PART THREE: CLASROOM

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Researching grammar learning strategies: Combining the macro- and micro-perspective

1. Introduction

The last almost four decades that have passed since the publication of the first seminal papers on the characteristics of good language learners (e.g. Rubin 1975; Stern 1975) have seen a flurry of research activity directed at different aspects of language learning strategies (LLS) (e.g. Anderson 2005; Macaro 2006; Cohen and Macaro 2007; Griffiths 2008; Cohen 2011; Oxford 2011; Pawlak 2011a). Interest in this area has not abated despite the reservations that have been expressed about the concept itself and proposals that it should be replaced with a more inclusive and more process-oriented construct of self-regulation (cf. Dörnyei and Skehan 2003; Dörnyei 2005), with the effect that major advances have been made when it comes to the identification and classification of LLS, variables affecting their use, the intricate relationship between LLS and target language proficiency, or the efficacy of training programs. What may come as a surprise, however, is the fact that some areas have been rather blatantly neglected by researchers, one of them undoubtedly being the actions and thoughts in which language learners engage when studying grammar rules and trying to gain greater control over them, or what can be referred to as grammar learning strategies (GLS), a gap that has been acknowledged by leading experts on LLS. Anderson (2005: 766) writes, for example, that "[w]hat is greatly lacking in the research are studies that specifically target the identification of the learning strategies that L2 learners use to learn

grammar and to understand the elements of grammar". Oxford and Lee (2007: 117), in turn, comment that "[u]nfortunately, most researchers who have become well known in the L2 learner strategy area (…) have either ignored grammar strategies or slid them into the more general 'cognitive strategy' category, thereby unwittingly hiding these strategies from view". Such opinions have recently been echoed by Oxford (2011: 256), who remarks that "(…) grammar strategies have had very little attention. In fact they have garnered the least interest and concern of any area of L2 learning strategies".

In view of the fact that empirical evidence in the domain of grammar learning strategies is still extremely scare, there is an urgent need for more studies, such that would, on the one hand, allow us to come up with a viable classification of GLS and enable appraisal of their application, and, on the other, shed light on the factors impacting their application as well as providing us with insights into how this use is tied to attainment in learning not only grammar but the target language (TL) as a whole. This challenge brings with it, however, a number of methodological issues, some of which have to be tackled in the more general field of LLS research, and others which are specifically related to the study of GLS. The former are connected, among other things, with the choice of a quantitative or qualitative approach, both of which can be more general or situation-specific. The latter mainly stem from the fact that, since relevant research is still in its infancy, there is no one generally accepted classification of strategies employed for learning grammar, with the effect that data collection instruments vary from one research project to the next, some of them being hardly adequate for the task. The present paper aims to address these crucial issues by highlighting the decisions that have to be made when investigating GLS, and it emphasizes the need to combine for this purpose what can be referred to as the macro-perspective, involving reliance on questionnaires based on Likert-scale items that offer insights into general use of GLS, and what can be labeled the micro-perspective, entailing the employment of tools tapping the application of GLS during the performance of specific tasks. It starts with elaborating a definition of grammar learning strategies and elucidating their importance for the development of explicit and implicit second language knowledge, which is followed by a brief overview of studies of this area that have been conducted to date. Emphasis is then shifted to methodological issues, in particular the challenges involved in the classification of GLS and the measurement of their use, the place of the macro-perspective and micro-perspective in research into GLS, and the description of two studies each exemplifying one of these approaches. The paper closes with guidelines regarding the methodology and foci of future research projects into grammar learning strategies.

