the Council of Europe, Byram (1993a: 3–16) posited a framework based on a seven-fold categorisation:

Social Identity and Social Groups (social class, regional identity, ethnic minorities)
Social Interaction (levels of formality, as an outsider and an insider)
Belief and Behaviour (moral, religious beliefs, daily routines)
Social and Political Institutions (health care, law and order, social security)
National History (historical and national events as markers of national identity)
National Geography (factors seen as significant by members)
Stereotypes and National Identity (what is 'typical', symbols of national stereotypes).

This framework embraces a broad set of components, drawing heavily on what used to be termed 'low culture' to the detriment of 'high culture'[11] and as such may be considered more inclusive. Furthermore, Byram, as well as providing a framework, makes a strong case for any approach to include not only actively enhancing cultural awareness but also incorporating some form of cultural experience in his model of foreign language learning:

> Learners need to be prepared for experience of the daily rhythm of the foreign culture, of the behaviours which are different and those which are the same but have a different significance. Such phenomena are verbal and non-verbal, and learners need both the skills of accuracy and fluency in the language and the awareness of the cultural significance of their utterances (1989: 145).

The emphasis here is on understanding culture as being both a part of and the result of dynamic, interactive forces that operate in a social context which have an impact on individual practices.

[10] Based on several 20th century publications (e.g. 1929, 1956), the hypothesis has both 'strong' and 'weak' versions and held great sway in language education into the 1970 s. Today, it is widely accepted that more than just language shapes the thoughts, worldviews and perception of reality of language users.

[11] High culture is usually defined as the works of writers, artists and composers who have gained the epithet 'great' through academic and critical appreciation. Works from this category are also considered superior and less accessible.

Several institutions have issued guidelines aiming to establish standards for the teaching of culture in foreign language education.[12] These documents are influenced by the work of many scholars who have attempted to define culture in relation to educational programmes. A common description views culture as being composed of three elements: for example, products, behaviours and ideas (Tomalin and Stempleski 1993) or artifacts, sociofacts and mentifacts (Fantini 1997) or form, meaning and use (Larsen-Freeman 1987). Moran (2001) introduced a five dimension interactive model into the discussion, the dimensions were: products, practices, perspectives, communities and persons. He states that "Culture is the evolving way of life of a group of persons, consisting of a shared set of practices associated with a shared set of products, based upon a shared set of perspectives on the world, and set within specific social contexts" (ibid: 24). This is a comprehensive attempt at a definition which sits well with the five-fold model suggested by Byram (1993a) and described above. What is added here is a direct reference to the human aspect of culture: it is people who either alone or in groups are the agents of making culture part of the real world. In this way it also echoes the approach advocated by members of the Birmingham school of 'Cultural Studies' (Hoggart et al.) by directly referencing the fact that culture should be seen as fundamentally a "way of life" phenomenon: "Culture is thus both individual and collective—psychological and social (ibid: 25)".

To illustrate the usefulness of this framework, take one of Moran's examples, the cultural phenomenon of 'law enforcement' and examine it in the context of the appearance of a British police officer in coursebook (not an infrequent occurrence). Is the police officer in the coursebook male or female? Experienced or a novice? [persons] Does the officer have a baton? A gun? A name badge? [products] Is the officer arresting someone? Giving a tourist directions? Doing nothing? [practices] What is the officer's 'place' in this society? Who and what does the officer represent? [perspectives] Is the officer alone or with other officers? With a member of the general public? [communities] What becomes abundantly clear here is that not all the cultural implications of including a British police officer in ELT materials are immediately obvious: there is inherent complexity and also a great deal that is not explicit: the image of an iceberg[13] is often referred to as a means of illustrating this point and undoubtedly it is easier to understand what you can see (literally and metaphorically) than what you cannot (as a foreign language learner). Shaules argues that much of the difficulty and confusion surrounding 'culture' in an educational setting has to do with a failure to understand a further three way differentiation: "(1)

[12] In the USA, National Standards for Foreign Language Education Project (1999). In Europe, the Council of Europe's Common European Framework of Reference for Languages (2001) section on socio-cultural contents. In the UK, The National Curriculum (2007) includes content definitions for different 'Keystage' levels of language learning.

[13] Just as 90 % of an iceberg is invisible then so it is with culture: how people conceive of time, how people handle emotions, how people view leadership issues and so on. This idea derives largely from the American anthropologist Edward T. Hall's seminal work "Beyond Culture" (1976).

culture as a form of personal or social identity (2) culture as something that influences behaviour and (3) culture as shared meaning that acts as a framework for interaction …" (2007: 115) and that is the third dimension which is less explicit and less easy to grasp and is, in fact, what he terms "deep culture". Here it is also possible to detect the ripples of influence emanating from Birmingham.

What is crucial here in relation to coursebooks is how to embody the conjoined, interactive and yet separate nature of language and culture in FL learning materials. For example, foreign learners of Portuguese have a need to understand the how and the when of the use of the 'you' personal pronouns "tu" and "você" (used according to degree of formality/respect) which takes them in the realm of the deep, the invisible: How do speakers of Portuguese view their relationships with other people? What is at stake is the appropriate use of language for self-expression, for communication and for social interaction (within the same linguistic domain, learners of English need to understand the how and the when (if ever?) of the use the impersonal pronoun "one"). Thus it is possible to state that:

> Culture and communication are inseparable because culture not only dictates who talks to whom, about what, and how the communication proceeds, it also helps to determine how people encode messages, the meanings they have for messages, and the conditions and circumstances under which various messages may or may not be sent, noticed, or interpreted … Culture … is the foundation of communication (Samovar et al. 1981: 24).

However, language and culture have tended to be dealt with as separate entities in many coursebooks: these coursebooks will have a "Culture Spot" or a "Facts and Trivia" or something similar. This separation perhaps results from the desire on the part of educators and teachers to give their learners the means to be able to participate in pedagogical activities (largely focussed on dealing with linguistic forms and meanings) which improve their general levels of language production and comprehension before tackle the more complex demands of improving their cultural competence (Hymes 1967, 1972).

In order to interpret culture, respond to culture or participate in culture the foreign language learner requires language for communicative and expressive purposes: this view sees language from a functional perspective. Several authors have noted the importance of categorising and understanding language in terms of communicative functions: the most influential of which in ELT in the European sphere were probably Van Eck and Alexander (1975) and Wilkins (1976).[14] Stern (1983) summarises the work of five different linguists of the 20th century from Bühler (1934) through to Halliday (1973) characterising their approaches under the broad heading of "functional categories of speech acts" (ibid: 224). Contemporary ELT methodology makes use of all kinds of pedagogic activities in the classroom that replicate the social interactions that require language use in the real world (speech as action). These activities include role plays, simulations, dialogues, interviews and so on which encourage the use of language for

[14] For a comprehensive review of David Wilkins (1976) classic book "Notional Syllabuses" written to mark 21 years since its original publication, see Hurst (1997).

communicative and expressive purposes, albeit in a modified or adapted from depending on the national programme or the learners' level or the physical limitations of the classrooms itself, among other factors. Some coursebooks include items described as a "function bank" or similar, acknowledging the relevance of linking the form which the language takes and the purpose for which it is used: greeting people, making promises, giving advice, asking for directions etc. This is the specific language that is used in specific social contexts for specific purposes which also depends on the people involved, the topic area in question and many other non-linguistic factors: the role of silence, physical distance, eye contact etc. (Moran 2001: 40). Knowledge and choice are critical here.

It would be impossible for any coursebook to take into account all realisations of socio-cultural practices or interactions since they are almost infinite by definition but guidance may be found in the work of Orwig (1991) who developed a list of categories which included: functions used when socializing: greetings/addressing, taking leave, introductions etc.; functions used in establishing and maintaining relationships: sharing personal information etc.; functions involving barriers; functions involving influencing people: requests for action, requests for information, giving permission; functions involving feedback: compliments, responding to requests; functions involved in arguing: agreeing/disagreeing, convincing, persuading, threatening; functions involving avoiding trouble: denials, accepting responsibility, explaining, making excuses etc. Taking as an example the function of "introductions" which frequently appears in coursebooks at the level of initial FL learning it is possible to state that this function of language is something of immediate usefulness but which is very often presented in the false paradigm of "Hello, what's your name? My name is X". It is relevant to question: how often people introduce themselves to each other compared to how often introductions are made by a third party? Under what circumstances do people have to make such abrupt introductions? Do the young people into whose mouths these words are often placed ever use the language in this way? This line of argument serves to illustrate the need for a deeper examination of how participation in language learning involves culture learning even when the learning experience is in the classroom and not embedded in the culture itself.

Language and culture in the classroom are subject to a process of adaptation and modification for pedagogical reasons but this does not mean that the learners' experience has to be distorted to the extent that it becomes inaccurate and/or inappropriate.

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Takes Two to Tango: Research into Accent, Comprehensibility and Intelligibility and the Implications for CLIL

Alice Henderson

Abstract Varieties of English abound and students need to understand them, but research is still attempting to determine which features make a given accent easier or more difficult to understand. To that end, the constructs of accent, comprehensibility and intelligibility have been the subject of research in relation to, among others: fluency (Derwing et al. 2009; Cucchiarini 2000; Kormos and Dénes 2004); assessment of listening and speaking (Major et al. 2002; Tauroza and Luk 1997); and prosodic features' influence on speech segmentation (Cutler in Cognitive models of speech processing: psycholinguistic and computational perspectives. MIT, Cambridge, 1990). Studies with immigrant populations in the North American context of English as a Second Language (e.g. Munro and Derwing 1995; Derwing and Munro 2001, TESOL 2005) show that researchers are trying to operationalize these three concepts, in order to help instructors better define their learners' needs within such settings. This chapter argues that the body of research into these three concepts, including experimental and descriptive studies, holds crucial insights for Content and Language Integrated Learning (CLIL). Similarly to bilingual education, CLIL is becoming more widespread in Europe under the impulse of the Bologna process. The corresponding increase in the number of non-native speakers of English teaching field-specific content in English highlights the importance of the interplay between the principles and goals of CLIL and three constructs: accent, comprehensibility and intelligibility. This chapter explores the main findings of studies into these three constructs in order to address one of the main challenges of CLIL: communicating field-specific content via effective, comprehensible language.

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1 Introduction

Since the restructuring of European higher education began with the Bologna process in 1999, universities in numerous countries have made a concerted effort to promote the internationalization of their student body. Concomitantly, English-medium instruction has become more and more common, especially at Master's level and usually in northern Europe—but not exclusively: in spring 2012 the Politechnico di Milano announced that from 2014 most of its degree courses will be taught in English. The University Rector, Giovanni Azzone, justified the decision as follows:

> We strongly believe that our classes should be international classes and the only way to have international classes is to use the English language. … Universities are in a more competitive world. If you want to stay with the other global universities, you have no other choice.[1]

Such teaching has been referred to as CLIL (Content and Language Integrated Learning), ICLHE (Integrating Content and Language in Higher Education[2]), Content-Based Instruction (CBI) or Language Across the Curriculum (LAC) and may be conceived of as the continuation of bilingual education at the primary and secondary levels. For the purposes of this chapter the European Commission definition will be used, where CLIL "involves teaching a curricular subject through the medium of a language other than that normally used".[3]

The trend towards CLIL has been greatly aided by the support of European bodies, which see it as yet another means to facilitate the European ideal of integration and plurilingualism (see Bonnet 2012; de Zarobe 2008). According to Van den Craen (2002: 1), since the European Commission's 1995 White Book on Education, "CLIL suits European aspirations of educating citizens capable of speaking, apart from their mother tongue, two community languages".[4] Under "Benefits of CLIL" the EC's website lists, amongst others: "builds intercultural knowledge and understanding, develops intercultural communication skills, improves language competence and oral communication skills".[5] The language of such documents and reports is overwhelmingly positive and optimistic; Bonnet refers to "the powerful metaphors of 'two for the price of one' and the 'added value of CLIL'" as having become accepted truths (2012: 66). However, he argues in favor of more evidence-based CLIL, echoing Meyer (2010) cry for more and more substantial research into both positive and negative outcomes of CLIL

[1] http://www.guardian.co.uk/education/2012/jun/19/elt-diary-june-technology-innovation.

[2] See Costa and Coleman (2010).

[3] European Commission (EC) Web site: http://ec.europa.eu/languages/language-teaching/content-and-language-integrated-learning_en.htm.

[4] See also Wolff (2003) about constructivist principles underlying CLIL.

[5] EC Web site, as above.

Table 1 Word search in ICRJournal

Word	No. of occurrences
Accent, phonetics, phonology, stress	0
Comprehensible (input), comprehensibility, intelligibility, pause	1
Intonation, fluent	2
Lexis	4
Pronunciation, plurilingualism	5
Speech, sentence	6
Italian	9
Speak, policy, mother tongue	12
Native, Spanish, intercultural	13
Multilingualism	15
Fluency	16
Grammar, French, German	17
Vocabulary	19
Communication	28
Competence	29
English	32

programs.[6] One of the most obvious areas needing research is spoken language, as the communicative competence which CLIL seeks to promote is inevitably dependent upon spoken interaction.

Over the past 20 years, research on CLIL has been presented at numerous international conferences and published in a variety of journals, with one journal devoted entirely to the topic: the International CLIL Research Journal (ICRJ), established in 2008 at the University of Jyväskylä. In an attempt to determine whether or not spoken English is a research focus within the field of CLIL-related research, all ICRJ issues were searched for several related terms[7] (Table 1):

The 13 occurrences of *native* include the forms *non-native* and *not native*. Native was often contrasted with *foreign* and, similar to *mother tongue*, was rarely used in relation to pronunciation features. The item *grammar* (17) appears more than three times as often as *pronunciation* (5), as does *fluency* (16)/*fluent* (2). The latter obviously refers to speaking, as does *intonation* (2) and yet there are no occurrences of the words *accent* and *stress* in relation to speaking, and only one occurrence of *comprehensible* (*input*), *comprehensibility*, *intelligibility*, *pause*. It is therefore reasonable to conclude that in CLIL research in this particular journal pronunciation is not a frequent topic. Even in Bonnet's very recent (2012) study, where he outlines a research program for the field of CLIL and explains what type of data should be collected and analyzed, pronunciation is not mentioned:

[6] See Apsel (2012) about the urgency to learn from the experience of learners who drop out of CLIL, referring particularly to the German context.

[7] Query Occurrences from URLs or book titles were eliminated from results. This was not a proper keyword search of a corpus, because the terms were selected by me rather than generated by the data; other terms with higher frequency rates may thus have been missed.

> If classroom data are rich enough (i.e. long phases including student–student interaction), they can be analyzed for lexical, syntactic and other features using established methods from applied linguistics (ibid., 75).

However, a few ICRJ articles do stand out for their explicit mention of pronunciation features. First, Costa and Coleman (2010) admirably recorded lectures in Italian universities and analyzed the effectiveness of input presentation strategies; the transcriptions were never intended to determine the "native-ness" of a speaker. Instead, they analyzed the transcriptions using Coonan's (2002) categories of techniques for facilitating linguistic and conceptual comprehension in CLIL and noted the frequency of occurrence of each technique. They included the technique "emphasizing through intonation" yet excluded "slowing down the pace of speaking" and "articulating words clearly" as "these are too cultural-based to be determined and too dependent on the spoken language of each teacher to be standardized" (2002: 19). Secondly, in his attempt to assess spoken bilingual scientific literacy, Airey (2009) looked at syllables per second (SPS) and pauses, as well as speech between pauses (MLR, or mean length of runs). However, he was less interested in pronunciation itself and more interested in developing a measurement of overall literacy by combining measures of "SPS, MLR, involuntary code switching and a judgment about the disciplinarity of what has been said" (2009: 27). Thirdly, de Zarobe's (2008) longitudinal study of bilingual secondary education in the Basque country generated results with pronunciation measures, as participants did a speech production test which was scored for fifty points. Ten points were given to Pronunciation ("phonetic accuracy and the communication effect of pronunciation") and another ten for Fluency ("the communicative effect of the oral production and continuity"), with the other thirty points going to Vocabulary, Grammar and Content (ibid.: 66). Unfortunately "communicative effect" is not clearly defined, but the results do show that the CLIL groups significantly outperformed the non-CLIL group in all measures, including Pronunciation. Lastly, Yassin et al. (2009) mentioned that the constructs of pronunciation, intonation, fluency and rhythm are included in the School Based Oral Assessment, which they used to measure young learners' proficiency in Malaysia, in both English and Malay.

More broadly, the ICRJ articles repeatedly mention numerous classic dichotomies which often crop up in the wider field of foreign language teaching: function versus form; meaning versus form; fluency versus accuracy; content versus language; native versus non-native. A brief discussion of these oppositions makes it clear how important it is to address pronunciation explicitly within CLIL, both in research and in teaching programs. The first three dichotomies are cited by Sudhoff (2010: 32) when he argues that the field of foreign language teaching in general has entered a (post)-communicative era, where:

> […] one finds the call for authentic language learning contexts that are linked to the real world and its issues (connection to the Lebenswelt). Here, the main emphasis is placed on the functional use of language, i.e. to utilise language as a tool for communication. These function-focused classrooms are often described by using the dichotomies of fluency before accuracy or meaning before form (Littlewood 2004). Learners are engaged in

> authentic communication processes and acquire skills and strategies to successfully carry out given tasks.

Beardsmore (2008) addresses the fluency versus accuracy debate when he clearly distinguishes language courses from CLIL courses. Citing the work of Muñoz (2002), he states that "The added value of such CLIL/EMILE models of teaching is that it encourages fluency, whereas language courses tend, even if not exclusively, to focus on accuracy" (2008: 9). This may explain the numerous occurrences of *fluent/fluency* in the ICRJ. Content, meaning, fluency and function would seem to be more important in CLIL than language, form or accuracy, perhaps in part because of the constructivist orientation of many CLIL discussions (Madinabeitia 2007; see also Wolff 2003).

The combination of linguistic and cognitive demands in one task is often described as an advantage of CLIL, where learners ideally have more opportunities to use the target language in an authentic context of interaction, negotiation and communication—all in pursuit of non-linguistic content. This interaction often takes place between learners of different cultures and of different levels of linguistic mastery. In his study of code-switching patterns in L2 (non-mother tongue or non-native language) classroom talk, Majer (2009: 31) rightly asserts that "the use of different languages in a pedagogic environment shares certain characteristics of interactions occurring in language-contact situations involving multilingual speakers." The desirability of such multi- or pluri-lingualism is often mentioned in discussions of European language policy, where bilingual schooling can be seen as an initial step in the right direction. However, behind the terms bi-, multi- and pluri-lurks the "native v non-native" dichotomy. Derivry goes so far as to say that "the ideology of native-speakerism pervades the entire foreign language teaching field" (in Pawlak 2008: 283) and that it is "part and parcel of historical perceptions developed within the field of foreign language teaching" (ibid.: 285).[8] These perceptions have not changed since the Bologna process:

> Within a European context of mobility, language teachers are particularly invested in a policy of multilingualism and multiculturalism. However, perceptions of foreign language teachers are still based on a monolingual paradigm in which the native speaker opposes the non native speaker in strict categories. This contradicts a more plurilingual perspective where 'nativeness' is rather viewed as a continuum and no longer as a dichotomy (ibid.: 283).

The distinction is tenacious and must, therefore, be respected for the powerful role it plays in individual and societal representations of foreign language teaching, despite the focus of the Common European Framework of Reference for Languages (CEFR) on developing intercultural awareness, skills and know-how. CLIL necessarily promotes such interculturality, as it involves various permutations of

[8] It also holds in the larger job market: "Employers within the teaching market seem to promote the very concept of *nativeness* as a commercial and competitive argument for excellence. As a result it is more difficult for non-native teachers of English to be employed within the English teaching business of EFL and ESL than for native teachers." (Derivry-Plard 2008: 284).

native and non-native speaker interactions, conveying content via another language or range of languages, dialects and accents. This situation raises the issue of the interplay between accent and intelligibility. It is a key issue for CLIL, and not only because accent is perceived by learners[9] as the key indicator of linguistic competence (Derivry-Plard: 289). Obviously this would make it a potentially crucial factor of motivation in learners (Can I trust the field expertise of this speaker?) and in speakers (I dearly do not want to lose face). More importantly, to borrow a term from Majer's (2009) study of L2 classroom intra-sentential code switching, just how "hybrid" or non-native can utterances become before communication breaks down completely? If communicative competence is the objective of CLIL, the relationship between accent and intelligibility must be explicitly addressed.

Fortunately, an entire body of research exists which addresses precisely these issues. An understanding of the findings of this research is crucial to implementing CLIL properly. Thus, this chapter will summarize the main relevant findings to date of such research, after establishing that pronunciation has an impact on how an individual speaker is perceived in both social and professional contexts. Then, the guiding principles and objectives of CLIL will be analyzed, drawing on a variety of reports, recent research and case studies. The implications for CLIL will be described, including a few suggestions for practical applications.

My research questions are the following:

- What constitutes accented speech for learners and why are their perceptions important?
- Which characteristics of spoken English have an impact not only on the perceived comprehensibility of a speaker but also on their intelligibility?
- What can be done in concrete terms to improve communication in CLIL contexts?

2 Pronunciation and Perceived Disciplinary Competence

This section will briefly explain the often unconscious relationship between a speaker's accent and the perception of their disciplinary competence. The important social and professional ramifications of accented speech are revealed in: a longitudinal study of students' perceptions of their teachers' competence; the vastly larger scale International Teaching Assistant (ITA) system at North American universities.

Given that the sounds of our mother tongue are the very last things we lose if we lose our mother tongue (Pennington 1996), it seems logical that mastering the

[9] Obviously, as Derwing and Munro make clear, "Having an accent is not a sign of overall low proficiency" (2009: 478). However, being *perceived* as less proficient would tend to impact negatively on one's image.

pronunciation of another language should be difficult and should require great effort over a long period of time. Most foreign language teachers who are non-native speakers of the target language have devoted tremendous amounts of time and energy to mastering it, including its pronunciation, with greater or lesser success. Success is most often measured against the native speaker norm, with impressionistic yet durable judgments about a speaker often based solely upon their accent. These judgments feed the beliefs which, in turn, inform how individuals "approach their learning, the strategies they employ, their motivation, their attitudes, and their success in language learning" (Oxford and Lee, in Griffiths 2008: 308). For example, in Derivry-Plard's longitudinal study of French university students' perceptions of their foreign language teachers (in Pawlak 2008: 289), accent was consistently held up as a key criterion[10] indicating the greater linguistic competence of the native speaker teachers. The following student quotes from that study reveal sensitivity to accent and to "nativeness":

> 'much better for pronunciation which is perfect', 'have a better pronunciation', 'teach students to speak without an accent', 'owns a good accent to better understand interaction and sounds we do not have', 'accents of spoken language are difficult', 'pronunciation is difficult, so it's better with a native speaker', 'has a better knowledge of pronunciation', 'for listening and for getting a good understanding', 'to pick up the good accent', 'it's good for pronunciation', 'for phonetic subtleties', 'for speaking with native speakers' (S-2007).

Some of the quotes from 1997 have a more explicitly normative tone, e.g. *right*, *pure*, *authentic*, *genuine*, *good*, *better*, *perfect*, *more natural*, *correct*:

> 'one acquires a better accent', 'has the English accent', 'has the right accent', 'perfect accent', 'good accent', 'has a better accent', 'for being bathed in a genuine accent', 'has the right accent of the country', 'has a pure accent', 'an authentic accent', 'has no accent, which allows to hear genuine English', 'has a perfect accent', 'has a better accent', 'has the accent', 'a better pronunciation and accent', 'his/her accent often sounds more natural, so it's better', 'a correct accent' (S-1997).

Such studies lend support to the idea that, in relation to a speaker's perceived accent, a strong social and affective influence exists and, consequently, that it could be a non-negligible factor in learner success in CLIL programs. Derivry-Plard's study not only shows that learners attributed greater linguistic competence to those teachers who had a more native-like accent (2008: 288); remarks such as "pronunciation is difficult, so it's better with a native speaker" reveal an unfortunate confusion:

> This is definitely a social representation which is confusing two different matters: language accuracy and teaching efficiency. Although there is an obvious link between language accuracy and teaching efficiency there is no equivalence between these two dimensions in language teaching. Some strong social schema is in play mystifying the speaker and the teacher, the native speaker and the native teacher. (ibid.: 285)

[10] Grammar and vocabulary combined constituted the other main criterion which determined native speaker teachers' greater perceived linguistic competence.

It is reasonable to assume that this is also the case for content teachers who accept the challenge of teaching their subject in a foreign language, as is the case in CLIL. Their disciplinary competence would seem to be inextricably linked to perceptions of their accent.

This was precisely the case in the 1970s–1980s in North America, where growing numbers of International Teaching Assistants (ITAs) presented universities with quite a dilemma; how could the comprehensibility of ITAs be "guaranteed"? Often ITAs teach first-year level courses; if an ITA is doing a PhD in Economics, then they will teach an Economics 101 course. If students cannot understand them, then official complaints tend to be lodged, especially if tuition fees are high; Bailey referred to it as "the foreign TA problem" in 1984. Universities in the United States and Canada, both of which are multicultural yet predominantly English-speaking contexts, were forced to develop training programs for their ITAs.[11] Universities established specific programs to screen, train and certify ITAs, for example: the Spoken English Program at Ohio State University, UCLA's American Language Institute or Northwestern University's Searle Center for Teaching Excellence. Such programs include work on all aspects of spoken interaction with students, from delivering lectures, managing individual tutorials, providing feedback in real-time during class, etc. Segmental and suprasegmental features of English are covered but, faced with limited time and money, priorities have been set. Certain teachers are also researchers and/or work closely with researchers, and together they have tried to determine how best to serve these ITAs. Legal and political pressure has also been exerted, in that universities have to certify the intelligibility of ITAs or face law suits. For example, the law for the State of Ohio requires "state-supported colleges and universities to ensure that instruction to students is provided only by teaching assistants who have demonstrated oral proficiency in the use of the English language".[12] A variety of evaluations of spoken English proficiency have thus been used, including commercial instruments (Test of Spoken English, replaced in 2010 by the TOEFL IBT speaking test) and other means of assessment (interviews, teaching simulations, etc.).

At the same time, other teachers and researchers were trying to improve the efficiency of English lessons for immigrant populations: which aspects of spoken English help an individual with accented speech to be as comprehensible as possible, as quickly as possible, in both social and professional settings? The stakes were obviously quite high and the inevitable time and budgetary constraints meant that effective solutions had to be found quickly. Much of this research has been done in Canada, perhaps most prolifically—but by no means exclusively—by Derwing and Munro in British Columbia (see references in this chapter). This North American research found an echo in Australia where, for example the phonetician Fraser worked closely with the Department of Education, Training and Youth Affairs to help ESOL teachers improve their teaching of pronunciation (see

[11] See Smith et al. (1992) or Jia and Bergerson (2008) for more details.

[12] See http://esl.ehe.osu.edu/wp-content/uploads/2011/05/StateLaw.pdf.

Fraser 2000). Yet other researchers and teachers have been involved in programs to help hearing-impaired adults and children, adding their perspective to the research. For example, Bradlow at Northwestern has done extensive work on what she refers to as a "distinct, listener-oriented speaking style" or "clear speech" (Smiljanic and Bradlow 2009). In their conclusion, the authors highlight that

> it is crucial to understand which articulatory changes make clear speech more intelligible, it is equally important to understand how the interaction of various levels of linguistic structure and cognitive functioning determine clear speech output and how clear speech changes affect speech processing at different levels, such as sound category formation, speech segmentation, lexical access, and syntactic and prosodic processing. Expanding clear speech research to include language processing at various levels of linguistic structure will help shed light on the underlying mechanisms of speech production and perception that allow talkers to adapt their output, and allow listeners to take advantage of the clear speech adjustments. (259–260)

In reply to this call to "extend clear speech research toward more naturalistic communication settings" (ibid.: 260), the next two sections will review, first the constructs of accent, comprehensibility and intelligibility and then those research findings which are useful for both listeners and speakers. The overall goal is to understand how such research can inform good practice and policy in CLIL.

3 Three Key Constructs: Accent, Comprehensibility, Intelligibility

In this context, more and more studies began to appear, trying to identify and then operationalize constructs in the North American context. The goal was to improve pronunciation pedagogy with evidence-based research. Three constructs have been defined in a host of ways and operationalized in relation to how listeners perceive speech: accentedness, comprehensibility and intelligibility. Roughly, "accent is about difference, comprehensibility is about the listener's effort, and intelligibility is the end result: how much the listener actually understands" (Derwing and Munro 2009: 480). It is worth looking more closely at each of these three constructs.

Derwing and Munro (2009) refer to accent as "the ways in which speakers' speech differs from a local variety of English and the impact of that difference on speakers and listeners" (476). For example, research shows that listeners' sensitivity to accent is quite acute, as participants can distinguish foreign-accented speech from native-produced samples in 3 unexpected conditions: for languages they do not speak (Major 2007), judging on extracts of less than 30 ms of speech (Flege 1984), and even when extracts are played backwards (Derwing and Munro 2009: 477). Therefore, accentedness is a perceptual measure of the "noticeability" or "strength" of a person's accent and is usually obtained via Likert scales. Gass and Veronis (1984) found that listeners understood L2 speakers better if they were

familiar with foreign-accented speech in general.[13] This finding has important ramifications for "listener education" and will be explored later in this chapter.

Comprehensibility is another perceptual measure assessed via Likert scales and is defined as "the listener's perception of how easy or difficult it is to understand a given speech sample." (Derwing and Munro 2009: 478). The authors continue, explaining that:

> This dimension is a judgment of difficulty and not a measure of how much actually gets understood. … comprehensibility ratings correspond to the amount of time, or the effort it takes to process utterances, even if they are perfectly understood in the end (ibid.).

It is this emphasis on the perceived difficulty which is key; given that perceived lower proficiency can be associated with greater accentedness, it would seem necessary for listeners (e.g. foreign students studying in a European CLIL context) to become aware of the fact that accentedness and comprehensibility are mere perceptions. For their personal objectives (e.g. professional future, end of term marks) it is a third construct which is most important.

Intelligibility is distinct from the first two constructs.[14] Intelligibility is defined as "the degree of a listener's actual comprehension of an utterance" (Derwing and Munro 2009: 478) and is measured in a variety of more and less satisfactory ways, e.g. number of correct words in a written transcription, True–False or short answer questions. Whereas listeners "usually agree with each other quite strongly on who has a heavy accent and who doesn't, who is easy to understand and who isn't" (ibid.), intelligibility and accentedness are partially independent.

> It is possible to be completely intelligible and yet be perceived as having a heavy accent. The reverse doesn't happen (ibid.)

The authors describe this as "one of the most robust findings that has emerged from every study we have done" (ibid.: 479) and it is of crucial importance for CLIL.

To conclude, their studies have shown all three to be distinct constructs which are not static; "they can change over time, on their own, and as a result of instruction" (ibid., 480). This is an encouraging finding for CLIL and for foreign language instruction in general, as it means that, despite preconceived notions about the usefulness of pronunciation instruction (see Pica 1994 or Trofimovich et al. 2009), speakers can become more intelligible despite their accent. Munro and Derwing (2011) express surprise that confusion persists between what Levis (2005) referred to as the nativeness principle (still widespread in language curricula and published materials, according to his analysis) and the intelligibility principle, the former being of limited use when making pedagogical decisions:

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[13] Familiarity with a particular accent, speaker and topic also helped, as expected.

[14] It is not a new concept; Munro and Derwing trace the distinction between accuracy and intelligibility back to 1900, when Sweet (1900) argued that "sufficient accuracy of pronunciation to insure intelligibility" should be the goal of language learners (1900: 152, cited in Munro and Derwing 2011: 319).

> … the voluminous work on error prediction models seems to have limited pedagogical significance because advance knowledge of errors is unhelpful in prioritizing phonological structures in an instructional programme that aims at intelligibility. Rather, the mere fact that a phonological structure poses difficulty for a learner says nothing about whether it is actually worth teaching or whether it can even be taught (Munro and Derwing 2011: 317).

The next stage is to improve our knowledge of what to focus on, in order to improve a speaker's intelligibility. This will be addressed in the next section of this article.

4 Useful Findings for Listeners and Speakers

In staffrooms and in the literature on pronunciation instruction, the debate has often centered on whether to focus on segmental and/or supra-segmental aspects of spoken English (for example Anderson-Hsieh et al. 1992 or Magen 1998). Recent research which takes into account the three constructs above has generated some useful findings. For example, sentence stress errors impact on intelligibility (Hahn 2004), as does the pronunciation of segments in specific locations: "Segments in strong syllables were an important source of information for the listeners and their non-standard production had a greater impact on intelligibility than their non-standard production in weak syllables" (Zielinski 2008: 81). This section will describe some key findings, first in terms of listeners' needs and then in terms of speakers' needs.

Examining the listeners' perspective naturally orients the discussion toward the influence of speech processing strategies, which may be language-specific. Cutler (2001) found that participants from different L1s (mother tongues or native languages) locate word boundaries in continuous speech depending on different features in the speech signal. For example, tuning into patterns of strong and weak syllables not only helps native English language listeners to segment the signal, but that it also helps in lexical recognition and recall (Cutler 1984). Other studies (Bond 1999; Bond and Small 1983) confirm the role of vowels in these strong syllables as key to lexical recognition and access. In relation to consonants, in initial position they provide word boundary clues to native English listeners (Sanders and Neville 2000; Stevens 2002).

In terms of the implications for L1 listeners, Zielinski (2008: 82) is quite clear about the need for "listener education"[15]:

> By highlighting the features of speech production of greatest importance to intelligibility for native listeners, the findings of this study may also have implications for native listeners who want to improve their ability to understand L2 speakers. Listener education has been found to have a positive effect on native listeners' perceptions of their ability to understand L2 speakers (see for example, Derwing et al. 2002). Explicit instruction in how the features of different accents might impact on their listening strategies, and which non-standard features are likely to have an impact on intelligibility might also have a positive effect on their actual ability to understand L2 speakers.

[15] See similar suggestions in Fraser (2011).

Zielinski also found further support for Hahn's 2004 work, distinguishing between effects of non-standard syllable stress patterns in individual polysyllabic words and in series of words (2008: 81). The former patterns had the greatest impact on intelligibility for two of the three speakers and second greatest impact for one of the three. However, a non-standard pattern where a function word was produced as strong when it should have been weak, had little impact on intelligibility (ibid.: 82): "This finding suggests that non-standard stress on particular words in a series of words may not affect listeners' ability to identify those words. However, findings reported by Hahn (2004) suggest that it might affect listeners' ability to understand their meaning". However, the number of participants was small, so Zielinski urges great caution in interpreting these results; obviously, her research protocol should be replicated with more participants and more and/or different language combinations, as it holds great potential to provide insightful results.

Listeners who are not from an English-speaking background are, for the moment, under-represented in the research. However, an understanding of speech processing already allows for certain implications to be drawn. More is now known about which features of the English speech stream carry or highlight important information for native listeners. In listening, L2 listeners' attention should therefore be trained on these features, so that they can access and can then decode the essential information- instead of non-essential content. However, attending to appropriate cues may depend on L1 background and is not always easy:

> Previous studies have shown, however, that the cues to syllable strength may be different for listeners from different L1 backgrounds (see for example Archibald 1997; Lehiste and Fox 1992; and also Grabe et al. 2003 for a brief review). Thus, if the listeners in this study had been from L1 backgrounds other than English, they might well have attended to different features in the speech signal in attempting to differentiate between strong and weak syllables than would a native listener. There is also evidence that L2 listeners from some L1 backgrounds may have difficulty in perceiving English syllables (Ishikawa, 2002, and see Setter and Jenkins, 2005 for a brief review), making it difficult for them to mark out the critical strong syllables and the segments they contain. (Zielinski 2008: 81–82).

Research into speech processing, accent, and intelligibility can provide useful guidelines not only for L2 listeners who want to improve their English listening skills, but also for L2 speakers who would like to improve their intelligibility. This is precisely the case in CLIL where at the moment the focus is more on speakers than listeners.

Much applied linguistics research has been devoted to strategies which lecturers or public speakers, for example, can mobilize in order to be easier to understand; a fair amount has been done by corpus linguists via major projects such as MICASE (Michigan Corpus of Academic Spoken English[16]) or BASE (British Academic Spoken English[17]) and numerous publications based on these corpora have looked at lexis or at techniques for clarifying content. In relation to CLIL, Costa and

[16] http://micase.elicorpora.info/.

[17] http://www.reading.ac.uk/AcaDepts/ll/base_corpus/.

Coleman's non-corpus based study (2010) looked at students' awareness of and lecturers' use of such clarification techniques, referring to Coonan's (2002) categorization. In relation to pronunciation, Coonan's list includes emphasis via intonation as well as two other techniques (reduced pace and clear articulation) which recall Bradlow's work on clear speech (2007; see also Smiljanic and Bradlow 2009) where she emphasizes the distinction between code and signal; certain techniques improve the signal (fewer syllables per second and more pauses) and others the code (expanded pitch range and expanded "distance" between vowel contrasts). Bradlow (2007) encourages speakers to accommodate listener-receivers' needs, in terms of both signal and code: slow down; pause at meaningful points; clearly distinguish between long and short vowels esp. in stressed syllables; enhance distinction between minimally different words; vary pitch range to signal meaning and to avoid monotony.

In relation to the specific code of English, Zielinski (2008: 82) suggested that the most important factors contributing to intelligibility are "the standard production of syllable stress patterns, and the standard production of the segments in the strong syllables within those patterns." However, she cautions against overgeneralizing, as these results may only hold for L2 speakers interacting with native listeners; the problem is that non-native listeners do not process speech in the same way as native listeners.

To conclude, Munro and Derwing (2011: 317) neatly summarize the dilemma which "nativespeakerism" presents[18]; if achieving a native-like accent is the goal, it is probably useless to teach pronunciation because it is so unlikely that such pronunciation will be attained without a huge personal investment being made—and made predominantly outside the classroom. However, the research summarized above supports their optimism, because the operationalization of the three constructs does enable teachers to set priorities for their specific learners and context. Communication is the objective in CLIL, so intelligibility should be the focus. Evidence-based information exists upon which useful, concrete advice can be based. This allows CLIL teachers who want to, to set feasible and effective goals for improving their intelligibility, even within the features of their own non-native accent. The key question becomes: how can they get that advice … and do they want it?

5 CLIL'S Four "COs": COmmunication, COnstructivism, COoperation, COllaboration

The 2002 report *CLIL/EMILE*: *The European Dimension*; *Actions*, *trends and foresight potential* claims that "four principles—the 4Cs-content, communication,

[18] Another solution is to use un-connotate terms. For example, instead of the terms L1/native and L2/non-native, Fraser (2011) uses English-speaking background (ESB) and non-English-speaking background (NESB) to describe participants in a case study in Australia.

cognition and culture/citizenship—elevate CLIL to the position of major and significant contributor to the realization of the EC's Language Policy" (Marsh 2002: 28). This section will examine four, slightly different key words which appear frequently in the literature. The objective is to reveal a conflict that CLIL might ignite, if utopianism holds too much sway in decision-making processes.

There is a tendency to think of CLIL as predominantly European (Costa and Coleman 2010: 19). However, it is also widespread in the Middle East, South America and Asia; for example, Colombia, Brazil and Korea have all hosted CLIL conferences or workshops within the last 5 years.[19] Regardless of the particular national context, CLIL is based on a more widespread assumption that probably underlies much bilingual education policy around the world: "the well-known assumption that foreign languages are best learnt by focusing in the classroom not so much on language—its form and structure—but on the content through which language is transmitted" (Wolff 2003: 35). Before specifically addressing plurilingual education in the Basque country, Alonso et al. (2008, 36) propose three principles for practicing CLIL:

> … first, language is used for learning and at the same time for communicating; second, the subject being studied is what is used to determine the type of language required for learning; and finally, in language use relevance is given to fluency over accuracy.

In that article, the paragraphs which follow that quote use a series of words beginning with CO-: concepts, cognitive (requirements), cooperative (learning), conceptual (frameworks), complex (skills), community, content, competence. These words are representative of the predominantly constructivist orientation of CLIL research and reports; CLIL contexts are often described as promoting the creation of knowledge via pair- or groupwork. CLIL is supposed to involve the integration of content and language. It is supposed to rely upon cooperation between language and content teachers to, in theory, kill two birds with one stone. The optimistic tone of so many CLIL texts is at its most extreme in Ting's (2010) article "CLIL Appeals to How the Brain Likes Its Information: Examples From CLIL-(Neuro)Science":

> I would like to discuss why some very basic understandings regarding how the brain processes information promotes CLIL as a didactic approach that can overcome serious lacuna of 21st Century education (Sect. 2). … (it) can go far beyond merely "content plus language" if it ventures beyond the confines of reading comprehension into a constructivistic modality. (ibid.: 5)

For this to happen Ting declares "it is clear that the era of teacher-as-talking-encyclopaedia must give way to more student-centred science-education" (ibid.). While this ideal may actually exist in certain contexts (e.g. in the Basque country, see Alonso et al. 2008), it would not seem to be the norm at tertiary level:

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[19] http://www.onestopenglish.com/clil/clil-teacher-magazine/news-and-events/clil-events/. See also the AsianEFL Journal's call for papers for the September 2013 conference "CLIL in Asian Contexts: Emerging Trends", at http://www.asian-efl-journal.com/special-editions.php.

> Currently, it seems that CLIL at the tertiary level is often performed in a rather casual manner because university professors are not inclined to receive training on how to teach in a foreign language. They are content to teach independently, and see no need to discuss issues with language teachers. (Costa and Coleman 2010: 20)

The underlying assumption (that CLIL fosters harmonious COllaboration and COoperation) is in direct opposition to certain institutional realities:

> … while CLIL functions as a bottom-up approach at the primary and secondary school levels, at the tertiary level it typically represents a top-down approach, an institutional initiative dictated by the strategic need for internationalization, and one which will enhance the employability of home students while attracting international students. (Costa and Coleman 2010: 20)

The mere thought of top-down implementation of CLIL begs the question of just how cooperative and collaborative the policy can be; in other words, is it desirable, ethical or even possible to force people to teach their subject in another language? Top-down policies *can* be effective in promoting "CO" attitudes and modes of functioning, given certain conditions. For example, Yassin et al. (2009) studied Malaysian pupils' and teachers' perceptions of English for the Teaching of Mathematics and Science (ETeMS). The authors describe several support mechanisms put into place in Malaysia: the creation of an English Language Training Centre, on-going professional development courses for pre-service and in-service teachers, cooperation between language and content teachers, development of courseware for all school levels, follow-up surveys to address users' questions and needs, classroom-based action research, regular consultations with stakeholders including school principals and parents. This would seem to be a good example of "best practice" in CLIL, especially if analyzed using Räsänen's (2011) prerequisites for a successful CLIL programme, which include but are not limited to:

- Clear, specified and mutually accepted aims at institutional and individual level
- Role of language and target language development acknowledged as an integral part of instructional design and content delivery
- Programme overtly promoted by institutional policies
- An interactive and learner-centred pedagogical approach
- An instructional approach offering rich language input and practice.

Attention is drawn to these features because they reflect several of the themes treated in the discussions of CLIL and accent, comprehensibility and intelligibility. The explicit mention of pronunciation training (esp. related to the three constructs) for speakers or listeners is also conspicuous by its absence. Perhaps such training is implicitly understood when a lack of awareness of the role of language is mentioned, both in the 2011 list and in the one year report from LANQua (Greere and Räsänen 2008). The authors clearly outline steps from non-CLIL to CLIL in L2 and FL mediated higher education (ibid.); although pronunciation is not mentioned explicitly, the oft-cited lack of awareness might be assumed to include pronunciation.

6 Conclusion

CLIL is resolutely focused on the transmission of content via a language that is not the usual language in a specific context. The contexts are quite varied, ranging from a bilingual school in an Italian mountain valley to an engineering course at a Japanese university. Evidence-based research into accent, comprehensibility and intelligibility supports the claim that "it is intelligibility—rather than native-like pronunciation- that is most critical for successful communication in an L2" (Munro and Derwing 2011: 316–317). This must therefore be taken into consideration in the development of CLIL programs, especially in the language support provided for content teachers. Pronunciation has been referred to as an orphan in language teacher training programs and in the classroom (Gilbert 2010). This must not be allowed to happen in CLIL.

It is clear that research remains to be done in order to prioritize and justify pedagogical choices, especially as regards pronunciation. For example, more research should be done on what *non*-native listeners need, on what features they attend to in listening. In terms of supporting content teachers, language teachers can usefully contribute to making evidence-based choices which are appropriate for their context. This makes effective language support more likely than a reliance on, for example, quick-fix "accent reduction/elimination/neutralization" programs widely available via Internet.[20] Cooperation between language and content teachers—accompanied by appropriate institutional recognition and support—is a condition *sine qua non* for CLIL to be successfully implemented.

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[20] For example, see the 1,790,000 hits for "accent reduction" on Google Search in June 2012.

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Analysing Spoken Language for Complexity, Accuracy and Fluency: Some Methodological Considerations

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Abstract The chapter presents and discusses important methodological principles involved in the study and analysis of spoken language data. The objective addressed by the author is gauging learners' proficiency in English by measuring their performance along the variables used in numerous studies devoted to spoken discourse and labelled as linguistic, i.e. complexity, accuracy and fluency. The article offers an overview of various measurement tools used in studies on CAF worldwide, outlines psycholinguistic criteria underpinning the choice of the most appropriate data segmentation method, and, finally, describes a method of identifying and calculating instances of the unit of spoken discourse, referred to as AS-unit, which has been proved to significantly improve the quality of analyses of learner language.