2. Definition and scope of grammar learning strategies

Given the difficulties in defining second language learning strategies which are evident in Dörnyei's (2005: 166) conviction about "(…) the lack of an unambiguous theoretical definition of the learning strategy construct", providing a precise definition of GLS poses a formidable challenge, as any such attempt is bound to suffer from flaws, the most important of which is perhaps drawing a clear-cut distinction between activities that are part and parcel of any learning process and such that are strategic in nature (cf. Dörnyei 2005). While these concerns are salutary and it is indeed necessary to tease out such differences and to confront a number of other issues related to the concept, as Griffiths (2008) quite successfully manages to do, for example, in the opinion of the present author, it would be much too premature to get rid of the construct of learning strategies, with the effect that definitions of LLS can serve as a point of departure for defining GLS. One such characterization, which is in fact an extension of a much earlier definition of LLS proposed by Oxford (1990) comes from Oxford and Lee (2007: 117), who posit that "(…) grammar strategies are actions and thoughts that learners consciously employ to make language learning and/or language use easier, more effective, more efficient, and more enjoyable". A similar definition, which has been adopted as a point of reference in the present paper, is offered by Cohen and Pinilla-Herrera (2009: 64), who describe grammar learning strategies as "deliberate thoughts and actions that students consciously employed for learning and getting better control over the use of grammar structures". Despite subtle differences, what these two definitions have in common is that they share the assumption that the learning of grammar cannot be confined to understanding and remembering grammar rules, but must also involve trying to apply these rules in spontaneous, real-time communication. In other words, they both recognize that the aim of GLS is the development of both *explicit knowledge*, which is conscious and can be accessed only when the learner has sufficient time to reflect upon his or her language use, and *implicit knowledge*, which is subconscious and automatic and is therefore available under any circumstances, including real operating conditions and time pressure (Ellis 2005, 2009). Even if we were to concur with DeKeyser (cf. DeKeyser 2003, DeKeyser and Juffs 2005, DeKeyser 2007) that, owing to scant exposure and age-related constraints, implicit knowledge is hard to come by for foreign language learners, we can still assume that the use of GLS should lead not only to the growth of declarative (i.e. explicit) knowledge, but also automatization of this knowledge to the extent that it can be successfully, effortlessly and rapidly employed to convey genuine messages under time pressure. Obviously, as will become evident later in this paper, such a position has crucial implications for research into grammar learning strategies, since, in order to obtain a complete picture of the whole repertoire of such strategic devices, it is necessary to use

data collection tools that tap both GLS used for formal study of grammar, and such that aid the employment of grammar structures in spontaneous communication (cf. Pawlak 2012a).

What should also be clarified at this point is that not all groups of LLS distinguished in the leading taxonomies, such as those proposed by O'Malley and Chamot (1990) and Oxford (1990), will be equally helpful in learning grammar structures, and the utility of different GLS is bound to hinge upon the specific aspect of the TL grammar being learnt as well as the nature of the task performed. For example, if we take Oxford's (1990) classification as a point of reference, we can assume that while indirect strategies (i.e. metacognitive, social, affective) will play in this case a role similar to that performed in learning any other TL skill or subsystem, the LLS falling within the category of direct strategies will not be beneficial to the same extent, with cognitive strategies playing the most important part, followed by memory strategies and, only on some occasions, compensation strategies. It also seems logical to make the assumption that successful retention of irregular verb forms will in the main call for the application of memory strategies, while attempts at the use of such verbs in different contexts will best be served by reliance on cognitive strategies, in particular some kind of formal and naturalistic practice. Finally, it stands to reason as well that different GLS will be required in the performance of controlled exercises, such as paraphrasing, translation or filling out gaps, and communicative tasks, both *focused* ones, which necessitate the use of a specific linguistic feature for successful completion (i.e. a description of a scene in a park that calls for the use of the present progressive) and *unfocused* ones, where a whole gamut of grammar structures must be used (e.g. a discussion about the advantages and disadvantages of taking part in an Erasmus exchange program) (Ellis 2003). The main reason for this is that in the process of completing a traditional exercise, there is typically ample time to fall back on requisite rules, consciously held as explicit knowledge, a luxury that can hardly be afforded in the course of ongoing communication. Consequently, while it is clearly feasible to engage in analyzing and reasoning when translating or paraphrasing sentences, it is difficult to envisage this subset of GLS being applied during spontaneous, online language production.

3. Previous research into grammar learning strategies

As mentioned in the introduction to the present paper, research into grammar learning strategies is still in its infancy, particularly when it comes to studies that would go beyond the identification and classification of GLS, attempting in particular to offer insights into factors affecting their use, examine the relationship with attainment or gauge the value of strategies-based instruction in this area.

The available studies can be divided into those, usually carried out in the 1990s, where GLS were investigated alongside other language learning strategies, and those that have focused specifically on the strategic devices employed for the learning of grammar, typically conducted over the last few years, which speaks to increasing realization that attempts to master grammar are an integral part of the language learning process.

As regards research in which grammar learning strategies were just one of many types of LLS to be examined and they may not have even been labeled in this way, some interesting insights come from studies of good language learners, mentioned in the introduction to this paper. Rubin (1975), for example, emphasized that success in language learning requires not only a focus on meaning and message communication, but also attention to form and attempts to identify patterns in the target language. Similarly, Naiman et al. (1978), included in their discussion of strategies used by good language learners those that involve the realization of language as a means of communication and interaction, and as a system, while Stern (1983) stressed the need for such learners to rely both on a social learning strategy (i.e. seeking out opportunities for authentic communication) and an explicit learning strategy (i.e. the ability to pay attention to the TL as a formal system that needs to be constantly updated and willingness to engage in study and practice). It is interesting to note that the findings of these early studies have been corroborated in more recent empirical investigation into the characteristics of good language learners, such as the research project undertaken by Griffiths (2008) which showed that higher levels of proficiency are related, among other things, to frequent use of strategies aimed at enhancing the knowledge of grammar. Quite obviously, some strategies for learning grammar were identified in a number of studies undertaken in the 1980s (e.g. O'Malley et al. 1985; Chamot 1987; O'Malley 1987) which provided the necessary data for the development of the influential taxonomies of language learning strategies by O'Malley and Chamot (1990) or Oxford (1990). However, as Oxford and Lee (2007: 117) point out, under the influence of communicative methodology which downplayed the status of grammar, most researchers have been reluctant to investigate them as a category of LLS in its own right. In Poland a landmark study was carried out by Droździał-Szelest (1997), who explored the whole repertoire of LLS employed by secondary school learners, including those used for studying and practicing grammar. The analysis of the participants' responses to an open-ended question dealing with this language subsystem, which drew on the categorization of LLS by O'Malley and Chamot (1990), revealed a marked preference for reliance on traditional cognitive strategies such as deduction, much less frequent use of metacognitive strategies, usually in the form of selective attention, and no instances of socioaffective strategies.

When it comes to research projects that focused only on grammar learning strategies, it is fitting to start with research into the assignment of grammatical

gender to nouns in first and additional languages, a line of inquiry that has been by and large ignored by second language acquisition specialists (e.g. Karmiloff-Smith 1977; Tucker, Lambert and Rigault 1977; Cain, Weber-Olsen and Smith 1987; Stevens 1984; Oliphant 1997). These studies revealed that, depending on learners' sensitivity to different types of cues, grammar strategies could fall into three categories, namely: *morphological* (e.g. word endings), *semantic* (e.g. natural gender of the referent) and *syntactic* (e.g. derivational suffixes), and that their use is moderated by such factors as age, the stage of second language development, the nature of the mother tongue and the additional language, as well as the discrepancies between the two (Oxford and Lee 2007; Oxford 2011). In the domain of SLA, in one of the earliest studies focusing on GLS, Fortune (1992) examined learners' preferences towards different types of self-study grammar practice activities and found that although the participants initially favored tasks based on deduction, they came to appreciate more those based on induction after having been supplied with ample opportunities to engage in discovery learning.

Interestingly, research aimed at the identification of grammar learning strategies has in recent years been particularly robust in Poland, although it should be emphasized that these studies have relied on different data collection instruments, which makes direct comparisons difficult. Mystkowska-Wiertelak (2008a), for example, employed a modified version of Oxford's (1990) *Strategy Inventory for Language Learning* (SILL) with senior high school students and found, contrary to Droździał-Szelest (1997), that metacognitive GLS were the most frequently used, followed by compensation, social, memory and affective strategies. In another study (Mystkowska-Wiertelak 2008b), she collected data on grammar strategy use with the help of a checklist included in the *European Language Portfolio for Senior High School Students and Language Learners in Institutions of Higher Education* (Bartczak et al. 2006) from students majoring in English. It turned out that these advanced learners tended to favor such GLS as discovering rules, highlighting new structures, remembering example sentences or falling back upon reference grammars over understanding and memorizing rules, engaging in different forms of practice or conducting regular reviews of the structures covered during grammar classes. The use of grammar learning strategies has also been investigated in a series of studies undertaken by Pawlak (2008, 2009a, 2010a, 2011b, 2012b), which, again, have drawn on different data collection tools, but have also taken into account the impact of specific contexts of application of GLS. The first of them (Pawlak 2008) used qualitative data collected over two months from diary entries made by English majors and demonstrated that although they reported applying a variety of strategic devices, there was a marked preference for reliance on traditional cognitive strategies such as formal practice, an outcome that was accounted for in terms of the predominant instructional practices used in grammar classes as well as the format of end-of-the-year examinations. Another two (Pawlak 2009a, 2012b) were questionnaire studies, one using a survey