1 Introduction

Studies focusing on the measurement of complexity, accuracy and fluency (CAF) of learner spoken language comprise an increasingly popular strand of research devoted to the developmental aspects of interlanguage. The reasons for this popularity stem from the fact that the above-mentioned features can be measured quantitatively and, since quantitative descriptors are characterised by higher objectivity, the conclusion that follows is that they allow researchers to trace the stages of learner language development in a reliable way. By the same token, they enable us to draw comparisons between different language users and, potentially, open up possibilities of generalisations about what constitutes the essence of competence in the foreign language.

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CAF measures as parameters of proficiency have been identified in a bottom-up process, as a result of empirical research on language. The origins of the process go back to the 1980s, when applied linguistics and foreign language teaching recognised the distinction between *fluency* and *accuracy* in spoken language production. Along with the distinction came the view that because of the complex psycholinguistic processes involved in speech production the two aspects of spoken language are mutually exclusive. It was frequently observed that while some learners typically produced language which was fluent but inaccurate, others did exactly the opposite, i.e. spoke accurately, but were far from being fluent. The observation led to a rather general, but widely accepted conclusion that language users are by nature either content- or form-focused when speaking, and that their orientation results in being either fluent or accurate, but hardly ever both.

The two concepts were initially operationalised in purely didactic terms, which was reflected in Brumfit's (1984) renowned classification of language learning activities into fluency-oriented and accuracy-oriented tasks. Soon, they were eagerly accepted by researches and language testers alike, as standard measures, or assessment criteria, of spoken language proficiency. They have since been used in language testing and interlanguage studies.

The third of the measures—complexity, interpreted as the degree of variation of a learner's vocabulary and grammar—emerged in the studies on interlanguage in the 1990s. (cf. Foster and Skehan 1996; Yuan and Ellis 2003). It was only to be expected that new attempts to operationalize the three concepts would follow. Fluency was defined as the ability to process spoken language at the speed natural for its native-speakers (Lennon 1990); accuracy—as the ability to produce error-free language; linguistic complexity as the degree of richness of lexis and grammatical structures demonstrated by the given language user (Ellis 2003: 42).

It should be noted at this point that no consistent theory has been offered as yet to explain which of the cognitive and psycholinguistic processes operating in the learner's mind are responsible for the quality of language production with reference to the three measures. As can be inferred from the results of many studies conducted so far, the levels of accuracy and complexity depend on the actual level of linguistic knowledge—declarative and procedural—represented by the learner. While linguistic knowledge stands for familiarity with the rules of syntax as well as a repertoire of lexical items, including multi-word, formulaic expressions, fluency reflects easiness of access to and the degree of control over the knowledge store available to the learner (Wolfe-Quintero et al. 1998: 4; cited in Housen and Kuiken 2009). Some studies have attempted to identify the constructs which comprise communicative language competence by means of psychometric tests (cf. Harley et al. 1990) and have informed our current knowledge in this respect. However, the status of complexity, accuracy and fluency as psychological constructs has proved difficult to be validated.

In spite of the difficulties mentioned above, the existing models of communicative competence (Canale and Swain 1980) or communicative language ability (Bachman 1990) allow to interpret the CAF measures as overt manifestations of various kinds of competences. Thus, linguistic complexity and accuracy are placed

within the range of linguistic competences in these models, while fluency is regarded as an index of strategic competence.

A question arises whether, if at all, complexity, accuracy and fluency can be treated as distinct and separate components, or dimensions, of communicative language competence. Much of the research on interlanguage conducted in this interest area aims to define the CAF variables as constructs and, by the same token, provide a theoretical rationale for their identification. How effective these studies are largely depends on the validity and reliability of the methodologies adopted, including the quality of instruments used for measurement and analysis.

The next section of the article will discuss some of the methods of data analysis and interlanguage measurement used in studies focusing on linguistic complexity, accuracy and fluency.

2 Measuring the CAF Variables

The majority of studies on complexity, accuracy and fluency reported in the literature apply quantitative methods of data analysis. The methodology usually consists in calculating the frequencies of occurrence or ratios of particular linguistic features. The calculations are performed with reference to some standard measure, which—depending on the objective of the study—can be the number 100 or the total number of words or structural units identified in the given stretch of discourse. Some of the many methods used in SLA research to measure the CAF levels are discussed below.

2.1 Complexity Measures

Syntactic complexity is often interpreted as the amount of subordination in the text. Skehan and Foster (1997) studied the interaction between task planning time and proficiency levels. The index of syntactic complexity they used was the total number of subordinate clauses divided by the number of c-units. Similarly, Robinson (2001) calculated the proportion of subordinate clauses to the total of c-units. Yuan and Ellis (2003) measured the ratio of the total number of simple sentences divided by the sum of T-units. The measure adopted by Iwashita et al. (2008) was the total number of sentences divided by the overall number of c-units.

Mehnert (1998: 90) divided her corpus of spoken language data into c-units, T-units and dependent clauses. Formulaic expressions, e.g. "*Hello*", "*Sorry*" were identified as c-units. Moreover, following the assumption that ellipsis is excluded from the definition of the T-unit, all the T-units were redefined in terms of c-units and totalled. An additional measure was the length of a c-unit determined by the number of words it contained.

Another index of syntactic complexity is the use of some specific linguistic form, e.g., the number of different verb forms used by the speaker (Yuan and Ellis 2003), or the number of verb arguments, e.g., subjects, objects, complements, prepositional phrases, divided by the total number of finite verbs (Bygate 1999).

The commonly used measure of lexical complexity is *the type-token ratio*, that is, the total number of different words used in the text, which are referred to as *types*, divided by the overall number of words in the piece of discourse, labelled as *tokens*. The type-token ratio is a standard, yet somewhat criticised, measure of lexical variation. A relatively new instrument for analysing lexis is the measure called *lexical sophistication* (Read 2000). The measure is arrived at by comparing the words used in the text with vocabulary frequency lists, to see how many words classified as difficult or rare in those lists are actually used by the speaker(s).

2.2 Accuracy Measures

According to Ellis and Barkhuizen (2005), some of the most commonly used measures of accuracy are calculated with reference to a certain number of words; usually every 100 words. The number 100 appears to be more valid as a point of reference than, for instance, the total number of sentences or units in the text. Owing to the fact that the number of words in sentences is by no means constant, calculating the ratio of inaccurate forms on this basis would not account for variation in sentence length. The indices of accuracy which are often examined include the frequency of self-repair, the frequency of error, the ratio of accurate and inaccurate sentences. Although, from the methodological point of view, the adoption of the number 100 as a point of references poses no difficulty, serious problems may arise when trying to identify the actual sentences in the spoken text which—as has already been noted—may and will contain incomplete sentences, non-sentences and ellipted forms.

Examples of research in which the method of measurement was based on the number 100 include the studies conducted by Skehan and Foster (1997) and Yuan and Ellis (2003), who counted the percentage of sentences which were free from morphological, syntactic and lexical errors. Similarly, Mehnert (1998) measured the percentage of correct sentences, as well as the number of errors per every 100 words.

Other measures of accuracy include the number of errors per T-unit (cf. Bygate 2001), the total number of error-free c-units (cf. Robinson 2001), or the ratio between the number of correct sentences and the total number of sentences in the corpus (cf. Iwashita et al. 2008).

Measures of accuracy as those described above are not free from error themselves. One of the challenges for analysts to face is being able to apply consistent criteria for error identification, as well as setting boundaries between clusters of single, local errors and global errors, so as not to distort the results of the final count.

2.3 Fluency Measures

Measures of fluency fall into two categories: temporal variables and hesitation phenomena. Temporal variables, such as the rate of speech or the mean length of a pause, allow to measure the speed at which speech is produced. Hesitation phenomena, e.g. the number of false starts or repetitions, provide insights on the speaker's disfluency (Ellis and Barkhuizen 2005).

Various studies have used different methodologies for measuring fluency, often combining the quantitative and qualitative research paradigms. As a rule, analysts have used batteries of measuring instruments, apparently in order to render the complex nature of fluency as comprehensively as possible.

Lennon (1990) examined narrative discourse produced by German learners of English. Samples of the data were first assessed by native-speaking teachers of English and then submitted to quantitative analyses. The measures which were used in this study included temporal variables, specifically, the number of words per minute, the number of repeats and self-repairs per T-unit, the mean length of utterance between pauses, the mean and the total length of pauses between T-units.

Riggenbach (1991) wanted to find out what factors determine the differences between our perceptions of a person's oral fluency and disfluency in the foreign language. The methodology employed in the study consisted of two types of measurement: (a) the assessment of the speakers' fluency by a group of raters using a seven-point scale, and (b) a quantitative analysis of data by means of fluency measures such as filled and unfilled pauses, repeats and self-repairs, and the rate of speech indicated by the number of words/syllables per minute. No units of analysis were identified or counted in the corpus of data, although in the assessment of the different functions played by pauses some reference was made to the placement of clause boundaries. It follows then, that the clause as such may have been adopted as a unit of qualitative analysis.

A longitudinal 4-year study conducted by Towell et al. (1996) combined the qualitative and quantitative research paradigms. The measures used for the quantitative analysis focused on the rate of speech and articulation, the mean length of a pause, and the mean length of run between two pauses—the measure judged by the authors to be the most valid of all. The unit which functioned as a point of reference for calculations was a unit of time, rather than a component unit of discourse.

Later studies used similar measures: the number of pauses longer than 1 s (Skehan and Foster 1997), the number and length of pauses, the rate of speech and the mean length of utterance (Mehnert 1998), or the number of words per c-unit (Robinson 2001).

3 Segmentation of the Data

As has been shown above, all the studies of complexity, accuracy and fluency adopted a certain unit of analysis—in most cases it was syntactic or temporal—with reference to which the measurements were carried out. The main types of units of analysis are briefly described below:

(a) *C-unit*: a communication unit that is an utterance expressing a referential or pragmatic meaning. It consists of either a simple sentence or a sentence equivalent. Any dependent clauses are included in the c-unit. The unit is identified according to the semantic criterion (cf. Skehan and Foster 1997).
(b) *Utterance*: a stream of speech bearing at least one of the following characteristics: one intonational contour, the occurrence of pauses as utterance boundaries, the contents equivalent to a single semantic unit (Crookes 1990, cited in Foster et al. 2000: 359).
(c) *T-unit*: the Terminable Unit—"the shortest unit which a sentence can be reduced to, and consisting of one independent clause together with whatever dependent clauses are attached to it" (Richards et al. 1989). A T-unit is thus a main clause plus all the clauses (finite or non-finite), phrases or words dependent on it.

Foster et al. (2000) observe that many units used in research nowadays for the segmentation and analysis of spoken language are redundant in that they are in fact similar, yet differently defined entities. What is more, their definitions sometimes fail to recognize the specificity of spoken language. As Norris and Ortega (2009: 560) point out, the T-unit may be more appropriate for written discourse, as it is composed of full clauses and sentences, while the c-unit might be more suitable for analysing low-proficiency dialogic data containing many non-syntactic segments. In order to assess the levels of the CAF variables it is necessary to apply a standard unit of analysis which will serve as the main tool for the segmentation of the spoken discourse. The segments can then be counted and the total obtained can be subsequently used as a point for reference for calculating the frequencies of specific linguistic features.

The sentence—traditionally regarded as the basic building block of discourse—does not apply to the spoken language analysis, although it is a commonly recognised unit of segmentation of written discourse. It is a well-known fact that spoken and written discourse are structured differently. The process of speech production takes place in real time and does not leave much space for planning syntactically rich, let alone complete sentences. This does not mean, however, that the sentence as such is absent from spoken discourse altogether. The sentence is not totally excluded from spoken discourse; however, it is only one of the types of structural units possible. Apart from simple, compound and complex sentences, spoken discourse contains numerous subordinate clauses which are not connected to any particular main clauses, detached expressions, ellipted phrases and false starts, to name but a few. All these non-sentence units are legitimate linguistic

entities, in that they play various discourse functions, and must be fully accounted for in a reliable study of learner language.

The unit designed for analysing oral data has to be defined in such a way as to ensure its applicability to various types of discourse: monologue and dialogue, native and non-native, spontaneous and pre-planned. In other words, the unit must be a universal measure, or else valid comparisons between various types of discourse produced by different users would not be possible. It is often contended that oral data can be validly and reliably segmented only if the method of segmentation accounts for the psycholinguistic processes of speech planning and production (Crookes 1990; Foster et al. 2000).

4 Psycholinguistic Aspects of Speech Planning and CAF Measurement

Every act of speech begins with a communicative intention (Levelt 1989: 108–109). The path from intention to articulation proceeds through several stages. First of all, the speaker decides upon the general plan of an utterance in order to express his primary communicative goal. Besides, in order to realise this goal the speaker must plan a number of secondary goals and coordinate them with the overall intention. The total of these coordinated processes is referred to as *macro-planning*.

The act of planning involves more than merely the contents of the successive acts of speech. For each of them, a propositional structure needs to be defined. The speaker has to decide which piece of information is topical, which one is focused and which one is entirely new. Last but not least, the speaker must decide which linguistic features to attribute to each type of information. The whole complex of these decisions can be referred to as *micro-planning*. Its final product is the pre-verbal message.

Macro- and micro-planning can thus be treated as one process consisting of two stages: in the first stage the speaker formulates a communicative intention for each of the speech acts; in the second one, speech acts take on their propositional form. The second stage can begin before the first one has been completed. This means that speakers are able to plan the overall communicative intention, or the meaning of the utterance, without necessarily planning the details. To summarise, in order for a message to be composed two kinds of processes are needed:

(a) the planning of a speech act, that is, the selection of information necessary to achieve the overall communicative goal;
(b) formulating the preverbal message by assigning appropriate propositional format to each component piece of information.

The processes of macro- and micro-planning result in the production of longer and shorter stretches of spoken discourse respectively. The former is assumed to cover multi-sentence sequences, while the latter is associated with units

corresponding to a clause or sentence (Chafe 1980; Butterworth 1980, cited in Foster et al. 2000).

The efficiency of psycholinguistic processes involved in the planning of speech has consequences for the actual performance; this efficiency is manifested through—among other things—the quality of proficiency variables in question, that is, linguistic complexity, accuracy and fluency. It is expected that a higher proficiency level corresponds to the speaker's ability to plan, produce and monitor complex utterances, i.e. higher linguistic complexity. At the same time, the production of increasingly complex chunks of spoken discourse takes less and less time, which has consequences for the actual fluency of speech. Because less effort is required for the smooth production of complex utterances, more capacity of the working memory can be engaged in managing other tasks occurring simultaneously, such as monitoring linguistic accuracy, responding to feedback from the interlocutor(s), adjusting the content and register to suit the communicative goals (Skehan 1998, 2009; Robinson 2001).

As has been said before, in measuring the CAF variables of spoken language it is important to adopt a unit of analysis which corresponds to the stages, or units, of psycholinguistic planning. The section to follow presents a unit which is expected to conform to the above-mentioned criteria.

5 Adopting a Reliable Unit of Oral Data Analysis

The method of data analysis must necessarily include the choice of a unit of oral discourse on which the analysis will be based. Having decided on which unit to use, the analyst must then be able to identify these units in the corpus of data. Neither of these processes are unproblematic in the case of spoken discourse, in particular—an unplanned, spontaneously produced discourse. This is not surprising, since oral data contain many entities which escape standard syntactic definitions.

Foster et al. (2000) have proposed the Analysis of Speech Unit (AS-unit), which appears to be more reliable than the units of data segmentation discussed in Sect. 3 of the present article. The AS-unit is defined as:

> … a single speaker's utterance consisting of an independent clause, or sub-clausal unit, together with any subordinate clause(s) associated with either. (Foster et al. 2000:365)

The AS-unit has in fact been developed on the basis of the T-unit, but—unlike the latter—takes account of sub-clausal units which are not dependent on, or attached to, any other units. The nature of the unit is syntactic, which makes it much easier to identify than the units based on semantic or intonational criteria.

The syntactic criteria for identifying AS-units in a text have been laid out in detail so as to ensure greater reliability of analysis. The criteria are given below and illustrated with examples. The boundaries of AS-units are marked with the vertical slash.

Thus, an AS-unit is an utterance containing the following syntactic structures:

- an independent clause including a finite verb:

(1) | I'm taking a break | (1 AS-unit)
(2) | go ahead | (1 AS-unit)

- a main clause together with its subordinate clause(s):

(3) | you'd be surprised how clever he is | (1 AS-unit, 2 clauses)

- the subordinate clause may include a non-finite verb, plus one additional clause element (Subject, Object, Complement or Adverbial):

(4) | I love reading comics | (1 AS-unit, 2 clauses)
(5) | I love reading | (1 AS-unit, 1 clause)

- an independent sub-clausal unit including one or more phrases which can be elaborated to a full clause:

(6) A: | when did you arrive? |

B: | last week | (1 AS-unit)

- a minor utterance, defined otherwise as an irregular sentence:

(7) | never mind | (1 AS-unit)
(8) | thank you so much | (1 AS-unit)

- a coordinated clause:

(9) | it is obvious and you know it | (2 AS-units, 2 clauses)

- two or more coordinated clauses if they have the same Subject, and are separated by a pause of less than 0.5 s:

(10) | she called me the other day (0.1) and asked to dinner | (1 AS-unit, 2 clauses)

What the above criteria do not demonstrate is how to approach phenomena specific to spoken discourse. However, Foster et al. (2000) provide a range of recommendations for managing the 'irregular' data to meet particular research objectives. Thus, if words per unit need to be calculated, *a false start*, i.e. an utterance which is abandoned before it is completed by the speaker, should be excluded from the count. *Repeats* should be excluded from the count as well, unless they are used for rhetorical effect. *Self-corrections*, i.e. utterances which are reformulated by the speaker the moment he/she realises they contain errors, should be included in their final version. *Topicalizations*, i.e. noun phrases which state the

topic of the AS-unit should be included in the unit, unless markedly separated from it by falling intonation and a pause of 0.5 s or more.

Interactive discourse presents serious problems for analysis in terms of syntactically defined segments. This is because interruptions are a common feature of conversations; the speaker's utterance may be interrupted by the interlocutor and continued afterwards. The extract below demonstrates how such difficulty may be resolved:

(11) A:| oh that's a big problem

B: oh no!
A: because my shop's policy is only to give credits for the return goods | (1AS-unit)
(After: Foster et al. 2000)

The authors of the system of data segmentation described above insist on a principled approach to one's analyses. The ultimate decisions concerning the inclusion or exclusion of certain linguistic forms must be governed by research purposes and the type of spoken language data.

6 Conclusion

The purpose of the present paper is to present and discuss some of the methodological problems which analysing spoken language data imposes on the researcher. Research on spoken language may serve many objectives, e.g. conversation analysis, interaction analysis or functional analysis, to name but a few. The objective addressed by the author in her research is gauging a learner's proficiency by measuring his/her performance along the variables commonly labelled as linguistic, i.e. complexity, accuracy and fluency. Orientation towards these aspects of proficiency requires a specific methodology. Since most of the instruments used to measure the CAF variables are quantitative, it follows that the targeted language features have to be counted and calculated as percentages or ratios. Valid and reliable calculations have to relate to certain standardised units of discourse which can be applied consistently to different types of data.

The article discusses the main instruments of measurement used in studies on CAF worldwide, outlines psycholinguistic criteria underpinning the choice of the most appropriate data segmentation method, and, finally, describes a method of identifying and counting units of spoken discourse which—it is believed—can significantly improve the quality of analyses of learner language.

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On Applying Simultaneous Introspection in Researching Language Acquisition

Danuta Gabryś-Barker

Abstract Introspective reports have been long employed in psychology as a valid method of observing and researching human behaviour. However it was only at the time when cognitivism found its way to L2/FL teaching and learning that the employment of introspection was possible and that introspection was treated as a valid and reliable method of research, be it simultaneous, consecutive or delayed consecutive (retrospection). The first studies in SLA carried out by means of introspection in the early 1970s investigated the competence of native speakers and their intuitions about L1, whereas at the beginning of the 1980s introspection studies focused on L2 reception and production. This article quotes examples of a number of studies in SLA, as well as those in which thinking-aloud protocols (TAPs) were used in studying the language processing of multilinguals. However the main aim of this article is to offer a critical insight into the value of introspection for researching multilingualism, together with some guidelines for implementing introspective research methods when studying language learning processes.

1 Introduction to Introspective Methods

Introspective methods have been used in second language acquisition research for over twenty years now. Their use reflects a shift in emphasis from the language product to the process which underlies generation of this product. Introspective reports became empirical tools of measurement of human behaviour in psychology a long time ago, whereas they have gained recognition as a research method in SLA only fairly recently. The development of cognitivism in L2/FL teaching and learning allowed for the introduction of introspection as a valid and reliable

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method of research. The use of introspective methods came into being with the challenge to the hegemony of behaviouristic theory, which explained the mechanisms and structure of cognitive processes of the human mind by stimulus–response formula. Its inadequacy led to a feeling of dissatisfaction among applied linguists and made them look for methods that would enable them to probe the subjects' internal states. Data obtained in those experiments have become fundamental in psychology, although there are still many doubts raised about "the new methods" of introspection, about their being highly speculative and subjective in language research (Gabryś-Barker 1995).

The pioneers of introspective methods began this work at the turn of the 20th century. Most of them used the method to investigate the contents of human consciousness, reducing it to sensory and imaginal components reported on by their subjects. The number of studies undertaken was relatively small and they are now understood to be more anecdotal than scholarly. The first thinking aloud protocols (TAPs), which were assumed to be verbalizations of thinking processes of the subjects, were performed in psychological experiments. They were simply descriptions of what had been said by the subjects and not their actual verbalized thoughts. As a consequence, they were very selective, biased and unsubstantiated. The first protocols were used by Watson and Rayner (1920) to illustrate thinking processes involved in a problem-solving situation. They were very unsystematic and full of interpretative remarks (Gabryś-Barker 2011).

The term *introspection* means to reflect, to look inside oneself. When formalized and applied as a research method, it means to verbalize one's own thoughts and thinking processes. It is the process of externalizing what goes on in one's brain either at a given moment, on completion of a certain action or after a time lapse (Gabryś-Barker 2011). Ericsson and Simon (1984) see verbalized behaviour as a form of human activity that can be explained like any other behaviour by developing a model, this time a model of information processing, which would describe how data is accessed and encoded (verbalized) in response to stimuli one is exposed to at a given moment. What is more:

> Each verbalization is understood as deriving from the cognitive process that underlies it. As a result, verbalization must comply with all the constraints that have been identified for cognitive processes. In turn, cognitive processes consist of a set of sub-processes, which follow one another and are being transformed under the influence of a series of information processes. Information is stored in short term memory (STM—with a limiting capacity of about 15–20 s) and in long term memory (LTM—with permanent storage but slow access time). Information just received is stored in STM and is easily retrieved and articulated at the time of performing a task. (Gabryś-Barker 2011: 122)

Verbalizations are functions of time as they reflect cognitive processes in two ways: either directly, i.e. when the time of the task performance is concurrent with the verbalization or indirectly, i.e. when the information is retrieved from STM or LTM after the completion of the task. The data in both times of verbalizations will not be homogenous because of forgetting and interpretative processes that may occur. Table 1 presents how Ericsson and Simon (1984) describe levels of verbalization processes.

Table 1 Levels of verbalization

Level of verbalization	Description	Comment
VOCALIZATION	Articulation of oral encodings, where no thinking processes take place. In self-directed verbalizations (e.g. in the case of thinking aloud protocols—TAPs), they are individual and depend on the subject's interpretation of the instruction s/he is given or on the semantic content of the task	A direct process in which information encoded is vocalized (articulated), i.e. in a language task a phrase or a sentence is pronounced or read aloud by the subject with no cognitive processes taking place
DESCRIPTION and/or EXPLICATION OF CONTENT	"Labelling" information and recoding it in an idiosyncratic way, characteristic of a subject/informant	Encoded verbalizations where the information attended to by the subject (level 1) is modified by recording processes, i.e. the subject generates a verbal representation of the information s/he has got stored in his/her mind by means of filtering it for the purposes of the task
EXPLANATION OF THOUGHTS	Ideas that rush through the subject's mind or any other, even emotional, reactions to the information (task) s/he is to solve. it involves a process of interpretation	The subject reports his/her ongoing thinking, embracing not only its verbal aspects, i.e. word associations and interferences from L1 and L3 (for example) but also personal, emotional responses to the task

2 Focus of Introspective Research

In an earlier discussion of the object of introspection (Gabryś-Barker 2008) I pointed out that the focus of introspection may be in any of the various aspects of language production the experimenter wishes to investigate. His/her interest may lie in the cognitive structure of the IL (interlanguage) of the informants. In other cases, when for example L2 achievement is to be measured, an affective aspect of a language performance may be in focus. In the case of measuring affective aspects involved in L2 learning, such as motivation and attitudes, introspection becomes a complementary tool to all kinds of interviews and questionnaires. Table 2 presents examples of studies of different aspects of foreign/second language performance where a whole variety of introspective methods and their combinations has been deployed.

The selection of studies in Table 2 is by no means exhaustive, however it is representative of the method as they are either the earliest, the most recent or the best-known studies in different areas of language learning research. Learner-related behaviour described in the studies focuses on:

Table 2 Introspection-based SLA studies

Research focus	Studies
Learning strategies	Stevick (1981); Wenden (1982); Cohen (1984); Yamashita (2002)
Reading in a foreign language	Cavalcanti (1982); Cohen (1986); Bowels (2004)
Translation	Krings (1986); Zimmermann and Schneider (1986); Schneider and Zimmermann (1987); Ronowicz et al. (2005); Schlesinger (2000)
Lexical search	Zimmermann and Schneider (1986); Haastrup (1985); Williams and Hammarberg (1998); Herwig (2001)
Spoken language	Schwartz (1980); Dechert et al. (1984); Cohen and Aphek (1981); Faerch and Kasper (1987)
Writing in a foreign language	Raimes (1985); Beare (2001); Sachs and Polio (2007); Wang and Wen (2002)
Language transfer	Dewaele (2001); Jessner (2003); Gabryś-Barker (2005)
Pragmatics	Kasper and Rose (2002); Liu (2006); Taguchi (2008)
Language awareness	Tomlin and Villa (1994); Leow and Bowles (2005)

(a) the way learners attend to language input they are exposed to when performing a language task
(b) the way they arrive at spoken utterances (the process of speech production)
(c) the way the text is being processed (reading comprehension, the reading process in L2 itself)
(d) the way the text is being generated (the writing process)
(e) the way lexical items are learnt at the stage of input (inferring and guessing using other languages or other compensation strategies)
(f) the way lexical items are retrieved from memory (the use of recall strategies). (Gabryś-Barker 2011: 132)

More recently simultaneous introspection has also been used in studying multilinguality. The research projects presented in Table 3 are examples of my own studies on multilingual mental lexicon and lexical processing in trilingual language acquisition/learning. Research issues were explored with the aid of simultaneous introspection, in which the complexity of multilingual language interaction in the mental lexicon was observed from various perspectives.

The aim of this article is not to elaborate on the findings of the above studies but to comment on the difficulties encountered at different stages of the research when implementing simultaneous introspection as data collection method.

Table 3 Simultaneous introspection in MLA studies

Study	Type of language tasks used	Research focus	Year
Study 1	Cloze task (in L2 English) Translation from L1 (Polish) into L2 (English)	Retrieval strategies of restricted collocations Metaphoric interpretations Psychotypology Learner profiles	1993
Study 2	Translation of the text from L2 (English) into L3 (Italian)	Learner profile (approach to the task, metalinguistic awareness, language transfer)	1995
Study 3	Translation from L2 (English) into L3 (Italian) (English/Italian)	Language transfer at the level of lexis and syntax Transfer of training Language competence in language transfer	1998
Study 4	Translation from L1 (Polish/Portuguese) into L2 (English) Translation from L2 (English) into L3 (German)	Lexical search processes Acquisition versus learning Transfer of training	1999
Study 5	Translation (as above)	The influence of the language of input (L1 versus L2) on the TL output Implicit versus explicit processing Lexical transfer	2005
Study 6	Translation (as above)	Inner/private speech Activation of individual languages Levels of metalinguistic awareness	2005
Study 7	Translation of a semi-authentic text	Interlingual language transfer in syntactic processing Transfer of training (explicit metalinguistic knowledge) The affective dimension of language processing	2008

Source Gabryś-Barker (2010)

3 Difficulties Encountered and Methodological Recommendations for the Use of Simultaneous Introspection

Implementing simultaneous introspection means first of all following a clearly designed sequence, at each stage of which some methodological and procedural problems may emerge (Table 4).

The difficulties encountered appear at different stages of research in relation to:

- facilitating subjects' performance
- selection of research tasks for verbalisation
- criteria of data classification (objective and focus of the study)

Table 4 Stages in simultaneous introspection

Stage	Objective/focus
1. Training session	To develop the subjects' awareness of verbalizations
	To expose the subjects to sample TAPs
2. Selection of an appropriate task to be performed	To formulate research questions
	To analyze the nature of the task and its degree of openness to verbalizations
	To formulate instructions to the task
3. Preparation of the subjects	To explain the instructions to the task
4. Performance of the task and simultaneous thinking aloud	To record the verbalizations of individual subjects
5. Transcription of the verbalizations	To produce TAPs of the thinking processes

- TAP coding system
- incompleteness of data.

I will comment on difficulties and problems and recommend possible solutions that can facilitate the use of simultaneous introspection for data collection purposes in researching language acquisition.

4 Facilitating Subjects' Performance (Stages 1 and 3)

First of all, the problems may arise due to the subjects' inability to verbalize caused by their unfamiliarity with this type of task. So it may be assumed that the success of verbalization processes, and consequently the type and richness of data retrieved, are very much determined by the initial training of the subjects. This entails exposure to introspective methods and thinking aloud materials in an overt manner, preferably with discussion and comments. In many cases warm-up exercises are used to attune the subjects to the verbalizations or to give them some initial practice. Such exercises allow the researcher to intervene to help the subjects in their verbalizations by stopping them from lapsing into silence. Some training also constitutes a form of monitoring the subjects before they perform verbalizations proper on their own, without the intervention of a researcher. However, the extent to which pre-training is given should depend on the informants, their personal characteristics and on the nature of the task to be performed.

5 Selection of Research Tasks for Verbalisation: Degree of Automaticity and Reactivity Effects (Stage 2)

Secondly, the type of task selected will or will not be conducive to verbalization. The tasks used in my studies were translation tasks involving different input and target languages.

Translation tasks allow us to use simultaneous introspection successfully, as a written translation is a non-immediate task that involves mostly conscious processing. In other words, it is open to verbalization, as observed in my earlier study (Gabryś 1993).

One of the criticisms of the thinking aloud method points to reactivity as a significant factor in language processing, which means that thinking aloud may disturb and trigger different cognitive processes during the verbalization task. However, as other research shows (Leow and Morgan-Short 2004), reactivity is minimal and cannot be considered a significant factor in distorting thinking aloud as a process.

6 The Criteria for Classification of TAP Data and Coding Systems (Stage 5)

The third area of difficulty posed by the use of simultaneous introspection is the way data is transcribed as a thinking aloud protocol (TAP) by means of an appropriate coding system reflecting the study focus. This needs initially to be determined by clear-cut criteria for the data classification. Table 5 presents a simplified coding system.

Once TAPs have been transcribed, the data needs structuring, that is to say, the relevant fragments of the produced script have to be selected. Any researcher using

Table 5 A simplified TAP coding system

Coding sign	Description
(0.5)	Five seconds pause in the verbalization
(hm)	Non-verbal manifestations of non-automatized thinking
(aha)	
(oh)	
	Raising intonation, questioning oneself about the solution to the problem
	Flat intonation, an ongoing thinking process
	Falling intonation, an answer/choice is being made

Table 6 The object of introspection as criterion of data structuring

Object (objective)	Examples
1. Cognitive	1. Strategies of recall
2. Affective	2. Comments on success and/or failure of performance
3. Social	3. Asking for assistance in performance of the task
Declarative versus procedural knowledge	Comments on grammatical/lexical rules versus comments on strategies
Modality of language use 1. Spoken versus written	1. Verbalized comments versus those in the written text
2. Receptive versus productive	2. Comprehension comments versus produced language solutions
3. Combination of the above	
Continuity of the verbalization process versus a discrete research aspect	1. Focus on pauses (as marked in TAPs) in the verbalization processes 2. Focus only on the researched phenomena, e.g. errors, strategies etc.

simultaneous introspection is aware of major difficulty in the deployment of this type of methodology, i.e. abundance of data which may not only be idiosyncratic but also highly unstructured. However, there are certain procedures which allow us to overcome this obstacle. Faerch and Kasper (1987), the first and most ardent advocates of introspective methods in SLA research, propose the object of introspection (the type of information gathered) to be the main data-structuring criterion (Table 6).

7 Completeness of Data

Simultaneous introspection has certain drawbacks and it is often criticized because of:

- the inaccessibility of certain cognitive processes for verbalization,
- the inconsistency of actual behaviour and verbalization,
- the interfering character of verbalization, i.e. influence on the performance of an informant (reactivity),
- the incompleteness of reports.

However, in the case of translation tasks which are most often used in introspective research, these criticisms and alleged drawbacks become quite irrelevant. In a process of written translation, introspection utilizes information stored by informants in their STM, i.e. information which is still accessible at the time of verbalization. Besides, processes verbalized do not require on the part of the informant any kind of selection, interference or speculation on the language

sample, but straightforward information on what he or she is actually doing at that very moment and whatever thoughts pass through his or her mind.

8 Closing Comment

As mentioned earlier, introspection is often questioned as to its reliability. This is mostly due to the assumed effects of reactivity on verbalization processes. In other words, it is believed that a significant influence is exerted by language on thinking processes and interpretation of these thinking processes at the moment of verbalization. However, studies on validity of simultaneous introspection do not confirm that reactivity occurs in all research contextsppendix (Bowels 2010). Reactivity can be diminished by an appropriate form of informant preparation and training in verbalization. What is more, the higher the level of informant language proficiency for the type of task chosen and the more explicit the instructions to the task are, the more reliable verbalizations are. Available statistical calculations allow a researcher to measure the validity of the introspective method used in a given study as the data collection tool (as demonstrated by Bowels 2010). I would recommend the use of simultaneous introspection, together with delayed introspection (post-task verbalization) and retrospection (for example in the form of a questionnaire or interview), which express the informants' reflection on their own language performance to complement the concurrently received data.

Introspection as a data collection tool, and thinking aloud protocols in particular, can perform different functions under different circumstances. From a cog-

TAP 1	Task: Translation of the text from L2 (English) into L3 (Italian), L1- Polish
Sample data	- *ah—I'll read it first—przeczytam (czyta)* When Albert… I've won the big prize—*kurcze nie wiem—hm hm—czasy—(czyta)* When Albert entered the office- *(pisze)*Quando Alberto—*enter -entrare- entered—entre—o—r—a—entrato in—past definite—czyli simple past—czyli—passato prosimo—entered—(pisze) entrare*—entrato in—*l'oficio—l'uficio—nel'oficio—(pisze)* nel'oficio—*double f—(powtarza) officio–officio-officio*…
Object of analysis	• attendance to input: holistic versus fragmentary • the use of metalanguage and consciously acquired rules • automatic recall of nominal phrases • importance of accuracy in grammar and spelling

TAP 2	Task: Translation of the text from L2 (English) into L3 (Italian)
Sample data	*(reads)* Nobody was working—*to będzie czas ciągly—(powtarza) nobody was working- czas ciągly czyli imperfetto czyli a -work—lavoro- (pisze)* nessun—*tylko czy to będzie tak jak po angielsku—was working—working—liczba pojedyncza—nikt nie pracowal—(pisze)* nessun—*nie wiem czy to bedzie podwojna negation—bo jak w polskim—(pisze)* nessun lavorava—*napiszę-* a tutti impiegati.
Object of analysis	• examples of transfer between L1, L2 and L3 • focus on grammatical accuracy • verbalisation exclusively in L1

TAP 3	Task: Translation of the text from L2 (English) into L3 (Italian)
Sample data	*(czyta)…* were still talking about the lottery—*and—znowu będzie imperfetto- to zreszta podają poniżej—parlare di—parlavano—(pisze)* impiegati parlavano—*vamo—di lottery—lotterija—to bedzie po hiszpańsku—no to ja muszę sprawdzić w slowniku—*loteria—*parlavano di lotteria—czyli będzie (pisze)* della lotteria—*della lotteria.*
Object of analysis	• grammar focus (again) • use of grammatical rules • references to Spanish (L4): perceived language distance

TAP 4	Task: translation of the text from L2 (English) into L3 (Italian)
Sample data	*(czyta)* Jules—*jak to się będzie wymawiało—po włosku—*Jules—*nie—(czyta)* his best friend—*I—il—migliore—miglior—(pisze)* miglior amico—il suo miglior amico—*a jeszcze zapomnialam—(czyta)* impiegati parlavano—*still still—to jest—nie—ancora—nie pamietam—musze sprawdzić—still ancora—nie wiem czemu mi sie skojarzyło z już—yet—still—impiegati ancora parlavano—nie wiem czy będzie przed parlavano…*
Object of analysis	• focus on word order (L2/L3 language transfer) • need of assistance (dictionary) in lexical search

nitive perspective verbalizations (TAPs) can be viewed as a window to the cognitive processing of information, by means of which we can find out among other things, about processing strategies, cross-linguistic influences and the language problems encountered by a learner in a given language performance. As such, verbalizations have been presented in this article. However, I do believe that from a socio-cultural perspective, introspection can also be seen as a form of reflection on one's cognition and affectivity and thus a significant learning tool. It allows learners to become more aware of the idiosyncracies in their own learning process, whereas for teachers it may offer guidance on their learners' cognitive and affective profiles.

A.1 Appendix: Sample Think-aloud—Protocols

A.1.1 Study 1: Multilingual Learner Profile (Gabryś-Barker 2011)

A.1.2 Study 2: The Role of the Language of Input in Multilingual Language Processing (Gabryś-Barker 2005)

Source text: *New wine commission for Dão wine* (L2 input)

Yesterday, at the inauguration of Jorge Teixeira as the new president of the Dão Region Vintners Commission (CVRD), in Viseu the Secretry of State for Agriculture and Food, Cardoso Leal, called attention to "the need to develop markets". Jorge Teixeira, who is well-known in the PS, has promised to continue the work started by his predecessor Alvaro de Figueiredo with "aggressive marketing". Jorge Teixeira, as President of CVRD, will now be one of the three representatives to the Government for the cooperatives and private sectors of Dão wine producers. The inauguration ceremony of the new president of the CVRD was punctuated by a speech given by Alvaro de Figueiredo. This ex-member of parliament for the PSD, who many will agree has affected Dão wines profoundly in the last few years, gave a necessarily positive summing up of his actions whilst in charge of the commission. "From the climate of stagnation, the official region has moved on to a situation of technological and commercial development adapted to these modern times", said Alvaro de Figueiredo, who also congratulated himself on the existence of more than 20 producers-bottlers (who produce the already famous "wine from Dão"), six wine centres and the complete restructuring of seven of the ten cooperative cellars of the official Dão Region today.

Task: translation of the L2 (English) input text into L3 (German)

Think-aloud protocol (an sample of the transcription):

(reads) at the inauguration of Jorge Teixeira as the new president—hm—of the Dão region Vinters Commission—ok—Gestern wahrend—hm—não sei—die Inauguration—I don't know—Inauguration—von Jorge Teixeira als—als- dativ-no accusativ—als(..) als(..) what—so, als neuen -não- eh- Prasident—hm—der komition—how should I know- der komition des Vitners Dão Gegend (laughter)—hm—CVRD—komma- in Viseu der- hm- der what- what's he called—Stäats hm Sekretar für Landwirtschaft und Essen- essen—ok—und essen- Cardodo Leal (.x) so where was I—Landwirtschaft und Essen cardoso Leal—call attention (twice) must nach (laughter) hm- I don't know- hm- called attention—Attention -nein—pass auf—nein- (.x)- pointed out- called attention (laughter) say it the other way—hm- hat gesagt das es war -ne es ist (.) sehr wichtig -hm-neu—como se escreve—how do you write neu—neu markets—I don't know—neue—neue- kaufen Platz—Platze—Kaufen platze -zu bauen oder so was (.3) so (reads) Jorge Teixeira who is well known in—der—den—hm- I don't know—der—well known—is important—hm- recognized—hm—den—berühm in PS ist (reads) has promised to continue the work (.) promised—God—promise—verspr spre—versprachen—ok—Jorge

Teixeira hat versprechen—ne—hat—has promised to continue the work started by his prede- hat versporchen—das ein—die werk—main dein sein sein—predecessor whatever—I don't know how to say that—die werk sein—hm—weiter fuhren—hm- hat versprochen—das die werk sein- etwas—wieter führen—wurde (.) werde wurde werden nein—dass es die werk sein predecessor wieterführen—werd wird—no it is past—has promised to continue—present perfect—to continue the work started by his predecessor—hm (writes) die werk sein predecessor weiter fuhren—let's say wird—oh I forgot something here—hat versprichen—dass es die werk sein (.3) predecesor (.) Alvaro de Figueiredo weiter führen wird mit (laughter) aggressive marketing—right—I don't know—it is probably marketing in German as well—mit aggressive—stark—mit stark marketing (twice)—it's international—isn't it—hom predecessor (laughter) Jorge Teixeira again—als Präsident—der den die—how should I know—Komition die probably—als Präsident (.1) CVRD (reads) will now be one of three representatives (.1) hm (.1) wird jetz ein der—ein oder—ein der (.10) where was I—I lost myself—where am I—will now be one of the three representatives—ein der drei—drei drei—representatives don't know—für die regierung—regierung—I don't think it is Regierung—whatever—God—für die regierung—für die cooperatives—und privat Sektoren (.1) hm producers—I don't know Produktoren -so für die cooperatives and private (.4) oh—für die—hm—und privat Sektoren der—I don't know—der Dão Wein Produktores -(reads) the inauguration ceremony—ceremony—ceremony—I don't know—Zeremon (laughter)the inauguration hm (.1) ersten Tag—I don't know (.1) really really really don't know—let's say inauguration ceremony of the new president of the CVRD (writes) the inauguration ceremony für den neuen Prasident der CVRD. (subject 3).

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On the Role of Pre-service Language Teachers' Beliefs on Multilingual Education in Developing Teacher Training Programs

Weronika Szubko-Sitarek

Abstract For over twenty years now the role of teachers' beliefs in teacher education designed to help pre-service and in-service teachers develop their thinking and practices has been a topic of intense debate among teacher educators and trainers (cf. Freeman and Johnson 2005; Borg 2003; Mattheoudakis 2007; Farrell and Kun 2008; Gabryś-Barker 2010; Li and Walsh 2011). According to Calderhead (1996) the main areas in which teachers have been found to hold significant beliefs are learners and learning; teaching; the subject itself; the process of learning to teach; the self and the teaching roles. The present chapter, however, refers to those beliefs that are related to multilingual didactics (Jessner 2006; Ringbom 2007). More specifically, the article discusses and promotes the need to analyse the pre-service teachers' beliefs in the field of teaching a second foreign language (L3). Undoubtedly, the findings, which demonstrate what pre-service teachers think of L3 teaching and learning within the context of multilingual education may have practical implications for course design and evaluation in language teacher education programs—both in the area of ELT as well as in the field of teaching other foreign languages. Moreover, insights from such data could help to identify and address the gaps between pre-service teachers' beliefs and the requirements of the language teacher training courses. Thus, the present chapter advocates in favor of exploiting pre-service teachers' beliefs on multilinguality in the teacher training programs.

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1 Introduction

Although multilingualism is a relatively new area of research, it already covers a wide range of topics, from multilingual language lexicon, cross-linguistic influence and multilingual language awareness to learners' and teachers' language learning attitudes and their influence on multilingual education. Traditionally what is meant by multilingual education are "educational programs that use languages other than the L1s as media of instruction and aim for communicative proficiency in more than two languages" (Cenoz and Genesee 1998: 14). However, in a broader understanding, it may seem justified to extend the term to educational programs that teach at least two additional languages (L2 and L3) as school subjects simultaneously (cf. De Angelis 2011). In both cases the aim of the programs is achieving communicative proficiency and providing the multilingual skills that are becoming increasingly necessary in the modern world. Naturally enough, reaching such goals necessitates complex planning and new teacher education programs whose aim is to prepare language teachers for promoting and exploiting potential language learning benefits connected with multilinguality.

The present chapter attempts to shed some light on the role and impact of preservice language teachers' beliefs on multilingualism in designing teacher education systems. At the outset, issues related to the multilingual education in the European context will be presented with a special focus on multilingualism with English. This will be followed by a discussion of the distinctiveness of multilinguals' language learning processes and how these may differ from those of monolingual learners of a second language. The subsequent section introduces the idea of teachers' beliefs and analyses it within the context of multilinguality. The article closes with a brief discussion concerning future directions of research into the role and place of these beliefs within teacher education programs and the implementation of integrated foreign language didactics.

2 Multilingual Education and Multilingual Didactics

For many years research on multilingualism was defined in the literature as "a byproduct of research on second language learning and acquisition" (Jessner 2006: 13). More recently, following the rapid development of research on third and multiple language acquisition (TLA/MLA) in the light of which the knowledge of more than one foreign language is increasingly being recognized as an asset for individuals, a large proportion of European educational institutions are becoming more supportive of multilingualism and multilingual education.