designed on the basis of the framework developed by Oxford and Lee (2007), and the other employing a tool based on a classification of GLS proposed by the present author (Pawlak 2010a), described at greater length later in this paper. Since detailed discussion of the findings is not possible due to space constraints, suffice it to say at this juncture that there was a striking discrepancy in responses to Likert-scale items, which suggested heavy reliance on GLS involved in implicit learning with focus on form (e.g. trying to use specific grammar structures in communication), and those to open-ended items, which provided evidence for the predominance of formal practice (e.g. doing various types of exercises). Of particular interest are also two research projects seeking to explore the use of GLS in the course of performing communicative tasks (Pawlak 2012c) and highly controlled exercises (Pawlak 2012d), which showed that the demands of the activity at hand determine to a large extent the choice of strategic devices. Being embedded in specific contexts, combining quantitative and qualitative approaches to data collection and analysis, and taking into account the characteristics of the participants as well as the nature of the interactions between them, the two studies represent a micro-perspective on the study of GLS and thus the first of them will be described in more detail below.

There is paucity of research that has addressed the relationship between GLS use and second language attainment, factors impacting the choice of these strategies or the efficacy of strategies-based instruction in this area, with the findings being sometimes inconsistent and even contradictory. Tilfarlioğlu (2005), for example, failed to find a relationship between the frequency of use of GLS and Turkish learners' achievement, whereas a positive relationship in this respect was identified by Mystkowska-Wiertelak (2008a, 2008b) in the two research projects mentioned earlier, with the caveat that this outcome was not verified by the requisite statistical procedures. More complex are the findings reported by Pawlak (2009b, 2011c), as although, on the whole, the relationship between the use of grammar learning strategies and attainment was weak, it was stronger and statistically significant in the case of GLS used for explicit deductive learning in one study, and for metacognitive, cognitive and feedback-based GLS in the other. When it comes to the impact of mediating variables, empirical evidence is extremely scant, but some studies have revealed that reliance on GLS may increase with age (Mystkowska-Wiertelak 2008a), and that females tend to employ strategic devices of this kind more often than males as do learners with less experience in learning English (Tilfarlioğlu 2005). Even less is known about the effects of training students in the application of different types of GLS, notable exceptions being studies undertaken by Morales and Smith (2008) and Trendak (2012). In the former, American university students of Spanish who were trained in making mental image associations with a view to assisting them in differentiating the uses of two verbs (i.e. 'ser' and 'estar') outperformed those who did not receive such training in their ability to distinguish between the correct and incorrect uses of

the instructional targets. In the latter, the participants received instruction in the use of memory and cognitive strategies with a view to enhancing their mastery of English emphasis, with the intervention resulting in more frequent reliance on GLS in general and the memory group outdoing the cognitive group, both immediately after the treatment and in the long run.

4. Issues in the classification and measurement of grammar learning strategies

Apart from the obvious fact that the research findings overviewed in the previous section are still fragmentary and sketchy, which clearly points to the urgent need for more empirical investigations in this area, there are also problems with the ways in which GLS were classified and measured in particular studies. It is clear, for example, that most research conducted to date has relied on general taxonomies of language learning strategies, most often the one developed by Oxford (1990) and the data collection tools designed to tap their application, typically the SILL, with only minor adjustments being introduced to better accommodate grammar learning (e.g. Tilfarlioğlu 2005; Mystkowska-Wiertelak 2008a; Trendak 2012). Although this approach is to some extent warranted in light of the fact that the work on comprehensive taxonomies of GLS and related data collection instruments is very much in its initial stages, it is obvious that adopting as a point of reference a general categorization of LLS is not free from shortcomings as some of the techniques may be difficult to extrapolate to the learning of grammar structures while some strategic devices specifically employed for this purpose may simply be left out. It is also difficult to draw comparisons between the results of different studies or to synthesize these findings in a meaningful way if the data are gathered by means of rather disparate research tools, ranging from open-ended questions, through diaries and interviews, to various Likert-scale surveys, which, however, differ as well as a consequence of being developed on the basis of competing classifications. Obviously, as is the case with research into LLS in its entirety (cf. Pawlak 2011a), there are also serious doubts as to whether even a perfectly-designed survey based on a comprehensive and empirically-validated categorization of GLS can ever tell us the whole story with respect to how these strategic devices are used, the variables that affect their application as well as the consequences of their employment for the mastery of grammar, which implies that such a macro-perspective should be augmented with a micro-perspective that would be more context-sensitive and nuanced.