The White Paper on Education and Training issued by the EU in 1995 stated that multilingualism should be viewed as an essential characteristic feature of the European identity. According to the official European language policy, EU citizens should be proficient in three European languages: their L1, one foreign language

with high international status-L2 (English in the majority of cases, although not a necessity) and a neighboring language-L3 (such as German in Poland or French in Germany). This policy exerted a direct impact on language learning and teaching programs since adding another language to the educational system evoked a need to analyze the existing language teaching programs thoroughly and triggered the rapid development of research on multiple language acquisition and multilingual didactics (cf. Hufeisen and Neuner 2003; Cenoz 2009).

The concept of multilingual didactics is not new. In fact, a multilingual teaching approach was already advocated by Wandruszka (cf. 1986, 1990), who argued in favor of an introductory course in Latin and Greek for all language students, claiming that it would provide them with the basics for learning modern European languages. Similarly, Hufeisen (2007) and Jessner (2008) promote the idea of integrating all of a learner's parallel languages into one common curriculum based on the multilingual concept. By way of example, programs based on such an idea have been introduced in Luxemburg (Hoffmann 1998) and Bulgaria (Dikova et al. 2001). Hufeisen and Neuner (2003) argue that introducing a common curriculum would limit the competition between languages, which seems to be beneficial for a number of languages such as French or German that might otherwise be dropped. Multilingual didactics not only promotes language learning but it also changes the approach to learning by helping learners exploit the previous knowledge and language learning strategies. In the words of Jessner (2008: 40), "teaching across languages presents a promising didactic tool of multilingual teaching, whatever languages are involved in the learning process."

3 Multilingualism with English

The spread of English as a lingua franca in Europe has triggered the acquisition of English as a second language for wide majority of Europeans.[1] Such a situation, however, does not imply that students should quit learning other languages. Contrary to many expectations, recent statistics prove that the proclaimed predominance of English has not resulted in a loss of interest in learning other foreign languages. Many studies (cf. Graddol 2004, 2006) show that English is and will continue to be learned together with other languages, at least in the European context. Therefore, including an additional foreign language in the curriculum of schools where English is a first foreign language seems to be well-justified and is also welcomed by both parents and students.

A question, however, arises concerning the role English should play in the multilingual language acquisition and learning. Opinions on this subject vary considerably. On the one hand, researchers such as Hufeisen and Neuner (2003) promote the idea that multilingualism could be achieved more effectively if

[1] cf. Jessner (2006) for a thorough discussion of the changing status of English worldwide.

English is taught as a third language, after learners have already had some contact with other languages. On the other hand, many scholars advocate the view that early English learning should be organized in such a manner that multilingualism through or with English will be both supported and popularised (cf. Vollmer 2001). Bearing in mind the position and popularity of English as a European lingua franca, the latter option seems to be more realistic. Consequently, by activating and supporting cognitive processes, English could stimulate further language learning. It could also contribute to the development of metalinguistic and multicultural awareness by building a cognitive foundation for contrastive learning and reflection on language learning. In other words, English could and should "function as a kind of ice-breaker and this way create an openness to linguistic diversity" (Jessner 2008: 42).

4 The Multilingual Learner

As Ringbom rightly observes, "learning, including language learning, is based on prior knowledge. When you learn something new, such as a foreign language, you try to connect the new elements to whatever linguistic and other knowledge you may have" (Ringbom 2007: 1). Nowadays, the majority of language learners have some knowledge of other languages beyond the native one. In the modern educational context, the typical language learner is no longer a learner of a second language but rather a learner of a third or additional language. Moreover, a considerable group learns two foreign languages simultaneously, which further justifies the need for integrated didactics.

Numerous research studies on the effect of bilingualism on third language acquisition confirm the idea that in comparison to monolingual learners, bilingual learners experience a number of advantages when learning an additional language (cf. Cenoz 2003). As Hufeisen and Marx (2007) note, whereas the L2 learners in the process of learning a first foreign language are complete beginners, their situation changes the moment they start learning another language. A wide variety of factors, absent in the process of L2 learning, come to play supporting (and sometimes conflicting) roles, which have been fully described by Hufeisen in her Factor Model (Hufeisen 2004). Firstly, the L3 learner has already gathered some experience related to the foreign language learning process. Secondly, he/she has (consciously or subconsciously) developed or adopted individual techniques and strategies to deal with subsequent language learning, such as the ability to compare, transfer or make interlingual connections. Thirdly, he/she disposes of previous language interlanguages along with the target language interlanguage.

Clearly, L3 learners have "language specific knowledge and competencies at their disposal that L2 learners do not" (Jessner 2008: 23), which proves that L3 learners' needs must be far different from those of L2 learners, and thus they

should be catered to in a different way. Unfortunately, in the context of a foreign language classroom, it is often the case that although L3 learners already know so much, the moment they enter an L3 classroom they start from scratch.

5 The Multilingual Teacher

As mentioned in the previous section, over the last decade, the facilitative effect of one's native and non-native language on the acquisition of a third language has been widely acknowledged and approved by a number of research studies (cf. Ringbom 1987; Cenoz and Hoffmann 2003; De Angelis 2005; Cenoz and Gorter 2011). Yet, in too many cases today's teachers are still "influenced by advice that belongs to the past rather than the present" (Jessner 2006: 122). Many of them stick to the rules of Contrastive Analysis, which advocated the view that languages in the curriculum should be treated as separate subjects in order to avoid creating confusion in the learners' minds. Accordingly, many language teachers have avoided making use of knowledge about other languages in their classroom so as to avoid confusing their students. Thus, as Jessner observes

> in the ordinary language classroom contact with another language is still regarded as a hindrance to learning. With this in mind language teachers try to keep knowledge of and about other languages, including the students' L1(s), out of the classroom, assuming that this teaching method will prevent the activation of prior language knowledge in the students and ultimately fight confusion in the students' minds (Jessner 2006: 123).

Nevertheless, it has been confirmed that prior language learning experience does play a supportive role in the L3 learning. Multilingual learners clearly activate and exploit their prior native and non-native language knowledge regardless of how hard teachers try to discourage this from happening. It seems reasonable that instead of preventing the unpreventable, both teachers and learners focus on how to exploit the enormous potential that L3 learners bring with them into an L3 classroom.

A good example of a change in attitude towards a learner's previous knowledge is the usage of the native language. Until recently our attitude towards the use of a student's mother tongue in the foreign language classroom was highly critical. Recent studies on bilingualism, however, incontestably confirmed that learners' prior native language knowledge may in fact be beneficial to the learning process (cf. Cenoz and Hoffmann 2003; De Angelis 2005, 2007; Cenoz 2013). Similar evidence has been accumulated in the area of prior non-native language knowledge and language learning experience. Many researchers now tend to agree with Cenoz and Genesee's once controversial claim that 'bilingualism does not hinder the acquisition of an additional language and, to the contrary, in most cases bilingualism favors the acquisition of a third language' (1998: 20). Truly, recent research into multilingualism strongly promotes cross-language approach (cf. Clyne 2003) advocating for making use of the cooperation between the languages the learner knows.

The need for integrated foreign language didactics also results from the ever increasing amount of L3/Ln learners. As De Angelis rightly observes (2007) the growing number of multilinguals is a reality which more and more language teachers and researchers are dealing with in their daily work. Specifically, the position of English as a typical first foreign language imposes some important requirements on English teachers, who are no longer responsible for instructing only on the subject itself but also for training multilingual learners. A postulate which has also been commonly called for in the context of English as a Lingua Franca (ELF) discussion (cf. Berns 2009; Mauranen and Ranta 2009).

In general, the role of prior language knowledge in the multilingual language classroom seems to be of great importance. Students must be allowed to use their language background in the learning process, and teachers (of both L2 and L3) should encourage learners by teaching comparative strategies and using materials specially designed for multilingual speakers. As Skuttnab-Kangas (2000) rightly observes, before multilingual awareness can be raised in the classroom, it needs to be manifested in the teacher through their own multilingual learning skills, knowledge and, above all, attitude.

6 Pre-service Teachers Beliefs on Multilingual Education

Undoubtedly, multilingual education poses a number of challenges. One of them is the redefinition of the role of a foreign language teacher who, as many specialists in the field emphasize, should be trained both to instruct for multilinguality but also to exploit the multilingual potential hidden in the students' prior linguistic knowledge. One way to achieve this goal is by introducing a multilingual education module into pre-service language teacher training programs. In turn, many educationalists and teacher trainers claim that such programs should be developed with consideration of or, even more radically, on the basis of teachers' beliefs.

Seemingly, the term teachers' beliefs speaks for itself. However, as Pajares (1992) observes defining beliefs may not be such an easy task. They can refer to:

> … attitudes, values, judgments, axioms, opinions, ideology, perceptions, conceptions, conceptual systems, personal theories, internal mental processes, action strategies, rules of practice, practical principles, perspectives, repertories of understanding, and social strategy, to name but a few that can be found in the literature (Pajares 1992: 309).

It is beyond the scope of the present chapter to try to elaborate on the distinction between beliefs and a number of other related terms such as attitudes, judgments or opinions, all of which are used interchangeably in various studies. And thus, the term 'belief' in this chapter refers to any views held by the participants about the nature of foreign language learning and teaching, also in the multilingual context.

Language teacher educators agree that beliefs regarding the process of foreign language learning play an important role in pre-service teachers education.

Numerous research studies suggest that students enter EFL teacher training courses with a set of pre-conceived ideas (cf. Pajeras 1992; Richards and Lockhart 1994; Calderhead 1996; Borg 2003; Richards 2008; De Angelis 2011). Richards (1998) points out that it is through these beliefs that pre-service teachers process the content of the teacher development program. According to Phipps and Borg (2009: 380), "the study of teachers' beliefs has in the last 15 years emerged as a major area of enquiry in the field of language teaching".

A substantial body of research (cf. Freeman and Johnson 2005; Borg 2003; Mattheoudakis 2007; Farrell and Kun 2008; Gabryś-Barker 2008, 2010; Li and Walsh 2011) suggests that teachers' educational beliefs strongly influence both their professional development as well as their classroom practices (cf. Borg 2006; Farrell and Kun 2008; Li and Walsh 2011). As Kubler LaBoskey (1993: 23) puts it:

> (…) novices do not enter teacher education programs as blank slates. After many years in classrooms they have ideas about what teachers do. But these ideas are derived from a student perspective, not a teacher perspective, and thus, they are very likely to be inaccurate, inappropriate or incomplete. Such misconceptions may distort or block any new information presented in the teacher education program.

Similarly, Williams and Burden (1997: 56–57) claim that teachers' beliefs about language learning "affect everything that they do in the classroom", guiding and shaping classroom actions to a much greater extent than the use of a particular methodology or course book. Consequently, in the context of the present chapter, it may be argued that understanding the beliefs held by language teachers on multilingual learning seems to be crucial in the process of designing multilingual education programs. Teacher trainers need to consider prior language learning experiences as the foundation of prospective teachers' conception of teaching and account for "the potential influence of student preconceptions on the reflective activities and programs they design and implement" (Kubler LaBoskey 1993: 23).

Excellent as these recommendations are, their application remains somewhat of a challenge in the majority of contexts. Many studies have analyzed teachers' beliefs from a wide variety of perspectives; however, extensive research concerning the beliefs of pre-service foreign language teachers regarding the issue of multilingual education is still missing, as are the studies distinguishing and specifying both the roles and beliefs of L2 and L3 language teachers.

On the one hand, there is a constantly growing body of research offering insightful knowledge on TLA and MLA (cf. Ringbom 1987, 2001, 2007; Aronin 2005; Aronin and Hufeisen 2009; Cenoz and Gorter 2011; Otwinowska and De Angelis 2012). In addition, the applicability of research on multilingualism to language teaching has been widely recognized within the academic community. On the other hand, however, there have been few attempts in teacher education programs around the world to integrate current TLA and MLA research findings into the classroom. A thorough study is needed to shed some light on this issue by examining the beliefs of both L2 and L3 teachers on multilingual learning and integrated foreign language didactics. Similarly, it should also be specified how English (L2) language teachers perceive the relationship between TLA research

and language teaching and to what extent they believe the TLA research is useful and relevant for both L2 and L3 pedagogy.

7 Challenges for the Future

It is clear that contemporary foreign language teaching in the school context should be governed by a multilingual concept (Hufeisen 2007). Languages should not compete with, but rather support, one another (cf. Hufeisen and Neuner 2003; Cenoz and Gorter 2012). This can only be achieved by integrated foreign language didactics aimed at promoting multilingual development. In turn, cross language teaching can only be effective if we manage to train multilingually aware teachers to work with multilingual learners, which implies that the attitudes of trainees to multilinguality need to become more important indicators for the way in which pre-service preparation should be designed. As mentioned above, teachers' classroom practices largely hinge on their beliefs. Thus there is a need to conduct an extensive research of pre-service teachers' beliefs in the area of multilingual learning and teaching. Teacher educators and trainers should be more aware of such attitudes and biases as they have major implications for the way training programs ought to be constructed and their general objectives formulated.

Summing up, the fact that the large majority of language learners have contact with more than one foreign language means that language teachers should not only teach their own subject but also prepare learners for multilinguality (in case of L2 teachers) or exploit their learners' previous foreign language knowledge and language learning experience (in case of L3/Ln teachers). To achieve these goals we need to prepare language teachers to be more than just one-subject teachers. Education programs for foreign language teachers should obligatorily cover topics related to the role of prior linguistic knowledge and language learning experience in the process of additional language acquisition. Finally, since the increasing number of research has confirmed the strong connection between teacher's beliefs and thinking processes and the teachers' classroom actions, it seems reasonable to promote the view that the content of those multilingual modules needs to account for pre-service teachers beliefs on multilinguality.

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Gender-Related Distribution of Direct Learning Strategies as a Determining Factor in Successful Second Language Acquisition

Anna Michońska-Stadnik

Abstract According to Rebecca Oxford's classification (Oxford 1990), direct learning strategies comprise three sets: memory, cognitive, and compensation strategies. The whole group can be defined as actions undertaken explicitly by the learner in order to facilitate second/foreign language learning. Direct strategies are related to declarative knowledge, and they are concerned with learning vocabulary, grammar, and communicative skills. The aim of this chapter is to present research into the use of direct learning strategies as related to learners' gender, and to what extent they may influence success in foreign language learning. The participants of the research were 55 students from a lower secondary school (15–16 years of age). There were 36 girls and 19 boys in the group. It was expected that they should be mature enough to evaluate their own use of direct learning strategies on the basis of Strategy Inventory for Language Learning (SILL). Their success in foreign language learning was measured on the basis of average school grades, where both formative and summative assessment tools were taken into account. The quantitative results revealed that in the research group girls used more direct strategies that boys but that did not correspond to their school grades as boys appeared to be more successful. As to the average use of particular groups of direct strategies, girls used significantly more memory and compensation ones. Unfortunately, the research did not confirm any existing correlation between the use of strategies and the learners' school grades. It may mean that this instance of research, being of exclusively quantitative character, should be supplemented by more qualitative measures, for example by observation of students' classroom behaviour as regards strategy use.

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1 Introduction

General concern with successful human learning and considerations about what may facilitate this process, led to the development of studies on learning strategies. In the last four decades of second language acquisition research learning and communication strategies became one of the key issues (e.g. Stern 1975; Oxford 1990; O'Malley and Chamot 1990; Wenden 1991; Michońska-Stadnik 1996; Kasper and Kellerman 1997; Cohen 1998; Oxford 2011). Among many proposed classifications of language learning strategies, Rebecca Oxford's typology still remains most widely recognized and accepted as a reference point in many research studies. She made a distinction into two main groups of strategies: direct and indirect, and she did not recognize communication strategies as a separate group.

The aim of this paper is to report on the research attempting to examine the distribution of direct language learning strategies related to learners' gender, and to investigate to what extent their usage may determine successful second language learning (SLL). Consequently, two research questions have been formulated:

1. To what extent and which particular direct strategies influence success in SLL?
2. Are there any gender-related differences in the usage of direct learning strategies?

2 Description of Direct Strategies

The term *direct strategies* tends to speak for itself. The word *direct* designates something explicit, self-evident while the notion of *strategy* stands for a deliberate action undertaken by the learner in order to comprehend the linguistic content and complete a language task successfully. By putting the two terms together we can create a definition of direct strategies: they are actions undertaken by a learner explicitly, contributing to a successful task completion while learning a foreign/second language. They are related to declarative knowledge and they are much concerned with the acquisition of words, grammar, and communication skills. In other words, they involve the target language directly, both its rules and vocabulary. Komorowska (2000) in her article devoted to new tendencies in language learning stresses the fact that direct strategies are indispensable for students because they prepare them to be more self-directed. Apart from developing self-direction, this group of strategies helps learners to select most appropriate learning techniques, leading them to successful SLL. In Oxford's taxonomy direct learning strategies are divided into three substantial groups.

2.1 Memory Strategies

Memory strategies is the first group of direct strategies which consists of four subgroups (see Table 1). They all help in dealing with new vocabulary items, grammar rules, and their efficient memorization to be used in effective communication. They also provide learners with a set of techniques to facilitate the process of information retrieval. Information that enters memory (first stage of memorization) comes from the environmental input, e.g. conversations or texts. When something new is taken from the environment, it is first placed in sensory memory either by means of visual, auditory or tangible stimuli (Kurcz 1992). Since each learner has his own individual perceptual preferences, the intake is also dependent on his learning style. Oxford's taxonomy of memory strategies took that into consideration. For instance, the application of sounds and images, which stands for auditory and visual style, will suffice for some learners whereas employing action and mechanical techniques, related to kinaesthetic and tactile styles, may turn out to be pointless for others. Nevertheless, all memory strategies belonging to the second and fourth group (see Table 1) are of great help in taking the new information in by means of whichever perceptive style.

The next stage of memorization is related to practising and it overlaps with the first group of cognitive strategies. In other words, when items acquired by sensory memory are not practised/revised, people tend to forget them or store them temporarily in the short-term memory until some new information is acquired. Suppose learners desire to apply such information in the output, they will have to employ control processes involving rehearsal, coding, decisions and retrieval strategies (Kellogg 1997). Therefore, there are two golden rules adherence to which can be of great importance to the learners: the longer the period of the lack of retention, the worse memorization, and the earlier the items are taken in, the better they are memorized (primacy effect).

The third and the last memorization phase concerns the long-term memory, which is the permanent store. It consists of declarative (explicit) and procedural (implicit) knowledge (e.g. Kellogg 1997). Declarative memory is divided into two more memory types, such as semantic (facts) and episodic (events), whereas the procedural one includes skills, habits and priming. Therefore, reviewing well (group three in Oxford's taxonomy, Table 1) appears to be crucial for the learning process.

Table 1 Direct strategies (Oxford 1990: 18–19)

Memory strategies	Cognitive strategies	Compensation strategies
• Creating mental linkages	• Practising	• Guessing intelligently
• Applying images and sounds	• Receiving and sending messages	• Overcoming limitations in speaking and writing
• Reviewing well	• Analysing and reasoning	
• Employing action	• Creating structure for input and output	

Summing up, we can assume that learning is of no avail as long as learners do not know how to apply memory strategies, which may also include explicit knowledge about how our memory works. Therefore, the taxonomy of memory strategies proposed by Rebecca Oxford appears to be true-to-life, practical and comprehensive due to the fact that learners' perceptual styles as well as human information processing are given primary consideration.

2.2 Cognitive Strategies

The goal of cognitive psychology is to try to understand the nature of human learning. In cognitive theories (cf. Kellogg 1997) knowledge is viewed as symbolic and mental constructions in the minds of individuals, and learning becomes the process of committing these symbolic representations to memory, where they may be processed. In constructivist theories of learning it is believed that "individuals are actively involved right from birth in constructing personal meaning, that is their personal understanding" (Williams and Burden 1997: 21). Therefore, cognitive strategies tackle the issue of human reasoning in every respect and additionally they refer to practising, however not in the behaviouristic sense on the word. Such practising (first group of cognitive strategies, Table 1) involves mental processes and it provides a set of cognitive devices which are to be truly supportive during any learning process (e.g. recognizing and using formulas and patterns, analysing expressions, etc.). They have nothing in common with thoughtless repetition and imitation applied in behaviouristic teaching methods (e.g. audiolingualism).

Information once absorbed must be retained in memory for further use. Therefore, a student, apart from information processing abilities, should be capable of creating structures for input and output, e.g. by structuring his notes (highlighting, summarizing, etc.).

All in all, cognitive strategies concern all mental processes happening in the course of language learning and they are supposed to enable the learner to succeed in different language tasks.

2.3 Compensation Strategies

Studies on *good language learners* (e.g. Rubin 1975) confirmed that these learners are accurate guessers and exhibit willingness to arrive at meanings on their own. What is more, they have inclinations to apply language learning strategies, including those that allow to overcome limitations in producing the target language, e.g. using verbal or non-verbal cues, observing the environment, making inferences or appealing for help. The second group of compensation strategies described by Oxford also comprises all actions taken by the learner to fill in the

gaps in language knowledge, e.g. using paraphrase, circumlocution or mime and gesture. Some of compensation strategies, however, make use of message simplification, translation, code-switching, adjustment and avoidance. They are quite frequent at beginners' level and the teacher's task is to teach learners how to replace them with achievement strategies at later stages of language development. Some research reports confirm (e.g. Michońska-Stadnik 1996) that this is possible to be achieved.

Nowadays, compensation strategies, especially guessing, risk-taking and paraphrasing are widely promoted in lessons concentrated on the development of communication in a foreign language. It seems to be evident that successful language learners are those who communicate effectively.

3 The Notion of Success and Successful Language Learner

The notion of success in language learning emerged along with the research on first language acquisition (L1) and with investigations on how it takes place in children. It seems to be obvious that all children, apart from those with some serious speech impairments, are able to acquire their L1 successfully, they manage to master its idiomatic expressions and possess deeply rooted language intuitions. Some individual differences in the quality of mother tongue have always been of little significance to the researchers who treated them merely as the impediments related to cultural or linguistic background of the child.

However, it is hardly ever possible to say the same about second/foreign language (L2) acquisition or learning. There exist too many factors which may hinder the development of L2. One of the most crucial issues in this context is the age of the learners. Apart from age, it is possible to specify three variables on which success in L2 learning is truly dependent. These are: language aptitude, motivation and opportunity (Rubin 1975). Since aptitude is a relatively stable characteristic of an individual, it is hardly possible to suggest any modifications in this area. When it comes to motivation and opportunity, they can be influenced and improved. According to Rubin (1975: 43), "the good language learner seems to have a high motivation" and he will not succeed without it. Similarly, when there are no or few opportunities to practise what has been learnt, it will get distorted in the learner's memory, irrespective of his good intentions. Therefore Rubin called out for the implementation of strategies which are to instruct the learner how to deal with difficulties, and how to create structures for input and output also outside the classroom. Learners have to be motivated and look for opportunities to practise on their own in order to try out the most suitable strategies which will compensate for their cognitive insufficiencies.

Other studies on good language learners, the best known of which is that of Naiman et al. (1978), also stressed the necessity of employing language learning strategies for efficient assimilation of knowledge and for effective communication. For example, Cohen (1991) underlined the necessity to refer to our general

knowledge of the world while learning anything, including a foreign language. Humans cannot understand things if they are contemplated separately, without neither the references to certain environments nor knowledge of a given topic or context. Hence, if the learners do not notice the cues from prior utterances within a given discourse, they will never be able to understand the language even though they possess grammatical knowledge. Therefore, social contexts, speaker's tone of voice or body language are also of great importance to the learner who wishes to comprehend or convey messages. Thus it is vital for the learner to remain open to input, attend to meaning and form, read out environmental cues, and make use of the knowledge he possesses. Cohen's claims clearly indicate the indispensability of language learning strategies and their connection with the concept of success in language learning.

4 Gender and Foreign Language Learning

4.1 General Learning Differences Between Female and Male Learners

Gender also belongs to individual factors determining success in language acquisition and learning. It is frequently stated that women are more successful than men in this area. Still, the role of gender has been underestimated and neglected in research for a long period of time. Due to recent research on gender differences in brain structure (e.g. Moir and Jessel 1993), it may be assumed that male and female learners vary not only in the rate and efficacy in developing different language skills, in learning and perceptive styles, but also in the use of strategies.

Gender-related differences in perception are attributed to diversity in brain structure. It is believed that the left hemisphere, which is analytical, favours logical thinking and processes information linearly, seems to be a male domain in various learning tasks. In contrast, the right part of the brain, which accounts for advanced visual, tactile and auditory sensations as well as for holistic, imaginative and emotional thinking is more frequently dominant in females in their learning tasks. In consequence, males prefer to adhere to their own ways of learning, frequently ignoring classroom routines and teacher's ways of instruction. Females tend to act intuitively, are subjective and sometimes unreasonable in judgements, prefer open-ended tasks. They are also considered to be fluid, spontaneous, disorganized, while males are said to be more intellectual, analytic, logical, objective, planned and structured. Yet, they are less likely to be tolerant of ambiguity, which is the feature of the majority of female learners (Chapelle and Roberts 1986). When it comes to acquiring new knowledge, males are more likely to use auditory perceptive style—they prefer to learn by listening. Females, on the other hand, are fond of visual cues and are keen on learning from books. It is interesting to observe that special

language impairments of neurological or psychological character, for instance, dyslexia, dysgraphia and dyscalculia, are statistically much more frequent in boys than in girls (Brown 2000). Still, it is necessary to mention that some of the gender-differing traits overlap and some are acquired by the learner in the course of his/her learning experience, or derive from cultural and linguistic background.

4.2 Gender Differences in Acquiring Language Skills and Abilities

According to various researchers (e.g. Moir and Jessel 1993), language and spatial abilities are controlled by centres in both hemispheres of the brain in women, whereas men, who have stronger lateralization, have their language function placed in the left hemisphere. It may explain why they suffer from serious language impairment when they are subject to stroke or accident and their left hemisphere is affected. Females, by contrast, are capable of fluent speaking even if they experience considerable injuries to the left part of the brain. This is all due to the fact that the corpus callossum in the female brain is more open, which allows for information to travel freely from one part of the brain to another, and it also implies quicker brain recovery after illness or accident.

When it comes to learning foreign language skills, reading understood as letter recognition is mastered by both genders with equal success. On the other hand, listening appears to be subject to sex differentiation. It has been examined that male and female brain interprets the content which is being listened to differently due to the fact that the centres of phonological processing are placed in different parts of the brain. Composite fMRI show divergent distribution of brain activation patterns in men (left hemisphere) and women (right hemisphere) during a listening task (Shaywitz et al. 1995). It may not only account for the differences in listening comprehension but also for a successful task completion. For instance, female listeners can interpret the content far more emotionally (right hemisphere), they may sense speaker's mood or feelings on the basis of his tone of voice or variations in intonation. Frequently, it may lead to overinterpretation of events that can hinder proper comprehension. On the other hand, men hear things as they are, which does not always provide appropriate understanding.

There are even more pronounced differences between males and females as regards the acquisition of productive skills. Research proves that girls learn to speak earlier than boys while acquiring their mother tongue and they seem to be more fluent, mostly at preoperational stage of their cognitive development (Brown 2000). They possess more extended scope of vocabulary and create more accurate and complex stretches of speech. The same occurs in learning a foreign language: women appear to be better language learners, however only at the beginning stages. It is connected with the fact that they use routines and patterns, and learn them by heart, which initially results in better oral performance (Ellis 1994). This

strategy of employing memorized patterns and rote learning is common for first and second language acquisition in females, and gives the impression that women are generally better language learners. What is more, the fact that females also engage themselves in more frequent social interactions, which allows for training and improving their verbal memory and applying naturalistically everything they had learnt, also sustains that impression. Men, on the other hand, seem to be considerably weaker as beginners in productive skills, but then spring into subsequent stages of language learning thanks to their capability to take risks or experiment creatively with language. Yet, they are more reluctant to speak if they see no necessity for interaction (Moir and Jessel 1993). Thus, they start as average beginners but succeed in more advanced language levels. They also tend to be rather accurate while speaking and extremely specific as far as the content they desire to deliver is concerned.

When it comes to writing, boys who are more frequently left-handed than girls, tend to be less legible, less expressive and accurate in spelling, however, they seem to show more advanced or novel grammatical structures. Females are more expressive in their writing, yet their statements are less direct, they overuse affirmative sentences, polite requests and indirect structures.

In case of vocabulary and grammar, women appreciate prestige standard forms, and are very sensitive to shades of meaning. Men accept any forms which present the content they want to express, even though they deviate from target language norms (Labov 1991). Thus, the application of non-standard grammatical and lexical forms by male students suggests that they are generally less successful than females on achievement tests.

In terms of pronunciation, females' good sense of hearing and well-developed right part of the brain allow them to range the pitch and tone of voice while speaking or arrive at meanings owing to recognition of intonation patterns while listening. Women are observed to use rising intonation in declaratives, which designates indecisiveness and uncertainty, but they are very correct and avoid mispronouncing words (Gass and Varonis 1986). In consequence, women are better at pronunciation mostly at the beginning stages of language learning and in situations when they do not have to pay much attention to content. On the other hand, men speak to express content and they do not pay that much attention to correct pronunciation.

More recent studies on gender differences in second language learning emphasize lack of conclusive research results in that area (Kubota 2011). Some researchers argue (Sunderland 2000; Ehrlich 1997; Pavlenko 2001) that the male/female dichotomy seems to be exaggerated as it creates "a fixed and static notion of gender differences in language-related behaviours, and ignore the social, cultural and situational contexts in which language is acquired and used" (Kubota 2011: 264). In summary, it has recently been assumed that men and women learn and use the language in different social settings, in different contexts, which largely determines their discourse type and form.

4.3 Recent Studies on Gender and the Use of Strategies in Language Learning

Research on early stages of SLL (Diller 1981) confirmed that the right hemisphere is more active in initial stages of second language learning. This activity is manifested in the use of language learning strategies such as guessing at meanings or applying formulaic utterances and prefabricated patterns. It leads to the conclusion that women will be more willing and likely to employ them because of their tendency to right-hemispheric processing.

Generally, research confirms that men and women apply different sets of strategies in different language tasks. For example, Bacon (1992) examined the relationship among gender, comprehension and processing strategies. She drew the conclusion that men and women employ different listening strategies, yet she discovered no major differences in listening comprehension—both males and females were equally successful. Harmer (2004) confirmed that it is true also about reading in the second language.

All things considered, males and females differ in the application of language learning strategies, which is manifested in various language activities requiring different skills. Nonetheless, they both eventually arrive at successful task completion. Komorowska (2001: 92) summarizes essential male/female differences in language learning in the following way:

Men:

- Prefer individual work.
- Use logical memory which makes grammar easier to learn.
- Are more accurate than fluent.
- Prefer to compete in language tasks.
- Use mechanical techniques and direct translations.

Women:

- Often speak spontaneously.
- Are holistic language learners, prefer rote learning and social language.
- Appreciate teacher's approval, are eager to follow instructions.
- Like to work in groups.
- Are more fluent than accurate.

5 Research Description

As stated at the beginning of this paper, the aim of the research reported on here was to find out whether there exist any gender-related differences in the use of direct learning strategies and to what extent they may influence success in second language learning. Most research in this field concentrates on second language

acquisition context, thus it might be interesting to observe if the usage of direct strategies applies also to language learning in formal classroom environment.

The participants of the research were 55 students (N = 55) from a lower secondary school (gimnazjum) in Wrocław. There were 36 girls and 19 boys who took part in the complete procedure, and they were 15 and 16 years old. It was expected that they were mature enough to be able to self-evaluate their own use of direct learning strategies on the basis of the questionnaire. The research was typically quantitative and the following variables were established:

- Independent: learners' application of direct learning strategies as measured by Strategy Inventory for Language Learning (SILL) (Oxford 1990);
- Dependent: success in the acquisition of English as a foreign language as measured by learners' average school grades;
- Moderator: gender.

In order to verify the existence of the relationship among the variables, the following hypotheses were formulated:

H_{01}—There is no systematic relationship between applying direct strategies (memory, cognitive and compensation) and success in second language learning in the investigated group.

H_1—There is a systematic relationship between applying direct strategies and success in second language learning in the investigated group (non-directional hypothesis).

H_{02}—There are no statistically significant differences in the use of direct strategies between female and male students.

H_2—There are significant differences in the use of direct strategies between male and female students.

As mentioned in the specification of research variables, two instruments were used: Strategy Inventory for Language Learning and students' average school grades. The SILL, in its Polish translation done by the researcher herself, comprising only the part referring to direct learning strategies, can be found in the Appendix to this paper. The learners' grade averages were recorded from the class register. They included all the grades of individual learners comprising tests, homework, activity during the lessons, oral performance, etc. The researcher did not decide to prepare a separate language test to measure students' success in language learning. The researcher believed that such test, though convenient to be applied for statistical measurements, could not really give a true picture of the learners' achievements. Such tests constitute a single event, may create a stressful situation, and therefore it is better to refer to teacher's opinions as regards students' overall progress. It is also necessary to mention how the grades were calculated for statistical purposes. In order to form a proper arithmetical sequence they were assigned the following values (Table 2):

Table 2 Arithmetical representations of school grades

Grade	Value
6	6.00
6−	5.66
5+	5.33
5	5.00
5−	4.66
4+	4.33
4	4.00
4-	3.66
3+	3.33
3	3.00
3−	2.66
2+	2.33
2	2.00
2−	1.66
1+	1.33
1	1.00

6 Research Results

For the purpose of this research the probability of any relationship between variables occurring due to chance alone was established at 5 % ($\alpha < 0.05$). In other words, there was 95 % probability that the observed statistics was due to other than chance factors. Two main statistical measures were used: correlation and the t test. Correlation was employed to check whether there was any relationship between learners' use of direct strategies and their school grades. The formula for Pearson product-moment correlation coefficient was applied. The t test was used to confirm whether the difference between the mean use of direct strategies in girls and boys was statistically significant. The t test formula for two groups of different size was applied here. The observed results are presented in (Table 3).

On the basis of obtained results it can be observed that on the average girls use more direct strategies than boys in this particular group of students. That refers to all types of strategies. However, this does not correspond to the achievement measured by the average school grades, as boys' results in language learning were slightly better. In order to establish to what extent these differences were

Table 3 Descriptive statistics for direct strategies and school grades in girls and boys

	Memory strategies		Cognitive strategies		Compensation strategies		School grades	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Girls	2.51	0.5	3.33	0.65	3.23	0.55	3.43	0.92
Boys	2.02	0.52	3.03	0.74	2.53	0.66	3.65	0.91

statistically significant, more advanced measures were calculated. More detailed results are presented in tables below. Table 4 contains the results of comparison of the mean values of strategy usage between girls and boys.

The value of t critical for N = 55 equals 2.021 (Brown 1993: 168). It appears, then, that in two groups of strategies, memory and compensation, the mean difference between girls and boys was statistically significant. In other words, girls used significantly more memory and compensation strategies than boys. The difference between school grades, however, was insignificant. Table 5 shows the correlations between the use of different types of direct strategies and school grades.

As the critical value of Pearson r for the group of girls (N = 36) is 0.3246 (Brown 1993: 140), the observed values of correlation are too low to be of any statistical significance. For the group of boys (N = 19), the value of r_{crit} is 0.4329, which also indicates no statistical significance of any observed correlation between the use of direct strategies and school grades.

7 Discussion and Conclusions

As regards the relationship between the use of direct learning strategies and successful language learning as measured by school grades, the results of the research indicate that the H_{01} must be accepted. All observed correlations appeared to be insignificant. Still, a few interesting remarks can be made. Firstly, there appears to exist a negative correlation (though very weak, i.e. −0.13) between school grades and the use of memory strategies in the group of boys, which means that to some extent more successful boys use fewer memory strategies. This may indicate that boys have a tendency to use more elaborate direct strategies, e.g. cognitive, in remembering words and expressions. Classroom real-life observations confirm as well that male students use dictionaries and other resources (cognitive strategy) more willingly than female learners. We need to remember, though, that SILL is a self-report instrument and some of the learners' evaluations might have been accidental.

Table 4 Comparison of mean values of direct strategies and school grades between girls and boys

	Memory strategies	Cognitive strategies	Compensation strategies	School grades
T value	3.5	1.58	4.12	0.85

Table 5 Correlation of strategy usage and school grades in girls and boys

	Memory strategies and school grades	Cognitive strategies and school grades	Compensation strategies and school grades
Girls	r = 0.20	r = 0.23	r = 0.08
Boys	r = −0.13	r = 0.22	r = 0.15

Secondly, the only type of direct strategies indicating a relatively high (though still insignificant) correlation with school grades was the group of cognitive strategies in both girls and boys. It would seem then, that in this particular group of learners cognitive strategies were the most influential in successful language attainment, although that influence did not appear to be very strong. Classroom real-life observations (e.g. Michońska-Stadnik 1996), confirm again that educational experience in itself encourages and develops the usage of cognitive strategies. In other words, the more we learn, the more developed our cognitive abilities become. It is difficult to say, then, whether it is the use of cognitive strategies that contributes to more pronounced success in language learning or whether it is the learning experience itself that teaches students how to make use of cognitive strategies.

As regards the differences in direct strategy use between boys and girls in the researched group, it appears that H_{02} can be partly rejected and the alternative hypothesis accepted (H_2). There are statistically significant differences in strategy use, as supported by SILL results, in memory and compensation strategies ($t = 3.5$ and $t = 4.12$ respectively). Girls use more memory and compensation strategies than boys. As it was already noticed, the girls' strategy use does not, however, correspond to greater success in language learning, measured by their average school grades. The difference in the use of cognitive strategies between girls and boys in the researched group appeared to be statistically insignificant. The girls' more excessive use of compensation strategies can be explained by their general willingness to interact in both L1 and L2 (see Sect. 2.2 of this paper).

In answer to the first research question posed at the beginning of this paper, we can safely state that the influence of any particular strategy type on successful language learning could not be observed in that particular group of students. There were, however, some statistically significant gender-related differences in strategy use (research question no 2), which may indicate the girls' preferences for applying memory and compensation strategies more frequently and more willingly. That would to some extent confirm the female learners' higher willingness to communicate and to compensate effectively for any shortcomings in their oral skills. Obviously, more studies ought to be done in this field since it would be difficult to claim, on the basis of just one piece of research, that there exist gender-related differences in the use of strategies in the whole population of language learners.

It would be extremely useful for teachers and learners to measure the extent of usage and the most efficient combinations of indirect learning strategies as well. It could show a wider distribution of all learning strategies among genders, which might offer some interesting suggestions on how to improve gender-related language instruction.

On the other hand, the researcher fully realizes that this paper lacks the qualitative perspective. It was deliberately planned as quantitative, with complete awareness of the shortcomings and limitations of this research type. I believe that the results could have been supplemented by some qualitative measures, for instance by interviews with male and female students about their use of direct strategies, or by an interview with the students' teacher. What is more, it would have been valuable to observe

more and less successful students during their lessons as regards their use of direct strategies. Some strategies can be easily observable. It could also be interesting to see how successful male and female students differ in their use of both direct and indirect strategies, especially during classroom interactions in English. In result, both quantitative and descriptive insights gained from the research could be further studied in contexts of foreign language learning and teaching.

A.1 Appendix

A.1.1 Kwestionariusz bezpośrednich strategii uczenia się

Część A (strategie pamięciowe)

1. Kiedy uczę się angielskiego, próbuję połączyć nową wiedzę z tą, którą już mam.
2. Układam zdania z nowymi słówkami, aby je lepiej zapamiętać.
3. Kojarzenie brzmienia nowego słowa z jego wyobrażeniem pomaga mi je lepiej zapamiętać.
4. Aby zapamiętać nowe słowo wyobrażam sobie sytuację, w której może być ono użyte.
5. Układam rymowanki z nowymi słówkami, aby pomóc sobie w ich zapamiętywaniu.
6. Używam obrazków, aby lepiej zapamiętać nowe słówka.
7. Pokazuję nowe słówka gestami i mimiką.
8. Często powtarzam materiał z lekcji.
9. Zapamiętuje nowe słówka poprzez umiejscowienie ich na stronie w książce lub na tablicy.

Część B (strategie kognitywne)

1. Powtarzam ustnie lub przepisuję po kilka razy nowe słówka.
2. Staram się naśladować rodowitych użytkowników języka angielskiego w mowie i w piśmie.
3. Pracuję nad poprawną wymową języka angielskiego.
4. Staram się używać znanego mi języka w różnych sytuacjach.
5. Samodzielnie inicjuję rozmowy w języku angielskim.
6. Oglądam angielską telewizję lub wypożyczam filmy w wersji oryginalnej.
7. Czytam dla przyjemności w języku angielskim.
8. Piszę notatki, wiadomości tekstowe, listy czy emaile w języku angielskim.

9. Najpierw czytam angielski tekst bardzo szybko, żeby zorientować się, o co w nim chodzi, a dopiero potem czytam uważnie.
10. Szukam w języku polskim słówek, które są podobne do angielskich.
11. Aby odnaleźć znaczenie słowa, staram się podzielić je na części, które rozumiem.
12. Aby zrozumieć tekst, staram się nie tłumaczyć go dosłownie, ale odnajduję ogólne znaczenie.
13. Streszczam informacje usłyszane lub przeczytane w języku angielskim.

Część C (strategie kompensacyjne)

1. Staram się samodzielnie odgadnąć znaczenie nieznanych słówek.
2. Używam gestów, gdy nie mogę odnaleźć odpowiedniego słowa w trakcie rozmowy w języku angielskim.
3. Wymyślam nowe słowa, jeśli nie znam właściwych wyrażeń po angielsku.
4. W trakcie czytania po angielsku, nie sprawdzam każdego nieznanego słowa; staram się zrozumieć ogólną treść.
5. Staram się zgadywać, co druga osoba powie w trakcie rozmowy w języku angielskim.
6. Jeśli nie mogę przypomnieć sobie jakiegoś angielskiego słowa, używam słowa lub zwrotu, który ma podobne znaczenie.

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The Role of *Mindsets* in Foreign Language Learning: A Person-in-context Perspective

Anna Mystkowska

Abstract The psychology-based construct of a *mindset*, that is, convictions a person holds with respect to permanence and immutability as opposed to flexibility and a growth potential of some trait or ability (Dweck 2006), will undoubtedly have an impact on their behavior and motivation. Language learners' beliefs concerning the role and importance of a natural talent, work and affordances may translate into their extended effort, which in turn might lead to academic success, if they have a "growth" mindset, or abandonment and failure, if they are convinced that everything is fixed and immune to change (Mercer 2012). The present chapter reports the results of a small-scale qualitative study conducted among learners of English whose beliefs and opinions were analysed with a view to identifying factors which might contribute to the development of a positive mindset that would promote rather than impede language learning. Applying a person-in-context relational perspective (Ushioda 2011) not only allows a better understanding of learners' cognitive and affective domains, but also reveals a complex network of social relations, past experiences, motives, intentions and goals.

1 The Concept of a Mindset

In psychology, the construct of a mindset or "implicit theory" represents an array of beliefs and assumptions people have with reference to the potential of a certain quality or ability to develop (Dweck 2006). For many, being born with a natural talent, be it intelligence or dexterity, is a necessary and sufficient condition for success, while others would perceive having such an innate quality just the point of departure for sustained effort and hard work. Dweck and her colleagues (Dweck

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et al. 1995; Dweck 2006) define these two perspectives as a *fixed mindset* (entity theory) and a *growth mindset* (incremental theory). Advocates of the former believe that nothing can be done to affect underlying human traits, the supporters of the latter view such attributes as flexible and capable of advancement.

2 Questioning the Role of Innate Talents

In the area of an individual's academic development intelligence seems to be the feature that occupies an exceptional position since a mindset a learner holds towards intelligence can tremendously affect their way of thinking, readiness to take risks, undertake effort, and eventually the ultimate level of attainment. Perceiving intelligence as a feature amenable to change leads to learning and growth that are achieved through perseverance, resilience and accepting challenges. On the other hand, a fixed mindset is most likely to result in avoiding risks for fear of failure, which, if occurring, would be attributed to external factors rather than one's own insufficient engagement or effort (Mercer 2012). Obviously, such a stance towards factors leading to success or failure resonate with Attribution Theory (Comer 2004).

The common understanding of intelligence as a stable and quantifiable construct stems from the reliance on the Stanford-Binet IQ scale that, although amended and revised, has been applied for over a century by various educational institutions, the army, immigration agencies, and companies, to estimate individuals' intellectual capacity, often with a detrimental effect. Interestingly, Alfred Binet (as cited in Shenk 2010: 29), the inventor of the test himself, strongly opposed viewing intelligence as a fixed trait. IQ tests, heavily criticized for a whole array of reasons connected with either demographic or methodological factors, have failed to account for the existence of different types of intelligence. Both Sternberg (1985, 2002) and Gardner (1999) recognized the diversity of intellectual capacities of the human mind. The former differentiated between the three facets of intelligence: analytical, creative and practical, pointing to their dynamic and context-dependent character. The analytical or componential facet represents problem-solving abilities; creative, or experiential aspect, defines how well one deals with new situations, while the practical, contextual facet, often referred to as "street smartness," is the ability to grasp, understand and cope with everyday tasks. For Gardner (1999), accounting for natural diversity and individuality cannot be accomplished if a single measure, an IQ test, is applied to explain ways in which the human intellect functions. Gardner, the proponent of Multiple Intelligences Theory, discriminated between eight different dimensions of intelligence that "can be realized to a greater or lesser extent as a consequence of the experiential, cultural, and motivational factors that affect a person" (Gardner 1999: 82).

Another feature prone to appraisal within a person's mindset is a natural talent for languages or language aptitude, a set of abilities that enable learners of an additional language to benefit in a superior way from instruction provided in an educational context. Operationalized by Carroll (1981) as a combination of a phonemic coding ability, grammatical sensitivity, inductive learning ability and rote learning, language learning aptitude can be measured in specially developed aptitude tests whose results predict rather than guarantee academic success. A slightly different conceptualization offered in Skehan's *Processing Stage Model* (2002) recognizes the concept's malleability depending on the learner's level. Another recent theoretical standpoint on language learning aptitude comes from Robinson (2002, 2005) who views the construct as a multidimensional complex of interrelated, hierarchically-structured abilities. Robinson's *Aptitude Complex Model* (2002) tackles the relationship between foreign language learners' cognitive profiles and types of instructional L2 exposure. He also claims that differential cognitive processing abilities crisscross with the context and affordances, and interestingly, differences in aptitude level cannot be accounted for unless affective and motivational factors (mindset?) are taken into consideration (Ortega 2009). Up-to-date research on foreign language aptitude points to its complex nature viewing it "not as a monolith, but as a conglomerate of a number of cognitive variables" (Biedroń 2011: 472) (cf. Dörnyei and Skehan 2003). While the majority of foreign language aptitude theories (cf. Carroll 1993; Robinson 2002; Skehan 2002) investigate only cognitive factors, the only one that explores personality and motivational features is that presented by Snow (1987), whose cognitive-affective-conative triad of language aptitude, further developed by Corno et al. (2002), takes into account various personality aspects such as, among others, achievement motivation, freedom from anxiety, and a positive self-concept.

Notwithstanding the theoretical underpinnings as well as empirical evidence concerning the nature of language aptitude, a commonly held belief assumes that without a special talent, flair or knack, mastering a language is a long, painstaking process with little chances of success (cf. Mercer and Ryan 2010). A fixed language learning mindset predisposes learners to a passive posture towards challenges, leads to frequent discouragement and reluctance to set one's own goals. Undertaking effort seems pointless if the outcomes are perceived as independent of the amount of work invested in the task. In the words of Mercer (2012), such learners "(…) are in danger of becoming demotivated possibly to the extent of a state of helplessness in the face of perceived futility of engaging in any strategic behavior" (2012: 22).

The complexity of the mindset dichotomy between the predilection towards success or predisposition towards failure is further deepened by the claim by Dweck (2006) who asserts that one person can have a fixed mindset in one area and a growth mindset in another. Moreover, holding a growth mindset with reference to language learning in general does not preclude differing views with respect to individual language skills; thus, the growth attitude to language learning may not include mastering the phonetic system of the target language, the area which not infrequently is attributed to an exceptionally good ear for music.

Empirical investigations of the concept within the domain of foreign language learning are few and far between, which precludes making far-fetched claims; however, as Mercer (2012: 23) points out, advancements in psychology suggest that encouraging teachers and learners to cultivate the growth mindset will create motivation and result in language development. Moreover, de-emphasizing the role of aptitude or natural talent may aid learners of various backgrounds, genders and ages.

Factors leading to expertise in language learning have also been investigated within the scope of the Good Language Learner (GLL) studies. Following the recognition that not a particular method of instruction but rather certain qualities or behaviours explain success or failure, researchers (e.g., Rubin 1975; Stern 1975; Naiman et al. 1978) began to compile lists of features shared by successful language learners with a view to identifying personality traits, cognitive styles, motivations that, if developed by less fortunate learners, would help them achieve better results. Moreover, the researchers attempted to investigate techniques, strategies or activities whose application could improve the rate of language development among poorer learners. Correlational studies conducted in the early days of GLL studies resulted in the identification of the following strategies employed by successful learners: (1) adopting an active stance towards tasks and challenges, (2) recognizing the systematic character of language, (3) using the target language for communication, (4) successfully dealing with anxiety in language learning, and (5) monitoring linguistic outcomes (Naiman et al. 1978).

In the further line of research into good language learners the impact of social, cultural and historical factors started to be recognized (cf. O'Malley and Chamot 1990; Oxford 1990; Wenden 1991) as well as their interplay with individual variation (cf. Griffiths 2008). Thus, the existence of numerous paths leading to success has been acknowledged leading to the conclusion that "there is no single good language learner model" (Oxford and Lee 2008: 312). Norton (2000) and Toohey (2000) sought the explanation of success in the access that good language learners had to a variety of conversations in their immediate context rather than the control over linguistic form or meaning. Norton and Toohey (2001: 310) point to the limitations of the traditional way of investigating good language learners that concentrated on mental processing of linguistic data; instead, they argue that exploring unique characteristics of successful learners needs to be coupled with examining of the social practices applied in the context of learning. Moreover, interest in the learning situation has drawn attention to the identity and agency of the language learner. Thus, it seems that not only should contextual aspects be taken into account but also the extent to which language learners take advantage of them or miss available opportunities. According to Norton and Toohey (2001), good language learners develop ways of exercising agency that allow them to assume respected positions within social networks that offer rich practice opportunities.

Agency comprises such notions as self-consciousness, reflexivity, intentionality, cognition, emotionality (Carter and New 2004). For Gao (2010), agency in language learning involves learners' will, intent and motives as well as their

beliefs concerning learning. Gao states that language learners, apart from metacognitive knowledge and the self-regulatory learning capacity, need to have the power to protect their right to speak and ensure that others would listen to what they want to say. A strong sense of agency makes learners "goal-oriented, intentionally invoked and effortful, or strategic" (2010: 25). Language learners should be able to manipulate the context and the social processes it evokes in order to create conditions that would be conducive to learning (Norton 2000: 8). In the words of van Lier (2008), agency involves doing, not being, and is commensurate with a person's initiative and self-regulation. Its dynamic character manifests itself in the fact that it mediates and is mediated by the social context. Probably the most vital aspect of agency is the awareness of responsibility for one's own actions.

Yet another argument in support of the need to promote the growth mindset comes from the studies conducted by Ericsson and his colleagues (Ericsson et al. 1993) who attempted to compare the effect of innate talent to that of deliberate extended practice in different areas of human activity. *Practicing deliberately*, to yield results, needs to be continued over an extended period of time, preferably for 10,000 h over ten years. Its efficacy stems not only from the intensity of exercise but also from the realisation and acceptance of the hardships and inconveniences in which repetition and refinement of the skill might result. Thus, expertise will not be achieved without special dedication or passion. Investigating pathways individuals assume pursuing expert-level knowledge or skill, Ericsson et al. (1993) ascribe excellence to different ways individuals deal with a specific task and not their innate potential. Moreover, they emphasise the impact of the so-called *significant others* on the beliefs children develop with reference to a particular skill, their motivation and creating opportunities for deliberate practice, the claim which has obvious pedagogical implications.

3 Person-in-context Perspective

A *person-in-context relational view* of language learners' motivation was put forward by Ushioda (2009) who argued for the need to approach learners as real persons rather than as theoretical abstractions. Traditionally, studies on motivation have been conducted within a psychometric approach, which led to the development of abstract models of mental processes, typical behaviours and learning outcomes. Motivation viewed as one of individual differences (ID) affecting the rate and ultimate level of language attainment has been subject to various largely quantitative analyses whose results, instead of informing about the ways individuals differ, provide information on features shared by particular groups of learners (Ushioda 2011: 12). Generally, as Ushioda (2009, 2011) states, techniques used in data collection and analysis as well as statistical procedures employed in ID research allow making claims concerning the normal distribution of certain features in a particular population, thus concentrating not on what makes

individuals unique, but on mean values of certain traits that group together people who have some characteristics in common. This, according to Ushioda (2011: 12), "depersonalises learners, who are treated simply as abstract bundles of variables so that, as Bandura (2001: 2) wryly notes, 'it is not people but their componentized subpersonal parts that are orchestrating courses of action.'"

A person-in-context view entails a focus on the agency of an individual learner with the recognition of this person's thinking, feelings, personality, social and cultural background, goals, ambitions, motivations and beliefs. Moreover, what such a perspective needs to take into account is the interplay between a learner, perceived as a "self-reflective agent," and the constantly evolving spectrum of social relations, accomplishments, experiences and contexts. It needs to be pointed out that being a language learner is just one of many roles an individual performs, and not necessarily the most important one. Ushioda (2009: 217) argues that in most studies on motivation, context, both social and cultural, is viewed as a stable variable, existing externally outside the learner. Although some studies considering the importance of the learning context "take a more 'situated' approach" and are based on students' perceptions, they still maintain the division between the mental world and the surrounding context as separate entities. Furthermore, such studies are mostly concerned with revealing "psychological laws that explain how context affects motivation, rather than [exploring] the dynamic complexity of personal meaning-making in social context" (Ushioda 2009: 217). Thus, the scholar's emphasis on the need to explore a "person-in-context" instead of investigating the impact of context, perceived as an independent variable, on an individual's motivation and agency since applying such a perspective allows revealing intricate ways in which the context and a learner interact. In many studies on motivation the line of enquiry revolves around linear, cause-effect patterns, with attempts being made to identify features or motives that lead to sustained effort. Such enquiries offer predictions as to possible kinds of motivation in specific circumstances as well as the kind of pedagogical intervention that might overcome effects of defective motivation. However, Ushioda (2009) doubts whether such linear cause-effect models can account for an individual learner's thoughts and feelings concerning the process of language learning; in her own words: "linear models of motivation which reduce learning behaviour to general commonalities cannot do justice to the idiosyncracies of personal meaning-making in social context" (2009: 219). What she calls for, following Allwright (2006: 13), is a shift from commonalities to idiosyncracies in exploring processes pertaining to language acquisition. Taking a relational view, rather than linear, allows perceiving motivation as an emergent process dependable on intricate relationships between contextual elements. In order to capture unique motives of individual learners, a theoretical framework is needed that would recognize the personal and context-dependent nature of motivation. Ushioda (2009: 220) concluding the discussion of her proposal states:

> I mean a focus on real persons, rather than on learners as theoretical abstractions; a focus on the agency of an individual person as a thinking, feeling human being, with an identity, a personality, a unique history and background, a person with goals, motives and intentions; a focus on the interaction between this self-reflective intentional agent, and the fluid and complex system of social relations, activities, experiences and multiple micro- and macro-contexts in which the person is embedded, moves, and is inherently part of.

4 The Study

The perspective Ushioda (2009, 2011) so advertently argues for offers a promise of an in-depth analysis of a situated mutual interplay of factors making up an individual profile of a learner and the context in which s/he dwells and, at the same time, shapes. The stance assumed here might inform not only studies on motivation but also those tackling numerous other domains especially with reference to IDs. This way of dealing with various components of the educational landscape seems appropriate to investigate aspects leading to the development of a fixed or a growth mindset. For this reason, the present author has attempted to explore the area conducting a semi-structured interview with highly motivated students of the English philology. The present section will comprise a brief presentation and discussion of the collected data followed by tentative conclusions and recommendations.

4.1 Aims and Data Collection

A person-in-context relational perspective has been applied here with a view to gaining insight into the connection between the participants' mindset, their overall motivation, as operationalized by Ideal L2 Self (cf. Dörnyei 2005), their plans and ambitions as well as past learning histories, metacognition and perceived level of autonomy. The relevant data were collected in the course of interviews based on a list of questions that were treated as a starting point for discussion allowing the students to digress and elaborate on aspects they considered appropriate. The participants were repeatedly invited to add their comments or provide examples, evidence, evoke memories pertaining to particular issues brought up in the conversation. It appears warranted to say that because of this reason the length of time the questionnaires lasted differed considerably, from 20 min to as long as an hour and a half. The interviews were recorded with the permission of the participants; the recordings were then transcribed and analysed.

The questions designed for the purpose of the present study could be grouped around a number of different topics including demographic information, past language learning experience, metacognition involving the knowledge of the dominant intelligence type, learning style and the resulting from thereof use of

language learning strategies. The questions related to the learners' future self and Ideal L2 Self were modeled on the questionnaire developed by Ryan (2009), who replicated the original Dörnyei's (2005, 2009) study attempted at exploring language learners' underlying motives within the L2 Motivational Self System. In order to tap into the participants' specific mindsets relating to L2 mastery a set of questions touching upon the role of the natural talent were devised. Moreover, among the questions concerning the students' learning history there were queries that referred specifically to their stay in Norway as international exchange students as such an experience might be indicative of the participants' perceptions of the role of affordances for success in language learning. Since the discussion of all these areas is not the focal point of the present paper, only those particularly involved with the issue of mindsets will become the focus of the forthcoming analysis. Another remark appears warranted here, namely, because of the fact that the concept of the mindset seems to be complex and convoluted and evading rigid measures, its character, either fixed or growth, transpires from answers and comments provided with regards to various questions, not necessarily those referring to the nature of intelligence or a talent for languages.

4.2 The Participants

All of the four participants were female students, aged 22 on average, of the third year of the BA programme who had taken part in the student exchange scheme. Having spent a semester in Norway, they were enrolled in the final year of their studies in the course of which they were required to write a diploma paper. All of them became part of the English language methodology seminar, which testifies to their increased awareness and interest in issues pertaining to language acquisition and foreign language learning. It was thus assumed that methodology-related terminology could be comfortably used throughout the interview without running the risk of misinterpretation, which allowed for increased precision and clarity. The students' proficiency level, established on the basis of end-of-the-year grades could be estimated as approaching the C1 and C2 level, in two cases, applying the criteria put forward by the *Common European Framework for Reference for Languages.* The fact that the participants had taken the decision to spend part of their studies abroad was considered as an indication of a considerable level of *international posture* (IP), as put forward by Yashima (2009 and elsewhere), one of motivational propensities contributing to increased contacts with speakers of the target language and, as a result, language attainment. One of the facets of IP, apart from the intergroup approach tendency and interest in foreign affairs, concerns the learner's interest in international vocation and activities, such as, for example, participating in student exchange programmes (Yashima et al. 2004). Increasing practice opportunities in this way may be assumed to function as an affordance capable of overbalancing presumed inborn predispositions for language learning.

4.3 Results and Discussion

This section presents major findings resulting from the analysis of the interview data. Although the interview touched upon a number of issues, for the purpose of the present analysis, only aspects referring to the mindsets held by the respondents will be tackled. Details will be presented and discussed separately for each participant.

Student A Student A who had reached C2 level of proficiency and was awarded with grade 4 at her end of the year examination elaborated profusely on various, often innovative and imaginative, techniques she employed while developing her control over of the target language. For example, she reported drawing fairy tale characters to associate them with particular topics. Right from the beginning of the interview she declared: "*English is my passion (…) it started when I was 13*". However, she did not evoke any particular circumstances or people who had influenced her choices. The motivation to learn English does not stem from any particular inclination for the target language community, its culture or history. It transpires that, in this case, integrative motives, as defined by Robert Gardner (2001), need to be excluded in the light of the student's declaration: "*It is also connected with the popularity of English. If it were French, I would be learning French,*" which implies that the learner was largely driven by instrumental motives.

Discussing her aims, Student A stated: "(…) *to be native-like, I know it will never be possible absolutely to become native-like but I'll try.*" Her career plans had not been clearly defined yet at the moment the interview took place; nevertheless, the student considered becoming a translator rather than joining the teaching profession. She proved to be preoccupied with attempts leading the development of her ability to communicate. When asked about the need to study grammar, she declared: "*(…) grammar? Hardly anyone uses those structures we talk about in grammar classes*," which might be indicative of the learner's critical and reflective stance towards the instruction received within the educational system, which, in turn, accounts for her need to experiment and pursue novel, nonconformist ways of dealing with the task of mastering a foreign language. She believes in the existence of a natural talent for languages; however, the advantage such a talent constitutes has not the power to overcome the effect of extended effort, as evidenced in her declaration that: "*I have a talent, a linguistic talent but it is not enough, you have to work beyond your means*." What transpires from the above quote is not only her diligence but also the acceptance for inconveniences the process of language learning entails. The caution with which Student A approaches natural predispositions for language learning also applies to the role of affordances, in this case exemplified by her participation in the exchange programme. Student A observed: "*(…) as it turned out with my stay abroad, affordances don't guarantee anything. My good grade at the practical exam was the result of my work, practising during holidays, not my stay abroad, I owe it to my own effort, not going abroad (…) I was disappointed, I wanted to come home*."

Student B The student had reached the C1 level: nevertheless, her end of the year result did not exceed grade 3. She seems to have clearly defined her aims and plans: she declared she intended to become a teacher in primary school as young learners appear to be the group she would feel most comfortable with. The choice of her studies and, consequently, of her professional career turned out to be to be the result of the encounters with an inspiring teacher in her junior secondary school: "*I didn't like English before, many things made me angry, but I decided to study English after lessons with her (…) she was nice and helpful and used lots of techniques and encouraged me to take part in competitions*." The expression of the teacher's appreciation for her effort and engagement was sending her to a summer language camp which, being an enjoyable experience, affirmed her abilities and effectiveness of the attempts she had undertaken to develop her linguistic skills.

With a high level of metacognition, the student had managed to match learning techniques and strategies to her learning style, preferences and needs. Having expressed doubts concerning the level of her speaking skill, she enumerated various actions she undertakes in order to improve it. Student B declares a far greater reliance on effort and engagement than predispositions. When asked about her views on the role of talent, she states: "*You need a talent for languages and I think I have it (…) if you don't have it, you will learn but it will be more difficult (…) a talent is not enough, unfortunately, much work, hard work is needed and effort and motivation to learn (…) knowing that we will need the language in our job in the future, travelling but if you see a talent in yourself, you know you should develop it*." Her active stance towards challenges is also evident in her reflections concerning the examination which she failed: "*I failed my exam once, but because I didn't work, didn't do things I should (…) teachers are not to blame, it was my fault (…) it's up to us if we learn or not*."

The experience of taking part in the exchange programme did not prove to affect the student's overall proficiency level. She asserts she became more open and willing to communicate because the level of anxiety resulting from the need to use English diminished to some extent; however, she did not observe any immediate impact of enlarged contact opportunities on her language level.

Student C Another student, whose proficiency level could be described as between B2 with reference to some language subsystems and C1 in the case of the others, with the examination grade at 3, does not intend to join the teaching profession. Her aims do not seem to be very precise and definite, and include the following options: getting a better job, communicating abroad and helping her father translate documents and run his firm: "*I would like to reach the stage at which I could speak accurately and fluently about … business, for example (…) I doubt I'll manage to reach such a stage during my studies*." She was not able to identify the reasons for which she would not be able to reach her desired proficiency level during her university education. However, it can be inferred from other comments and opinions that her self-esteem with respect to her language level was lower than all the other participants'. Moreover, she seemed more reliant on other people's support and guidance including her teachers and fellow students, especially with reference to learning grammar which she numerously evoked as

her greatest weakness haunting her from the earliest stages of learning. She seems to have lost hope in herself managing to overcome the problem, that is why she decided to resort to the help of others' in this respect, which hopefully appears to be an effective strategy.

When enquired about the sources of motivation, she pointed to the experiences connected with the life of her family, not education: "*(…) talking to clients in my dad's firm, not any teacher (…) speaking English could be useful, I could help my parents*." Student C's interests are neither related to the English language itself nor the target language culture; English seems to be treated instrumentally; however, it is used to gain access to the cultures the girl finds fascinating: "*(…) and getting to know other cultures, particularly of the East (…) I can talk to people from China, Indonesia, Japan (…) it is really exciting*."

Surprisingly perhaps, Student C, commenting the role of talent in learning a foreign language, stated: "*Hard work (…) talent is elusive, I don't have a talent, hard work can conquer everything (…) Affordances? When I inherit 2 million and live in Australia? No, I can earn 2 million dollars if I work*" showing a remarkable level of agency and optimism. Probably slightly in contrast to the above claim, the student admitted: "*If I fail, it is sometimes my fault but it can also be the teacher's*" which implies she might not be ready to fully accept responsibility for the learning process.

Student D A competent speaker of French and German as well as English, Student D, started learning English in primary school. Her proficiency level, the highest of the four participants, can be described as C1, which was manifested in her end-of the-year grade that amounted to 4 plus. Such a grade is relatively unusual among students of English philology, given the fact that the exam comprises three distinct parts: an oral interview, lexical grammatical test and an essay where language subsystems and all language skills are thoroughly tested. The exam resembles to some extent a proficiency exam, rather than an achievement one, since, apart from the material discussed and introduced during the academic year, it contains aspects relating to all and any language students might have contact with. Being a keen learner of languages, Student D is generally positively disposed towards examinations and although complaining about stress, she finds exams an opportunity to show how much she has learnt: "*It is nice when you can show the vocabulary you have mastered and you can use those difficult words in sentences and you know what they mean*." English had not been her favourite subject until secondary school when her teacher of English managed to arouse interest and established a very good relationship with the whole class. What the interviewee stressed was a special way the teacher treated the teenagers: "*He was an exacting teacher; but generally he had a very good attitude; on the one hand we had to try hard, but on the other, he understood that one might have a bad day (…) he tried to make us busy and engaged in the lesson. Seeing that we were no longer following, he tried to direct our attention to the focus of the lesson telling anecdotes or funny stories. He just kept our motivation high*." The participant highly valued the fact that her teacher, apart from presenting and practicing complex grammatical structures, devoted much time to developing the learners' colloquial

vocabulary. She claimed that during her first visit to an English-speaking country she did not feel perplexed by words rarely to be found in course books: "*I did not feel such a shock that someone is talking to me and uses every-day language I had never heard before; I knew I could make associations and guess; then I knew that it had been a good idea to study and it paid back*."

When asked about her aims, Student D responded that she did not think about her proficiency level in terms of grades. What she found particularly appealing was the ability to cope with every situation without thinking about specific structures or vocabulary items. She would like her explicit knowledge to transform into the implicit representation that would enable her to express all intended meanings, as it happens when she uses her mother tongue. Reflecting on literature classes she attended together with American exchange students in Norway, she voiced her doubts concerning her ever reaching a similar level of proficiency, natural ease with which they tackled complex literary matters. Her reservations did not concern grammatical accuracy which she hoped her contributions were characterized by, but rather the complexity and maturity of the way she spoke to the teacher and her classmates.

Student D seems to have a very clear picture of herself as a language learner knowing her weak and strong sides as well as the dominant intelligence type and learning style. Moreover, she appears to be very knowledgeable about various techniques and ways in which she can orchestrate them with her individual profile.

5 Conclusion

A question arises if, once a person-in-context view has been applied, making generalizations is legitimate here. An attempt to draw general conclusions may be perceived as disputable or, at least, arouse doubts concerning the purpose of the implemented procedure. It appears better grounded here to offer some tentative implications and identify areas requiring a further, more in-depth analysis. Despite having many important features in common, such as age, gender, general background and university course, among others, the four participants turned out to be driven by different motives and aims. Moreover, the impact of the context within which they function proves to be dissimilar in each of the cases. Being asked about the impact of affordances in language learning, they stressed the bigger role for effort, referring to the semester they spent abroad which, as they declared, did not contribute to language development. Undoubtedly, the students can be described as representing the growth mindset with respect to learning foreign languages, however, to a varying degree. Thus, just like all other individual differences, a growth and a fixed mindset seem to be the opposite extreme ends of one spectrum between which learners can be placed. What two of the narratives suggest, language teachers may play a role in helping learners establish their attitude towards the growth potential of one's learning abilities. The growth mindset represented by all of the participants, apart from being present in overt declarations, was also

visible in how the students approached the task of learning the language, in their descriptions of techniques and strategies they used. Their meta-awareness allows them to function successfully in the academic context. All of them appear to have developed their unique ways of dealing with tasks and difficulties, but they uniformly seem to have accepted the fact that learning entails hardships, requires time and effort. It seems legitimate to say they represent a growth mindset, but the degree with which they believe they are able to affect reality differs and corresponds to the level of proficiency.

All of the participants stressed the importance of extended effort in mastering English, but they also declared they believed in the existence of a special talent for language learning, which they were not able to define. Three of them stated they understood it as predispositions to learn. Despite the fact that one of them claimed she had not been predisposed to learn foreign languages, she still believed she could achieve her ambitious aim.

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Some Remarks on the Late Acquisitions: The Reformulation of Relative Clauses by Polish Children in Polish L1

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Abstract The purpose of this paper is to review some reformulation processes traditionally known as late acquisitions, i.e. they take place in the language of children over the age of four. This paper is especially interested in observing how Polish children ages 4, 6, 8 and 10 reformulate sentences relating to the restitution of a previously heard story (narrative). In other words, the aim of this work is to validate the hypothesis that reformulation is one of the key principles of acquisition. Before starting any analysis, we suggest a short description of the research project of which our study is a part.

1 International Project *Acquisition and Reformulation*

The aim of the project *Acquisition and Reformulation* (see Martinot et al. 2006 and Paprocka-Piotrowska 2003, Martinot 2005) is to find an answer to the following questions:

- How do children construct their predications?
- Or, how do they form the meaning of their statements with the lexical and grammatical means at their disposal?

In this project it is argued that the acquisition of one's mother tongue is the same as the acquisition of constructing a predication in different ways, and that this is a specific feature of language. Further, it is the case that the different ways of constructing a predication are related to different stages of linguistic development (until around the age of 15) and this has yet to be described from a linguistic point of view.

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Finally, it is argued that the capacity to produce utterances, which becomes more and more numerous, develops necessarily in reference to a statement a child has heard and memorized. Producing a statement reference means that a child (1) while retelling (or keeping) a part of the source utterance (SU)—at the level of words, construction and/or meaning—is producing a new utterance defined as a reformulated utterance (RU). The RU may also (2) have a new meaning or (3) an equivalent meaning to the SU. In the first case, the child keeps the construction of the SU and only changes lexical resources which are not synonymous with those of the SU. In the second one, the child keeps words and meaning, but changes the construction (case of restructuration). There are a lot of other cases of reformulation, but the principle of *keeping a part-changing a part* remains the same (Table 1).

SU: One morning, the teacher arrived in the schoolyard later than usual.

The above mentioned hypothesis about the acquisition of a mother tongue relies on several points of view of language and its description (Harris 1976, 1988; Ibrahim 2001, 2004; Ibrahim and Martinot 2003). Each language contains sets of equivalence classes, or sentences with the same meaning (Harris 1976). Our research adds, following Gross (1975), that each language contains sets of sentences which share the same structure, but not the same meaning. This point is very important in the case of very young children who often try to produce utterances/sentences using the same structure, but different lexical words. Hence, the utterances of language are in relation to each other following formal (systematic) rules (reformulation 2), but also following non-formal rules like in all other cases of reformulations (reformulation 1 and 3).

Language can only be described by itself. This very important hypothesis from Harris (1968, 1976), known as 'metalanguage is in language,' which means that it is impossible to describe language with means that are external to it; this is true for the language used by children as well. If the tool used to describe language is not actually isomorphic to that one, there is no guarantee that what is described is indeed language. Now, only language is isomorphic to itself. Furthermore, the link between thought and language is anything but clear. In Harris (1988) notes, "Virtually nothing is known about how the brain processes the syntactic structure, nor is it to be assumed that the brain follows the whole descriptive order as against recognizing a large body of partly similar constructions" (1988: 102).

Moreover, the strictly linguistic point of view of this project, which must describe language by language itself, relies on two facts:

Table 1 General types of reformulations

Repetition (a part or all SU)	RU: One day, the teacher arrived in the *school* later than usual
New production: new meaning	RU: One day, *Tom* arrived in the school later than usual
New production: equivalent meaning	RU: One day the teacher *was late in the school*

SU source utterance/*RU* reformulated utterance

1. The existence in each language of paraphrastic utterances that provide thus the same information and express without doubt the same notional categories.

If it is possible to assert that the same thought is at the origin of each paraphrase, it seems to be impossible to explain why the same thought is expressed in different utterances, except with a linguistic explanation.

2. The existence of a huge number of different languages and their respective grammars.

The diversity among languages is much more important that the diversity among notions. If we try to find a link between thought and language, this link will be very abstract and will not account for the specificity of each particular language. What children have to acquire or learn is how to express a certain thought with the particular means of their mother tongue.

If languages were organized in a way that all utterances would be semantically and syntactically different, then no produced utterance could describe another utterance of the same language and linguists could not find a descriptive utterance. Redundancy is thus necessary in language. But, as we mentioned above, there are sets of utterances in each language which are semantically equivalent for different reasons. Among these equivalent utterances, a part of them can describe other utterances. For example: (1) The next morning, Tom was waiting for the arrival of his little desk partner describes (2) Tom was waiting for Julie. The non-reduced sentence (1) describes the meaning of the reduced sentence (2). We argue that the description of meaning in utterances is the condition necessary for the eventual construction of a new meaning.

Furthermore, the possibility for a speaker to use different equivalent sentences to tell the same information and to use the same means to tell different information is the condition necessary for a language to change and evolve, but not die. Reformulation is thus a dynamic principle of language, and speakers apply it while speaking. In the process of acquisition, children repeat significantly less utterances than they alter and repeat less and less over the course of their development (even if they are able to repeat long texts). This means that they change more and more utterances as they are growing up. The changes are different because they are relative to the utterances and the age of the child. The procedures of reformulation become more and more numerous relative to the age.

In the experiment carried out in the project, it is argued that the way children manage the utterances of the source story is similar to the way children reformulate (i.e., change/keep the meaning) previously heard utterances in a naturalistic situation. We suggest that this way of linking the utterances of a source text with those of the reformulated one determines the acquisition of language.

2 Pattern of Analysis

To systematically observe the formulations of children ages 4, 6, 8 and 10 (15 children per age group) from the same text source, we use a semi-experimental protocol (see Martinot 2010b) which consists of reading to each child *The Story of Tom and Julie* (see English version and Polish version in the addendum below) and ask each child to retell the story "using his/her own words, without forgetting anything."

Each *story re-telling* provides all of the reformulated utterances (RU) that we compare with the corresponding source utterances (SU). This analysis emphasizes the differences between each pair of source utterance and reformulated utterance. Only language units which strictly repeat, semantically paraphrase, or functionally change the SU meaning have been taken into consideration. Moreover, we can consider narrative restitution (the re-telling of a text) to take place during the situation of natural language acquisition and to occur during a condensed period of time.

Our hypothesis of acquisition by reformulation will be validated if it can establish that the procedures used by children constructing reformulations differ from one age to another, correspond more to paraphrastic reformulations and are increasingly numerous and more 'complex.' From the Polish source text, we selected here 5 relative clauses (see Polish version in addendum). Besides the fact that this linguistic phenomenon is present in 8 languages of our project (French, English, Polish, German, Italian, Croatian, Romanian, and Yemeni Arabic) and therefore likely to be compared, it will be cautiously assumed that the relation between antecedent and relative clause is syntactically 'complex' because:

- Unlike subordinate clauses, whose sequence is traditionally labeled as complex, relative clauses are not attached to the main verb, but to the antecedent;
- Relative pronouns have three functions: (1) to serve as the subject or complement of the verb of the relative clause, (2) to be the connector between the main and relative clauses, and (3) to be the anaphoric pronoun for a preceding word;
- The semantic relation between an antecedent and a relative clause is not necessarily the same because it depends on whether the relative clause is defining or non-defining.

It is clear that the "complexity" of relative clauses is not only a matter of mentioned phenomena: relative clauses can be particularly complex when reformulated by the child if, for example, it contains a metaphor (*the light that filled the inside of the tree*), if it contains an operator verb (Ibrahim 2000) whose meaning is not available to young children and if this verb is applied to a complex predication (*where the flowers seemed to be speaking to each other in singing voices*). In other words, to define the acquisition of relative clauses from a linguistic point of view can not be reduced to taking stock of utterances introduced by a relative pronoun.

The analysis of the procedures of reformulation applied to relative clauses in the source text allows us to show precisely that the process of acquiring this type

of sequence includes several stages, from the lack of any form of reformulation to the reformulation of a relative clause by another linguistic realization which is semantically equivalent, e.g. an adjective. The description of these steps must take into account the morphological level of some languages and the lexical, syntactic and semantic ones in all the languages.

3 Analysis: Relative Clauses in the Production of Reformulations by Polish Children

We said that during the retelling of source text, a child can choose between three reformulating positions:

1. The child can repeat the source utterance (the same or nearly);
2. The child can modify the source utterance by giving another meaning to the reformulated utterance;
3. The child may change the source utterance, but keep its meaning.

Position 3 produces a semantic equivalence between the source utterance and the reformulated utterance; this equivalence is realized in different paraphrastic forms (semantic, formal, functional, and descriptive paraphrases; see Ibrahim 2007; Martinot 2010a). From the acquisitional perspective, Position 1 is much more common than the others in the productions of younger children (in our project: 4-year-old children, but this position appears a long time before). However, posture producing equivalence is progressively more frequent, varied and complex depending on the increasing age of children.

These two tendencies are indicative and must of course be adjusted according to the "complexity" of the source utterance and also in terms of the paraphrastic plasticity offered by each tendency (Martinotet al. 2008). Five relative clauses were selected from the Polish source text:

Sequence 1	Trzymała za rękę dziewczynkę, której nikt dotąd nie widział *She was holding the hand of a little girl whom nobody has seen before*
Sequence 4	[…] i wręczył jej pudełko, które zrobił dla niej poprzedniego wieczoru […] *and (he) held out the box that he made the previous evening*
Sequence 6	[…] i zobaczył karteczkę, na której Julka napisała […] […] *and (he) discovered a piece of paper on which Julie had written* […]
Sequence 12	Tomek i Julka znaleźli się w cudownym ogrodzie, gdzie wydawało się, że kwiaty rozmawiają ze sobą śpiewając *Tom and Julie found themselves in a magic garden where the flowers seemed to be speaking to each other in singing voices*

Sequence 13 Chcę nauczyć się rozmawiać z ptakami, które wiedzą o wszystkim co się dzieje w niebie,
I want to learn how to speak with the birds that know everything happening in the sky,…

The result of this study is the formulation of a database containing the results of 60 adults telling *The Tom and Julie Story* to 60 different children, and recording the children's narrative restitution, or re-telling of the source text in their own words. The children represent four age groups (4, 6, 8 and 10) and each group contains 15 children. The sessions were recorded (almost simultaneously) as face-to-face interviews between a single child and an investigator (i. e. adult Polish native speaker). All children have attended a nursery school or primary school.

The relative sequences reformulated by children selected for this analysis are presented in the table below (Table 2).

Before discussing these differences in more detail, it should be assumed that we have to deal with (false) longitudinal studies in which the knowledge of selected children about the structure of their L1 language is more and more complete, the nature of learned languages is dynamic (it changes depending on different linguistic stages) and the particular conditions of data collection (reading to each child the story and asking him/her to reformulate this story) implies the method of case-group analysis and comparisons.

3.1 4-Year-Old Children: Reformulation Without Relative Pronouns

4-year-old children had great difficulties retelling the source relative utterance by a new relative utterance (*relative to relative*). Only one child produced a relative covering a relative pronoun, but in an idiosyncratic form (*co tam były/what there were*). This is the sequence 13:

Sequence 13 Chcę nauczyć się rozmawiać z ptakami, **które** wiedzą o wszystkim co się dzieje w niebie,
I want to learn how to speak with the birds that know everything happening in the sky,…

Hania Tomek chciał rozmawiać z tymi zwierzątkami **co** tam były z rybkami i ptaszkami
Tom wanted to talk with those pets what(=that) were there with fish and birds

The most frequent reformulation procedure is represented by reformulated utterances using the empty pronominal correlates. Normally, pronominal

Table 2 Reformulations by sequence and by group (4/6/8/10 years old)

	Sequence 1 whom nobody has seen before	Sequence 4 that he made	Sequence 6 on which Julie had written	Sequence 12 where the flowers seemed	Sequence 13 that know
All the type of reformulation of the entire sequence (total × of 60)	14/6/15/9 (44/60)	7/12/11/11 (41/60)	11/15/14/15 (54/60)	15/8/12/8 (43/60)	15/10/12/12 (49/60)
Relative to relative	0/1/3/2 (6/60)	0/0/0/0 (0/60)	0/1/4/3 (8/60)	0/2/5/2 (9/60)	1/2/7/7 (17/60)
(Empty) pronominal correlates	4–2–2–1 (9/60)	0–1–3–4 (8/60)	5–2–0–0 (7/60)	1–3–1–1 (6/60)	0–0–0–0 (0/60)
	taką	0	taka/-ą, jakąś	taki/-ego, jakimś	0
	jakąś	takie		taki	0
	taką, jakąś	te, to	taka/-ą	tam (kwiaty gadają że)	0
	jakąś	te, to	0		0
			0		
	Sequence 1	Sequence 4	Sequence 6	Sequence 12	Sequence 13
	której nikt dotąd nie widział	**które** zrobił dla niej poprzedniego wieczoru	**na której** Julka napisała	**gdzie** wydawało się, że..	**które** wiedzą

correlates are useful to refer to the lexical units previously mentioned. But, in the productions of 4-year-old children, we have a lot of "empty" references to hypothetically known units, such as in sequence 13:

Alan Były też kwiatuszki i były tam kwiatki **takie**
There were flowers and there were this flowers(=flowers such)

Very often, when children produced equivalences of defining relative clause, their sequences did not contain a determinative element, as in sequence 1:

Mateusz Pani przyszła do szkoły z **taką** dziewczynką + Ø
The teacher arrived in the school with this girl + Ø

Of the 4-year-old age group, 15 children (100 %) reformulated sequences 12 and 13; 14 children (93 %) have reformulated sequence 1, 11 children (73 %)—sequence 6, and only 7 children (47 %)—sequence 4 (*the box that he made the previous evening*). This predication is not difficult but only 41 (68 %) of all of the children were able to retell sequence 4. The reason for this is most likely due to the fact that sequence 3, which precedes sequence 4, makes it very easy to identify the noun and thus the use of a relative is not necessary:

Sequence 3. Tom was so very excited at the idea of perhaps having a new friend. That evening at home he made for Julie a little round, red and gilded box.

Sequence 4. The next morning, in the schoolyard, Tom was waiting for the arrival of his new little desk partner. As soon as he saw her, he came up to the little girl and held out the box that he made the previous evening.

3.2 6-Year-Old Children: More Relative Pronouns and More Complex Utterances

In comparison with 4-year-old children, reformulations produced by 6-year-old children are less frequent: 62/75 (82.7 % of children age 4) and 51/75 (68 % of children age 6). However, a relatively high number of 6-year-old children using relative pronouns (6 occurrences vs. 1 occurrence in 4 year-old children productions) counteract this decrease. See sequence 13:

Ala Tomek powiedział chcę rozumieć rozmawiać z ptakami **które** wiedzą wszystko co jest w niebie
Tom said I want to understand talk to the birds that they know everything that is in heaven

On the other hand, the number of empty pronominal correlates (8 occurrences vs. 10 occurrences in 4-year-old children and 6 occurrences of relative pronouns clearly mark that although 6-year-old children tend to re-tell all the relative sequences this posture of reformulation (*relative to relative*) is still too difficult.

We said above that only 68 % of all 60 children reformulated sequence 4 (… *and [he] held out the box that he made the previous evening*). It is interesting to emphasize that this sequence is never reproduced with a relative pronoun. The non-occurence of relative pronouns could be important evidence for claiming that the ability to produce an equivalent meaning of a relative utterance (with or without a relative pronoun) is perfectly acquired at the age of 4 and 6.

Regarding the most and the least frequently reformulated sequence, 100 % of 6-year-olds retold sequence 6 (… *Tom lifted the lid up and discovered a piece of paper on which Julie had written*…), but only 6 children (40 %) repeated sequence 1 (*a little girl whom nobody has seen before*). Sequence 13 (… *I want to learn how to speak with the birds that know everything happening in the sky*…), one of the most complicated utterances from a syntactic point of view, was reformulated by only 10 (66.7 %) of 6-year-old children and this rate is the lowest for all groups.

3.3 8-Year-Old Children: Reformulation and Relative Pronouns

The total rate of the retellings of the source text increases from 82.7 % (at the age of 4) and 68 % (at the age of 6) to 85.3 % (64/75, at the age of 8). However, as for 10-year-old children this rate will be only 73.3 % (55/75), even if it is already quite high. 8-year-old children start to clearly reformulate the relative clause by constructing another relative clause. The choice of relative pronoun does not seem to be a problem for them: in total, there are 19 relative clauses equivalent to the relative source utterances in sequence 1 (3 occurrences), sequence 6 (4 occurrences), sequence 12 (5 occurrences) and sequence 13 (7 occurrences). It is important to say that the number of empty pronominal correlates decreases in 8 year-old children productions (6 occurrences only). We also note a new type of restructuration: reformulation by equivalence ("the same meaning with new words"), such as in sequence 13:

Sequence 13	Tom answered: 'I want to learn how to speak with the birds that know everything happening in the sky, with the fish that know everything happening in the water, and with the ants that know everything happening on the ground'
Joasia	Tomek powiedział, że by chciał rozmawiać z ptakami, które wszystko wiedzą o niebie *Tom said that he wanted to talk to birds that they know everything about heaven*

The choice of relative pronoun and reformulation mechanisms was made in conjunction with increasing complexity and sophistication of syntax. 8-year-old children construct a complex utterance *with all available lexical means*, even if

these means are idiosyncratic, i.e. Agata for sequence 4 (… *and held out the box that he made the previous evening*).

Agata Nagle jak Tomek powiedział że zrobił to pudełko dla niej *w poprzedniejszy wieczór*
Suddenly as Tom said that he did this box for her most previous evening

Finally, 8 year-old children reformulate more and more often all the "relative" sequences: sequence 1 was retold by 15 children (100 %), sequence 6 by 14 children (93.3 %), sequences 12 and 13 by 12 children (80 %), and sequence 4 by 11 children (73.3 %). From this point of view, the group of 8-year-old children is the most homogeneous (from 73 % to 100 % reformulations of relative utterances).

3.4 10-Year-Old Children: Competence Similar to Capacity of an Adult Speaker

Compared to younger children, the number and the types of reformulations by 10-year-old children is evidence for a new stage in acquisition. Four points must be specified in the end of our observations. In all the productions, the empty pronominal correlates disappear. The reformulation by equivalence substitutes the use of indefinite pronouns without an antecedent (*jakiś, jakaś*):

Sequence 1	1. […] She was holding the hand of a little girl whom nobody has seen before
Mateusz (4 years)	Pani przyszła do szkoły z **taką** dziewczynką + Ø *The teacher arrived in the school with this girl + Ø*
Jarosław (10 years)	za rękę trzymała jakąś nową dziewczynkę *She was holding the hand of some new girl*

In total, 14 relative utterances (14 occurrences of a relative pronoun) were produced to reformulate the "relative" sequences of the source text (sequences 1, 4, 6, 12, 13).

Sequences 12 (*in a magic garden where the flowers seemed to be speaking to each other in singing voices*) and 13 (*I want to learn how to speak with the birds that know everything happening in the sky*), which are really complex syntactically, were reformulated by 2 and 7 children, respectively. 2 children also used the relative pronoun to reformulate sequence 1 (*She was holding the hand of a little girl whom nobody has seen before*), and 3 children in the case of sequence 6 (*Tom lifted the lid up and discovered a piece of paper on which Julie had written…*).

In the productions of 10-year-old children, we observe that the syntax of (re)produced utterances is increasingly complex. It is clearly visible in

reformulations of sequence 13 (the longest and the most complex syntactically in the source text). See these two examples:

Hania (4 years) Tomek chciał rozmawiać z tymi zwierzątkami **co** tam były z rybkami i ptaszkami
Tom wanted to talk with those pets what = that were there with fish and birds

Magda (10 years) Tomek powiedział, że chce nauczyć się rozmawiać z ptakami, które wiedzą o wszystkim co się dzieje na świecie
Tom said he wanted to learn how to speak with the birds that know everything happening in the world

Magda's production is quasi-similar to sequence 13 and just one element has been changed: *in the world* replaces *in the sky*. Finally, the reformulation of sequence 13 made by the 10 year-old children is even more complex not only syntactically but cognitively. Sequence 13 is long and there are three repetitions: "… I want to learn how to speak with the birds that know everything happening in the sky, with the fish that know everything happening in the water, and with the ants that know everything happening on the ground." In fact, *sky*, *water* and *ground*, put together, form *the world*. Therefore, reformulations by 10-year-olds illustrate the existence of selecting operations concerning both the structure of utterance and the structure of information to be transmitted. This skill is normally operating in the language (L1) of an adult speaker.

Last but not least, we will give a short comment on the "U" tendency, so characteristic for longitudinal studies. Very often, the results of more advanced learners (L1/L2) seem to be "worse" than those of the less proficient learners: their mistakes are more frequent and their sentences less perfect. This criterion (the presence of standard forms) is normally important for characterizing a stage in acquisition. But, in fact, the productions of more advanced learners are not faultless because they do not *re-produce* but rather actually *re-formulate* the source utterances (i.e. they do not *repeat* but *re-use* the linguistic input to which they are exposed). For this reason, in the productions of beginner-level learners and young children (age 4), the number of similar repetitions can be high. At this stage of acquisition (L1/L2), repetition is a strategy of safety, closely related to the phenomenon of short-term memory (i.e. working memory capacity). On the other hand, the learner in progress who starts to test his/her own hypotheses about 'how language works,' starts to produce more him/herself.

4 Conclusion

In conclusion, we have seen not only how children ages 4, 6, 8, 10 can reformulate a source text and how these children re-tell relative utterances from this source text in a manner syntactically and semantically complex, but also have observed at least some matches between produced reformulations and stage of acquisition.