Attempts to come up with a taxonomy of grammar learning strategies have been made by Oxford and Lee (2007), Cohen and Pinilla-Herrera (2009), and Pawlak (2009c, 2010a, 2012a). As for the first of these, Oxford (2011: 257) explains that the two scholars "(…) offered an overview of four modes for L2 grammar

instruction (two implicit modes: focus on meaning and focus on form, and two explicit modes, inductive and deductive), which are allied with different learning strategies. These modes differ according to whether meaning or form is primary, whether the grammatical form is enhanced or otherwise made noticeable, whether the grammar rule is supplied for the learner to apply, and whether the learner is expected to induce a rule or ignore structure entirely". Since a focus on meaning is unlikely to induce any attempts to learn or gain greater control over grammar, their theoretical framework includes three categories of GLS, that is:

1. *strategies for implicit learning which includes a focus on form* (e.g. noticing structures which cause problems with communication, paying attention to how more proficient people say things and then imitating);
2. *strategies for explicit inductive learning* (e.g. taking part in rule-discovery discussions, creating and testing hypotheses about how structures work;
3. *strategies for explicit deductive learning* (e.g. previewing a lesson to identify the structures to be covered, paying attention to the rule provided by the teacher or coursebook).

Cohen and Pinilla-Herrera (2009), in turn, did not develop a taxonomy of grammar learning strategies *per se* but designed a website intended to help learners improve their knowledge of Spanish grammar, drawing upon the information about the most problematic areas indentified through online questionnaires and interviews for teachers and students. Such data provided a basis for the website which, on the one hand, raises the users' awareness with respect to their current strategy use and, on the other, offers examples of a number of strategies which have proved to be useful in studying Spanish grammar, both those helpful in learning specific grammatical features, and those that can be beneficial in learning a variety of target language forms. Apart from details concerning the grouping of specific GLS or the sources from which they were derived, the main difference between the perspectives adopted by Oxford and Lee (2007), and Cohen and Pinilla-Herrera (2009) is that while the former offers a framework that can be utilized to describe grammar learning strategies in any language, the latter is language-specific in the sense that many of the proposed techniques aim at facilitating the learning of the peculiarities of Spanish grammar only.

While the approach embraced by Cohen and Pinilla-Herrera (2009) is commendable and it may in fact indicate the direction that research into GLS should go in the future, it is the belief of the present author, that at this still very much initial stage of empirical investigations, it is necessary to propose taxonomies that would be applicable to a range of languages, which is the perspective adopted by Oxford and Lee (2007). Still, their taxonomy also suffers from a number of shortfalls, the most serious of which being the exclusion of learners' viewpoint, the omission of different forms of practice which constitute part and parcel of grammar teaching and learning in most foreign language contexts, or the failure to incorporate the categories of LLS included in the leading classifications (cf.

Pawlak 2009b, 2012a). For this reason, there was a need to develop an alternative categorization of grammar learning strategies, such that would be much more comprehensive and thus truly reflective of the actions and thoughts that learners engage in when trying to understand and gain control over grammar structures. Such an attempt was made by Pawlak (2009c, 2010a, 2012a), who set off with the premise that a taxonomy of this kind should:

1. build upon existing classifications of LLS;
2. draw upon a current classification of methodological options in teaching TL forms;
3. be informed by research findings, however scant and partial these might be.

Thus, the point of reference in the construction of the taxonomy was the division of language learning strategies proposed by Cohen and Dörnyei (2002), which is a compromise between the classifications developed by O'Malley and Chamot (1990) and Oxford (1990), modified items from Oxford's (1990) SILL, and the inventory of techniques and procedures that can be used in form-focused instruction introduced by Ellis (1997) and later modified by Pawlak (2006).

In accordance with these tenets, the taxonomy comprises four broad group of strategies, namely:

1. *metacognitive strategies*, which are applied to consciously supervise and manage the learning of grammar by planning, organizing, monitoring and evaluating this process, and include such GLS as seeking opportunities to practice grammar structures in different ways, having specific goals and objectives, or scheduling reviews of the structures covered in class;
2. *affective strategies*, aimed at regulating emotions and motivations involved in the study of grammar, such as trying to relax when experiencing difficulties in understanding or using this subsystem, encouraging oneself to practice structures that pose serious problems, or keeping a diary including comments on learning grammar;
3. *social strategies*, which entail interaction with other learners or target language users with the purpose of improving the knowledge of grammar and might take the form of asking the teacher to repeat or explain a grammar point that has not been fully understood, practicing grammar structures with peers, or helping those who experience problems when trying to understand or use specific linguistic features;
4. *cognitive strategies*, which represent the mental operations and processes taking place when learning and using grammar structures.