In younger children's productions (4 years old), reformulations of a source utterance are mainly defined as 'zero relative pronoun' and 'empty pronominal correlates' (i.e. *taka—this, jakaś—a + F noun*); older children (6 years old) progressively become more successful at disambiguating; their reformulated utterances are characterized by the 'presence of relative pronoun' and 'more complex syntax.' The reformulating work is done on *która* (*who* feminine)/*które* (*who* plural neuter), *gdzie* (*where*), and *co* (idiosyncratic for *które*). In 8-year-old children's texts, one main pronoun and complex syntax are established: *który*/*która/które* (*who* masculine/feminine/plural neuter) and their prepositional constructions *na której/którym, w której* (*where*, *in which*) increase significantly. However, this particular work on the syntax and meaning (i.e. on reformulating postures) is undoubtedly visible in the productions of 10-year-olds. Their reformulated relative utterances (RRU) are clearly marked by (1) the lack of empty pronominal correlates, (2) the use of appropriate relative pronouns and (3) increasingly complex utterances. This shows that the work of reformulation leads to mastery of L1, which is similar to the capacity of an adult L1 speaker. On the other hand, differences between the four groups of subjects 'controlled' in this study allow us to say that the development of reformulation procedures has something to do with stage of L1 acquisition by young and older children.

Addendum 1: *Tom and Julie Story* (English Version)

1. One morning, the teacher arrived in the schoolyard later than usual. She was holding the hand of a little girl whom nobody has seen before.
2. When she arrived in the classroom, the teacher said: 'Children, I want to introduce you to your new classmate, her name is Julie. Tom, there is an empty space next to you, Julie will be your new desk partner, be very nice to her!'
3. Tom was so very excited at the idea of perhaps having a new friend. That evening at home he made for Julie a little round, red and gilded box.
4. The next morning, in the schoolyard, Tom was waiting for the arrival of his new little desk partner. As soon as he saw her, he came up to the little girl and held out the box that he made the previous evening.
5. Julie liked the box so much that she always carried it with her. When the teacher said: «Get out your things!», Julie would put the box gently down between Tom and her on their desk.
6. One day, Julie whispered to Tom: 'Open the box!' Tom lifted the lid up and discovered a piece of paper on which Julie had written: 'Meet me this evening at 8 o'clock under the big tree at the edge of the forest'
7. Tom was a little afraid because he was not allowed to go into the forest, especially at night.

8. But, just the same, at 8 o'clock in the evening, he was at the meeting place. Julie was already waiting for him.
9. Without saying one word the little girl took Tom hand's and knocked 3 times on the trunk of the big tree.
10. After a few minutes, the children heard a creaking noise; the tree was starting to turn around.
11. Suddenly, the trunk opened and the children were dazzled by the light that filled the inside of the tree. They took a few steps in and the tree closed up behind them.
12. Tom and Julie found themselves in a magic garden where the flowers seemed to be speaking to each other in singing voices. Then Julie said to Tom: 'Come, let's go through the garden, there is a big party for you this evening. Until midnight you have the right to ask our king for anything you want'.
13. Tom answered: 'I want to learn how to speak with the birds that know everything happening in the sky, with the fish that know everything happening in the water, and with the ants that know everything happening on the ground'.
14. And since that day, Tom has become an extremely wise boy.

Addendum 2: *Tomek i Julka* (Polish Version, Relative Clauses)

1. Tego ranka Pani weszła na szkolne podwórko później niż zwykle. Trzymała za rękę dziewczynkę, której nikt dotąd nie widział.
2. Po wejściu do sali Pani powiedziała „Dzieci, przedstawiam wam nową koleżankę, ma na imię Julka. Tomku, miejsce obok Ciebie jest wolne, Julka będzie siedzieć obok Ciebie, bądź dla niej miły!".
3. Tomek bardzo się cieszył, że być może będzie miał nową dobą koleżankę. Wieczorem w domu zrobił dla Julki okrągłe złoto-czerwone pudełeczko.
4. Nazajutrz rankiem, na szkolnym podwórku Tomek niecierpliwie wyglądał przybycia swojej nowej sąsiadki. Gdy tylko ją spostrzegł, podbiegł do niej i wręczył jej pudełko, które zrobił dla niej poprzedniego wieczoru. Julce pudełeczko tak się spodobało, że nosiła je zawsze przy sobie.
5. A kiedy pani mówiła: „Wyjmijcie swoje rzeczy", Julka delikatnie kładła pudełeczko na ławce, pomiędzy nią i Tomkiem.
6. Pewnego dnia Julka szepnęła do Tomka: „Otwórz pudełko!". Tomek podniósł pokrywkę i zobaczył karteczkę, na której Julka napisała: „Czekam na Ciebie dziś wieczorem o 8.00, pod wielkim drzewem przy wejściu do lasu".
7. Tomek trochę się bał bo nie wolno mu było chodzić do lasu a już zwłaszcza nocą.
8. Jednak o 8.00 stawił się na spotkanie. Julka już na niego czekała.
9. Bez słowa dziewczynka wzięła Tomka za rękę i trzy razy zastukała w pień wielkiego drzewa.

10. Po kilku minutach dzieci usłyszały jakieś skrzypienie. To drzewo obracało się wokół siebie.
11. Nagle pień drzewa otworzył się a dzieci olśniło światło wydobywające się z jego wnętrza. Gdy zrobili kilka kroków, drzewo zamknęło się za nimi.
12. Tomek i Julka znaleźli się w cudownym ogrodzie, gdzie wydawało się, że kwiaty rozmawiają ze sobą śpiewając. Wtedy Julka powiedziała do Tomka: „Chodź, przejdźmy przez ogród, dziś wieczór jest przyjęcie na twoją cześć. Aż do północy możesz prosić naszego Króla o co tylko chcesz".
13. Tomek odpowiedział „Chcę nauczyć się rozmawiać z ptakami, które wiedzą o wszystkim co się dzieje w niebie, z rybami, które wiedzą o wszystkim co się dzieje w wodzie i z mrówkami, które wiedzą o wszystkim co się dzieje na ziemi.
14. I od tego dnia, Tomek stał się bardzo mądrym dzieckiem.

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Part II
Discourse and Communication

Selected Observations on the Effect of Rhythm on Proficiency, Accuracy and Fluency in Non-native English Speech

Ewa Waniek-Klimczak

Abstract This chapter aims to explore the relationship between the production of the elements of the rhythmic structure of English and language proficiency. Speech samples from 5 non-native speakers are first described for their target-like production of selected phonetic variables and then assessed for accuracy and proficiency by 25 experienced Polish teachers of English. The analysis concentrates on the relationship between general language proficiency and accuracy/proficiency ratings and the effect of elicitation style on the ratings. The study shows that the elements of rhythm and connected speech ('fluency' factors) correspond to the proficiency ratings to a greater extent than segmental articulation. Moreover, the proficiency ratings are considerably higher than those for accuracy across styles for more proficient, upper-intermediate speakers; in less proficient, lower-intermediate speakers, the ratings depend on the style of speech: proficiency is rated higher in speech than in reading. The results are interpreted as preliminary evidence for the elements of rhythm developing in parallel to language proficiency, independently from segmental articulation which may be subject to fossilisation and may not reflect the level of language proficiency. The rhythm not only matters for proficiency ratings, but it also develops with language proficiency and language experience.

1 Introduction

Teaching English pronunciation may seem an easier task today than in the 'old days', when the requirement of accuracy in native-like production of individual sounds defined the aim at an extremely high level of difficulty. Two important changes: stressing the importance of fluency rather than accuracy, and

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'comfortable intelligibility' instead of native-like competence partly relieved the strain and integrated pronunciation instruction with the development of the speaking skill in a communicative framework. The shift towards fluency brought suprasegmentals, stress and rhythm, into the foreground. Ironically perhaps, no sooner had the connected speech been accepted as crucial for meeting communicative needs of the learners than the new proposals for pronunciation priorities (Jenkins 2000, 2002) questioned the need for English rhythm in English used by the learners in the international context. The task of specifying priorities in pronunciation teaching has become more difficult than ever.

Among different aspects of pronunciation teaching that need to be re-considered in view of 'comfortable intelligibility' and Lingua Franca Core is the English rhythm. Defined as 'stress-timed', English rhythm belongs to the more marked, less frequent type of rhythmic organisation found among languages. As any rhythm is based on a regular repetition of elements perceived as similar, "in speech these elements are syllables or stressed syllables in particular" (White and Mattys 2007: 501). While all types of rhythmic organization are "produced by the interaction in time of relative prominence of stressed and unstressed syllables" (Laver 1994: 152), in English the combination of syllabic timing and syllable structure results in the stress-timed rhythm. The rhythm corresponds to structural characteristics of the language, such as a complex syllable structure, the presence of many vowel types, varying in length, vowel reduction in unstressed syllables and relatively free lexical stress. Apart from the Germanic group of languages, the majority of languages do not share the stress-timing rhythm with English, which makes the English rhythm difficult for the learners.

Recognising the level of difficulty and the tendency to abandon stress-timing in non-native English, Jenkins (2000, 2002) proposes that the English rhythm should not be included in the pronunciation priorities formulated as the Lingua Franca Core. In fact, she believes that features of the English rhythm and connected speech can inhibit communication in the international context and consequently, advocates not teaching them. The non-core areas include "Weak forms, the placement of word stress, stress-timed rhythm. (…) One could argue that in these cases, it is perhaps native speakers who need to make receptive adjustments" (Jenkins 2002: 98). The native speakers, however, may not be ready to do so—as the following quote from the book for pronunciation teachers suggests:

> Learners who use incorrect rhythm patterns or who do not connect words together are at best frustrating to the native-speaker listener. (…) When learners (particularly whose first language is syllable-timed) obscure the distinction between stressed and unstressed syllables in English, native speakers may either fail to comprehend or they may grow impatient at the lack of selective stress on key words. (Celce-Murcia et al. 1996: 131–154)

The question whether to teach or not to teach the English rhythm remains open. One might argue that the answer depends on the future use of the language by the learner—the distinction between English as the second/foreign versus international language (see e.g., Cunningham 2009). Alternatively, we might want to know to what extent the rhythm corresponds to the level of language proficiency before we

decide about the extent to which it might need to be included into the pronunciation priority list.

Interestingly, the evidence showing the relationship between language proficiency and stress-timed rhythm comes from the first language acquisition studies. Discussing the phonological development in English as the first language, Vihman (1996) refers to Allen and Hawkins' (1980) study, which they conclude by saying that "Despite early control of intonation, [English] children are slow to develop the ability to reduce weak syllables—the absence of reduced syllables in 1- or 2-year olds results in speech sounding more syllable-timed" (Vihman 1996: 203, after Allen and Hawkins 1980). In the development of stress-timing, the tempo of speech and an increased complexity of utterances containing more unstressed syllables seem crucial. As the result, it is not before the age of 4 or 5 that English children are expected to produce stress-timed, adult-like rhythm (Vihman ibid.). Similar results supporting a longer period of acquisition and the resulting correspondence between the general language proficiency have been reported by Grabe et al. (2000) in their study of French and English speaking children. They found that at the age of 4 the rhythmic organisation of French children and their mothers matched to a greater degree than that of English children and their mothers: in the latter case, the rhythm of the children was estimated considerably more syllable-timed than that of their mothers. These results point to two types of the relationships: firstly, syllable-timing precedes stress-timing in language acquisition, and secondly, stress-timing develops with language proficiency (longer, more complex utterances containing more unstressed syllables, faster speaking rate). The gradual development of stress-timing in first language acquisition suggests a parallel relationship between the rhythm and language proficiency in non-native speech.

The expectation of a positive relationship between language proficiency and pronunciation is by no means surprising—the assumption that increased proficiency refers to all skills and sub-systems of the language forms the basis of second language acquisition theories and foreign language teaching practice. However, the predictions with regards to the degree to which growing language experience affects pronunciation differ due to the recognized effect of possible fossilization (Selinker 1972, Han and Odlin 2006). Without attempting a detailed discussion of this issue, let us notice that the phenomenon of a foreign accent has been long recognized as largely independent from other element of the linguistic system, with the Polish-origin English writer Joseph Conrad quoted as a well-known example of the discrepancy between the skills. The fact that a foreign accent may remain relatively stable regardless of language experience seems to question the main tenet of Major's ontogeny model (Major 2001) or the possibility of extending functional approaches to phonology (e.g., Boersma and Hayes 2000; Pierrehumbert 2003), to second language acquisition. The explanation for the discrepancy between the prediction that growing language experience increases the level of language proficiency and the reality of a foreign accent in proficient speakers may be found in the way in which a foreign accent is defined on the one hand and a varied sensitivity of individual components of speech on the other. The

impression of a foreign accent tends to be based on a holistic assessment, often related to the 'correctness' in pronunciation (e.g., Asher and Garcia 1969; Thompson 1991; Anderson-Hsieh and Koehler 1988; Munro and Derwing 1998). When studied for the relationship between individual elements of pronunciation and accent gravity ratings, non-native speech tends to be assessed on the basis of prosodic rather than segmental or syllable-structure features (Anderson-Hsieh et al. 1992). Moreover, the accentedness of speech may not affect the degree of intelligibility or comprehensibility of the speaker (Munro and Derwing 1999; Van den Doel 2006), which suggests that language proficiency and accentedness do not necessarily develop in a linear way, with the former dependent on language experience to a greater extent than the latter. As language experience and language proficiency have been shown to be needed for the development of the English rhythm in first language acquisition, the elements of the rhythmic structure can be expected to be related to the assessment of language proficiency in second/foreign language speakers. The proficiency ratings, however, do not need to correspond to the level of 'accentedness' measured by the accuracy criterion.

2 Study Design

The study reported in this chapter attempts to look for tendencies in the relationship between the elements of the rhythmic structure and language proficiency in non-native speech in order to explore the importance of the rhythm in the EFL teaching and evaluation. The key question: does rhythm matter? is asked with reference to the assessment of two styles: text-reading and questionnaire-elicited speech, for accuracy and proficiency of the speaker. In the course of the study, the speech samples from 5 ESL learners (Polish immigrants to the U.S.), all functionally fluent in American English, are first analysed from the perspective of the target-like production of selected phonetic variables (pre-assessment) and then evaluated by 25 Polish experienced teachers of English in Poland. The proficiency and accuracy ratings are then discussed in relation to the general level of language proficiency of the speakers (from native-like to lower-intermediate) and the elicitation style of the speech samples.

2.1 Speakers

The speech samples come from five Polish native speakers living in the U.S. The speakers represent two main levels of language proficiency: upper-intermediate and lower-intermediate; the samples from the fifth speaker, who is a near-native speaker of English, have been added in order to increase the range of auditory input in the assessment study and normalize the stylistic effect. The speech

Table 1 Speaker characteristics

Gender	2-P Female	1-A Male	3-J Female	4-K Male	5-KT Female
Age at recording	15	56	54	55	45
Age at arrival	4	46	43	44	36
Length of residence	11	10	11	11	9
Level of education (in Poland)	N/A	MA	Ph.D.	MA	MA
Formal instruction in EFL (in Poland)	N/A	10 years	12 years	Minimal	Minimal
Use of English in everyday life	90 %	70 %	70 %	50 %	50 %
Pre-assessed level of proficiency in English	(near) native	Upper-intermediate	Upper-intermediate	Lower-intermediate	Lower-intermediate

samples last about 1 min each and come from two elicitation styles: text reading and questionnaire-elicited speech.

Main speaker characteristics have been tabulated in Table 1. The investigated samples come from middle-aged speakers, one male and one female in each category; the near-native speaker is a young female. The speakers share the same higher level of education in Polish and the period of immersion in the English-speaking environment, but differ with respect to the amount of formal education in English and the amount of English used in everyday life.

The fact that the difference in the amount of formal education in EFL corresponds to the pre-assessed level of language proficiency suggests the positive effect of language instruction before the immersion in the English speaking environment; in fact, although the speakers report considerable difficulties with English on coming to the U.S., the previous language experience cannot be ignored. For the purpose of the present study it is important to notice that the difference in experience corresponds to the level of proficiency, which is the main variable taken into account. In the case of all speakers the length of residence and the proportion of the usage of English indicate their regular exposure to the target language; all speakers work in an English environment on a regular basis, the difference in the proportion of English usage is caused by the preferences with respect for language choice in contacts with friends and mass-media.

2.2 Listeners

The group of listeners who acted as judges in the study contains 25 experienced Polish teachers of English. The teachers are all fully qualified, with many years of experience in the Polish academic system. Their interest in the pronunciation of English is manifested by the attendance at a conference devoted to teaching pronunciation as an element of foreign language instruction—it is during this conference that the data analysed here were collected (see Waniek-Klimczak 2003 for an earlier discussion of the rating procedure). The listeners have the experience in rating Polish learners of English, mostly at an advanced level, both in their phonetics classes (accuracy), and oral parts of practical English exams (proficiency). The choice of non-native judges may be questioned, however, it has been motivated by the context of the study, aiming to explore the effect of the elements of rhythm on proficiency ratings in the Polish teaching institutions. The results of previous studies involving non-native judges support the relevance of the results for a more general discussion: while the familiarity with the accent may increase intelligibility (Munro et al. 2006), the non-native speakers have been found to be on average more severe judges of a foreign accent than native speakers of English (Fayer and Krasinski 1987; Majer 2002; Piske et al. 2001; Scheuer 2003).

2.3 Procedure

The study used a selection of speech samples collected in the course of interviews with the speakers. The interviews consisted of a word-list reading, text-reading and questionnaire elicited speech, out of which only short, 50–60s long fragments of text-reading and semi-spontaneous speech were used. The selected samples represent the same fragment of the text for all speakers and a fragment of their answer to the same question (How important is it for you to be recognized as a person of Polish origin?). The samples were first analysed for their phonetic characteristics (Stage 1, pre-assessment), and then assessed for accuracy and overall language proficiency by 25 raters, experienced Polish teachers of English (stage 2).

Stage one involved the assessment of the samples for target-like production of a number of selected phonetic variables assumed to reflect the rhythmic organisation of speech.

The following variables were selected:

- the use of a weak form/reduced vowel in ‘the’
- unexploded plosive in a consonant cluster (e.g., *would discuss*; *misled by*, etc.)
- alveolar plosive deletion in a three-consonant cluster (e.g., *most important, must be*, etc.)
- word stress (clearly marked on the right vowel).

Additionally, the samples were analysed for two segmental features: the dental fricative and the use of aspiration in fortis plosives. The pre-assessment was based on an auditory and acoustic analysis performed by the investigator (for a more detailed account of this part of the study see Waniek-Klimczak 2005).

The second stage consisted in an auditory assessment of the same speech samples by 25 experienced Polish teachers of English at the university level. The raters heard the samples in a random order within the style: 10 investigated samples from 5 speakers were mixed with 2 random samples from a larger database. The participants were asked to assess each sample for accuracy and general language proficiency on the scale 1 (the lowest) to 6 (the highest) on the answer sheets provided. Before the assessment started, the procedure was explained and illustrated with a sample not included in the main set. The raters were asked to rate 'accuracy' in the way they perform the rating in their pronunciation classes; the 'proficiency' rating was accepted as the most holistic assessment, comprising accuracy and fluency, and corresponding to the evaluation used in the oral exam format performed by all the raters on a regular basis.

3 Results

The two stages of the study provided different types of the data: the estimated degree of target-like production of individual phonetic variables for each speaker and the grading performed in the assessment of language proficiency by the raters. Both the descriptive analysis of the phonetic variables used in pre-assessment and the auditory study results represent a small sample of observations, however, they are used here as preliminary evidence pointing to some possible general tendencies in the relationship between the values of phonetic variables, elicitation style and rating criteria on the evaluation of proficiency in non-native speakers.

3.1 Phonetic Variables

The results of Stage 1 have been interpreted in terms of the degree of target-like production of the selected variables in the investigated samples for each speaker (the percentage reflects the proportion of values assessed as target-like within the sample, see Table 2). This part of the study provides the basis for the following ranking of the speakers for proficiency on the basis of the values of the selected rhythm-based variables: 2-P, 3-J, 1-A, 5-KT and 4-K. Predictably, the near-native speaker produces all the investigated elements in a target-like way, the speakers estimated as (upper)intermediate score 80 % (3-J) and 65 % (1-A), and the two lower-intermediate speakers are very similar in their rating, with about 50 % of

Table 2 The proportion of target-like production of individual phonetic variables in individual speaker samples

	1-A	2-P	3-J	4-K	5-KT
Weak 'the'	30 %	100 %	80 %	30 %	20 %
No plosion	50 %	100 %	50 %	50 %	50 %
Plosive elision	100 %	100 %	100 %	25 %	100 %
Word stress	80 %	100 %	90 %	90 %	50 %
Mean	65 % (3)	100 % (1)	80 % (2)	49 % (5)	55 % (4)

Table 3 The proportion of target-like production of individual phonetic variables in individual speaker samples

	1-A	2-P	3-J	4-K	5-KT
'th'	50 %	100 %	44 %	35 %	20 %
Aspiration	45 %	100 %	40 %	71 %	46 %
Mean	47.5 % (3)	100 % (1)	42 % (4)	53 % (2)	33 % (5)

target values. Interestingly, the main difference between the upper-intermediate speakers proves to be in the production of the weak form of the definite article—Speaker 1-A, who is a slower speaker, has a tendency to produce a strong form of the word, with a tense high vowel. The two lower-intermediate speakers differ with respect to the amount of elisions—Speaker 4-K, again much slower than Speaker 5-KT tends not to elide consonants (with frequent insertion of pauses between the words), which affects not only the tempo, but also the organisation of his speech. In contrast to 5-KT, he is also much more accurate with respect to stress placement. The results of the additional variable values, the accuracy of the dental fricative articulation and aspiration (Table 3), show that the main difference between the two lower-intermediate speakers is in accuracy, with Speaker 4-K producing more target-like values in aspiration than any other speaker.

The results of the first part of the analysis point to the tendency for speakers with a general higher level of language proficiency to use a higher proportion of target-like production in the rhythmic organisation of speech. The production of the segmental elements does not differentiate the speakers to the same extent as the production of the suprasegmental ones; in fact, the proportion of target-like values of aspiration is higher in the lower-intermediate than the upper intermediate group (notice a general tendency for aspiration to be noticed and produced before the 'th' in the two less proficient speakers). The qualitative nature of the study does not make it possible to draw generalisations, however, there seems to be a clear tendency for the elements of the rhythm, and not segmental articulations, to be associated with higher language proficiency.

3.2 The Auditory Assessment Study

The data obtained in the assessment study were checked for inter-rater variability by means of establishing the value of correlation coefficient for all pairs of raters within the group; the results proved high degree of correlation (the smallest Pearson correlation value = 0.7, the highest = 0.95), reaching the level of high significance ($p \leq 0.1$). The descriptive statistics for the data have been tabulated below (Table 4).

The ratings for each speech sample were averaged for every speaker (the resulting grade and the standard deviation of the sample are tabulated in Table 5). At the descriptive level, the data point to the differences in the general proficiency of the speakers, with Speaker 2-P rated the highest, followed by speaker 3-J, 1-A, and then 4-KT and 4-K. The comparison of the averaged means shows a relatively high level of agreement as to the general tendency for rating semi-spontaneous speech higher than reading, and proficiency higher than accuracy, with an interesting exception of Speaker 4-K, who receives the lowest rating for proficiency, but not accuracy, in the reading style. When treated in terms of the grading system, the two least proficient speakers would receive a weak pass, Speaker 1-A an average, Speaker 3-A average plus and Speaker 2-P very good (but not excellent, corresponding to grade 6—an interesting result for a fluent bilingual, with a native-like command of English).

Table 4 Descriptive statistics for the raters

	St. deviation	Variance	N
Group 1	1.56	2.44	25

Table 5 Mean grades (range 1–6) for individual speech samples; data from the auditory assessment; the number of raters N = 25

		Text-reading		Elicited speech		Mean
		Grade	Std. dev.	Grade	Std. dev.	
1-A	Accuracy	**2.44**	0.85	**2.8**	0.85	2.90
	Proficiency	**2.52**	0.85	**4**	1.1	3.26
2-P	Accuracy	4.64	1.09	5.68	0.47	5.17
	Proficiency	5.13	0.8	5.72	0.53	5.43
3-J	Accuracy	**2.84**	0.88	**2.84**	0.92	2.95
	Proficiency	**3.6**	1.1	**4.32**	1.01	3.96
4-K	Accuracy	1.48	0.5	2.08	0.69	2.18
	Proficiency	1.24	0.43	2.2	0.8	1.72
5-KT	Accuracy	**1.28**	0.45	**1.8**	0.63	1.59
	Proficiency	**1.52**	0.57	**3.04**	0.88	2.28

Table 6 Pearson correlation for criterion differences within the same style for each speaker

		Reading	Speaking
1-A	Accuracy/proficiency	0.46*(*)	0.65**
2-P	Accuracy/proficiency	0.83**	0.45*(*)
3-J	Accuracy/proficiency	0.72**	0.53**
4-K	Accuracy/proficiency	0.4	0.48*(*)
5-KT	Accuracy/proficiency	0.21	0.5*

**Highly significant correlation at 1 % level is marked
*Significant at 5 % level marked
(*)Values approaching 5 % marked

The consistency of the raters with respect to the grading for individual speakers in different conditions, i.e., with respect to the elicitation style and the criterion of accuracy versus proficiency has been checked for correlation (Table 6). The results indicate a greater degree of correlation in the ratings for accuracy and proficiency in speaking (significant correlation for all speakers, Table 8) than reading, where raters were less consistent in the grading of the less proficient speakers 4-K and 5-KT. The results may point to the difficulty the raters experienced when asked to assess reading—the task less natural and less frequently performed than the assessment of speaking.

4 Analysis and Discussion

The results of the two stages of the study support the effect of the target-like production of the elements of the English rhythm on general proficiency ratings. When compared to the pres-assessment, the ratings prove to be consistent with the pre-assessment based on the elements of the rhythm in the case of more proficient speakers for both rating criteria. In the case of the less-proficient speakers, however, the segmental features (dental fricative and aspiration) prove to be a better predictor of the accuracy rating, with Speaker 4-K rated higher for accuracy than Speaker 5-KT both in reading and speaking (Table 7).

Table 7 The comparison of the ranking of the speakers in the two stages of the study

	1	2	3	4	5
Pre-assessment based on the organisation of speech	2-P	3-J	1-A	5-KT	4-K
Proficiency rating text	2-P	3-J	1-A	5-KT	4-K
Proficiency rating speech	2-P	3-J	1-A	5-KT	4-K
Accuracy rating text	2-P	3-J	1-A	**4-K**	**5-KT**
Accuracy rating speech	2-P	3-J	1-A	**4-K**	**5-KT**
Pre-assessment based on segmental accuracy	2-P	4-K	1-A	3-J	5-KT

Table 8 Significant results of two-tailed t-tests for paired samples performed for text reading versus speech ratings within accuracy and proficiency criterion for each speaker

	Text/speaking accuracy	Text/speaking proficiency
1-A	#	4.083**
2-P	#	#
3-J	#	#
4-K	#	9.351**
5-KT	#	6.672**

The exceptionally high level of accuracy in the selected segmental pronunciations of Speaker 4-K places him higher than any of the other speakers (except for 2-P) when ranked for these features only in the pre-assessment. The difference between the ranking based on segmental accuracy in isolation and the one based on accuracy in context, i.e., in the auditory study (Speaker 4-K is rated higher for accuracy than 5-KT, another lower-intermediate speaker, but lower than any of the upper-intermediate speakers) shows that the proficiency level affect accuracy ratings: the raters consistently assess more proficient speakers higher not only for proficiency, but also accuracy. Consequently, the comparison suggests that the elements of the organisation of speech have a major effect on the proficiency ratings and override the segmental target-like production of aspiration or a dental fricative.

The correspondence between the target-like production of the elements of the rhythmic organisation of speech and proficiency ratings has been found in all speakers, however, the degree to which the ratings depend on the elicitation style vary. When tested for significant difference (Table 8), the grading proves to depend on the elicitation style in those speakers whose overall proficiency is rated relatively lower: Speaker 1-A and both lower-intermediate speakers: 4-K and 5-KT. The difference in the ratings is particularly striking in the case of 5-KT, whose mean proficiency grading for reading is 1.52 (which would mean a fail in the school system), and 3.04 (average) for speaking. The comparison of the ratings for reading style in the less-proficient speakers with the more proficient ones suggests that it is the level of language proficiency that decides about the relative ease/difficulty of reading; however, it may be important in this case to notice another difference between the speakers, i.e., the level of their formal education in English. As speakers 4-K and 5-KT had only basic English at school in Poland, they may not have needed to develop reading aloud or may not have had the opportunity to use it at all.

The general tendency for lower grading in the assessment of text-reading is worth noticing in the context of school assessment, where reading is more likely to be used as an element of assessment than in other contexts. Most generally, the significance of the difference suggests that text-reading, although well-established as an element of elicitation procedure in the attention-to-speech paradigm in native (Labov 1972) and non-native language use (Tarone 1979, 1982), needs to be

Table 9 Significant results of two-tailed t-tests for paired samples performed for accuracy versus proficiency rating for two speech styles: text and speech for each speaker

	Accuracy/proficiency text	Accuracy/proficiency speech
1-A	#	3.646**
2-P	#	#
3-J	5.653**	6.346**
4-K	#	#
5-KT	#	#

treated with caution, as a separate skill rather than an element of speech continuum (for the discussion of this issue in sociolinguistics see Romaine 1980; also Waniek-Klimczak 2005).

When analysed for the regularity of the difference in the ratings depending on the criterion, the data show another interesting tendency: it is the more proficient speakers (3-J and 1-A) whose ratings systematically vary, with the accuracy level assessed significantly lower than proficiency. The difference (see Table 9) is most systematic in Speaker 3-J (both is text-reading and in speaking) and 1-A (in speaking). The difference noticed here corresponds to the discrepancy in the pre-assessment for segmental pronunciation versuss the elements of the rhythm (Table 7), suggesting that the more advanced speakers may retain elements of a foreign accent at the segmental level, possibly due to fossilisation or the need to preserve their foreign accent as an identity marker, while the elements of the rhythmic organisation of speech correspond to the increased language experience and proficiency level.

The discrepancy between the proficiency and accuracy ratings in the assessment study corresponds to the results of the phonetic variant analysis. In fact the proportion of target-like productions of the segmental variants has been found not to vary between the investigated speakers (Table 3) to the same extent as the suprasegmental ones (Table 2). This result suggests that on the one hand, it is not the segmental variants that decide about the perception of proficiency, on the other hand—more generally—a higher degree of proficiency does affect the organization of speech more than the segmental elements, which remain relatively stable over time, not affected by a growing language experience. Viewed from the perspective of a foreign accent, the segmental variants may be said to have fossilized in the more advanced speakers; the elements of the rhythm on the other hand, do not—in other words, the rhythmic organization of speech develops with a growing language experience in non-native speakers just as it does in the case the first language acquisition in English. As mentioned by Vihman (1996) the production of the English rhythm depends on the tempo of speech and the complexity of the utterances; it is not until non-native speakers become relatively proficient in the language that the rate and lexical as well as syntactic complexity of the utterances creates favourable conditions for the use of the English rhythm.

The assumption that it is the language proficiency that causes more target-like rhythmic production of English is only partly supported in the case of a high rating

of the low-proficiency Speaker 5-KT. Although the overall ratings for this speaker are lower than those for the more proficient speakers, the difference between the accuracy/proficiency ratings and the proficiency ratings across styles seems difficult to account for on the basis of the data. A possible explanation can be found in a more holistic description of the speech patterns used by this speaker, e.g., the use of lexicalized chunks (e.g., 'kinda', 'gotcha' etc.) which may give the impression of greater fluency of this speaker. The strategy of using the 'articulatory chunks' proves very successful in speaking, but obviously not reading.

5 Conclusion

It needs to be stressed that all observations based on the data reported here need to be treated as tentative due to a small scale of the study. However, some regularities found in the data can be treated as preliminary evidence pointing in the direction of a positive relationship between the development of English rhythm and language proficiency. The comparison of accuracy and proficiency ratings suggests that it is the rhythmic organization of speech that may be affected by an increased language experience more than segmental articulation.

The rating of speech has been shown to depend not only on the overall language proficiency level, but also on the style of speech and the criteria used in assessment. The effect of speech style has been found particularly relevant in lower-proficiency speakers: in a pedagogical setting, the choice of the elicitation style may decide about success or failure in an exam situation for those speakers. It seems that with growing language proficiency, all speech styles improve, however, text reading remains difficult and consequently, cannot be used as the basis for general speech assessment.

The sensitivity to assessment criterion, on the other hand, first increases with growing language proficiency and then decreases in the case of fully proficient speaker (speakers 1-A and 3-J are systematically graded higher on proficiency than accuracy, while in speaker 2-P the difference is smaller and does not reach significance). The tendency for highly proficient users of English to be rated significantly lower for accuracy than language proficiency suggests that the elements of the foreign accent may have fossilised in their speech, while the rhythmic organisation keeps changing as the effect of growing language experience. Tentative as the conclusions are, they suggest a positive answer to the main question: rhythm does matter in a number of ways, both in the pedagogy of English pronunciation and general English proficiency assessment.

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Evaluating Conference Abstracts in Applied Linguistics and L2 Learning and Teaching

Anna Niżegorodcew

Abstract This chapter presents a case study in which the author focuses on her role as an evaluator of the abstracts to be selected for presentation at an international conference. This chapter mainly aims at a re-evaluation of the negatively assessed abstracts in applied linguistics and second/foreign language learning and teaching in order to discover reasons for their negative evaluation and finding the minimum criteria of acceptability. They are as follows: an adequate level of proficiency in English, a clearly formulated purpose of the presentation and a relevant choice of the research area, taking into account the conference audience. The model of more or less *legitimate peripheral participation* in discourse community (Lave and Wenger 1991, Wenger 1998) is used to account for the applied evaluative approach.

1 Introduction

This chapter presents a case study in which the author focuses on her role as an evaluator of the abstracts to be selected for presentation at an international conference. The analyzed abstracts (176) have been sent by their authors in answer to a call for papers to be presented at a conference in English Studies in Poland. Senior academic staff members of the Conference Organizing Committee have acted as evaluators of the abstracts according to their specialization in English Studies: older British literature, 20th and 21st century British literature, American literature, culture studies, linguistics, applied linguistics, second/foreign language learning and teaching and translation studies. This author evaluated 52 abstracts in applied linguistics and second/foreign language learning and teaching.

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In the literature and culture sections the assessors accepted 58 % of the papers, whereas in linguistics, applied linguistics, second/foreign language learning and teaching and translation studies 50 % of the papers were approved. Respectively, 13 and 19 % of the papers were rejected and 28 and 31 % were placed on a "waiting list", consequently, most of them were not accepted, since the conference schedule did not allow for more than about 90 papers to be presented (amounting to about 50 % of all the received abstracts).

This chapter mainly aims at a re-evaluation of the negatively assessed abstracts in applied linguistics and second/foreign language learning and teaching in order to discover this author's subjective reasons for their negative evaluation and finding the minimum criteria of acceptability. The model of more or less *legitimate peripheral participation* in discourse community (Lave and Wenger 1991; Wenger 1998) is used to account for the applied evaluative approach.

2 Challenges in Writing Conference Abstracts in Humanities Faced by Non-native Authors

More than twenty years ago John Swales expressed the opinion that "abstracts continue to remain a neglected field among discourse analysts" (Swales 1990: 181). In his analysis of characteristic features of an abstract in English based on Graetz's corpus of 87 abstracts from a variety of fields, Swales claims that the most characteristic feature of the genre of abstracts is one of *distillation* or *condensation* of what is to be included in the research paper or presentation itself, so as to communicate to expert members in a particular field of knowledge what the prospective research article or conference presentation will contain (ibid: 179).

As far as content is concerned, the majority of abstracts are supposed to contain four standard moves to be found in research articles: Problem-Method-Results-Conclusion. However, Graetz discovered that nearly 50 % of the analyzed abstracts instead of formulating the problem in the first move, rather "established a territory", and about 25 % of the abstracts opened with the purpose of the study or with a restriction in the study. According to Swales, other authors' recommendations as regards the structure of abstracts, referred to placing findings at the beginning of an abstract (in the topic sentence), for which there is little evidence, and to placing general statements at the end, which was more strongly supported by evidence.

In abstracts in humanities, the above four standard moves are very rarely found. What is evident considering constantly repeated recommendations given by conference organizers to prospective non-native presenters in humanities on how to write abstracts in English, as well as the analyses of submitted abstracts including the present sample, is that the content, structure and style of abstracts fall short of rigorous recommendations. Consequently, the evaluators' task becomes more challenging since they have to pass subjective judgment having a direct impact on the authors' professional future without clear criteria what is required of the model abstract to be accepted.

It should be admitted that the authors of abstracts in humanities face a number of challenges. One of them is their incomplete knowledge at the time of abstract writing on what their final articles will contain. In order to condense their papers, the authors must know precisely what is included in them. However, complete research papers are infrequently ready at the time of abstract submission. In particular, a detailed knowledge on the content of conference presentations may not be available yet at the time of conference abstract writing since conference presentations in humanities are frequently individual small scale projects their authors are able to prepare some time before the announced conferences with an expectation that if their abstracts are accepted, they will have time to complete full presentations.[1]

Other reasons for the deviations from the recommendations given by academic conference organizers on how to write standard conference abstracts in English are different academic traditions in humanities in different national academic cultures, for instance, in East-European or Asian traditions, as well as different abstract writing traditions in particular fields of studies, e.g. literary studies versus applied linguistics. Finally, and most conspicuously, non-native authors' English language writing skills are sometimes inadequate even if they are professionals in English Studies in their academic institutions.

Consequently, the prospective non-native authors of conference papers in English face at least three challenges: (1) The above described gap in their knowledge on what to include in an abstract at the time of abstract writing, (2) Inadequate English language proficiency resulting in the use of inter language forms which may be unintelligible to the evaluators, (3) Differences between their national academic cultures and the mainstream English language academic culture, including different abstract writing traditions in particular fields of studies in national academic cultures and in standard English language academic culture.

While the first two challenges are of a practical nature and can be met if the abstracts are written and carefully proofread after the full texts of the presentations have been completed, the third challenge creates numerous problems for the evaluators, who have to decide themselves to what extent deviations from the genre standard norms are acceptable in the structure, content and style of non-standard abstracts in English.

I have argued recently (Niżegorodcew 2011) that non-native academics try to uncritically emulate the genre of native writers in their conference presentations. However, this may be true in the case of only some of them, while others may unintentionally adhere to their national genre norms, where more elaborate and flowery style is advocated and where the prospective audience is not taken into account. Still others may take a more confrontational attitude towards native

[1] In some academic contexts, e.g. in Ukrainian academic institutions, submitting an abstract for a book of abstracts, without having to present a full paper at the following conference, counts as the author's academic achievement. In consequence, the abstracts included in the books of abstracts greatly outnumber the papers actually presented at conferences.

English norms and intentionally contest standard forms of academic practices.[2] These three postures can be also seen in the condensed stylistic and structural variations in the received abstracts. The question arises how an evaluator can assess abstracts on the grounds of their content merits, notwithstanding their different styles of academic writing. My attempt in the following part of this article is to analyze my own process of abstract assessment in view of finding consistent criteria of evaluation.

3 A Retrospective Analysis of Abstract Evaluation in Applied Linguistics and Second/Foreign Language Learning and Teaching

The first question this author asked herself referred to the communicative purpose of the evaluated abstracts. In the evaluator's opinion, following Swales's definition of a genre (Swales 1990: 58), the abstracts were supposed to clearly state the purpose of the proposed research papers and to refer to them either at the beginning or at the end. Those which did not make any reference to the research and to its purpose, as well as very general and vague abstracts were negatively assessed, in particular those in which errors in the use of the English language merged with their indefinite purpose.

> E.g. The expertise of English as a universal language is essential for human life. In this globalization era people must be able to realize that language which is spoken by many people around the globe is one element that cannot be separated in order to communicate internationally. There are many obstacles that people deal with the ability in English. Speaking is one factor that mostly becomes one of the most difficult parts of learning English. The best treatment to encourage students to speak is needed. [The name of a teaching technique developing speaking skills] is one way to realize the dream to give a mutual understanding for students in reaching the goal of being fluent in speaking it. [The author mentions some ways in which speaking skills could be developed].[3]

The second question concerned the content, that is, the authors' focus in the proposed presentations. In other words, I tried to find whether their research area could be of interest to the audience at the English Studies conference they were meant for and if their research was up-to-date and linked with the contemporary publications in applied linguistics and second/foreign language learning and teaching. The conclusion I arrived at was very positive since no abstract was

[2] An extreme rebuttal of native English norms in a conference presentation I witnessed was a non-native speaker's code-switching to his native language and giving the whole presentation in it, in spite of the fact that the conference language was English and the speaker had prepared his presentation in English. As he explained to the bewildered audience, he did it in protest against the arrogant behaviour of native speakers.

[3] In the examples of negatively assessed abstracts, the fragments that could identify their authors were deleted.

rejected only on the grounds of representing an obsolete area of knowledge. Thus, it seems that the international authors, probably due to the Internet sources, are knowledgeable about the contemporary state of affairs in the field of applied linguistics and second/foreign language learning and teaching.

Finally, the authors' written English was considered. Minor English language errors and non-native structures and style were disregarded unless they seriously interfered with abstract comprehensibility. However, if the deficiencies in the English language affected comprehensibility, the abstracts were negatively assessed. Some of those typical negative features are more difficult to assess than others.

Firstly, deficiencies of style and language in some of the abstracts blur the content of the described research. The grammatical structures are convoluted and the lexical items are inappropriately used to the extent that the meaning is nearly incomprehensible. Additionally, some abstracts have not been edited properly since they contain misspellings. Those negative features are unquestionable and easy to assess. Interestingly, however, very few abstracts belong only to this category since language errors are usually coupled with other negative features, such as lack of research purpose and general vagueness.

The second type of negatively assessed abstracts is less obvious, it refers to the above mentioned indirectness, vagueness and lack of research details. The authors of the abstracts of this type may have lacked the detailed knowledge on the content of their proposed presentations at the time of conference abstract writing. Instead they have given only background information about their study field without referring to their own research. The indirectness and lack of specificity may have also stemmed from the authors' native language writing conventions. In the case of such abstracts evaluators cannot be certain if they have not misjudged the actual value of the proposed presentations. However, in the case of conference abstracts, their authors cannot be given the benefit of the evaluator's doubt.

> E.g. If educational [theories] and teaching styles are related, and they have been proven so, whether totally matching each other or not, there is a possibility for an educator to exactly implement their personal educational [theories] within their own behaviors in the teaching–learning exchange process. However, the elements interfering with the [compatibility] between one's educational [theory] and teaching style are numerous. [In the remaining part of the abstract, the author enumerates the interfering elements.]

The next category is made up of a few abstracts in which the authors focus on their proposed suggestions concerning changes in the English language spelling, grammar and lexicon to make it easier to learn and more "neutral" ideologically to use in Asian and African countries. Their authors take a contestatory posture towards the object of their studies and professional work, that is, the English language itself and the implications of its teaching and use. The ideas expressed by them seemed to me too bizarre to be included in the conference program.

They also seemed to misunderstand the nature of language. Additionally, the abstracts have other deficiencies of language and style. I must admit, however, that the negative evaluation of such abstracts without detailed justification may have

been interpreted as discrimination of the authors who expressed unorthodox views on the English language. Regretfully, refusals to accept abstracts are not accompanied by their reasons.

> E.g. The present article aims at rationalizing the crucial need for making need-based changes in the grammatical and orthographic systems of the English language, i.e. the language which is widely acknowledged as a world lingua franca. The changes will aim at simplifying the rules and conventions for the said aspects, hence formulating a type of English that would be easy to learn and use across the globe. [In the remaining part of the abstract, the author further develops his main idea.]

Finally, there are some abstracts where the authors are entirely focused on the research methodology without providing background justification for engaging in the described research studies. Additionally, the quantitative nature of the research coupled with its inadequate description and interpretation and language deficiencies result in a pseudo-scientific jargon. All in all, that type of abstract makes the impression of awkward calques of the genre of scientific English.

> E.g. The present study is conducted to investigate how appliance of […] which has been merged by […] will influence on the level of [students'] proficiency. […] The required data was supplied from a corpus of […] through […] questionnaires and language scores. […] Descriptive statistics, correlation analysis and regression analysis were used to analyze the data. The results and statistical calculations represented that there is a significant relationship between […] strategies […] with the level of […] students' English proficiency. The conclusions and implications of the research were discussed with reference to the earlier findings.

4 Discussion

According to Lave and Wenger's model (Lave and Wenger 1991; Wenger 1998), while striving for full participation in the practices of expert target language community, non-native English language users engage in *legitimate peripheral participation.* The term focuses on the right of non-native speakers of English to participate in discourse practices of expert English language native speakers, identifying them, however, as less valuable participants of the community of practice. Characteristically, non-native speakers also position themselves according to their ability to use the English language. They realize that in international conferences where English is the conference language its use in presentations and abstracts is an indispensable requirement to participate in professional communities.

It should be observed, however, that the concept of *legitimate peripheral participation* may not refer *per se* to non-native speakers' less valuable position but to the less valuable position of less privileged and knowledgeable participants of the global academic community of practice, whose national academic practices place them at a disadvantage in comparison with the so-called *core* participants, belonging to more privileged and knowledgeable national academic communities (Canagarajah 2002).

The *core* communities are identified with English language native speakers but they may also include non-native academic speakers using English and keeping high standards in their academic practices. The concept of *periphery* in academic practices involves degrees of peripherality. Within the broadly understood *periphery*, some countries and educational institutions are more peripheral than others. Bennett (2011) uses the term *semi-periphery* to refer to Portugal as a country between the *core* and the *periphery* in terms of having characteristic features of both. Although her reasoning is not fully consistent, the idea that non-native academics in some national communities may play the role of *mediators* between native English language academic standards and less privileged non-native academic communities can be plausible.

In this respect, the identity of the evaluators must be taken into account. If an international conference takes place in a non-English language country, as was the case in Poland, where English is used as a conference language in international conferences, expert members of local academic communities act as evaluators of conference abstracts. In the conference in question, they are non-native academic speakers of English at a near-native level of English language proficiency. Their status of experts in their fields and their proficiency in English enable them to evaluate abstracts of other members of the global academic community of practice in their field of expertise. The question arises if they use the same criteria of evaluation as native English assessors and academics belonging to the *core* communities (Flowerdew 2001; Lillis and Curry 2010).

What follows from the above analysis of this author's criteria in the evaluation of conference abstracts in applied linguistics and second/foreign language learning and teaching is that rigid abstract genre norms were not of the utmost importance for her. She primarily took into consideration a clearly stated research purpose, the audience's expected interests and the authors' proficiency in English. It can be concluded that in that subjective evaluation she was guided by her own academic expertise in the field of applied linguistics and second/foreign language learning and teaching. Being aware of more rigid standards of *core* academic communities, as a legitimate member of a peripheral academic community, she *mediated* between high standards of the core community and the reality of the received abstracts, accepting those that seemed promising and refusing to accept only those that fell beneath the minimal standards described above.

Thus, the role of an abstract evaluator as a legitimate peripheral participant of the global community of academic practice seems to be more liberal than the analogous role of a non-peripheral participant. The latter has to follow strict rules imposed on him/her by the high standards of the world elite academics, whereas the former may keep the *back door* ajar for those more peripheral participants who are not able to enter through the *front door*. Their aim is to get inside, whichever *door* they use and a more tolerant evaluator is their first choice.

5 Conclusion

The above analysis focused on negatively assessed abstracts in order to clearly indicate what features were primarily responsible for the negative assessment. This author's criteria drew on the definition of the genre of abstracts in two respects: on the purpose of the proposed conference presentation and the relevance of the research area to the academic audience. It seems that the third feature, that is the authors' inadequate English language proficiency, mostly combined with the first two, made the evaluative process easier since poorly written abstracts were negatively assessed in the first place.

It could be claimed that another evaluator might have assessed the same abstracts in a different way. Such a claim is valid with regard to a number of doubtful cases but not in the case of those abstracts as to which the evaluator's opinion was immediate and definite. Consequently, this author set herself the task of identifying the minimum level of standards that should be kept in order to submit an abstract of a conference presentation to an academic committee for consideration. They are as follows: an adequate level of proficiency in English, a clearly formulated purpose of the presentation and a relevant choice of the research area, taking into account the conference audience.

Non-native academics writing in English may have a strong sense of peripherality and inferiority in comparison with native English language academics. However, in view of the implications of the model of legitimate peripheral participation, non-native authors become empowered in that participation as they move towards full participation as experts in a given area. Such general participation is achieved through specific participation in academic conferences, presenting papers and publishing them in academic journals. The first step in that process consists in submitting a conference abstract.

Non-native evaluators may also perceive themselves as more peripheral members of the global academic community in their fields. However, in the field of broadly understood applied linguistics and second/foreign language learning and teaching, they may be more suitable to mediate between very rigid native academic standards and different standards of some disadvantaged academic communities. Besides, in humanities, knowledge is more contextualized and more closely connected with local cultures, educational contexts and first languages. Local non-native evaluators may have a much better understanding of local contexts than global native evaluators.

In the case of conference abstracts in English submitted to a conference in non-English speaking country, which could be described as peripheral, the main task of an evaluator should be to establish minimum criteria and requirements of acceptability. Those minimum criteria do not have to be formal in terms of structure and style, rather they should refer to the content of the abstracts. As regards the English language, however, the abstracts should be easily comprehensible both for native and non-native speakers of English. Emulation of standard native norms should not be discouraged but more liberal English as a lingua franca

norms should be allowed. First and foremost, the authors should have clear ideas what their research papers consist of and how to present them in a condensed form. Consequently, prospective authors of conference abstracts should be given very clear guidelines on the criteria and requirements of the abstracts and, if possible, those who have been negatively assessed should be provided with reasons for the negative evaluation. The final conclusion is that abstract writing is a composing and writing skill that should be developed in its own right.

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Phonological Short-Term Memory and the Operation of Cross-Linguistic Factors in Elementary and Pre-Intermediate Adult L2 Learners' Collocational Usage

Agnieszka Skrzypek and David Singleton

Abstract This chapter addresses the link between Phonological Short-term Memory (PSTM) and collocational transfer between L1 and L2, which to date has been relatively unexplored. According to Bonk (2001), elementary and intermediate L2 learners "may not have sufficient available processing capacity to pay careful attention to how words are conventionally combined" and when not sure of the correct L2 form they may resort to avoidance or transfer from L1. In this connection we hypothesize that in L2 learners with lower PSTM capacity L1 transfer may be more discernible than in those with higher PSTM capacity. We report on an empirical study involving adult Polish learners of English attending a six-month English language course in Ireland—30 students at elementary level and 30 at intermediate level—whose mean age was 29.8 years. The testing battery we deployed included decontextualized multiple-choice questions, collocation accuracy judgement sentences, fill-in-the-blank sentences and writing tasks. The findings from the study are broadly supportive of our hypothesis.

1 Introduction

The present chapter seeks to make a connection between the L2 learner's degree of phonological short-term memory (PSTM) efficiency and the amount of cross-linguistic influence he/she evidences in dealing with L2 collocations. Essentially the argument is that lower levels of PSTM functioning eventuate in lower levels of

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L2 collocational knowledge, which results in learners' falling back on L1 collocational patterns simply because the relevant L2 resources are lacking. Since there is evidence that the strength of link between PSTM and rate of language acquisition differs across different stages of language acquisition, we analyse data from two proficiency levels, A2 and B1 (elementary and pre-intermediate students respectively).

2 Research Background

2.1 The Baddeley and Hitch Working Memory Model

Baddeley and Hitch launched their research on the relationship between short-term memory (STM) and long-term memory (LTM) at a time when research on STM was beginning to lose popularity in favour of LTM theories such as, e.g., levels of processing (Craik and Lockhart 1972). Prompted by the patterns observed within their own dataset, Baddeley and Hitch (1974) replaced the notion of a unitary STM system, such as that in the Atkinson and Shiffrin modal model (1968) or that in the Levels-of-Processing model, with a memory model that consisted of multiple interdependent components. The framework they proposed has become widely known as the Working Memory (WM) model or the fractionated WM model. It has also been referred to as the European WM model, as it has been particularly favoured by European researchers. Baddeley and Hitch continued to explore the architecture of the model and the respective functions of its components. As a result, the 1974 WM model has been refined several times in the last 30 years (e.g. Baddeley 1986, 1990, 1992, 2000, 2003a, b, 2007). Irrespective of minor modifications, the relative simplicity of the architecture of the WM model has been retained.

The current version of the WM model consists of a supervisory attentional system, called the central executive, and three subsidiary systems—namely the phonological loop, the visuospatial sketchpad and the more recently incorporated episodic buffer (Baddeley 2000). The central executive, probably "the most important but the least understood component of working memory" (Baddeley 2003b: 835), is currently treated as a purely attentional system. The original view was that it comprised both attentional and storage functions. The episodic buffer, an additional storage component, is theorised to be either a fractionation of the original central executive (Baddeley 2007: 147) or the fourth component of the WM model (Baddeley 2000). The two remaining components, the visuospatial sketchpad and the phonological loop, are separated into processing and storage systems. The visuospatial sketchpad is envisaged as responsible for processing visual and spatial information, while the phonological loop, which is the focus of the current chapter, is represented as dealing with the manipulation and retention of verbal material.

2.2 The Phonological Loop Component of the WM Model

The phonological loop component of the WM model is assumed to comprise a phonological store, which can hold memory traces for up to a few seconds before they fade, and an articulatory rehearsal mechanism, which reactivates the traces and prevents them from decaying (e.g. Baddeley 2003b). The phonological store has been compared to an 'inner ear' that stores speech-based information, while the articulatory rehearsal process has been likened to an 'inner voice' that repeats verbal information on a loop to keep the trace active within the phonological store (Cohen et al. 1986). Some changes in terminology have occurred since the model was first introduced. Before it came to be known as the *phonological loop* (Baddeley 1990), this component was referred to as the *phonemic buffer/loop* (Baddeley and Hitch 1974) and the *articulatory loop* (Baddeley 1986).

The term *phonological short-term memory* (PSTM) is also commonly used to refer to the phonological loop (e.g. Bishop 2006; Gathercole and Thorn 1998; Kormos and Sáfár 2008; Masoura and Gathercole 1999; Papagno and Vallar 1992). The term *phonological* or *verbal STM* may be used to refer to performance on specific types of task that involve the retention of a small amount of verbal information, which is normally tested immediately after the stimulus is presented. In this chapter the term *PSTM* is used to refer to the ability to store small amounts of verbal information over a brief interval.

2.3 Approaches to Researching PSTM

There are a number of different approaches to researching PSTM, and they include experimental manipulations of PSTM efficiency in order to mimic the effect of brain lesions (articulatory suppression or irrelevant stimuli studies), computational modelling with a view to creating mathematical models of human PSTM performance (e.g. Gupta and Tisdale 2009), case studies of patients with brain lesions (e.g. Trojano et al. 1992), and correlational studies of individual differences in PSTM functioning (e.g. Gathercole et al. 1992). This last approach is the one upon which the current chapter is based. The approach in question involves measuring PSTM performance in a randomly selected sample from a given population.

Individual differences in PSTM functioning are normally tapped by such measures as nonword repetition, serial nonword recall, serial nonword recognition, nonword span, word span, digit span and articulation rate. Serial nonword recall and serial nonword recognition are the measures chosen for inclusion in the current study. The former measure entails repeating back an auditorily presented sequence of nonwords in its original order, while the latter requires indicating whether two auditorily presented sequences of nonwords are identical. The merits of using these two measures are presented later in this chapter.

2.4 Cross-Linguistic Influence and L2 Proficiency

The notion of cross-linguistic influence having its origins in ignorance goes back to Newmark's endeavours in the 1960s to put distance between the notion of language transfer and discredited behaviourism, with which it was widely associated (Newmark 1966; Newmark and Reibel 1968). Newmark and Reibel's 'Ignorance Hypothesis' gave the following non-behaviourist account of transfer:

> … a person knows how to speak one language… but in his early stages of learning the new one there are many things he has not yet learned to do… What can he do other than use what he already knows to make up for what he does not know? To an observer… the learner will seem to be stubbornly substituting the native habits for target habits. But from the learner's point of view, all he is doing is the best he can: to fill in the gaps of training he refers for help to what he already knows. (Newmark and Reibel 1968: 159)

This approach to the phenomenon of cross-linguistic influence also featured in the work of Corder (e.g. 1978, 1983) and Krashen (e.g. 1981, 1983), who both focused heavily on the strategic dimension of transfer—transfer as 'padding', 'borrowing', 'resource expansion' 'when new knowledge is lacking' (Krashen 1983: 148; cf. also Singleton (in press).

In the literature specifically focused on communication strategies one strategy-type that is ubiquitously mentioned is the deployment of knowledge of languages other than that in which communication is taking place. Thus, for example, 'conscious transfer'—covering 'literal translation' and 'language switch'—is one of Tarone's (1977) categories; Faerch et al. (1984) have a category labelled 'L1 based strategies', which includes 'code-switching', 'Anglicizing' (where the L2 is English; the more general term is *foreignizing*) and 'literal translation'; and Kellerman (1991: 150) sees resorting to another language as one of the 'two fundamental ways' in which the linguistic or code archistrategy operates. Communication strategies are, of course, widely seen as 'problem-solving devices that learners resort to in order to solve what they experience as problems in speech production and reception' (Faerch et al. 1984: 154), in other words as responses to gaps in linguistic knowledge, including temporary gaps.

More broadly, there is a longstanding discussion in the SLA literature on the general question of the relationship between proficiency and cross-linguistic influence (cf. e.g. Odlin 1989: 133ff). An oft-cited study in this connection is that of Taylor (1975), who found that more advanced Hispanophone students of English were less likely than elementary-level students to produce errors which reflected L1 influence. Broadly similar results emerge from a number of other studies. Chen (1999), for example, in a study of evidence of cross-linguistic influence in the English written production of Chinese learners of English found that manifestations of L1 transfer appeared primarily at the early stages of learning and decreased as learners' L2 proficiency increased.

Our postulation of a relationship between the quantity of discernible cross-linguistic influence and the level of L2 proficiency appears to be well grounded in previous research findings. Since the relationship between PSTM and language

learning appears to be linked to language proficiency, we turn now to the question of the link between L2 proficiency and the individual differences in PSTM capacity.

2.5 The Involvement of PSTM in Language Learning at Different Proficiency Levels

PSTM has been linked to the pace of vocabulary acquisition and grammatical learning in first (L1) and second language learning (L2). The evidence in this area draws on findings from different settings—laboratory (e.g. Papagno and Vallar 1992; Service and Craik 1993) and formal (e.g. Cheung 1996; Service 1992; Skrzypek 2010, in press; Speciale et al. 2004)—as well as from various groups of subjects—normally developing children, children with language impairments, normal adults and adults with brain injuries (e.g. Baddeley et al. 1998; Gathercole and Baddeley 1990; Gupta 2003; Montgomery 1995). PSTM performance has been shown to be closely linked to the rate of vocabulary learning and the level of vocabulary attainment in child L1 (Gathercole et al. 1992; Jarrold et al. 2004) and L2 learning (French 2004) as well as in adult L2 learning [Skrzypek (2009), but compare O'Brien et al. (2006), who failed to obtain this pattern of results, and Service and Craik (1993), who detected a link between PSTM and L2 vocabulary in older but not in younger adults].

Generally, the link between PSTM and vocabulary knowledge as well as grammatical learning is believed to be strongest in the early stages of language acquisition (e.g. Jarrold et al. 2004; O'Brien et al. 2006, but see Gathercole et al. 1999; Skrzypek in press), and its involvement in vocabulary acquisition appears to decrease as the level of familiarity with the language increases (Papagno et al. 1991). In adult L2 learners the correlations between PSTM scores and subsequent L2 vocabulary scores have been shown to be statistically significant both at a relatively early stage of L2 proficiency (elementary) and at a more advanced level (pre-intermediate) (the Skrzypek study reported in Skrzypek 2009; Skrzypek 2010, in press). However, thanks to the use of cross-lagged correlational paradigm in the Skrzypek study PSTM has been able to be shown to be a causal determinant of subsequent knowledge of L2 vocabulary in adults at an early stage of L2 proficiency development (elementary), but not at a more advanced level (pre-intermediate). It appears, therefore, that individual differences in PSTM capacity may have a particularly noticeable impact on L2 vocabulary learning at relatively early stages of L2 proficiency. The question arises as to whether or not PSTM can be viewed as a primitive language learning tool that is utilized mainly at very early stages of language learning. In this connection O'Brien et al. (2006: 339) hold the view that at initial stages of L2 learning PSTM is mainly deployed for vocabulary learning, but that at later stages when vocabulary access is more automatic PSTM is redeployed for learning more complex structures.

3 Methodology

3.1 Research Questions

The current chapter explores two questions, set out and commented on in what follows.

1. Is there a relationship between PSTM scores and the number of cross-linguistic errors evidenced in attempts by L2 learners at the A2 level (elementary) to deal with L2 collocations?

It has been shown that lower levels of PSTM capacity result in lower levels of L2 collocational knowledge in adult L2 learners (Skrzypek 2009). Since lower levels of PSTM functioning eventuate in lower levels of L2 collocational knowledge, it is plausible to speculate that this may result in learners' falling back on L1 collocational patterns owing to lack of relevant L2 resources. If this is indeed the case, we would expect to observe negative correlations between PSTM scores (reflecting individual variation in PSTM capacity) and cross-linguistic scores (reflecting the numbers of errors that can be attributable to L1 influence in the end-of-course test).

2. Is there a relationship between PSTM scores and the number of cross-linguistic errors evidenced in attempts by L2 learners at the B1 level (pre-intermediate) to deal with L2 collocations?

At a pre-intermediate level of proficiency, individual variation in PSTM capacity has also been linked to subsequent knowledge of L2 collocations in adult L2 learners (Skrzypek 2009). The prediction could, therefore, resemble that outlined above in relation to A2 learners; namely, lower levels of L2 collocational knowledge may result in a falling back on L1 collocational patterns. However, since research on cross-linguistic influence and L2 proficiency indicates that L2 learners at higher levels of proficiency are less likely to produce errors that reflect L1 influence (Taylor 1975), it is also plausible to entertain the view that pre-intermediate learners may rely less heavily on L1 structures and adopt other strategies to deal with L2 collocations, which may in turn result in non-significant correlations between PSTM scores and cross-linguistic scores.

3.2 Participants

The sample comprised 60 adult Polish learners of English resident in Ireland (age range 25–35), 30 of which were at the A2 level of proficiency and 30 at the B1 level. Proficiency levels were defined in accordance with the Common European Framework of Reference (CEFR; Council of Europe 2001) and were measured by the OUP Pen and Paper Placement Test (2001). The longitudinal data obtained in

Table 1 Background information about participants

Group	A2 (n = 30)			B1 (n = 30)		
Gender	13 males			11 males		
	17 females			19 females		
Age (years)	M = 29.3			M = 30.4		
	SD = 4.091			SD = 3.654		
Residence in Ireland (months)	M = 17.16			M = 24		
	SD = 7.61			SD = 11.76		
Context of first exposure to English	Primary	8[a]	26.67 %	Primary	8	26.67 %
	Secondary	8	26.67 %	Secondary	7	23.33 %
	Vocational	0	0 %	Vocational	0	0 %
	Tertiary	5	16.67 %	Tertiary	8	26.67 %
	Other (e.g. private tuition)	9	30 %	Other (e.g. private tuition)	7	23.33 %
Education	Secondary	14	46.67 %	Secondary	3	10 %
	Vocational	3	10.0 %	Vocational	1	3.33 %
	Tertiary	13	43.33 %	Tertiary	26	86.67 %
Other foreign languages	Russian	15	50 %	Russian	13	43.33 %
	German	14	46.67 %	German	20	66.67 %
	French	4	13.33 %	French	4	13.33 %
	Italian	1	3.33 %	Italian	2	6.67 %
	Spanish	1	3.33 %	Dutch	1	3.33 %
Number of other foreign languages per student	One	25	83.33 %	One	23	76.67 %
	Two	5	16.67 %	Two	7	23.33 %

[a] Number of students as well as percentages are specified

this study came from 24 males and 36 females (see Table 1 for more information about the participants).

The individuals who expressed a willingness to participate in our project were offered a six-month English language course at Trinity College Dublin (TCD) free of charge [see Skrzypek (2010) for a detailed description of the TCD course]. None of our subjects attended any other English language course for the duration of this study. Since a certain level of dropout from the TCD course was anticipated owing to motivational factors or other unforeseen circumstances, we recruited over 100 subjects. Approximately 40 % of the learners who signed up for the course had to be excluded from our analyses: a few individuals reported having hearing problems or dyslexia; some subjects dropped out before completing the course: while others failed to attend one of the testing sessions.

3.3 The English Language Course at Trinity College Dublin

In the TCD English language course due attention was paid to both paradigmatic and syntagmatic aspects of word knowledge (Lewis 2002). The textbooks used in the A2 group included *New Headway*: *Elementary* (Soars and Soars 2006), *English*

Vocabulary Organizer: 100 *topics for self-study* (Gough 2000), and *Essential Grammar in Use*: *Elementary* (Murphy 2007), and those used in the B1 group included *Total English*: *Intermediate* (Clare and Wilson 2006), *Enterprise* 3: *Grammar* (Evans and Dooley 1999) and *English Collocations in Use* (McCarthy and O'Dell 2005). Additional teacher-devised materials were also incorporated. The students were divided into four groups, and were taught by the same EFL teacher. The students had two 45-minute lessons a week blocked together [for more information see Skrzypek (2010)].

3.4 Operational Definitions and Research Instruments

The research reported here forms part of a larger study reported in Skrzypek (2009, 2010, in press). The current chapter draws on selected data from the above study—relative to five variables in reference to each of the two proficiency groups (A2 and B1). PSTM capacity was tapped by two types of nonword tasks (serial nonword recall and by serial nonword recognition) before the commencement of the TCD English language course (Time 1), thus yielding two sets of scores at each proficiency level (see Table 2). The operation of cross-linguistic factors in collocational usage—conceptualized as the number of cross-linguistic errors in an end-of-course collocation test—was measured at Time 2 (after the end of the six-month-long TCD course). Two potentially confounding variables were controlled for in our analyses, that is, productive knowledge of low frequency L1 vocabulary (Time 1) and amount of exposure to L2 outside the classroom (between Time 1 and Time 2). A detailed description of piloting of all the instruments can be found in Skrzypek (2010: 144–172) along with reliability coefficients obtained during the main experiment (ibid.: 213).

Productive knowledge of L1 (Polish) low-frequency vocabulary was included in our project as a potentially confounding variable. L1 long-term knowledge is assumed to be linked to the process of creation of L2 phonological representations in adult L2 learners at the onset of L2 learning, provided that the perceived cross-language phonetic distance between L1 and L2 is not considerable (Flege and MacKay 2004). It is plausible that in languages which are close to one another phonetically, such as for example Polish and Czech, the activation of L1 long-term knowledge at initial levels of proficiency may be sufficient to compensate for individual differences in PSTM functioning. In the case of Polish and English, it is not clear to what extent knowledge of Polish phonological regularities may compensate for individual differences in PSTM capacity, and thus affect the learning of novel English forms. Accordingly, to be "on the safe side" we decided to incorporate a Polish vocabulary measure in the experimental design.

To the best of our knowledge there is no standardized Polish vocabulary test available that has the capacity to differentiate between native speakers of Polish in terms of their L1 proficiency and so we had to design an instrument of our own. L1 vocabulary knowledge was for our purposes defined as productive knowledge of

Table 2 Constructs and corresponding measures

Underlying construct	Corresponding test scores		Scoring method
	A2 (elementary)	B1 (pre-intermediate)	
PSTM capacity (measured with articulation)	Serial nonword recall scores at Time 1[a]	Serial nonword recall scores at Time 1	1 point for each correctly repeated list of nonwords (correct-in-position criterion)
PSTM capacity (measured without articulation)	Serial nonword recognition scores at Time 1	Serial nonword recognition scores at Time 1	1 point for each correctly recognised set of lists of nonwords (as the same or different)
Exposure to L2 outside the classroom	Exposure scores[c] to L2 between Time 1 and Time 2[b]	Exposure scores to L2 between Time 1 and Time 2	Averaged number of hours per day
Productive knowledge of low frequency L1 vocabulary	L1 Vocabulary Test scores	L1 Vocabulary Test scores	1 point for each correctly produced word
The operation of cross-linguistic factors in collocational usage	Number of cross-linguistic errors in an A2 end-of-course collocation test	Number of cross-linguistic errors in an A2 end-of-course collocation test	1 point for each instance of a cross-linguistic error

[a] Time 1: before the commencement of the TCD English language course
[b] Time 2: after the end of the six-month-long TCD course
[c] Exposure scores: the average number of hours per day recorded in students' journals between Time 1 and Time

L1 low-frequency vocabulary measured at Time 1. For L1 nouns, verbs and adjectives to be defined as low-frequency they had to have a frequency of less than 600 in the IPI PAN corpus (2nd edition, 2006), a 250 million word corpus of written Polish. The design of the test was based on the productive Vocabulary Levels Test for lower-frequency words (5,000 + word level), but we decided against including a receptive component to avoid lowering the level of variability in the overall L1 test scores. In order to increase the test's power to detect linguistic differences between native speakers of Polish, the number of items on the test was increased from 18 to 54 (three times as many as in the Vocabulary Levels format). Our test was piloted on 14 Polish nationals from Dublin (7 males and 7 females, mean age = 29.5, SD = 3.976). The mean result was 86.4 % (item difficulty = .863, half-split reliability = .846).

Another potentially confounding variable identified at the design stage of our project was the amount of exposure to L2 outside the classroom. Our subjects were resident in Dublin throughout the duration of the TCD English language course and were therefore exposed to some amount of L2 outside the classroom. Since Poles were the most dominant migrant group in Ireland in the two years preceding 2008, we could not assume that the patterns of exposure to L2 would have been similar for all of our subjects. A considerable number of the Polish migrants that

we had interviewed in 2006 and 2007, in the context of a larger project, reported that they could go about their daily routines interacting mainly in their L1. They pointed to the fact that a large number of services were available in Polish (Polish shops, Polish schools, Catholic masses in Polish, Polish legal advice, Polish film festivals, etc.). Some of them indeed reported socialising principally with other members of the Polish community in Ireland. Among the Poles we had interviewed prior to 2008, there were, however, also a number of individuals who reported interacting mainly through English and using Polish hardly at all on a daily basis (cf. Skrzypek et al. in press).

We addressed the variable of out-of-class exposure by taking account of it. Such exposure was defined as interaction in English via face-to-face communication, via the telephone or on the Internet, but as including also watching TV, listening to the radio and reading in English. Exposure was measured in terms of hours per day between Time 1 and Time 2. The subjects were asked to keep a diary for six weeks (one selected week of each month during the TCD English language course), in which they were requested to note the number of hours of exposure to L2 outside the classroom per day. Our subjects were instructed not to include any TCD language course-related activities (such as homework) in their estimations of exposure.

3.5 PSTM Tasks: Serial Nonword Recall and Recognition

For the purpose of this study two operational definitions of PSTM capacity were formulated—one involving articulation of lists of nonwords and the other involving passive recognition sets of nonword lists.

The two operational definitions of PSTM adopted here are as follows:

1. serial nonword recall performance—the ability to retain and repeat L1-based nonword lists of varying lengths immediately after the presentation of each list with the correct nonword order maintained at Time 1 and Time 2;
2. serial nonword recognition performance—the ability to retain pairs of sets of L1-based nonword lists of varying lengths and to judge, immediately after the presentation of a given set, whether the nonwords within each set are presented in the same order at Time 1 and Time 2.

It should be pointed out that from a methodological perspective there are merits to using two PSTM measures instead of relying on one measure exclusively (Gathercole and Pickering 1999; Service 2008, personal communication). One of the merits stems from the fact that, contrary to the earliest writings on the subject, PSTM tasks do not provide a pure measure of the construct. Apart from memory functions PSTM tasks are also known to tap other processes, such as e.g. speech-motor output processing (Gathercole 2006a: 528–531). One of the implications of this is that, for example, some individuals might obtain substantially lower serial

nonword recall scores than their 'true' PSTM score as a result of some minor articulation problems. To ensure that the PSTM capacity of subjects with some (even minimal) output problems is not underestimated by using a recall measure only, the use of serial nonword recognition alongside Serial Nonword Recall has been strongly recommended (Gathercole et al. 1999: 66). In subjects who do not have any output problems, the two measures should be highly correlated (provided that nonwords of low word likeness are used, as explained below).

The serial nonword recall task used in this study consisted of three sets of nonword lists, each made up of 15 lists of the same length. Set one, two and three contained 2-item, 3-item and 4-item lists respectively (see Skrzypek 2010: 288–289). Before the commencement of the task the subjects were involved in a 5-minute trial session during which they were familiarized with the task procedure. No corrective feedback was provided during testing. The measure of performance on the serial nonword recall test was the number of correctly repeated lists across all list lengths tested. A repeated list had to contain no mistakes to be accepted as correct. The testing was discontinued if a subject failed to repeat eight out of 15 lists of a given length.

The serial nonword recognition task was comprised of 30 pairs of nonword lists with 10 pairs of nonword sequences associated with each of three list lengths, that is at 4-item, 5-item and 6-item lengths (see Skrzypek 2010: 290–291). The position of each nonword was controlled to ensure the nonwords occurred in a variety of positions within the pool of lists. In the case of each list length, five of the ten pairs of nonword sequences were identical and the remaining five shared exactly the same nonwords but two of the nonwords in question were transposed in the second sequence. The initial and final pseudowords never changed their position. The participants were instructed to listen to each set of lists and tick either "the same" or "different" (or "not sure") on a designated webpage. The subjects were told they would listen to each set only once. 1 point was allocated for a correctly recognised set of lists as either the same or different.

The nonwords created for use in this project were pronounceable phonological sequences according to Polish phonotactics. Each item was a three-syllable CV-CCV-CV combination. The constituent syllables were selected from a Polish language dictionary (Polish Scientific Publishers PWN—CD-ROM edition) and a frequency dictionary of Polish (Kurcz et al. 1990). The position in which these syllables appeared in the constructed nonwords reflects their position in real 3-syllable Polish words (i.e. initial, medial and final). Wordlikeness ratings were obtained for all nonwords prior to the commencement of the study in order to exclude those items that were too reminiscent of real Polish words. Wordlikeness ratings reflect the degree to which novel syllable sequences resemble existing words. It is believed that the lower the perceived degree of wordlikeness, the more limited the involvement of long-term memory and the purer the measure of PSTM (see e.g. Gathercole and Pickering 1999). The nonwords with the lowest word-likeness ratings were selected for inclusion in the recall and recognition tasks (see Skrzypek 2010: 362).

The reason why nonwords were based on L1 (Polish) phonotactics, and not L2 (English) phonotactics, derived from the fact that this was an attempt to employ PSTM measures that would produce consistent results when administered over a period of time. In investigations of adult L2 learning both L1- and L2-based nonwords have been employed (e.g. O'Brien et al. 2006; Speciale et al. 2004). In the serial nonword recognition format, L1-based nonwords have been shown to produce stable results over a period of time (O'Brien et al. 2006), and it is not unlikely that the same pattern may apply in the recall format. Additionally, had L2-based nonwords been used, the fact that some participants spoke English with a very strong Polish accent could have affected the accuracy of scoring L2-based nonword tasks.

3.6 Probing Cross-Linguistic Influence in Respect of Collocational Use

Two end-of-course collocation tests were developed, one for the A2 level group and the other for B1 level group. Each collocation test comprised 3 sections:

- **Section A**: 30 decontextualized multiple-choice items (each containing one correct collocation and one pseudo-collocation);
- **Section B**: 30 collocation accuracy judgement sentences with one highlighted collocation each (the students were instructed to tick either "C" or "I"—correct or incorrect—and whenever they had ticked "I" they were expected to correct the collocation);
- **Section C**: 30 fill-in-the blank sentences.

24 test items on each end-of-course test were specifically designed to prompt the operation of cross-linguistic influence in L2 collocational knowledge—12 of the decontextualized multiple-choice items (Section A) and 12 of the collocation accuracy judgement sentences (Section B).

With regard to selecting target collocations, we followed the approach presented by Howarth (1998), which subdivides restricted collocations into grammatical and lexical, the latter consisting of an open class word and a closed class word (e.g. adjective + preposition) and the former composed of open class words only (e.g. verb + noun). We adopted the framework utilized in *The BBI Combinatory Dictionary* of English (Benson et al. 1986), consisting of 33 grammatical and lexical collocation-types altogether. The types of collocations tested in the cross-linguistic section of the end-of-class test are listed in Table 3.

Collocations and vocabulary probed by the progress test were selected on the basis of frequency of occurrence in the teaching materials. The A2 and B1 end-of-course collocation tests are available in their entirety in Skrzypek (2010).

Table 3 Types of collocations tested in the cross-linguistic section of the end-of-class test

Collocation types (BBI typology)	Examples of L2 (English) collocations	Word-for-word translations from L1 (Polish)
G4 = preposition + noun	On the Internet	[a]In (the) Internet (w internecine)
G5 = adjective + preposition/ prepositional phrase	Good at something	[a]Good in something (dobry/a w czymś)
G8 = verb patters	Consist of something	[a]Consist with something (składać sie z czegoś)
	Congratulate her on passing	[a]Congratulate her passing (pogratulować jej zdania/że zdała…)
L1 = verb + noun	Cross the road	[a]Cross through the road (przejść przez ulicę)
	Take a photo	[a]Make a photo (zrobić zdjęcie)
L3 = adjective + noun (also when a noun is used as an adjective)	A taxi rank	[a](a) Taxi stop (postój taksówek)

[a] Incorrect in English

4 Results and Discussion

Prior to our main analysis, graphic and numerical methods were employed in order to test the assumptions of parametric data. Each distribution was checked for outliers using histograms, boxplots and normality plots. Skewness and kurtosis values in each distribution were transformed to z-scores in order to confirm that they were statistically different from zero. Additionally, the Shapiro–Wilk normality test was calculated for each dataset. Before the calculation of correlations and t test scores were undertaken additional assumptions were checked—the assumption of linearity (scatterplots) with respect to correlations and the assumption of homogeneity of variance (Levene's test) with respect to t-tests. All sets of data reported below were found to be normally distributed, with no outliers present (see Skrzypek 2010 for more information).

4.1 PSTM Characteristics of the Participants

The lowest score obtained on the serial nonword recall task was 6 lists at both proficiency levels. The highest scores were 25 and 30 lists in the A2 and B1 groups respectively. Serial nonword recognition scores ranged from 9 to 24 in the A2 group and from 10 to 25 in the B1 group. The means of A2 and B1 Serial Nonword Recall scores were found to be not statistically different ($t(58) = -1.30$, $p > .05$), and a similar situation of non-significance was found for the difference between the means of the A2 and B1 Serial Nonword Recognition scores ($t(58) = -.63$, $p > .05$). Serial Nonword Recall and Recognition scores were found to correlate at

Table 4 Serial nonword recall and recognition scores at Time 1

Measures	Relevant statistics	A2 (n = 30)	B1 (n = 30)
Serial nonword recall	k	45	45
	M	15.63	17.53
	min/max	6/25	6/30
	SD	4.944	6.257
	Shapiro–Wilk	$D(30) = .979$, $p > .05$	$D(30) = .978$, $p > .05$
	Skewness	−.087 ns	−.038 ns
	Kurtosis	−.644 ns	−.584 ns
	Half-split reliability	.918	.897
Serial nonword recognition	k	30	30
	M	16.43	18.07
	min/max	9/24	10/25
	SD	3.839	3.912
	Shapiro–Wilk	$D(30) = .979$, $p > .05$	$D(30) = .975$, $p > .05$
	Skewness	.036 ns	−.235 ns
	Kurtosis	−.694 ns	−.644 ns
	Half-split reliability	.831	.704

ns = non-significant (refers to values of skewness and kurtosis that have been standardized)

the 0.001 level in both proficiency groups ($r = .683$ and $r = .645$ in the A2 and B1 group respectively).

The split-half reliability coefficients for serial nonword recall at Time 1 (Spearman-Brown for unequal length) proved very high in the A2 and B1 groups, .918 and .897 respectively (see Table 4). The split-half reliability coefficients for serial nonword recognition at Time 1 (Spearman-Brown for equal length) turned out to be satisfactory (.831 and .704 for the A2 and B1 scores respectively), but not as good as the Serial Nonword Recall reliability coefficients. The reliability coefficients of the serial nonword recognition measure were found to be lower than we would ideally have wished for, despite our having adhered to guidelines that have been followed by other PSTM researchers using nonword tasks.

4.2 The Distribution of L1 Vocabulary Scores, L2 Exposure Scores and Cross-Linguistic Errors

The L1 (Polish) Vocabulary Test scores were slightly more spread out in the A2 group than they were in the B1 group (see Table 5). The highest scores obtained in the A2 and B1 groups were 98.1 and 96.3 % respectively. The lowest A2 and B1 scores were 61.1 and 64.8 % respectively. The mean of the A2 students' scores was 78.1, 3.7 % lower than the mean of the B1 students' scores (see Table 6.). A t-test for equality of means indicates that the difference between the two means is non-significant ($t(58) = -1.461$, $p > .05$).

Table 5 Means and standard deviations for Polish vocabulary scores, exposure and cross-linguistic errors

	Measures	Min	Max	Mean	Std. Deviation
A2 (N = 30)	Exposure to L2 (1–2)[a]	1	8	4.34	2.235
	L1 Vocabulary (1)[b]	61.1	98.14	78.15	10.703
	Cross-linguistic errors (2)	3	20	9.57	4.360
B1 (N = 30)	Exposure to L2 (1–2)[a]	2	9	5.4	2.204
	L1 Vocabulary (1)[b]	64.8	96.3	81.8	9.033
	Cross-linguistic errors (2)	4	18	9.37	4.013

Note The numbers after variables denote testing time, i.e. 1—Time 1, 2—Time 2, 1–2—between Time 1 and 2

[a] Hours of exposure to L2 (English) per day

[b] Scores converted into percentages

Table 6 Simple intercorrelations among principal measures in the A2 and B1 groups (Pearson product-moment correlation coefficients)

Groups	Variables			1	2	3	4	5
A2	1	Serial recall (1)	Pearson r	–				
			Sig.					
	2	Serial recognition (1)	Pearson r	.683***	–			
			Sig.	.000				
	3	Exposure to L2 (1–2)	Pearson r	.281	.294	–		
			Sig.	.133	.115			
	4	LI vocabulary test (1)	Pearson r	.258	.004	.000	–	
			Sig.	.168	.984	.998		
	5	Cross-linguistic errors (2)	Pearson r	−.531**	−.411*	−.057	−.370*	–
			Sig.	.003	.024	.763	.044	
B1	1	Serial recall (1)	Pearson r	–				
			Sig.					
	2	Serial recognition (1)	Pearson r	.645***	–			
			Sig.	.000				
	3	Exposure to L2 (1–2)	Pearson r	.555**	.185	–		
			Sig.	.001	.328			
	4	LI vocabulary test (1)	Pearson r	−.031	−.006	.018	–	
			Sig.	.871	.973	.926		
	5	Cross-linguistic errors (2)	Pearson r	−.376*	−.127	−.480**	.073	–
			Sig.	.041	.504	.007	.700	

Note The numbers after variables denote testing time, i.e. 1—Time 1, 2—Time 2, 1–2—between Time 1 and 2. * $p < .05$ level, ** $p < .01$ level, *** $p < .001$ (2-tailed)

Exposure scores in the A2 and B1 groups ranged from 1 to 8 and 2 to 9 h per day respectively. The mean exposure score in the A2 group was 4.4 h per day, while the mean exposure score in the B1 group was 5.4 h per day. The B1 group appears to have had one hour more of exposure to L2 per day than the A2 group did, but the difference between the group means was statistically not-significant ($t(58) = -1.74$, $p > .05$).

The number of cross-linguistic errors in the A2 group ranged from 3 to 20, while in the B1 group this number ranged from 4 to 18. The mean scores in the A2 and B1 groups were 9.6 and 9.4 respectively. Even though these two means appear fairly similar, it should be borne in mind that they were calculated on the basis of two different end-of-course tests that contained items at different levels of difficulty. These results, therefore, should not be treated an indication that L2 learners at the A2 and B1 levels of proficiency produce comparable numbers of cross-linguistic errors.

4.3 Simple Intercorrelations Among Principal Measures

In the A2 and B1 groups the serial nonword recall scores and the serial nonword recognition scores were highly correlated (both ps < 0.001) (see Table 6), which corresponds to the results obtained in our pilot study (Skrzypek 2010, Chap. 5) and in other studies (Gathercole and Pickering 1999; but compare Martin 2009). A correlation of this magnitude would normally be interpreted as an indication that selected PSTM measures tap the same construct. However, it should be pointed out that the present study revealed some potential problems with using a recall-based measure to tap PSTM in adults. The issue of construct validity of recognition-based measures of PSTM will be touched upon later in this chapter.

The first research question addressed in this chapter relates to the posited relationship between individual differences in PSTM capacity and cross-linguistic influence at the A2 level of proficiency. Our data indicate that, as predicted, there are negative correlations between PSTM scores (serial nonword recall and recognition scores) and cross-linguistic scores (the number of cross-linguistic errors). Serial nonword recall scores correlate with cross-linguistic scores at the 0.01 level ($r = -.531$), while serial nonword recognition scores correlate with cross-linguistic scores at the 0.05 level ($r = -.411$). This implies that as PSTM capacity decreases, the number of cross-linguistic errors increases. Cross-linguistic errors also correlate negatively with L1 Vocabulary Test scores.

The second research question addressed in this chapter examines the relationship between PSTM capacity and the number of cross-linguistic errors at a higher level of L2 proficiency (i.e. B1). The picture obtained in the B1 group is different from that obtained in the A2 group. Serial nonword recognition does not correlate with cross-linguistic errors ($r = -.127$, $p > .05$). Serial nonword recall correlates with cross-linguistic errors ($r = -.376$, $p < .05$), but when exposure to L2 outside the classroom is partialled out this correlation is reduced to a non-significant level as well ($r(27) = -.151$, $p > .05$). It could be concluded, therefore, that limited PSTM capacity has a very limited impact, if any at all, on the extent to which B1 learners fall back on their knowledge of L1 collocations when dealing with L2 collocational challenges. It should be noted that even though all of the correlations mentioned in this paragraph are negative, only one is statistically significant.

In relation to confounding variables included in the experimental design, the correlations between both PSTM measures and L1 vocabulary test are non-significant in both proficiency groups (all ps > 0.05). The fact that individual differences in the serial nonword recall and recognition scores are not related to the scores on the L1 Vocabulary Test scores in the current study echoes the trend presented in the literature that the higher the level of familiarity with L1 the weaker the link between L1-based PSTM scores and L1 vocabulary scores becomes. A number of studies indicate that the relationship between PSTM and L1 vocabulary knowledge tends to weaken as L1 knowledge increases (Gathercole et al. 1992; Papagno and Vallar 1995; Speciale et al. 2004: Experiment 1). Since adults are more proficient L1 users than children, the link between an L1-based nonword repetition task and L1 vocabulary knowledge observed in children (e.g. Masoura and Gathercole 1999) is no longer statistically significant in adult subjects. More advanced language learners are thought to become less reliant on PSTM, as they grow more adept at using their mental lexicons to access phonological representations of close neighbours of a new word to be learnt (Gathercole 2006a, b; Skrzypek in press).

As for PSTM and exposure to L2 outside the classroom, the existence of a significant relationship between these variables is a complicating factor. In the A2 group the correlations between PSTM measures and exposure to L2 are non-significant (ps < 0.05). However, in the B1 group the correlation between serial nonword recall and exposure to L2 is significant at the .01 level. This indicates that the B1 students with higher serial nonword recall scores received a significantly higher amount of exposure to L2 outside the classroom as compared to the B1 students with lower serial nonword recall scores ($t(28) = -2.87$, $p < .01$). This complication could not have been prevented from arising, as our experimental design did not allow us to control the amount of L2 our subjects were exposed to outside the classroom between Time 1 and 2. Factors such exposure can be most accurately controlled in a laboratory setting. In order to disentangle the impact of exposure and PSTM capacity on the operation of cross-linguistic influence, a laboratory-type study would have to be carried out.

5 Conclusion

The results obtained in the current study indicate that at the elementary (A2) level of L2 proficiency there is a link between individual differences in PSTM capacity and the operation of cross-linguistic influence evidenced in attempts to deal with L2 collocations by adult learners. The data suggest that the lower the PSTM capacity (as measured by L1-based serial nonword recall and recognition), the higher the number of errors that can be attributed to cross-linguistic influence. Since PSTM capacity appears to have an impact not only on the efficiency with which syllables are chunked into words but also the efficiency with which words are chunked into collocations (Skrzypek 2009), it therefore follows that when L2

collocational resources are lacking A2 learners tend to fall back on their knowledge of L1 collocations.

With regard to the pre-intermediate (B1) level of L2 proficiency, the data do not support the existence of a strong relationship between PSTM and cross-linguistic errors. Our data reveal a week negative correlation between serial nonword recognition and cross-linguistic scores, which is nonetheless non-significant. In a similar vein, there is a week negative partial correlation between serial nonword recall and cross-linguistic scores (with exposure to L2 partialled out), and this partial correlation is also non-significant. At the B1 level of proficiency, therefore, it appears that adult learners with a lower PSTM capacity are not more likely to produce a higher number of cross-linguistic errors. This may be linked to the fact that at this level of L2 proficiency, adult B1 learners have a richer array of L2 resources to draw on than A2 learners, and they are more likely to produce other types of errors such as, for example, intralingual errors.

Our data also indicate that in adult A2 learners the association between cross-linguistic errors and the recall measure is stronger that that with the recognition measure. One possible explanation could have to do with the way that the recall and recognition measures appear to be conceptualized within the multi-component WM model. In this model PSTM is theorized to comprise two sub-components, the phonological store that is responsible for creating new phonological traces and the articulatory rehearsal process that supports the trace creation. According to Baddeley (2003a), serial *recall* of phonological information relies on the phonological store and the articulatory rehearsal process, while serial *recognition* of phonological information relies on the phonological store only (Baddeley 2003a; Bowey 2001; Snowling et al. 1991). Potentially, therefore, it would seem that comparing the results obtained by means of these two task formats might provide information about how these two sub-components operate in relation to L2 learning. If one were to accept this conceptualization of the recall and the recognition measures, it could follow that in adults the articulatory component may be more closely linked to language learning that the phonological store on its own (as suggested by O'Brien et al. 2006: 395, but compare Gathercole et al. 1999: Study 1). This kind of comparison has been attempted in relation to child L1 acquisition (Gathercole et al. 1999), but it should be pointed out that normal adults unlike young children are known to employ rehearsal strategies that rely on subvocal rehearsal for lists that exceed the capacity of the phonological store. Many of the subjects who participated in the current study reported engaging in subvocal rehearsal while completing the recognition task. It would, therefore, seem hasty to conclude that in adults serial nonword recognition taps the phonological store but not the articulatory rehearsal process.