Constituting the core of the classification, cognitive strategies are the most numerous and they are further subdivided into four groups, following the division of techniques and procedures in teaching grammar mentioned above (Ellis 1997; Pawlak 2006), namely:

1. *strategies aiding the production and comprehension of grammar in communication tasks*, which include, for example, reading for pleasure or

watching television to enhance the knowledge of grammar, or comparing one's output with that of more proficient language users to see how it can be improved;

2. *strategies employed in developing explicit knowledge of grammar,* which can be based on *deduction*, such as paying attention to rules provided by the teacher or the coursebook or highlighting new grammar structures graphically (e.g. coloring, underlining), and *induction*, such as trying to discover grammar rules through analyzing examples or drawing upon electronic resources (e.g. websites, corpora) to figure out how rules work;
3. *strategies employed in developing implicit knowledge of grammar*, which can involve both *production*, such as doing exercises to practice grammar (e.g. paraphrasing, completion) or trying to use grammar rules in a meaningful context, and *reception*, such as reading or listening to texts containing many instances of a specific structure, or comparing the way grammar is used in speech and writing with one's own output;
4. *strategies employed in dealing with corrective feedback on erroneous use of grammar*, such as listening for any feedback that the teacher provides about the structures used, or attempting to notice and self-correct mistakes when practicing grammar.

This taxonomy served as a basis for the development of a research tool intended to collect data about the frequency of use of GLS that will be briefly described in the following section when outlining the design of the first of the research projects discussed here for illustrative purposes.

However well-designed, theory- and research-driven and carefully validated taxonomies of this kind as well as data collection instruments based on them may be, their main weakness is that they represent *a macro-perspective* on grammar learning strategies, which is predicated on the assumption that it is possible to obtain an accurate picture of the use of GLS in a given population by means of Likert-scale statements that are responded to on a single occasion. Although this approach undoubtedly has its merits, not least because it allows us to employ statistical procedures with an eye to uncovering relationships between different variables, it is also flawed the sense that it largely ignores the qualitative, contextual, situated and individual character of the use of grammar learning strategies (cf. Macaro 2006) in the course of specific language learning tasks. In other words, leaving aside all the other drawbacks of questionnaires as data collection tools, both in general and in research on learning strategies (Chamot 2004; McKay 2006; Dörnyei 2007; Pawlak 2009d), a response to a Likert-scale items such as *I try to use grammar rules as soon as possible in a meaningful context (e.g. use them in my speech and writing)* only provides information about frequency of use of this technique or the extent to which it applies to a particular learner, but tells us little about how exactly it is done, what is meant by "a meaningful context", what type of target language production is involved, or factors that might determine

whether a learner in fact engages in such an activity or the degree of his or her involvement. This indicates that there is a need to adopt a finer-grained approach to the study of GLS that would consider the nature of the learning task, contextual demands, learner characteristics and the degree of clustering (McDonough 1999; Ehrman, Leaver and Oxford 2003), thus embracing what has been referred to above as the *micro-perspective* on the use of strategies for learning and using grammar structures. This would involve tapping the application of these strategic devices in the course of the performance of different types of activities and tasks (e.g. controlled and communicative), taking into consideration the impact of context (e.g. planning) as well as considering individual variables. Clearly, obtaining such data calls for the employment of a variety of data collection tools, such as immediate reports or think aloud protocols used during or after tasks, as well as interviews or transcript analysis. Since it is the belief of the present author that neither the macro- nor the micro-perspective is sufficient in and of itself and they should therefore be viewed as complementary rather than mutually exclusive, the following section includes brief descriptions of two research projects that drew on those two approaches with the purpose of highlighting key issues in their design and the methodological choices and challenges involved.

5. Examples of studies employing the macro- and micro-perspective on GLS

The two studies described below, both of which have been carried out by the present author (Pawlak 2010b, 2012c), are aimed to demonstrate how adopting a macro- and micro-perspective on the study of grammar learning strategies can be achieved in practice. Since in both cases the main emphasis is laid on issues involved in the design of the research project, the methodology employed as well as the procedures of data collection and analysis used, no attempt is made to present and discuss the findings, all the more so that the results of research into GLS have already been overviewed in section 3 above.