This brings up the question of whether serial nonword recognition taps the same construct in adults as it is believed to tap in children. The serial nonword recognition task has mainly been used in research on PSTM and child L1 learning, and has not yet been extensively explored in studies of adult L2 learning. The task was employed by Gathercole and colleagues in a series of innovative studies (e.g. Gathercole et al. 2001) to tap PSTM capacity in children who might have (even minor) articulatory

difficulties. To the best of our knowledge, serial nonword recognition has so far been used in only one other longitudinal study of adult L2 learning (O'Brien et al. 2006), and the study in question did not aim to compare this procedure with a more widely used serial nonword recall procedure. Despite the fact that in the current study the correlation between serial nonword recall and serial nonword recognition was significant at the 0.001 level, we feel it is essential that the issue of construct validity of the serial nonword recognition task be explored in future studies when this is used in an adult population.

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Emotional Awareness and the Noticing Hypothesis

Barbara Lewandowska-Tomaszczyk

Abstract The chapter focuses on the place of emotions in human competence and processes which can be identified at the interface of two languages when emotions are experienced and expressed. The primary goal is to present the place and function of *emotions* in a given culture and to discuss possibilities for non-native speakers of L2 to effectively raise emotional awareness in L2 didactic contexts. The relevance of Schmidt's (1990) *Noticing Hypothesis* is emphasized in this context especially as the scope and use of L2 emotion concepts require of the learner a conscious apprehension and awareness of L2 input. The place and position of L1 and L2 materials generated from monolingual and parallel language corpora in enhancement of emotional awareness in FL classroom are exemplified and discussed.

1 Introduction

In the latest issue of the *New Scientist*, a journalist, Catherine de Lange (2012), reports very interesting experiments carried out by David Luna and his colleagues from Baruch College in New York City (*Journal of Consumer Research*, vol. 35: 279), who have recently asked a number of bilingual English–Spanish volunteers to watch TV advertisements featuring women—first in one language and then six months later in the other—and then rate the personalities of the characters involved. When the subjects viewed the advertisements in Spanish, they tended to rate the women as independent and extrovert, but when they saw the English versions they described the same characters as "hopeless and dependent". In another study reported by the journalist, conducted by Nairán Ramírez-Esparza

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from the University of Washington, Seattle, the researcher asked bilingual Mexicans to rate their personality in English and Spanish questionnaires. Each volunteer considered her/himself to be more humble in the Spanish questionnaires than when the survey was presented in English.

The present paper asks where we place emotions in our competence and what processes can be identified at the interface of two languages when emotions are experienced and expressed. The primary goal is to present the place and function of *emotions* in a given culture and to discuss possibilities for non-native speakers of L2 to effectively raise emotional awareness in L2 didactic contexts. The relevance of Schmidt's *Noticing Hypothesis* (1990) is emphasized in this context especially as the scope and use of L2 emotion concepts require of the learner conscious apprehension and awareness of L2 input.

2 Culture and Emotion Concepts

As proposed in Wilson and Lewandowska-Tomaszczyk (2012), the dynamic constructivist approach has challenged the belief that culture and language have stable effects on cognition. Rather, culture and its constitutive properties (see Lewandowska-Tomaszczyk 2011) of *patterning*, i.e. repeatedness of structure, *shareability*, *learnability*, *cultural transmission* in terms of symbols and signs, cultural imagery and its *embodiments* in human achievement in thought and in artifacts, exert an influence on both basic emotions such as fear or anger as well as more socially-shaped emotion concepts such as pride, guilt or shame.

As reported in Pavlenko (2008, see also Caldwell-Harris et al. 2012; Perunovic et al. 2012), when bilingual individuals move from one cultural context to another they switch networks, which allows them to access context-relevant cultural information. The questions essential from a second language acquisition perspective are to what extent monolinguals from one culture *learn to experience* the emotions of another language and culture and to what extent full L2 emotion concept internalization can be realistically foreseen in the classroom context. Studies referred to above do not provide conclusive evidence in this respect but they clearly show that learning a foreign language can influence relevant emotion concepts and the foreign (second) language conceptual similarities and contrasts can become *more salient* to non-native language users.

3 Emotion Concepts in Contrast

Studies on emotions have been vigorously developing over the last years from different research perspectives. Philosophers investigate the issues of the ontological and epistemological character of emotions. Psychological and cognitive scholars employ complex questionnaires and experimental methods to identify the

bodily and mental nature of emotions. Cognitive Linguistics uncovers intricacies of cross-linguistic universals in emotion concepts and emotion metaphors. Language corpus studies exemplify numerous language-specific contexts in which emotion words are employed (see Lewandowska-Tomaszczyk 2012c for a new agenda for Contrastive Studies).

To quote findings from Polish-English studies, I can refer to Dziwirek and Lewandowska-Tomaszczyk's (2010) analysis of a number of English and Polish emotion words. With reference to the verbs expressing love the authors note that the Polish verb *kochać* ('love', Verb) takes more frequently concrete objects (*Kocham to dziecko* 'I love the child'), while the infinitival and gerundive patterns such as *I love to skype my friends* or *I love walking*) are significantly more frequent in English than in Polish. In this respect, English *love* is more general and can be considered more abstract than its Polish most frequent equivalent.

An account of the relationship between Polish and English *happiness*, *contentment*, and *satisfaction* proposed by Wilson, Lewandowska-Tomaszczyk and Niya (2013), which is based on questionnaires and corpus data, interpreted in terms of cognitive linguistics methodology, uncovers a complex network of relations between the cluster of the Polish *szczęście* senses, involving both happiness, contentment, satisfaction as well as luck and fortune. A similar lack of one-to-one correspondences is identified in Lewandowska-Tomaszczyk and Wilson (2010) with respect to the relationship between English *surprise* and any of its potential Polish equivalents (*zdziwienie*, *zdumienie*, *zaskoczenie*), similarly, and English *fear* concepts and their linguistic expression (Lewandowska-Tomaszczyk and Wilson 2013), also with respect to Polish to English and English to Polish translation materials (Lewandowska-Tomaszczyk 2012d).

4 Affective Socialization and the Noticing Hypothesis in FL Context

Differences between foreign language learners, monolingual and bilingual speakers involve first of all differences in types of processing which are responsible for differences in recall and reaction to emotion words and emotional language, inseparable from the processes of naturally occurring affective socialization, absent in the FL classroom. As Pavlenko observes:

> Foreign language (FL) classrooms, however, do not offer many opportunities for affective socialization. Rather, lexical development in FL classrooms commonly takes place through the processes of definition, translation, and memorization, subserved by declarative or explicit memory (Paradis 1994), rather than through consolidation of personal experiences channelled through multiple sensory modalities. Consequently, FL words are rarely integrated with emotional and autobiographic memory and may trigger translation equivalents but not personal and affective associations or sensory representations. (Pavlenko 2008: 157)

Consequently, emotion words and emotion concept semantics are not likely to be naturalistically acquired in the FL classroom. Rather, they have to be consciously studied, understood and discussed. The studies evoke Schmidt's *Noticing Hypothesis* dilemma between conscious and unconscious acquisition, and foreground the place and function of metalinguistic knowledge and awareness, which include the registration of verbal and non-verbal stimuli, not only with reference to grammar but also with regard to the semantic and cognitive content of language utterances.

The Noticing Hypothesis as put forward by Schmidt in (1990) does not propose that language is acquired automatically the moment an L2 property gets to L2 learner's awareness, but as was first argued, noticing is the essential starting point in language acquisition. More precisely, the hypothesis states that L2 input does not become L2 intake for language learning unless it is noticed.

The relevance of the hypothesis to L2 emotion acquisition is evident. L2 emotionality cannot be easily acquired in a FL classroom. To try and get a natural 'feel' of L2 emotions, the learner needs to engage in L2 social practices to "fit oneself to one's environment, mediated and scaffolded by various actors and structures" (Atkinson 2010, as referred to in Schmidt 2010: 722). To learn about L2 emotions on the other hand, L2 emotion language input has to be noticed by the learner and transformed into language intake. On the other hand, the question as to whether either L2 emotionality or L2 embodied simulations of these emotions can be activated in L2 learners will need to be further explored.[1]

5 L2 Emotion Awareness Raising[2]

In order to more fully understand both native language and foreign language emotions it is worth exploring what scenario an emotion raising involves, in other words, to identify Emotion Event scenario constituents (Lewandowska-Tomaszczyk and Wilson 2010). Emotion Event Scenarios involve an Experiencer, a Stimulus, and an Emotional reaction, understood as mental and bodily signals as well as a possible verbal reaction to a stimulus, expressed on the phonetic and phonological levels, in grammar and vocabulary. Language emotion expression can be conveyed via the spoken or written channels, using a particular register and style, governed both by language convention and the cultural frames of Emotion Events. The experience of emotions channelled via affective processing, referred to as *emotionality* (Pavlenko 2008; Wierzbicka 2004) on the other hand, involves the totality of the Experiencer's bodily and mental reactions to internal or external stimuli.

[1] See Wiemer-Hastings and Xu (2005) for a discussion of native language reenactments of emotions in simulated contexts.

[2] Part of the argument and the role of corpus materials in L2 emotion competence raising have been presented at a plenary talk at TALC 2012, Warsaw (Lewandowska-Tomaszczyk 2012b).

Bilingual speakers and FL learners can certainly acquire the *L2 verbal expression level* of emotional reactions to stimuli, which is widely reported in language acquisition literature, even though the learners' conceptual and emotional types of reaction are much less understood. At the same time, studies carried out in the foreign language classroom contexts (Ozcelik and Paprika 2010) point to the advantages of a number of emotion raising techniques towards the development of a deeper understanding of emotion distinctions in L2 contexts. These processes are clearly part of an *explicit teaching agenda*, conforming with the Noticing Hypothesis and corroborating it., even though, as argued by Schmidt, the hypothesis is congruent with both explicit and implicit learning (see Footnote 2).

In this light, there are two minimal objectives of the classroom FL instruction envisaged in this situation. The first one may be phrased **L1 and L2 emotion recognition**. It is usually a successful strategy in the introduction of some new language material, provided the state of knowledge and maturity of L2 learners are taken into consideration. This phase would involve *the recognition of a particular emotional state as expressed in the native language*, which can serve as a point of reference to extrapolate to similar (to different degrees) states in L2. Carefully selected monolingual and aligned materials from the two languages, including, e.g. video clips, language corpus data, either from written or spoken sources might be of much help (see Lewandowska-Tomaszczyk 2012d for more details). They can represent either passages from *emotion descriptions* and *emotion clusters* (example 1) or can portray Emotion Event Scenarios with samples of *emotional language* (example 2), characteristic of a given emotion or clusters of emotions (Lewandowska-Tomaszczyk 2012a). A discussion following the presentation as well as story telling, role play, or other experiential techniques which aim at entrenching lexical and syntactic patterns of both emotional reactions and possible interlocutors' counter-reactions (bodily and verbal, including both endearments, swear and vulgar words), might be analysed, emphasizing the sociolinguistic conditioning of the interaction.

1. BNC examples

N Concordance.
36 as suddenly no longer to be rescued but to be destroyed, **to banish his own anger and shame**.
38 can generate problems which directly affect the body: **stress, loneliness, anger and frustration**—all regular features of royal life.
39 Farrington's **dark wine-coloured face flushed darker still with anger and humiliation** at having been defeated by such a stripling.

2. Bloody maniac. What you doing? Cocksure bastard. Trying to kill us? Proving something? Watch it, boyo. Bloody watch it.

Emotional language exemplified in (2) presents both *anger* and *rage* clusters of emotions, expressed by swearing and cursing, characteristic of spoken language.

A special role of emotion metaphors and metaphoric sayings in the elucidation of language-specific *conceptualization of emotions* and detailed meaning of

particular character traits and emotions, in other words in emotion recognition, can also serve as didactic materials in FL classroom as in (3), in which decreasing anxiety is presented in terms of the Source Domain of *metal destruction* while the cluster of anger and disbelief is mapped onto the domain of *agitated crowds of people moving noisily around*.

(3) N Concordance
69 **The anxiety is corrosive** and I spend much time **in a tumult of anger and disbelief**.

A contrastive analysis of samples of L1 and L2 is also worth considering. Particularly revealing on a more advanced level of L2 proficiency might be a comparison of parallel, i.e., translation, materials from the two languages, which illuminate some of the contrasts better.

Parallel materials from English to Polish translations (PELCRA materials) surprise

(4) On her arrival in the Rue Fossette, two or three days after my sudden settlement there, she encountered me **with very little surprise**.
(4a) Po przybyciu na Rue Fossette, w dwa czy trzy dni po moim nagłym zainstalowaniu się tutaj, zetknęła się ze mną **bez wielkiego zdziwienia**.
(5) For an instant, she seemed **taken by surprise**
(5a) Przez chwilę zdawała się **być zaskoczona**
(6) In the horrid pain and **surprise** of the moment
(6a) Podczas strasznego bólu i **oszołomienia** owej chwili

Parallel materials from Polish to English translations (PELCRA materials)

(7) Wróciwszy do chaty Nell **przekonał się, że jednak** na wyspie znalazło się większe zwierzę,
(7a) Returning to Nell's hut **he learned to his surprise** that there were larger animals on the 'island';
(8) Chmielnicki opanował już **wrażenie**
(8a) Hmelnitski mastered his **surprise**

(7) Ale noce w pustyni mają także **swoje niespodzianki**
(7a) But nights in the desert have **their surprises** too

It was shown by Lewandowska-Tomaszczyk and Wilson (2010) in a contrastive study of *surprise* that English *surprise* is associated with a higher activation-arousal parameter than Polish *zdziwienie*. So when this parameter is conveyed in the English originals such as the ones above (4, 5, 6) the Polish translation equivalents tend to be varied (*zaskoczenie*, *oszołomienie*, *wrażenie*, etc.) and not necessarily limited to one prototypical dictionary equivalent *zdziwienie*. This is

also corroborated as seen above in the Polish to English translation materials, which can be discussed with more advanced Polish learners of English.

The examples with *proud/pride* below show on the other hand two aspects of the English-Polish correspondences. The first is that the Polish *duma* emotion has an increased parameter of individual self-appreciation than the English concept of *pride*, and thus falls between the latter and another English emotion from the same cluster, namely *vanity* rather a pure *pride* concept, as seen in the English to Polish translation data below.

The other aspect found in the corpus data below refers to a possibly universal principle, observed in translation practice (Lewandowska-Tomaszczyk 2012d). The translated text presents an approximation with regard to the original, more frequently than not, a *simplified generalization* with respect to the latter, and presents a flattening of the original thought and intended meanings.

Pride

Parallel materials from English to Polish translations (PELCRA materials)

(9) He did not go skipping and prancing, but **moved with a dignified swagger** as became a pirate who felt that the public eye was on him

(9a) Nie podskakiwał, nie rozrabiał, **lecz godnie kroczył z dumną miną**, jak przystało piratowi, który wie, że publiczność patrzy na niego

(10) **She tossed her head** and passed on

(10a) **Podniosła dumnie głowę** i poszła dalej

(11) **They were jubilant with vanity** over their new grandeur and the illustrious trouble they were making

(11a) **Serca rozpierała im duma** z powodu wielkiej sławy, jaką zdobyli, i wspaniałego zamieszania, jakie wywołali w miasteczku

The next aims in FL classroom practice are emotional awareness raising tasks in **emotion management**, performed in terms of adequate linguistic **emotion expression**. In foreign culture contexts as well as during various intercultural encounters this property can be of primary importance. The use of L2 taboo or swearwords, less consequential in non-naturalistic context, will have strongly undesirable outcomes in real encounters. This effect may be mitigated if the L2 learner internalizes not necessarily a complete emotion concept and foreign culture emotionality, but tries to rationalize their use if a particular expression, connected with an emotion scenario, is adequately recognized. In second language learning contexts, particularly in those with a stronger immersion element, what is observed during the language acquisition process is some evidence of the rise of emotionality of L2 words with non-native users (Pavlenko 2004), while it would be unrealistic to expect identical outcomes in non-naturalistic FL setting. On the other hand, L2 learners can acquire knowledge *about* particular L2 Emotion Events by their observation and participation in such events. The didactic objective will then be to attain *a degree of the target L2 emotionality* associated with such concepts and events natively, during the process of emotion concept internalization.

Some techniques can be a viable tool in emotion awareness raising and can facilitate some emotion behaviour (e.g. Ozcelik and Paprika 2010), suitable for instance in intercultural contacts. Ozcelik and Paprika use collections of video clips, screen-capture technologies, etc., supported by the students' real-time international encounters by videoconferencing technology, which makes it possible for L2 learners to gain firsthand experience in emotional encounters and enhance their understanding of cross-cultural communication. The techniques are likely to facilitate the tasks of self-reflection on the observations in the context of L1 and L2. The learners can conduct action research in L1 and L2 *real* Emotion Event scenario contexts and try to recognize them. In conclusion, they can make an attempt to carry out valid comparisons between L1 and L2 scenarios. Reflection on L2 learners' own emotional experiences and their identification can make it easier for them to integrate the emotions in their respective interactional roles.

These tasks and techniques will make it possible to develop L1 and L2 Cultural Framing of Emotion Events scenarios in L2 learners, together with the development of Cultural Intelligence in emotion recognition to facilitate engaging in new cultural contact experiences.

6 Syntax-Determined Meanings

Emotion words are used in language-specific grammatical frames. Grammar as assumed in the cognitive model of language, is a symbolic level, carrying meaning. This practically implies an iconicity principle, encapsulated in the assumption that grammar shapes meaning (Langacker 1987, 1991). To transform L2 input into intake in the area of grammar and morphology, the learner, particularly the learner above the critical period age, has to pay (some level of conscious) attention to language *form* and make conscious reflection about language structure. L2 learners must attend to and notice linguistic features of the input that they are exposed to if those forms are to become intake for learning.

An interpretation of an Emotional Event in the prototypical context will give priority to the canonical event i.e. such that the subjects are non-Intentional Experiencer/Agents and the objects of the sentences designate a Stimulus (*I hate TV*, *He loves Mary*, *They are proud of their son*) (Lewandowska-Tomaszczyk 2000). Nevertheless, what can be identified in authentic language data, realistic video clips, etc., is a rich repertory of additional conceptual/semantic options, relevant to a given Emotion Event scenario. A minimal scenario of the Experiencer—Verb—Stimulus can undergo the process of conceptual *extension*, either by the profiling of additional relational event components or via the processes of metaphoric or metonymic extensions, where mapping of one conceptual domain on another one (metaphor) or part on a whole within the same domain (metonymy) is identified. The Stimulus is present there either as a human or other animate, a non-animate, a natural force or some other Cause in terms of another complex event. The prepositions in the phrasal verb constructions can also introduce a cause or stimulus, and they can help to

identify shades of language-specific polysemic meanings. Complex emotion patterns reveal a number of extended scenarios, typical of a given language and culture, e.g. the Emotion Event scenario of *fear* in Polish introduces a complex complement, not present in English or expressed by non fully synonymous modal constructions (e.g. *Boję się, czy ona sie nie spóźni—I'm afraid that she might be late* in Dziwirek and Lewandowska-Tomaszczyk 2010).

It is precisely by means of the learners' search of the Emotion Event *syntactic scheme*, that they can get more thoroughly acquainted with the similarities and differences in the meanings conveyed by different syntactic structures cross-linguistically.

Looking at the Emotion Event of *anger* in English, the learner can see the *canonical conceptual pattern*, which expresses a basic *fear scenario*:

(12)
"**Where is he?" "He is not here!"** The Commissioner **became angry and red in the face.**

The sentences uttered by the Commissioner (Experiencer) identify the Stimulus (*X is not here*), while the reaction is *anger*, accompanied by the redness in his face as one of the body signals.

The *elaboration* of the basic scenario by the explicit identification of the Stimulus can be expressed in English as a combination of the verbs *to be/feel* followed by the *about NP* prepositional phrase:

(13) N Concordance
2 'Some of us **feel very angry about** the way the system of submitting speakers' cards'
3 'Have you ever talked about this girl? Told anyone **you were angry about** the drugs?'

(14)
'We've both **got a lot to be angry about**.'

Example (14) is *a transfiguration* of the basic pattern in English relative constructions. The identification of other possible prepositional constructions with *angry* can provide some cues with reference to the (English) subtle distinction between what can be considered two distinct emotion words in Polish *złość* 'wrath' and *gniew*, both translated most frequently as *anger*. In English, the cases such as the ones below (17) would present a hybrid of the two Polish emotions from the same conceptual cluster:

(15) Would you say he was angry at her?
(16) When I got out of the shop I felt angry with myself, and a little alarmed
(17) Her mother was angry. Angry with Charity for having become what she called mixed up in the affair, angry with Bess for her frivolous conduct, and, above all, angry with Mrs. Maitland for having taken up the attitude she had.

Sentence (17) above identifies both Experiencer (*mother*) and a complex set of Stimuli in what follows: *Charity*, *Bess* and *Mrs. Maitland* as the interactional Goals and (personified) Agents/Stimuli, while all three *for* phrases following are the actual *instantiations* of the Stimuli.

Corpus examples to follow introduce further extensions. Sentence (18) below is a causative construction, in which the Stimulus is in the Subject position. In (19), the Stimulus is pronominally put in the Subject position and refers to a complex scene preceding.

MAKE Experiencer *angry*

(18) He made me angry

(19) Beeson, the England captain, scored his first victory over the world No. 9, Zarak Jahan Khan […] and then complained about the remarks he claimed his opponent had been making during the rallies. "I told him that was quite unnecessary," Beeson said. "*It made me angry*, and that sort of thing makes me get stuck in."

In the next examples the patterns with the adjectival use of *angry* are presented, attributively and predicatively, the first one additionally presenting its periphrastic adjectival comparison pattern (20):

(20) Adj comparison
She **became more angry**

(21) ADJ Attributive usage
N Concordance

25 Faced with the alternatives of the dole, or **the angry aggravation of the streets**
29 blissfully carried away into **the angry, amoral world of combat**
157 Doyle looked after him **in a kind of angry bewilderment**
159 What weight would that carry? It's no more than the vague charge of **an angry blackguard**."
160 he saw two dull red orbs, and heard **the angry bleat of a mother seal**
161 No one will think this **an angry book**.

It might be interesting to note that the attributive patterns would more frequently render the Polish equivalents derived from and associated with *gniew* rather than *złość.*

(22) Adj **Predicative usage**
he proved to be remarkably tactful and forbearing whenever **I was impatient or angry**,

The predicative use, devoid of the Prepositional Phrase, renders *zły* (in the sense of *angry* and not *evil*, which is polysemously represented in Polish) or *zezłoszczony.*

The invariance of the skeletal scenario frame of *anger* is expressed in the basic construal of the scene, which is retained, while changes are introduced by evoking partial images and mapped onto the same [metonymy] or distinct conceptual domains [metaphor, simile]. Numerous language games accessible for instance as paradoxical and humorous constructions (24) are also available and pose a challenge to the learner:

(23) N Concordance
4 His large face, with indistinct and small blue eyes, was naturally red, but during his frequent **attacks of anger** it grew dark and purple
5 A **faint blush of anger suffused** Anna's pale cheeks
6 This was my last **burst of anger** in defense of President Reagan
7 her actor husband **tied to her with chains of anger and hatred**
8 But **control of anger** did not mean **dismissing** it entirely
9 It was the cream-breasted tiercel's **cry of anger**
10 the **bitings and scratchings of anger coming** near enough to passion

(24) while Webster is silky and delightful, and about **as angry as a chocolate souffle**.

On a general plane, we can talk about basic exploitation of the Emotion Event scheme or scenario and various kinds of dynamic exploitation of the Event scenario. Examples of the latter include both literal and figurative sense extensions as well as other configurational variants.

7 Conclusions

Noticing, understood as awareness and attention (even though not necessarily *intention*[3]), seems conducive to the acquisition of more advanced L2 proficiency, particularly with adult learners. However, the questions as to whether all noticing must involve conscious awareness and whether all learning requires attention remain unresolved for the time being.

In his original 1990 publication Schmidt made a distinction between *noticing* in the sense of the conscious registration of attended specific instances of language,

[3] The concept of *noticing* does not exclude implicit learning. As explained in Schmidt (2010) in more detail: "The claim that "noticing" but not "understanding" is required for learning implies that both explicit and implicit learning of generalizations are possible. In the case of explicit learning, attended and noticed instances become the basis for explicit hypothesis formation and testing. Implicit learning is also hypothesized to depend on attended instances in the input, but generalization beyond the instance is held to depend on a basic human learning mechanism that automatically detects regularities across instances, resulting in an intuitive form of knowledge that goes beyond what can be verbalized."

and *understanding*, i.e., meta-awareness that includes generalizations across instances. Metalinguistic knowledge of language rules would belong to this higher level of awareness. In his latest publication, Schmidt (2010) proposes that "noticing is necessary for SLA, and that understanding is facilitative but not required". In the case of emotions it seems that in non-naturalistic FL contexts both processes are facilitative and meta-knowledge of L2 emotion concepts will pave the way to both their acquisition as well as the learners' social functioning in intercultural contexts.

Learning to *experience* L2 emotions is not likely to be the main objective of FL teaching. However, what the teacher might and should aim at would be L2 emotion recognition and comprehension, in other words, in agreement with the Noticing Hypothesis, keeping his/her emotional awareness alert by focusing attention on similarities and differences between L1 and L2 cultures. What will eventually also be expected of L2 learner though is verbal control and management over L2 emotions and their verbalization.

Emphasis in education on the development of cultural and emotional intelligences marks an advancement in foreign language and foreign culture education. Communication among people from different linguistic and cultural backgrounds involves both a combination of independent linguistic and cultural inputs from the native and non-native systems and a development of new cognitive categories, which represent *a third quality*, emerging at the points of contact. It is precisely this *trans*-cultural competence (Lewandowska-Tomaszczyk 2011) that L2 learners might be realistically expected to develop in the process of combining model sets of L2 Culture and Emotion Event scenarios.

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Philosophical and Communicative Turns in the Study of Language

Piotr Stalmaszczyk and Wiesław Oleksy

Abstract The main aim of our chapter is to offer a brief overview of selected turns in contemporary philosophy of language and the study of language, concentrating especially on the 'formal', 'cognitive' and 'communicative' turns. We discuss the most important turns in the philosophy of language (concentrating especially on Frege), next the cognitive turns associated with, on the one hand, Chomsky and the generative enterprise, and Cognitive Linguistics on the other, and we conclude with an overview of the communicative turn, and its more applied implications, including cognitive approach to language analysis, and communicative language teaching.

1 Introduction

The main aim of our contribution is to offer a brief overview of selected turns in contemporary philosophy of language and the study of language, concentrating especially on the 'formal', 'cognitive' and 'communicative' turns, and to provide some explanatory quotes from the relevant source texts (together with an extended list of references).[1]

The research areas of linguistics and philosophy of language often overlap to considerable degree. Certain crucial questions posed within linguistic research (such as those regarding the ontological status of linguistic entities) are genuinely

[1] Sections 2–5 of our chapter use the material from the introductions in Stalmaszczyk (2010a, b, 2011), and from Stalmaszczyk (2012).

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philosophical, on the other hand, issues traditionally studied by the philosophy of language (such as truth, reference, or meaning) are of considerable interest for linguistic research conducted within various frameworks and theoretical approaches. It is probably not possible to delimit precisely the two disciplines in question, although different attempts have been made. The relation between linguistics, philosophy of language, and linguistic philosophy has been described by Mackenzie (1997: ix) in the following way: "Linguistics is the empirical study of natural language. Philosophy of language is concerned with the underlying nature of the phenomena that linguists study. And linguistic philosophy is an approach to the philosophy of language".

In contemporary linguistics, studies carried out within the broadly understood communicative approaches (such as, for example, Functional Grammar, Critical Discourse Analysis, Relevance Theory) have provided a new research perspective, concentrating on communication, discourse and various concepts of context.

In this chapter we move from discussing the most important turns in the philosophy of language (concentrating especially on Frege), through the cognitive turns associated with, on the one hand, Chomsky and the generative enterprise, and Cognitive Linguistics on the other, and we conclude with an overview of the communicative turn, and its more applied implications.

2 Turns in the Philosophy of Language

According to Davies (2006: 29) the "foundational questions in philosophy of language concern the nature of meaning, understanding, and communication", which basically means that "philosophers are interested in three broad aspects of language: syntax, semantics and pragmatics" Martinich (2009b: 1). On the other hand, Vendler (1974: 5) claims that *philosophy of language* is a catch-all phrase, whereas *linguistic philosophy* "would comprise conceptual investigations of any kind based upon the structure and functioning of natural or artificial languages"; whereas for Rorty (1967: 3) *linguistic philosophy* is "the view that philosophical problems are problems which may be solved (or dissolved) either by reforming language, or by understanding more about the language we presently use". Additionally, Vendler (1974: 5) distinguishes *philosophy of linguistics*, which "comprises philosophical reflections on such linguistic universals as meaning, synonymy, paraphrase, syntax, and translation, and a study of the logical status and verification of linguistic theories".

To these, by now classical, descriptions one may add a recent formulation by Soames (2010):

> Philosophy of language is, above all else, the midwife of the scientific study of language, and language use. By language, I mean both natural languages line English, and invented languages like those of logic and mathematics. By language use I mean its private use in thoughts, as well as its public use to communicate thoughts. (Soames 2010: 1)

Soames also observes that the foundational concepts of philosophy of language (and philosophy as a whole) are "truth, reference, meaning, possibility, propositions, assertion, and implicature" (Soames 2010: 1).

As philosophy of language is not a homogenous field it is possible to distinguish different stages, or, to borrow Rorty's term, 'turns',[2] in its historical and contemporary development, from early associations with metaphysics and logic, through assimilation of developments in analytic philosophy and formal logic, to influences from modern linguistics and cognitive science. According to Rorty, the 'linguistic turn' resulted from 'linguistic philosophy', understood as "the view that philosophical problems are problems which may be solved (or dissolved) either by reforming language, or by understanding more about the language we presently use" (Rorty 1967: 3). It needs to be added, however, that in the retrospective essay included in the 1992 edition of his anthology, Rorty almost apologizes for attracting philosophers' excessive attention to language, and remarks: "What I find most striking about my 1965 essay is how seriously I took the phenomenon of the 'linguistic turn,' how portentous it then seemed to me" (Rorty 1992: 371). On the other hand, Dummett (1993: 5) sees the origins of the linguistic turn already in Frege's early work (see below).

Early attempts at reforming natural language led to considerable development and application of formal tools in linguistic analysis, hence triggering the 'formal turn', strongly related to Analytic Philosophy,[3] and the achievements of Gottlob Frege, Bertrand Russell, early Ludwig Wittgenstein, Rudolf Carnap, Jan Łukasiewicz, Kazimierz Ajdukiewicz, Alfred Tarski, W.O.V. Quine, Richard Montague, Donald Davidson, Saul Kripke, and also Noam Chomsky.

Elucidations concerning different aspects of speech act theory, communication, language use, and the role of presupposition, implicature, and context, resulted in the 'philosophical turn', associated with the later Wittgenstein, John Austin, Paul Grice, John Searle, and philosophers as diverse as Robert Brandom, Hans Georg Gadamer, Maurice Merleau-Ponty, Hilary Putnam, W.V.O. Quine (again), and Richard Rorty, to mention the most prominent names only.

Further on, the various cognitive approaches to language (from Noam Chomsky and Ray Jackendoff, to George Lakoff and Ronald Langacker) resulted in the 'cognitive turn' (or rather several successive turns), focused on, among others, the relation between language and cognition, the distinction between the literal and non-literal in language and thought, metaphors in language and thought, identification of meaning with conceptualization, and non-formal approaches to meaning.

[2] On the origin of the term 'linguistic turn' in philosophy, see Rorty (1967); see also the chapters in Sawyer (2010).

[3] According to Dummett (1993: 5) "analytical philosophy was born when the 'linguistic turn' was taken".

3 Gottlob Frege and the Formal Turn

Inquiry into language from the perspective of logic has often resulted in interesting theoretical claims, incorporated subsequently into philosophical and linguistic research. One of the most important logicians whose influence upon the philosophy of language and modern linguistics, especially semantics (but also pragmatics), has been profound was Gottlob Frege, the co-founder of analytic philosophy. Frege is most often associated with developments in modern predicate logic, with devising a symbolic language for logic (the *Begriffsschrift*), providing the seminal analysis of the meaning of an expression, a semantic analysis of identity statements, and formulating the context principle; he is also credited with putting forward the assumptions that lead to formulation of the compositionality principle.[4]

Frege was one of the first modern logicians to see the need for a formalized conceptual notation, and devoted to this problem his first major work, *Begriffsschrift, eine der aritmetischen nachgebildete Formelsprache des reinen Denkens* ('Conceptual Notation. A Formula Language of Pure Thought, modeled on that of Arithmetic', 1879). In the Preface he claimed that: "If it is a task of philosophy to break the power of words over the human mind, by uncovering illusions that through the use of language often almost unavoidably arise concerning the relations of concepts, by freeing thought from the taint of ordinary linguistic means of expression, then my *Begriffsschrift*, further developed for these purposes, can become a useful tool for philosophers" (Frege 1879: 50–51).

Paul Pietroski has recently remarked that Frege "bequeathed to us some tools—originally designed for the study of logic and arithmetic—that can be used in constructing theories of meaning for natural languages" (Pietroski 2004: 29–30). The 'Fregean tools' still prove useful in analyzing not only the fundamental issues of sense and meaning, but also such traditional linguistic notions as predication, and his "philosophy of language […] remains intensely vital today. Not since medieval times has the connection between logic and language been so close" (Mendelsohn 2005: 18).

As already noted above, Dummett (1993) points to Frege's early work as seminal for the development of the 'linguistic turn'. The relevant fragment, introducing the 'context principle', is to be found in § 62 of *Die Grundlagen der Arithmetik*, where Frege claims that "it is only in the context of a proposition that words have any meaning" (Frege 1884: 73). Dummett (1993: 3) observes that the context principle is "formulated as one governing an enquiry into language rather than into modes of thought". At the same time it needs to be stressed that Frege did not consider spoken language a sufficiently precise instrument for logic. He pointed to the need for creating a language made up of signs, the concept-script (or 'ideography'), clear of any double meaning, he also claimed that "[t]he main

[4] The classic study on Frege and philosophy of language is Dummett (1981). For more recent discussion of Frege's influence upon modern thought, including linguistics and philosophy of language, see Carl (1994), Kenny (1995), Beaney (1997), Pietroski (2004), and Mendelsohn (2005).

task of the logician is to free himself from language and to simplify it. Logic should be the judge of languages" (Frege 1906: 303). Frege's words were echoed, in a somewhat different methodological context, by Jan Łukasiewicz, who elucidated the idea of formalism and observed that every "scientific truth, in order to be perceived and verified, must be put into an external form intelligible to everybody", and this aim "can be reached only by means of a precise language built up of stable, visually perceptible signs. Such a language is indispensable for any science" (Łukasiewicz 1957: 15).

Elsewhere Frege stated that "[i]nstead of following grammar blindly, the logician ought rather to see his task as that of freeing us from the fetters of language" (Frege 1897: 244). As observed by Carl (1994: 54), this "struggle against language and grammar" directs the logician's concern to the issue of the thought expressed by a sentence, and aims at discovering the "logical kernel".

Another important development crucial for the 'formal turn' is associated with Richard Montague, who incorporated Fregean semantics into the model theoretic account of the intentional phenomena. At the same time he rejected the methodological distinction between formal and natural languages, claiming that: "There is in my opinion no important theoretical difference between natural languages and the artificial languages of logicians; indeed, I consider it possible to comprehend the syntax and semantics of both kinds of languages within a single natural and mathematically precise theory" (Montague 1970: 222).

Montague's approach to grammar resulted in what may be dubbed 'formal philosophy of language', in which syntax, semantics and pragmatics of natural language are considered branches of mathematics rather than psychology.

4 The Cognitive Turn

In a recent introduction to philosophical logic, John Burgess observes that in the "traditional view of the subject, the phrase 'formal logic' is pleonasm and 'informal logic' oxymoron" (Burgess 2009: 2). Similarly, one might argue that a 'philosophical turn' in philosophy of language is pleonastic. To understand this idea it is necessary to recall Ludwig Wittgenstein's observation that "Philosophy is a battle against the bewitchment of our intelligence by means of language" (Wittgenstein 1953, § 109), and that philosophers "bring words back from their metaphysical to their everyday use" (Wittgenstein 1953, § 116). But, as succinctly observed by Arendt (1978: 115), the trouble is that "this battle can be refought only by language". Hence, the need for 'reforming' language, either through devising necessary formalism, or through elucidations of meaning and focus on language use.

Attempts at formalizing language, initiated by Frege, triggered the 'formal turn', whereas elucidations concerning language meaning and use have resulted in the 'philosophical turn' in the philosophy of language. Philosophy of language and linguistic philosophy have, until recently, been confined to investigating problems

of truth, meaning, and reference. A quick perusal of introductions and textbooks published within the last 15 years (e.g. Mackenzie 1997; Taylor 1998; Lycan 2000; Miller 2007; Morris 2007) confirms this observation. Very characteristically, *The Blackwell Guide to the Philosophy of Language* (Devitt and Hanley 2006) is divided into two major parts, devoted to "meaning" and "reference". The former investigates issues such as thought and meaning, meaning skepticism, formal semantics, speech acts and pragmatics, propositional attitudes, conditionals, vagueness, whereas the latter focuses on descriptions, indexicals, anaphora, and truth.

On the other hand, *The Oxford Handbook of Philosophy of Language* (Lepore and Smith 2006) is divided into parts dealing with "the nature of language", "the nature of meaning", "the nature of reference", "semantic theory", "linguistic phenomena", "varieties of speech act", and "the epistemology and metaphysics of language". Also most of the canonical texts collected in four volumes in the *Critical Concepts in Philosophy* series (Martinich 2009a) clearly show that problems of meaning and reference remain the core of philosophy of language, even if extended to different aspects of language communication and understanding.

Recent studies in philosophy of language, especially concerned with the relation between language and thought, language and mind, problems of language normatively, the nature of linguistic understanding, often take advantage of developments in psychology, philosophy of mind, and new trends in metaphysics and epistemology.[5]

Interest in Cognitive Science has lead to yet another, "cognitive", turn in the philosophy of language, or rather, given the multidimensional nature of Cognitive Science, several different cognitive turns. This most recent turn in philosophy of language is also associated, on the one hand, with the "cognitive revolution" (in the sense of Chomsky),[6] and developments in Cognitive Linguistics, on the other. According to Chomsky: "The cognitive revolution is concerned with the states of the mind/brain and how they enter into behaviour, in particular, cognitive states: states of knowledge, understanding, interpretation, belief, and so on" (Chomsky 1991: 5) and "The cognitive perspective regards behavior and its products not as the object of inquiry, but as data that may provide evidence about the inner mechanisms of mind and the ways these mechanisms operate in executing actions and interpreting experience" (Chomsky 2000: 5).

Such an approach, coupled with precise formal models of language description and analysis, inspired debates and controversies concerning not only the nature of language, but also issues of knowledge of language and first language acquisition, all of them of utmost philosophical importance.

Research within Cognitive Linguistics, carried out by, among others, Ronald Langacker, George Lakoff, Leonard Talmy, Mark Turner, Gilles Fauconnier,

[5] See, for example, the chapters collected in Sawyer (2010).

[6] More precisely, this is the "second cognitive revolution", as the first one should be associated with the Cartesian tradition, cf. Chomsky (2002: 69). Cognitive Linguistics might be thus considered as contributing to the third wave of the cognitive revolution.

re-focused the study of language. As a result, several new topics emerged within contemporary philosophy of language. The methodological assumptions underlying cognitive linguistics have been characterized by Langacker in the following way: "A basic methodological principle of **Cognitive Grammar** (CG), and of **cognitive linguistics** in general, is reflected in the very rationale for choosing these names. They are "cognitive" in the sense that, insofar as possible, they see language as drawing on other, more basic systems and abilities (e.g. perception, attention, categorization) from which it cannot be dissociated" (Langacker 2002: 13).

The issues central to cognitive approaches to language, and hence the cognitive turn in philosophy of language, include, among others, the relation between language and cognition, the distinction between the literal and non-literal in language and thought, metaphors in language and thought, identification of meaning with conceptualization, and non-formal approaches to meaning. This is not to claim that topics such as, for example, metaphor, are completely absent from the publications mentioned earlier. However, the references are not only limited—only two texts devoted to metaphors in Martinich (2001)—but also the discussion is confined to the non-literal, figurative aspect of language use—cf. the chapter on "The Dark Side" in Lycan (2000).

We conclude this brief overview of current tendencies in the philosophy of language with a longer quotation from John Searle, a prominent figure in American linguistics and philosophy, especially the philosophy of language (earlier), and the philosophy of mind (more recently):

> For most of the twentieth century the philosophy of language was 'first philosophy'. Other branches of philosophy were seen as derived from the philosophy of language and dependent on results in the philosophy of language for their solution. The center of attention has now moved from language to mind. Why? Well, first, I think many of us working in the philosophy of language see many of the questions of language as special cases of questions about the mind. Our use of language is an expression of our more biologically fundamental mental capacities, and we will not fully understand the functioning of language until we see how it is grounded in our mental abilities. (Searle 2004: 10–11)

It follows from the above remark that the most recent turn in the philosophy of language centers around the mind, a natural consequence of adopting the cognitive turn. This does not mean that the (more 'traditional') philosophy of language has exploited its potential. On the contrary, the convergence of linguistic, formal, philosophical, and cognitive approaches opens exciting new research perspectives.

5 The Communicative Turn

So far we have presented an overview of some of the issues which are related to the converging influences of linguistics, philosophy of language, and linguistic philosophy with regard to the relevant formal and cognitive turns. While that part of this chapter dealt with theoretical issues present in current discussions of historical and developmental aspects of turns it is time now to address some less

theoretical consequences of the communicative turn and discuss yet another overlap between the work stemming from the research of language philosophers, especially the work of Austin and Searle on speech acts, on one hand, and developments in anthropological linguistics (Duranti 2009), sociolinguistics and social anthropology (Ardener 1971), ethnography of communication (Gumperz and Hymes 1972) on the other, which jointly but to a varying degree, were foundational in bringing about a new approach to language teaching, known as communicative language teaching.

Before the presentation of some of the origins of communicative language teaching is offered a brief remark on the notion of communicative turn is in order. This concept has proved over the years to be very productive and has inspired a range of scholars in disciplines as diverse as language teaching (Richards 2006), political discourse (which developed under the influence of Habermas' concept of communicative action (Habermas 1989),[7] communication studies (Constantinou et al. 2008), risk studies (Horlick-Jones and Farre 2010), conflict studies (Mathis et al. 2008), planning theory (Healey 1992), and other areas of social sciences in general. For reasons of scope, we will limit our discussion to the presentation of the influence that communicative turn has exerted upon language teaching.

The origins of the communicative turn in language teaching can be traced back to developments on both sides of the Atlantic (cf. Van Ek and Alexander 1980; Wilkins 1976; Richards 2006, on notional-functional syllabus which grew in prominence in Great Britain under the influence of Halliday's functional approach to linguistic analysis) but in this chapter we focus on the contribution of Dell Hymes and the seminal concept of *communicative competence* which he proposed in the 1960s and which was circulated and made accessible to a wider group of scholars and readers in the early 1970s (Hymes 1972a, b, c; Gumperz and Hymes 1972).

In the *Preface* to Gumperz and Hymes (1972) communicative competence is defined succinctly: communicative competence is "What a speaker needs to know to communicate effectively in culturally significant settings. […] communicative competence refers to the ability to perform." (Gumpertz and Hymes 1972: 7). Hymes' concept of communicative competence was later developed and incorporated into communicative language teaching methodology both in the United States (e.g. Paulston 1974) and in Europe (see an extensive discussion of the concept in Canale and Swain 1980) as well as throughout the world. Forty years or so from its inception communicative competence is described by Richards (2006: 3) as comprising:

1. the knowledge of how to use language for various purposes and functions,
2. the knowledge of how to adapt the use of language vis a vis various settings (including formal and informal speech as well as spoken and written communication) and participants,

[7] Also cf. Wodak et al. (2011) for comments on the relationship between Hymes' notion of 'communicative competence', Habermas' notion of 'communicative action', and the work of Austin and Searle.

3. the knowledge of how to understand and produce different types of texts, e.g. conversations, narratives, reports, interviews, etc., and
4. the knowledge of communication strategies that best suit the given communication context.

Hymes' approach to competence was strikingly different from Noam Chomsky's concepts of *competence* and *performance* which were then in vogue and enjoyed popularity among linguists around the world. In the first place, Hymes questioned the validity of the primacy of competence a la Chomsky (1965), (i.e. the knowledge of the abstract rules of grammar which an ideal speaker-listener is assumed to have to be able to generate and decode language) over performance understood as the actual production of sentences by an idealized speaker who is unaffected by any external influences such as shifts of attention, memory limitation, other distractions, etc., and performs linguistically in a homogeneous speech community. In doing so Hymes thus objected to the marginalization of performance from linguistic analysis and, contrary to Chomsky, claimed that performance usually happened in heterogeneous speech communities, diversified culturally and socially. He argued that Chomsky's rendering of the distinction between competence and performance was problematic:

> The term 'competence' promises more than it in fact contains. Restricted to the purely grammatical, it leaves other aspects of speaker's tacit knowledge and ability in confusion…. (Hymes 1971: 55)

Secondly, Hymes stressed the importance of the social and cultural contexts in which language is used, both of which were missing from Chomsky's approach[8] and further, he pointed to the importance of the study of rules of use. His famous statement "There are rules of use without which the rules of grammar would be useless." (Hymes 1972b: 280) might as well serve as a slogan with which to herald the communicative turn in language teaching.