5.1. Description of study one (Pawlak 2010b)

The study sought to explore the use of GLS by advanced learners of English, it involved reliance on questionnaires and interviews, and it set out to investigate the following research questions:
The participants were 200 advanced learners of English, who were students in the Department of English Studies, enrolled in year 1 (56), year 2 (48) and year 3 (96) of a three-year BA program.
Their proficiency oscillated between B1 to C1 according to the *Common European framework*, with their own average self-assessment equaling 4.24 on a six-point

scale, they attended extensive English classes as well as a number of content classes (e.g. literature, linguistics) and had some degree of training in foreign language methodology. The data were collected by means of a questionnaire, constructed on the basis of the taxonomy of GLS discussed in the previous section (Pawlak 2010a, 2012a) and interviews with twenty participants who expressed their willingness to take part in additional one-on-one sessions. The questionnaire was intended to provide quantitative and qualitative data and consisted of the following parts: (1) closed and open-ended items providing background info (level, length of study, final grade in a grammar course, importance of grammar, etc.), 70 five-point Likert-scale items subdivided into the categories in the taxonomy together with additional spaces for comments, with the subjects being requested to indicate their responses on a five-point scale (1 – it does not apply to me at all, 5–it perfectly describes what I do), and open-ended items about frequently used ways of learning and practicing grammar structures, favorite strategies for learning grammar, ways of using the structures taught in communication, as well as the encountered problems and ways of solving them. The instrument was used in a pilot study (Pawlak 2009c), which resulted in introducing some modifications in the wording of several items, steps were taken to ensure its validity, and its reliability was established by calculating Cronbach alpha, which stood at 0.82, a value that was satisfactory. The interviews were of the semi-structured type, they took approximately fifteen minutes, and the queries about the use of GLS were posed alongside others issues involved in the learning and teaching of grammar. The data collected were subjected to quantitative and qualitative analyses, depending on the research instrument and the nature of particular items. The former involved calculating means and standard deviations for each Likert-scale item, each category and the whole inventory, with two-tailed independent samples *t*-tests being applied to establish the significance of the differences observed. The interpretation of numerical results followed the guidelines proposed by Oxford (1990), whereby the averages falling within the range of 5.0-3.5 indicate high strategy use, those between 3.4-2.5 medium strategy use, and those in the range of 2.4-1.0 low strategy use. Qualitative analysis consisted in identifying recurring themes in responses to the open-ended items and comments included in the questionnaire as well as the interview data, and it provided a basis for gaining insights into various influences on GLS use.

5.2. Description of study two (Pawlak 2012c)

The study was conducted in order to shed light on the application of grammar learning strategies by advanced learners of English as they were engaged in the performance of a communicative task, or such where the primary concern is with message conveyance rather than a focus on the use of a particular TL feature. More specifically, the research project addressed the following issues:

1. the frequency of GLS use;
2. the categories of GLS used most and least frequently;
3. the effects of the employment of GLS on linguistic accuracy;
4. differences in these areas between more and less advanced students.

The participants were 40 advanced learners of English in an institution of higher education who, similarly to the previous study, were majoring in English, the difference lying in the fact that all of them were students in the third year of a BA program. Their proficiency level fluctuated around C1, with their self-assessment amounting to 4.44 on a six-point scale, they attended intensive English classes, most of their curriculum was taught in English, and they had received the necessary training in foreign language methodology. The students were asked to perform a communicative task within the timeframe of 15 minutes, which entailed talking about two universities on the basis of a set of prompts and reaching a consensus as to which one was a better place to study. Since the participants did not see each other's worksheets, the activity included a requirement for an exchange of information, and the prompts were constructed in such a way that the attainment of the objectives set required the use of the passive voice, which made the activity what Ellis (2003) labels a *focused communication task*.