It needs to be stressed that affinities between language philosophy and communicative approach to language teaching, what we call in this chapter a communicative turn in language teaching, have largely been unnoticed in the relevant literature. Therefore, in what follows an attempt will be made to show that Hymes' way of arguing for the importance of the study of language use and the functional properties of language, which is predominantly used for communicative purposes, bears witness to his familiarity with the work of language philosophers, which is manifested by the terminology he uses and it is also present in his occasional references to some of the philosophers of language, and most notably in the general tenor of his approach as explicated in his influential chapter "On communicative competence" (Hymes 1972a, b) and earlier works (Hymes 1964a, 1967).

[8] Cf. Johnston and Marcellino (2011) for comments on Hymes' perception of Chomsky's approach, see also Beuzeville (2012).

Let us now have a closer look at some fragments of Hymes' writings. On several occasions he uses the term *speech act*:

> Just as rules of syntax can control aspects of phonology, and just as semantic rules perhaps control aspects of syntax, so rules of speech acts enter as a controlling factor for linguistic form as a whole. (Hymes 1972b: 281)

And he continues on the same page:

> Within the developmental matrix in which knowledge of the sentences of a language is acquired, children also acquire knowledge of a set of ways in which sentences are used. From a finite experience of speech acts and their interdependence with sociocultural features, they develop a general theory of the speaking appropriate in their community, which they employ, like other forms of tacit cultural knowledge (competence) in conducting and interpreting social life. (Hymes 1972b: 281)

In the above passage, not only does Hymes reinforce his objection against the way Chomsky looked at the role of linguistic theory as predominantly concerned with how sentences are constructed, generated and acquired but he also stresses the importance for a linguistic theory to be concerned with how speech acts are acquired and how their use is interconnected with social life.

In Hymes (1972c: 56–57) the whole section is devoted to speech act as "… the minimal term of the set just discussed [i.e. speech event- our own inclusion], as the remarks on speech events have indicated". And then he continues to explain how speech act is to be represented and interpreted syntactically:

> It represents a level distinct from the sentence, and not identifiable with any single portion of other levels of grammar […] That an utterance has the status of a command may depend upon a conventional formula ("I hereby order you to leave this building"), intonation …, position in a conversational exchange …, or the social relationship obtaining between the two parties …. (Hymes 1972c: 57)

When dealing with general aspects of linguistic theory and with how it could be integrated with theory of communication and culture, a central point of Hymes' approach, already present in his published output in the early 1960s, he proposes four questions that must be asked of a theory for it to be accountable for the integration of communication and culture. Below the four questions are presented:

> And if linguistic theory is to be integrated with theory of communication and culture, this fourfold distinction must be stated in a sufficiently generalized way. I would suggest, then, that for language and for other forms of communication (culture), four questions arise:1. Whether (and to what degree) something is formally possible: 2. Whether (and to what degree) something is feasible in virtue of the means of implementation available:3. Whether (and to what degree) something is appropriate (adequate, happy, successful) in relation to a context in which it is used and evaluated: 4. Whether (and to what degree) something is in fact done, actually performed, and what its doing entails. (Hymes 1972b: 283–286)

While the first question might be understood as addressing grammatical aspects that a linguistic theory thus conceived should take care of, the remaining three questions clearly divert the theory from grammatical considerations and point to phenomena outside of the scope of grammar, i.e. to the intersections of

communication and culture. Interestingly, what Hymes proposes in (3) above bears striking resemblance to Austin's appropriateness conditions which he also called *felicity* or *happiness conditions*. His William James lectures delivered at Harvard University in 1955, later edited by J. O. Urmson and published in 1962 as *How to do things with words* (Austin 1962), contain the following passages:

> The utterance is then, we may say, not indeed false but in general unhappy. And for this reason we call the doctrine of the things that can be and go wrong on the occasion of such utterances, the doctrine of the Infelicities. (Austin 1962:14, Lecture II)

And he continues:

> … certain conditions have to be satisfied if the utterance is to be happy—certain things have to be so. (Austin 1962: 45, Lecture IV)

One has to bear in mind though that while Austin was concerned with appropriateness (felicity) of performative utterances Hymes had in mind communication in general, in fact any form of communication. That Hymes must have been familiar, though perhaps indirectly, with Austin's ideas, and certainly he was familiar with some of Searle's work, e.g. Searle (1967), can be found on a number of occasions in his writings. In Hymes (1972b: 290) the following passage can be found:

> A second concept is that of linguistic routines, sequential organizations beyond the sentence, either as activities of one person, or as the interaction of two or more. […] One special importance of linguistic routines is that they may have the property that the late English philosopher Austin dubbed performative (Searle, 1967). That is, the saying does not simply stand for, refer to, some other thing; it is itself the thing in question. To say "I solemnly vow" is to solemnly vow; it does not name something else that is the act of vowing solemnly. Indeed, in the circumstances no other way to vow solemnly is provided other than to do so by saying that one does so.

Also in Hymes (1972c: 51) he explicitly mentions the work in philosophy, especially ordinary language philosophy:

> … treatments of verbal art of necessity draw distinctions and make assumptions as to notions with which a descriptive model of speaking must deal, as does much work in philosophy, most notably in recent years "ordinary language" philosophy and the work of J.L. Austin, John Searle, and others on "illocutionary acts", or performatives.

On another occasion he also demonstrates familiarity with Morris' semiotics (Morris 1971) as is evidenced by this fragment from Hymes (1972b: 291):

> There is an analogue here to the representation of a lexical element in a language in terms of form (phonological features), meaning (semantic features), and context (features of syntactic selection), or, indeed, to the tripartite semiotic formula of Morris, syntactics, semantics, pragmatics, if these three can be interpreted here as analogous of form, meaning and context.

The above discussion was intended to show that without questioning Hymes' originality, the pioneering character of his thinking and the profound influence that his research paradigm has exerted upon anthropological linguistics and

sociolinguistics as well as on the general approach to what developed later as communicative language teaching it is fair to assume, on the basis of his own writings, as we have attempted to demonstrate above, that his thinking was influenced by research produced by language philosophers, especially Searle and Austin. Swan (2007) is the only writer on the topic, to the best of our knowledge, who notices the link between communicative language teaching and philosophy of language and stresses Hymes' role in bringing about the communicative turn in language teaching.

> The construct [i.e. communicative competence, our own inclusion] offered an engaging alternative to the purely formal type of language competence investigated by Chomskyan linguistics. […] It added some intellectual kudos to applied linguistics by forging a link with the work of linguistic philosophers such as Searle and Austin, who were also looking, broadly speaking, at what people do with language. And, quite simply, it fitted in with the 'spirit of the age', which was deeply concerned with interpersonal dynamics (Swan 2007: 1).

Thus the initial assumption in the second part of this chapter that communicative turn is yet another turn in a sequence of sometimes (dialectically) interrelated or parallel research approaches, such as the ones discussed in the first part of the chapter, or sometimes only indirect and intersecting influences and fruitful insights has been substantiated.

The presentation of Hymes' contribution and his role in turning the attention of linguists, anthropologists, sociologists, and language teachers and theorists toward communicative and cultural aspects of language use would not be complete without outlining his formative input to what he called "ethnography of speaking" (Hymes 1962) later renamed "ethnography of communication" (Hymes 1964a, b) and also referred to by means of a less technical term "ways of speaking" (Hymes 1989). The presentation of the basics of ethnography of communication, which will be used here as a cover term for all three above mentioned terms, will constitute the second part of what we call communicative turn in this chapter.

From the early 1960s Hymes insisted on the importance of including language use and its social and cultural diversity in linguistic investigation, very much the way it was done in ethnographic fieldwork because, he argued, only then could we investigate not only speakers' shared knowledge of the linguistic code but also norms and values which underlie language use, as well as the socio-cultural context in which speech is used. In order to account for linguistic performance that takes stock of both speakers' idiosyncratic features as language users and features which cut across conventionalized forms of verbal behavior in a speech community in which they perform, Hymes proposed a methodological heuristic for investigating communication and represented it in the form of S P E A K I N G acronym which will be referred to as Hymes' SPEAKING Model.

Hymes' theory of communication contains, among others (Hymes 1972c) eight components: speech community, speech situation, speech event, speech act, fluent speaker, components of speech events, functions of speech. The SPEAKING Model is in fact Hymes' interpretation of how the components of speech event could be handled. He proposes (Hymes 1972c: 52–65) sixteen components and to make them

mnemonically convenient he uses the SPEAKING acronym. The sixteen components are as follows: (1) message form, (2) message content, (3) setting, (4) scene, (5) speaker/sender, (6) addressor, (7) hearer/receiver/audience, (8) addressee, (9) purpose-outcomes, (10) purpose-goals, (11) key, (12) channels, (13) forms of speech, (14) norms of interaction, (15) norms of interpretation, and (16) genres. All the sixteen components are then grouped into eight classes to form the SPEAKING Model as follows:

6 Hymes' S P E A K I N G Model

6.1 Setting and Scene

Setting refers to the time and place of a speech act and to the physical circumstances.

While "setting" stands for the physical circumstances of a speech act "scene" is distinct from it and stands for the cultural-psychological circumstances. Both of them can be appropriate or inappropriate, happy or unhappy in a given speech situation.

6.2 Participants

Participants comprise: speaker/sender, addressor, hearer/receiver/audience, and addressee.

6.3 Ends

This category stands for purposes- outcomes and purposes-goals.

6.4 Act Sequence

These are form and order of speech event.

6.5 Key

Stands for the tone, manner, or spirit in which the speech act is performed.

6.6 Instrumentalities

Instrumentalities mean various forms and styles of speech, e.g. formal, informal, casual, etc. or standard/substandard.

6.7 Norms

These are acceptable in a community in which speech is performed social rules governing the event and the participants' actions and reaction.

6.8 Genre

By genre are meant oral and written categories such as anecdote, poem, tale, proverb, prayer, lecture, commercial, etc.

Two remarks are in order on the above model of communication as proposed by Hymes. First, Hymes stresses that the SPEAKING Model does not always have to be used in its entirety in order to account for a concrete speech situation nor is there any prescribed sequence of analysis, e.g. starting from S (Setting and Scene) and going to G (Genre) or a priority of one component over the other: "… any component may be taken as starting point, and the others viewed in relation to it." (Hymes 1972c: 66).

Second, in Hymes' SPEAKING Model the central unit of analysis is speech act. This is worth pointing out because the fact that Hymes made speech act the central point of his theory of communication provides yet another argument for the affinity between research in the philosophy of language as represented by Austin and Searle and the research paradigm proposed by Hymes, which greatly influenced developments in communicative language teaching.

In the above we have presented some highlights of the most important turns in the philosophy of language, which gave a new research impetus to a number of developments in theoretical and applied linguistics, including cognitive approach to language analysis, and communicative language teaching.

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The Third Way of Cognitive Science and the Middle Way of Buddhism

Jan Zalewski

Abstract Even though cognitive science may not be established as a mature science, being rather a loose affiliation of disciplines which make human cognition a scientific theme, it has already had significant impact in the field of epistemology. Since the late 1970s, research conducted on aspects of cognition ranging from perception to language has laid the groundwork for a fundamental epistemological shift in cognitive science, which bears directly on the Western philosophical dilemma of whether reality is objective (and independent of our cognition) or subjective (and so our mind's projection). My aim here is to trace some major developments in the history of cognitive science leading to the emergence of the so-called *third* or *middle way*, which is an alternative to the traditional chicken-or-egg problem of objectivism/realism versus subjectivism/idealism. It is an option developed by those cognitive scientists who have studied cognition as embodied action. My discussion finally points to the similarities between the new experientialist epistemology of cognitive science and the Buddhist tradition of Madhyamika (literally *middle way*).

1 Objectivism, Subjectivism, and Embodied Cognition

The modern world has been dominated by positivist science and its conception of the experienced world as existing independent of the mind (the *realist/objectivist* position). As Lakoff (1988: 122) points out, what is commonly referred to as *objectivism* is indeed a collection of philosophical doctrines which have become "so ingrained in our culture and our intellectual life that we don't even recognize them as theories, they take on the cast of self-evident truths." In Lakoff's (1988: 123)

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explanation, *objectivist metaphysics* claims that "the world consists of entities with fixed properties and relations holding among them at any instant. This structure is mind-free, that is, independent of the understanding of any beings." This view is what Varela et al. (1991: 172) call the *chicken position*, which states that "the world out there has pregiven properties. These exist prior to the image that is cast on the cognitive system, whose task is to recover them appropriately." This position appears to be so commonsensical that we think it is indeed impossible for things to be any other way. If we run into any problems, then we tend to think that the only alternative to objectivism must be subjectivism. Varela et al. (1991: 172) call it the *egg position* and explain it as follows: "The cognitive system projects its own world, and the apparent reality of this world is merely a reflection of internal laws of the system." We seem to be stuck with this chicken-or-egg problem. However, the developments in the cognitive sciences to be discussed in this paper point to a third way: Like chicken and egg, world and perceiver mutually specify each other and continually come into being in dependent co-origination (cf. Thompson's 2007, *dynamic co-emergence*). Cognition is then viewed as neither the recovery of an outer world (objectivism/realism) nor the projection of an inner world (subjectivism/idealism), but as *embodied action*. As Varela et al. (1991) explain, regardless of whether we understood cognition as recovery or projection, we all the same conceive of it in terms of *mental representation*, with the difference being that representations are seen as either a posteriori (the mind recovering what is outer) or a priori (the mind projecting what is inner). In the view of cognition as embodied action, the fundamental change is that the mind/brain is seen as working based on the principle of *operational closure* rather than that of mental representation.

Lakoff and Johnson (1980) opposed objectivist epistemology as a theory of human cognition with their account of *experientialist cognition*. Objectivist epistemology views human thought as fundamentally disembodied and so as a reflection (*representation*) of the fixed properties and relations pre-existing in the outer world, that is, independent of the actions (defined by the sensory-motor capabilities) of the cognizing subject. Experientialist epistemology, on the other hand, "sees human thought as essentially involving the kind of structured experience that comes with having human bodies, especially from innate human sensory-motor capacities" (Lakoff 1988: 121). Such an experientialist epistemology necessarily affects our conception of truth and objectivity in science (see Lakoff and Johnson 1980, on *the myth of objectivism*). Truth can only be perceived in terms of human understanding (so in terms of a language-based conceptual system, which is largely metaphorical in nature) and cannot be independent of human (i.e., biologically, culturally, historically shaped) experience. Therefore, as far as our search for truth is based on our conceptualization of the experienced world, our truth is not objective (i.e., absolute and unconditional) but rather intersubjective (i.e., socially agreed upon), in other words, the result of interactive and collaborative processes aimed at validation of individual observations.

2 The Mind's Architecture: From Representation to Operational Closure

The epistemological shift taking place in the cognitive sciences is a consequence of the changes in understanding how the brain/mind works and not the result of philosophical preferences. The advent of the computer in the 1940s led to a realization that the brain/mind can be understood as an information processing system (rather than be bypassed as the black box of behaviorism). Viewing cognition as information processing, cognitive scientists asked what general information processing capacities the brain/mind must have to do what it does. They claimed that an information processing system could be understood in terms of its data structures (which is what is meant by *mental representations*) and the processes operating on those representations (which is what is meant by *computation*). Much of the history of cognitive science is a history of the mutual antagonisms between two major conceptions of information processing, often referred to as the *symbolic* and *connectionist* approaches to cognition (see, e.g., Bechtel and Abrahamsen 1991; Thompson 2007: Chap. 1). The approaches advance different conceptions of *mental representation* and *computation*. In the symbolic approach mental representations take the form of symbol structures, with *propositions* as the central units of mental representation. Computation is then understood as transformation of symbols according to rules. Thus cognition is defined as rule-based symbol manipulation. Cognitive science in the 1970s became practically synonymous with the symbolic paradigm claiming that cognition must be carried out in terms of propositional representation.

The notion of *mental representation* for long became a core assumption in cognitive sciences and the *network* metaphor provided a tool for dealing with mental representations. As Gardner (1985) argued, "for scientific purposes, human cognitive activity must be described in terms of symbols, schemas, images, ideas, and other forms of mental representation" (p. 39). Under the symbolic paradigm, on the basis of experimental evidence (notably Sachs 1967) and introspective arguments (notably Fodor 1975), mental representations were assumed to take primarily the powerful and largely non-conscious propositional form. With propositions capturing relations between arguments and having a truth value, the neo-positivist epistemological grounding of the symbolic paradigm is clearly visible. However, as a result of their work with propositional formats, cognitive scientists came to realize that some higher-level structures were needed to organize propositions (cf. Rumelhart's 1975, *schemata*; Minsky's 1977, *frames*; Schank and Abelson's 1977, *scripts*) and many became gradually convinced of the need for some sort of associative activation of propositions organized within those network-like structures (cf. Collins and Loftus 1975). These developments contributed to the challenge posed by the connectionist architecture to the view that knowledge should be represented propositionally. With the addition of spreading activation and weights (strengths of connections in a network), network models like Anderson's (1976, 1983) proved superior to the traditional network models

(e.g., Kintsch 1974; Norman and Rumelhart 1975) in that they could account for typicality effects of prototype categories, involving ease/difficulty of learning and processing. Such models were forerunners to connectionist networks.

In contrast to the symbolic paradigm, connectionism boasts greater neural plausibility: Being motivated by the recognition that cognition must be instantiated in a brain and the brain is a neural network, connectionism views cognition as flow of energy through neural networks, with specific patterns of neural activity resulting in specific cognitive-affective states. In the 1980s, connectionism posed an ultimate challenge to propositional symbolic representations in that it did not invoke such knowledge formats at all in modeling cognition. A single most important feature of the connectionist approach to modeling cognition is that it is not symbolic but subsymbolic, which means that it deconstructs symbols into smaller units of information, called *microfeatures* (Rumelhart and McClelland 1986), which are too small to be meaningful by themselves and whose cumulative meaning depends on the pattern of connectivity within which they are being activated. Meaning is thus distributed over a large number of processing units, with such distributed networks using parallel associative activation.

In fact, connectionism originates both in the early neural network tradition (which goes back to the 1940s, see Cowan and Sharp 1988) as well as in the symbolic tradition of the 1970s, most notably in Anderson's (1976, 1983) above-mentioned models, which used hybrid solutions such as associative activation in addition to rules and non-propositional representations as additional forms of knowledge. All the crucial developments in the symbolic tradition, such as schema theory (Rumelhart 1975), prototype theory (Rosch 1978), or scripts (Schank and Abelson 1977) also belong in the connectionist tradition and can be given there arguably superior implementations. For example, the flexibility and adaptability of schemata is much easier to achieve in the connectionist architecture. A symbolic network imposes so-called *hard constraints* on cognitive operations. So, if one is thinking an idea, such as a single concept schema, the entire concept is assumed to be activated as an intact symbolic unit according to a rule-governed decision based on whether or not all the singly necessary and jointly sufficient conditions are present. Thus, if the concept is present in our thought, all its defining attributes must be present as well. By contrast, in a subsymbolic distributed network, if the same single concept schema is being processed, a large and varying number of processing units are being activated. Which units and to what degree are activated on a given occasion depends on the larger pattern of connectivity (the context) within which a concept is being activated. In other words, the meaning of this concept will vary with context. A system like this, where strengths of connections between processing units depend on frequency of processing and are modified with each activation process, will easily account for the ease/difficulty of processing and learning. What is relevant to my discussion and should be clear from the above is that connectionism redefines the notions of mental representation and computation. The notion of mental representation amounts to a connectivity pattern of processing units and computation has nothing to do with symbol manipulation but is the process by which processing units in a connectivity pattern excite and inhibit

each other, which involves calculating the strengths of connections between the units and so the degree of their activation.

Even though the notion of representation and so the idea of the mind/brain as an information processing device changed considerably under connectionism, the very idea of cognition as representation (i.e., recovery) of a pre-existing and pre-given world was never explicitly questioned by cognitive scientists before the 1990s, when Varela et al. (1991) put forward a non-representationist alternative in the form of their *enactive approach*. Until that time, cognitive science subscribed to cognitive realism. Dealing with a posteriori representations resulting from causal organism-environment interactions, they apparently broke the traditional philosophical deadlock over the subjective versus objective nature of reality. Indeed, cognitive scientists did not see representation as simple mirroring of the environment. They explained perception as an active process of hypothesis formation, where the mapping of the physical patterns of energy stimulating our senses provides a basis for making inferences and producing judgments. It may have seemed (probably to Rorty 1979, too) that such a conception of representation had nothing to do with the crude traditional philosophical view of the mind as a mirror of nature. However, the realist/objectivist assumption of a pre-existing world being recovered through mental representation remained intact.

Connectionism and enactivism are both motivated by the recognition that the brain is a neural network. However, embodied cognition is not a matter of just the brain but rather the whole nervous system, and ultimately the whole organism with its ways of interacting with the world. Because of the adaptive capabilities of the nervous system, repeated interactions between organism and environment lead to their *structural coupling* (Maturana and Varela 1987: 75). Such coupling means that changes of states in the nervous system become correlated with changes of states in the environment. What is crucial is that the environment only triggers structural changes and does not unilaterally prescribe changes in the nervous system. Maturana and Varela (1987) call another fundamental property of the nervous system its *operational closure* and explain that "the nervous system functions as a closed network of changes in relation of activity between its component" (p. 164). Structural coupling and operational closure became two basic notions in the enactive approach. In this view, the organism's environment emerges from the material world trough the organization of the nervous system and the sensory-motor capacities of the organism. This observation amounts to the claim that cognition is not representation of an independent world.

3 The Autonomous System and the Notion of Information

What posed an ultimate challenge to the idea of cognition as representation within the cognitive sciences was the idea of the brain as an autonomous network of relationships. Even before enactive theorists in the 1990s started to directly question the idea of complex neural networks being representational, cognitive

scientists had in fact been drifting away from the idea of the mind/brain as an input-processing-output system, focusing instead on the idea of the brain as self-organizing and autonomous. For example, Minsky (1986: 288) observed that

> it makes no sense to speak of brains as though they manufacture thoughts the way factories make cars. The difference is that brains use processes that change themselves–and this means we cannot separate such processes from the products they produce. In particular, brains make memories, which change the way we'll subsequently think. The principal activities of brains are making changes in themselves [Minsky's emphasis].

Here Minsky defines cognitive processes as self-modifying rather than representational ones, and he immediately points out that the "idea of self-modifying processes is new to our experience, [so] we cannot yet trust our commonsense judgment about such matters" (1986: 288). The enactive approach takes the autonomy perspective in explaining cognition and explores the significance of the claim that the brain is an autonomous system. According to this approach, any living organism must be understood as an autonomous system, and the mind emerges from self-organizing processes interconnecting the brain, body, and environment. The autonomy perspective has significant consequences for the concept of information/meaning.

Varela et al. (1991: 138) point out that "if we claim that the function of [cognitive] processes is to represent an independent environment, then we are committed to construing these processes as belonging to the class of systems that are driven from the outside." Thus, in the symbolic and connectionist paradigms, which explain cognition in terms of representational-computational systems, cognitive systems are conceived of as *heteronomous systems* (i.e., controlled from the outside). A system like this receives an input (assigned by an observer outside the system), goes through discrete internal states (a sequence of computations), and finally produces an output. In other words, the system proceeds from sensing, through perceiving, through thinking, to acting. The internal cognitive states carry information about the world, that is, are representational. The representations are objective in the sense that they are structures encoding information about an independent world. Thompson (2007: 52) explains that "this objectivist notion of information presupposes a heteronomy perspective in which an observer or designer stands outside the system and states what is to count as information (and hence what is to count as error or success in representation)." Here we can see that cognitive science with its underlying conception of a posteriori representations never extricated itself from the classical philosophical dilemma, the opposition between realism and idealism. According to the realist/objectivist, the final test for the validity of our representations is the independent world. However, the idealist/subjectivist answers that the test is not feasible since our representations (the so-called *veil of ideals*, i.e., concepts standing between us and the world) provide the only access we have to the independent world. Indeed, we cannot leave our bodies to assess the degree of fit between our mental representations and the world.

The enactive approach offers a way out of the above dilemma by treating cognitive processes as autonomous non-representational processes, in effect

proposing a new epistemology, which was called above *experientialist* (following Lakoff and Johnson 1980). As Thompson (2007: 43) explains, an autonomous system "is defined by its endogenous, self-organizing and self-controlling dynamics, does not have inputs and outputs in the usual sense, and determines the cognitive domain in which it operates." Autonomous systems belong in the class of *complex dynamic systems* (a notion borrowed from complex systems and dynamical systems theory). Cognition is a complex dynamic phenomenon. Dynamic phenomena are ones that change over time and are complex in the sense of being neither random nor ordered/predictable but displaying changing and unstable patterns (Kelso 1995). In this view, cognition is not a sequence of discrete stages transforming an input into an output, but a continuum of overlapping processes (sensing, perceiving, thinking, feeling, imagining, acting), all simultaneously influencing one another. Such processes are constantly ongoing: There are no clear starting points and no clear endpoints. The goal of the system is to maintain appropriate change (van Gelder 1998). As, among others, Freeman (1999a) and Kelso (1995) claim, *complexity as dynamic instability* appears to be fundamental to all kinds self-organizational and adaptive processes characterizing biological and social life on earth.

A basic property of autonomous systems is that they are organizationally and operationally closed. Distinguishing between the two kinds of closure, Thompson (2007: 45) states that "*organizational closure* refers to the self-referential (circular and recursive) network of relations that define a system as a unity, and *operational closure* to the reentrant and recurrent dynamics of such a system." The paradigm case is the biological autonomy of a living cell (Varela 1979). The constituent processes of this kind of autonomous system are metabolic reactions in a cell. Such metabolic processes depend on each other, forming a network. They produce molecular components which determine what kind of a bounded system the cell becomes and how it interacts with its environment, all of which accounts for what metabolic processes are possible. The notion of closure does not mean closure to what lies outside: The system is not closed to interactions with its environment, but it is said to bring forth its own domain of interaction (its own external world). Operational closure means that the products of the system's operations remain within the system. A living cell must constantly exchange matter and energy with its environment to maintain the self-producing metabolic network. Autonomous systems must be coupled to their environment/other systems. Structural coupling amounts to structural congruence resulting from recurrent interactions with the environment/other systems. The change of an autonomous system over time results from its organizational-operational closure and structural coupling.

In saying that the enactive approach takes the autonomy perspective on explaining cognition, it should be emphasized that it is just a perspective, one that aims to explain cognition in its own terms and not in terms of an input–output predefined by an external observer. We can always shift perspectives depending on our interests. The nervous system can be seen as heteronomous if we view it as a component system with functions defined in relation to the larger organism (e.g., sensing and guiding motor actions). However, taking this perspective, we are actually dealing with the

larger system of the organism. The fact that the brain is part of the nervous system, and this system is embedded in the body of the organism, which in turn is embedded in its environment seems to undermine the claim that the brain or the organism are autonomous. However, as Thompson (2007: 51) argues, "there is no inconsistency between characterizing the nervous system and organism as autonomous and emphasizing their somatic and environmental embeddedness." It might seem that the nervous system cannot have operational closure (with products of its processes staying in the system) if it is in a sensory-motor coupling with what lies beyond (i.e., the body and the environment). In this respect, Thompson (2007) points out, we have to distinguish between the operation of the system as such and its performance in relation to any context in which it might be observed. The nervous system is operationally closed in the sense that a change of activity in one neuron results in a change in another (i.e., the system's activity always turns back on itself). However, the performance of the neural network as a whole (i.e., the set of activation patterns available to it) depends on its history of interactions (structural couplings) with its environment. In addition to this, Thompson (2007) makes the fundamental observation that the terms *system*, *autonomy*, and *heteronomy* are heuristic notions, that is, they are our aids in understanding phenomena of interest to us. Thus, what we see as a system, and whether it is autonomous or heteronomous, is context-dependent and interest-relative. It is possible to adopt a heteronomy perspective in studying any system, so also the nervous system. However, as Thompson (2007: 50) concludes, this perspective does not explain but obscures

> certain observable patterns of behavior, namely, patterns arising from the system's internal dynamics rather than external parameters. An organism dynamically produces and maintains its own organization… and thereby also brings forth its own domain of interaction… A heteronomous perspective does not provide an adequate framework to investigate and understand this phenomenon; an autonomy perspective is needed.

The autonomy perspective brings with it a specific conception of information. The objectivist notion of information requires the presence of an observer outside the system (such as the system's designer in the case of a connectionist network) who has independent access to the world beyond the system and decides what information is, that is, what the input is and what the desired output of the system must be. For an autonomous system, information does not exist in such a system-independent sense. What counts as information arises always in the context of a system's internal dynamics and a related mode of structural coupling with its environment. A relevant illustration here will be the neurobiological binding problem (cf. Freeman 1995; Thompson 2007). Some kinds of cortical neurons are known to be most sensitive to types of sensory stimuli such as lines or spots, and are therefore called *feature detectors*. The binding problem consists in how distinct features such as shape, color, and motion should be bound together to render an accurate representation of an object. The problem is formulated from the heteronomy perspective. The system is given a predefined input (distinct features) and a predefined task (an acceptable combination of features producing an object). The notions of *feature* and *object* are defined by an observer who has access to the

environment independently of the system, and tries to map features to neuron and neurons back to objects. The system (the organism's brain) has no access to features and objects in such a system-independent sense. As Freeman (1995: 54) points out, "neurons that respond to edges, lines, and moving spots are manifesting the local topological properties of neuronal maps… No objects or features are manifested at the level of the single neuron, assuredly not those used by an observer." From the autonomy perspective, the binding problem is the observer's problem but not the brain's problem. As Thompson (2007: 53) explains, "neurons do not detect objectively defined features… [but] make sense of stimulation by constructing meaning… [which] arises as a function of how the brain's endogenous and nonlinear activity compensates for sensory perturbations." Here is a passage from Freeman (1999b) explaining how the brain makes stimuli into information:

> The emergent pattern [of neural activity] is not a representation of a stimulus…. It is a state transition that is induced by the stimulus, followed by a construction of a pattern that is shaped by the synaptic modification among cortical neurons from prior learning. It is also dependent on the brain stem nuclei that bathe the forebrain in neuromodulatory chemicals. It is a dynamic action pattern that creates and carries the meaning of the stimulus for the subject. It reflects the individual history, present context, and expectancy, corresponding to the unity and wholeness of intentionality. Owing to dependence on history, the patterns created in each cortex are unique to each subject. (p. 150)

The autonomous brain has no access to system-independently defined information. The meanings of the autonomous brain's states that are induced by its stimulation (made possible by its sensory-motor mode of structural coupling) emerge from the dynamic activation patterns as a function of its organizational-operational closure. By creating meaning, autonomous organisms "enact an environment inseparable from their own structure and actions… In phenomenological language, they constitute (disclose) a world that bears the stamp of their own structure" (Thompson 2007: 59).

4 Cognitive Science and Madhyamika

Fodor (1981: 298) has observed that "in intellectual history, everything happens twice, first as philosophy and then as cognitive science." Accordingly, in presenting the above overview of the debates raging in cognitive science over the mind's architecture, my intention was to point to their relevance to the Western philosophical dilemma of whether reality is objective (and independent of our cognition) or subjective (and so our mind's projection).

Rejecting the notion of meaning as representation and claiming instead that meaning (and ipso facto a world) is enacted by the cognitive agent in structural coupling with its environment, cognitive scientists reject the opposition between subjectivism/idealism and objectivism/realism, and demonstrate their affinity to the phenomenological tradition (cf. Thompson 2007). What is more and more

recognized is the converging epistemological stance between the enactive approach of cognitive science and the non-dualist philosophy of Buddhism with its long tradition of reflection on human experience, studying the mind and explaining its functions (cf. Varela et al. 1991). As Wallace (2003: 6) remarks,

> Buddhism fails to fit neatly into any of our categories of religion, philosophy, and science, for the simple reason that it did not develop in the West, where these concepts originated and evolved. Buddhism offers something fresh and in some ways unprecedented to our civilization, and one of its major contributions is its wide range of techniques for exploring and transforming the mind through firsthand experience.

The focus on human experience of the world and the shift away from the idea of the world as extrinsic and independent to the idea of a world as inseparable from the autonomous processes of the cognizing agent is what lies at the core of the similarity between the enactive approach of cognitive science and the non-dualist Madhyamika (The Middle Way) philosophy of Nagarjuna, a second buddha in this world and one of the major six commentators on the Buddha's teachings (see, e.g., Westerhoff 2009).

The Madhyamika school of the Buddhist tradition points out that our daily life is marked by an unreflective tendency to cling to two things we take for granted. One is our sense of unity and identity through time: It is our deep conviction that we have an enduring self. Our second deep conviction is that the world we live in exists independently of us and our ways of knowing. Madhyamika explicitly recognizes that both these tendencies are manifestations of our human yearning for an ultimate ground in our unstable existence, and are the cause of human suffering. Learning to let go of these two convictions (*groundlessness*) is the goal of Buddhist teaching. While the Eastern tradition has questioned the very tendency to search for an absolute ground, most of the Western philosophical tradition has been concerned with whether the absolute ground is to be found in the outer world (objectivism/realism) or in the inner world (subjectivism/idealism). The Madhyamika philosophy sees the tendency of the human mind to cling to a ground as the source of the twin extremes of absolutism and nihilism. It thus recognizes the link between the two, pointing to the fact that since all human efforts to find an absolute ground end in a fiasco, they naturally lead to frustration and contribute to human suffering.

In their research, cognitive scientists have experienced these very frustrations, the representationist view of cognition being one of the forms that the search for a ground can take. Cognitive scientists have experienced the feeling of anxiety arising when we realize we cannot trust the world out there as our stable reference point, where all our knowledge is grounded. Losing such a foundation, we experience what Bernstein (1983: part III) calls the *Cartesian anxiety*, a fear of chaos. Minsky (1986) writes about our inability to find such a fully independent world as the source of our knowledge. He comes to the conclusion that what the world reveals to us results from the structure of our interactions with it. Therefore, whatever we can say about the world is as much about us as it is about the world. As Minsky (1986: 304) puts it,

> Whatever you purport to say about a thing, you're only expressing your own beliefs. Yet even that gloomy thought suggests an insight. Even if our models of the world cannot yield good answers about the world…, they can tell us something about ourselves.

He explicitly expresses here a feeling of gloominess about our plight, finding comfort in gaining insight into ourselves. It seems we are condemned to believe in an objective world, that is, condemned to treat our mental representations as if they were the objective reality, because our experience of the world feels as if it were of an immediate objective world. When this Cartesian ideal of the mind as a mirror of nature cannot stand the test of rigorous scientific examination of cognitive processes, we tend to search for an inner ground we could trust. We can notice such a subjectivist turn in Minsky's statement that whatever we purport to say is just an expression of our beliefs, which amounts to the claim that cognition is a matter of subjective representation.

There is however, a problem with our falling back on ourselves in search for an inner ground because our belief in a permanent self has never been empirically verified. Our inner world is described as a stream of consciousness, a flow of momentary mental occurrences, and we are unable to discern any experiencer there. As Hume (1739–40/1964) has noticed, "I never catch myself at any time without a perception, and never can observe anything but the perception" (book I, part IV, section VI). Thus, on reflection, our experience turns out to be empty of a self. As Varela et al. (1991) observe, in the Western tradition this problem is dealt with in two ways. Recognizing that reflection contradicts our sense of self, some choose to turn away from the problem as Hume does, agreeing to a split between life and reflection. Others choose to postulate a transcendental self which is simply inaccessible to experience. The most notable example is Kant's transcendental ego. As Kant (1781/1963: 136) explains, because "no fixed and abiding self can present itself in [our] flux of inner appearances… there must be a condition which precedes all experience, and which makes experience itself possible… This pure original unchangeable consciousness I shall name *transcendental apperception*." In effect, Kant also turns away from the problem rather than confronts it. The point is not whether there is an absolute self that we cannot know, but rather to develop an understanding of our human condition, our situation as we experience it here and now. Thus, we face the situation when we believe in a permanent self whose existence cannot be verified empirically, and we also believe in a world to which we have no access. Realizing our inability to find a ground either inside or outside the mind and being unable to abandon our desire for a ground, we cannot avoid the turn toward nihilism. This is the point that Madhyamika makes, explicitly linking absolutism and nihilism.

In Buddhist teaching, absolutism and nihilism are forms of *grasping*, which underlies our attempts to find permanence in an impermanent world. Relinquishing all our tendencies to grasp (through mindfulness/awareness meditation), we can begin to experience all phenomena as free of any absolute ground, and it is this groundlessness of phenomena which is the condition for their *interdependent arising*. A similar idea of co-emergence as the result of collective self-organization has been

developed in the enactive approach. Autonomous systems enact or constitute a world which is inseparable from their own structure (their organizational-operational closure), which is in turn inseparable from their mode of structural coupling with their environment. Thus, there are two things at the heart of the similarity between the enactive approach of cognitive science and the Buddhist school of Madhyamika, namely, a focus on developing an understanding of how we experience the world and a shift to the idea of the world as inseparable from the autonomous processes of the cognitive agent structurally coupled with its environment.

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The Antonymous Nature of *Even* and *Only*

Aleksander Szwedek

Abstract Beaver and Clark complain that "… it is hard to put one's finger on the nature of [the] intuitive antonymy" (Sense and sensitivity: how focus determines meaning, 2008: 55) of *only* and *even*. Former analyses (Fraser 1972; Jackendoff 1972; Beaver and Clark 2008) were based on the concept of expectations. I analyse the meanings of *even* and *only* in terms of category inclusion and exclusion. *Even* and *only* require a preceding context, *Some people tried on the pants* and *Some people were talking* respectively, which accounts for the contrast between Max and the other people. The meaning of *even* in *Even Max tried on the pants* has the following components: (1a) The speaker assumes that Max and people from two different sets, X and Y. (1b) Max moves from category X and joins Y. Surprise (expectations) is a consequence of the clash between the speaker's assumption and the actual event. A similar analysis of *only* in *Only Max was eating* renders an antonymous interpretation. (2a) The speaker assumes that Max and people form one set W. (2b) Max leaves W and forms a separate set Z. Again, surprise (expectations) is a consequence of the clash between the speaker's assumption and the actual event. Thus, I see the antonymy of *even-only* pair in the reversed direction of movement: INTO the category Y in the case of *even* and OUT OF the category W in the case of *only*. "In considering the meanings of *only* and *even*, one is tempted to say that they are, in some sense, opposites. Yet it is hard to put one's finger on the nature of this intuitive antonymy." (Beaver and Clark 2008). The present chapter is a response to Beaver and Clark's challenge, proposing a solution on the basis of an analysis different from all others that have so far been offered.

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1 Introduction

Originally, *even* and *only* were discussed in terms of presuppositions by logicians as well as linguists. Of the latter, one has to acknowledge the works of Fillmore (1965), Kuroda (1966), Lakoff (1968), Horn (1969), Fraser (1972), Anderson (1972), Jackendoff (1972), and, in Poland, Hnatowicz (1981) and Grochowski (1986) for Polish, and Szwedek (1986, 1990) for English. The discussion was revived recently by Beaver and Clark (2008) in a formal pragmatic framework, and Toosarvandani (2009) in a discourse-oriented framework.

Before embarking on analyses, I need to clarify the problem of the contextual nature of *even* and *only*.

In my 1990 paper I stated that

> the essence of *even* consists in double contrast. Firstly, a contrast between the expressed state (Max tried on the pants) and what is considered to be the normal, expected state of the object (Max would not try on the pants on that particular occasion for whatever reason). Secondly, a contrast between what is considered to be the normal state of the object and what is considered to be the state of other comparable (mentioned) objects (other people try on the pants). By emphasizing the contrastive factor of the meaning of *even* I wanted to bring out its contextual character. Nothing can be contrasted unless there is something to contrast it with. In Szwedek (1986) I also wrote that the contrastive character of *even*-sentences is supported by the fact that *even* does not go together with cleft sentences (cf. Fraser 1972: 156–157) which are themselves contrastive. All this means that *even*-sentences are natural sequence sentences. (Szwedek 1990: 91–92).

In earlier research, the meaning of *even* and *only* was discussed in terms of presuppositions for sentences in isolation as, for example Horn's words indicate: "The availability of such scales explains why both (22) and (26) […] are far better than (23), at least in isolation." (Horn 1969: 101). The point is that in real communication, no sentences are isolated. Additionally, van Dijk (1972) claimed that "Since presuppositions are always represented as sentences, we may consider the set of presuppositions, followed by the sentence(s) presupposing them, to be part of a text." (van Dijk 1972: 103). It is simply hard to imagine that sentences like

Even John tried on the pants
or
Only John tried on the pants

could be used to open a conversation between, say, Fraser and Jackendoff.

I follow van Dijk in his claim, and this is why I write about the contextual nature of *even* and *only*. (cf. Szwedek 1990).

The syntactic behaviour of the particles *even* and *only* is well known. They associate with the item in focus. For example:

1. *Even* JOHN gave his daughter a new bicycle.
2. John gave *even* his DAUGHTER a new bicycle.
3. *Only* JOHN gave his daughter a new bicycle.
4. John gave *only* his DAUGHTER a new bicycle.

However, when *even* and *only* are in the auxiliary position and *bicycle* is stressed, as in

5. John *even* gave his daughter a new BICYCLE.
6. John *only* gave his daughter a new BICYCLE.

"*even* can go with *a new bicycle*, the VO, and perhaps the entire S." (Jackendoff 1972: 248).

This shows, as I claimed earlier (Szwedek 1986, 1990), that focus and the so-called 'scope of focus' are entirely different phenomena. The so-called scope of focus is independent of the focus in the sense that what is referred to as 'scope' is in fact contextually new information in the sentence, while focus is identified with prosody in the form of sentence stress coinciding with new information segment according to rules formulated in Szwedek 1976 and 1986.

Beaver and Clark describe focus as "the word carrying the greatest prosodic prominence" (2008: 6), following Ladd (1996: 45–46) in holding that in "English, focus is typically marked by a nuclear pitch accent; i.e. the last pitch accent in a phonological phrase". (Beaver and Clark 2008: 11). In that, they ignore works that cast doubt on such simple treatments of focus. For example, Estebas-Vilaplana (2000) holds that prominence is in fact a linguistic abstraction that may have several phonetic manifestations, such as, duration (Cooper et al. 1985), loudness (Wells 1986) and pitch (Fry 1958; and Ladd 1996). Toosarvandani (2009) observes that "(a) Focus is an abstract property: it has no unique formal realization—either across languages or within a single language. (b) A falling pitch accent will not do: It is neither a necessary prosodic correlate of focus nor a sufficient one (see Partee 1991: 21 on foci that lack pitch accents; Gussenhoven 1999: 46 for pitch accents that are not foci; and Selkirk 1995: 544 on the phenomenon of focus projection)."[1]

Semantically, *even* has been described in terms of expectations (introduced by Fraser 1972 and by Jackendoff 1972) in terms of "special, unusual, or unexpected […] connection of the constituent with the event", recently repeated by Beaver and Clark: "It is now the standard view (a view with which we agree wholeheartedly) that scalar additives comment on expectations that addressees have relative to a salient ordering of propositions." (2008: 71).

2 Analyses

Fraser proposed the following three-point explication (2.a–c.) of the meaning of *even* of 7.a.

7.a. *Even* Max tried on the pants.
8.a. Max tried on the pants.

[1] Available at: http://www.stanford.edu/class/linguist236/materials/11-18-toosarvandani-%20focus.pdf.

8.b. Other people tried on the pants.
8.c. The speaker would not expect or would not expect the hearer to expect Max to try on the pants.

According to the position I formulated earlier, 8.b. is the context for 7.a.

Essentially agreeing with Fraser, and Beaver and Clark, I suggest a more precise analysis of *even* and *only* leading to the conclusion that the two particles under discussion are antonymous. Analysing 7.a. we may conclude that the essence of the meaning of *even* consists in double contrast: first a contrast between the expressed state (Max tried on the pants) and what is known as the normal state of the object (Max does not try on pants). Secondly, a contrast between what is known as the normal state of the object (Max does not try on pants) and the state of other comparable objects (other people try on pants).

With 8.b. being the preceding context, and 8.a. being the actual statement, what is left as the meaning of *even* is 8.c.

I suggest that 7.a. can be described in a different way.

7.a. *Even* Max tried on the pants.
9.a. The speaker expected that Max and people form two different sets, X (Max not trying on the pants) and Y (people trying on the pants).
9.b. Max left the category X and joined Y, (X $\rightarrow$ Y), with Y $>$ X in the above example.
9.c. Basing on 9.a., the speaker did not expect 9.b.

Consider now the semantics of *only* in 10.a.

10.a *Only* Max was eating.
the context of which might be 10.b.
10.b When I entered the room, everybody was talking. *Only* Max was eating.
I think 10.a. can be analysed in a way similar to that of 7.a.:
11.a The speaker expected that Max and everybody form one set W.
11.b Max left W and formed a separate set Z (W $\rightarrow$ Z), with W $>$ Z (Max).
11.c Basing on 11.a., the speaker of 11.a. did not expect 11.b.

3 Conclusions

The analysis presented above allows to propose a solution to Beaver and Clark's problem with the antonymous nature of *even* and *only*. The analysis showed that *even* and *only* require two sets of participants, one in the preceding context sentence and one in the *even/only* sentence. The antonymy of *even* and *only* consists in the opposition of inclusion versus exclusion, more specifically, the inclusion of

the set in the *even* sentence into the set of the preceding context sentence, and the exclusion of the set in the *only* sentence from the set in the preceding context sentence.[2]

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[2] It is possible that a similar analysis of the association of *even* and *only* with verbs would lead to similar conclusions. Consider, for example:

Harry rested and Max even slept.
#Max slept and Harry even rested.
Harry slept and Max only rested.
#Max rested and Harry only slept.

where 'rest' is a broader category than 'sleep' (cf. also Horn 1969, and Szwedek 1990). However, that problem requires a separate study.

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