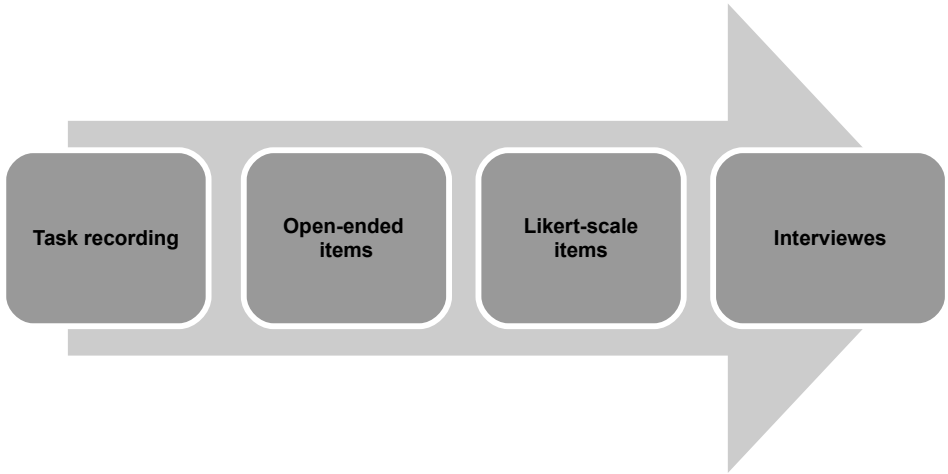

Figure 1. Graphical representation of the data collection procedure

As illustrated in Figure 1, the data were collected by means of four instruments, namely:

1. audio-recordings of 15-minute interactions between the participants as they were working in pairs on the task;
2. a survey, administered immediately after the task, which consisted of such questions as: *What strategies did you use to prepare for the task?*, *What strategies did you use when performing the task?*, *What strategies did you use*

to solve problems in the use of grammar?, *What did you pay attention to when you were speaking?*, *What did you try to do when you were listening to your friend?*, and *What helped you the most when communicating with others?*;

3. a questionnaire containing Likert-scale items, also administered after the task; the statements were selected from the questionnaire used in the previous study on the basis of their potential relevance to the completion of communication-based activities and the learners were told that they should indicate their responses with respect to the task performed; some of them were as follows: *I try to use specific grammar structures in communication (e.g. telling a story)*, *I notice structures that cause me problems with meaning or communication*, *I try to notice and self-correct my mistakes when practicing grammar*, *I ask more proficient learners to help me with grammar structures*;
4. post-task interviews with five high- and five low-level learners, with the assignment to either group being made on the basis of performance in the end-of-the-year examination in English.

The instruments were piloted and amended prior to the study, the order in which were administered was intended to avoid a situation in which the participants would simply copy the Likert-scale items in response to the open-ended ones, and the learners were allowed to use both English and Polish so that they could express their thoughts more precisely. Quantitative analysis involved tabulating the means for the Likert-scale items, computing two-tailed independent samples *t*-tests in order to establish statistical significance, as well as counting the instances of language-related episodes (i.e. segments of interaction featuring an explicit focus on linguistic items) in the transcripts of the recordings. Qualitative analysis consisted in identifying recurring themes in the responses to open-ended items and interview data, as well as looking at the nature of the language-related episodes and their outcomes. This approach enabled the researcher to examine the use of GLS in a specific context and to relate this use to variables that could not be detected through the administration of generalized Likert-scale statements.

6. Conclusions and implications

The present paper has focused on methodological issues which are involved in the study of grammar learning strategies, stressing the need to combine what has been referred to as the macro- and micro-perspective, or research based on data obtained through carefully designed questionnaires administered to large populations and empirical investigations which are much more context-sensitive, tap the use of GLS in specific tasks and seek to account for this use in terms of different variables. Such an approach appears to be indispensable because the micro-perspective can offer insights into the employment of strategies for understanding and using grammar that could not be obtained through sole reliance on a more general approach, which, however, also supplies valuable data and should by no means be abandoned. This

integration can be accomplished either by conducting separate studies embodying the two approaches and later synthesizing their findings, or by designing research projects that would simultaneously enable a more general and more task-specific outlook on the application of GLS. Obviously, adopting a micro-perspective on its own or combining it with a macro-perspective within a single study is bound to pose a considerable challenge, as it calls for reliance upon different sources of data and this information is likely to be much richer and varied, and therefore more difficult to analyze. Despite these difficulties, such empirical investigations are a necessity as they will allow us to better understand when and how grammar learning strategies are used, gauge their value in learning and gaining greater control over grammar structures, explore the factors that might impinge on the employment of such strategic devices in different contexts, as well as investigating the ways in which they can most beneficially be combined to form strategy clusters or chains facilitating the attainment of the learning goals set. Such insights, in turn, will serve as a basis for the development of training programs that can be better tailored to the needs of particular groups of learners, thus resulting in more effective learning of grammar and, hopefully, greater mastery of this subsystem both with respect to understanding specific rules and the ability to employ them in more or less demanding situations.

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