Corpus techniques at work in the ELT classroom

Antonio Pinna

1. Introduction

The present paper has a theoretical and a practical aim: first of all, it discusses the place of corpus techniques used for language exploration and learning in Second Language Acquisition (SLA) and English Language Teaching (ELT) theories. This point is explored by considering how an intentional, descriptive focus on the target language that is likely to promote explicit knowledge could also benefit learners’ interlanguage by facilitating an increase in their implicit knowledge. This is possible only within a theoretical framework that allows for an interface between explicit and implicit knowledge. Moreover, given the lexico-grammatical nature of the lexical phrases, patterns and extended units of meaning that are highlighted through corpus-driven techniques, it is posited that they are free from developmental constraints and may thus become part of the learner’s implicit knowledge through exposure to several contexts of use, practice in analysing their recurrent typical features and reflection on their typical semantic and pragmatic functions. This finds its place in consciousness-raising tasks that have been considered an important element which should be integrated in the communicative language teaching framework so as to combine a focus on intuitive acquisition of knowledge through communicative-oriented activities with a focus on direct exploration and reflection on features of authentic language use.

Secondly, the practical aim consists of a demonstration of how corpus-driven techniques pinpoint the fundamental role of idiomaticity in language use and how this should be focused upon in the language classroom if language teaching aims to promote learners’ effective command of the target language and competent communicative ability. For this reason, concordance lines centring on three common words have been explored and their phraseologies, patterns and functions have been highlighted so as to show the learning potential that these techniques of linguistic analysis can bring to the second and foreign language classroom.

2. The place of corpora in SLA and ELT theory

This section deals with the first aim delineated above, in that it discusses how the exploitation of corpora in language learning could fit into SLA and ELT theories. The consciousness-raising potential of mediated and non-
mediated approaches to corpus applications in language learning is explored with reference to Ellis's (1997) interface position between explicit and implicit knowledge and is then placed within the general communicative language teaching framework as a fundamental stage of tasks focused on the target language that can promote both fluency and accuracy and be generally beneficial to the development of learner autonomy.

Leech (1997; see also Fligelstone 1993; Aston 2000) describes three different ways in which the interaction between corpora and teaching can be described: teaching about corpora, exploiting corpora to teach and teaching to exploit corpora. The first of these is mostly concerned with corpus linguistics being taught as an academic subject, either alone or within the broader area of linguistics. Since the present study focuses on corpora as a resource in the second and foreign language classroom, only the other two of Leech’s models are taken into consideration. The difference between exploiting corpora to teach and teaching to exploit corpora can be reformulated as one between a mediated and an unmediated use of corpora. Indeed, the first model concerns the use of corpus data delivered in different formats to language learners without the need for them to directly access a corpus. In this case the teacher would probably be the one in charge of the data selection process. Inasmuch as this process involves principled decisions about what to teach and the actual development of materials to be used in the classroom, Aston’s (1998) definition of a ‘behind-the-scenes’ approach can also be employed. At its highest level, this approach is used to design syllabuses and develop materials and reference works. At the classroom level, it consists of a series of exercises that the teacher may produce to attract learners’ attention to particular aspects of language forms and usages.

On the contrary, teaching to exploit corpora is a model that promotes learners’ use of corpora without any external mediation. In this way learners can acquire the necessary know-how in order to investigate corpora for their own purposes. In this ‘on-stage’ approach (Aston 1998) it is essential that corpora activities are set in a learner-centred environment that fosters learner autonomy in planning and carrying out corpus-based searches and research projects, while the teacher takes on the role of advisor and facilitator. In its most innovative dimension, John’s (1991; also 1997) data-driven learning revolves around the idea of learners as language detectives who apply inductive procedures to obtain generalisations from authentic examples of language use. Indeed, learners autonomously explore corpora to discover facts about the language they are studying. Bernardini (2000a) highlights how beneficial the serendipitous ?? event of discovering new things is, especially
when advanced learners are involved in corpora investigations without a fixed agenda.

These ways of working on corpora in the classroom are in line with a series of important principles in second and foreign language learning. It is clear that the two models mentioned above are linked to a focus-on-form approach and, thus, pay particular attention to the relationship between explicit and implicit language knowledge. Following Bialystok (1981), Ellis (1997: 110) defines the first as knowledge which is stored in the learner's mind as generalisations of actual linguistic behaviour that are learned through intentional, conscious attention to the formal properties of the input. Implicit knowledge, on the contrary, is intuitive and incidental as it involves little attention to linguistic form in the input and limited awareness of the generalisations that the learner has internalised. This second type of knowledge is acquired through exposure to frequent, salient input and comprises the learner's interlanguage system. Therefore, any attempt to implement form-focused activities in the classroom must reject any non-interface position between explicit and implicit knowledge (e.g., Krashen 1981) and accept the possibility that explicit knowledge can become implicit through form-focused instruction. Ellis's (1997: 123) interface model is thus particularly interesting as it contends that explicit knowledge can be converted into implicit knowledge. This hypothesis is to be preferred to others that maintain an interface position but conflate explicit knowledge with controlled processing and implicit knowledge with automatic processing (e.g., Sorace 1985; O'Malley, Chamot and Walker 1987), since this unnecessarily simplifies the cognitive framework as it seems to imply that all language knowledge starts out as explicit and controlled. Indeed, there is widespread agreement with the claim that any new piece of knowledge is initially characterised by controlled processing that is subsequently automatised through practice. However, Ellis's (1997: 112) hypothesis is quadripartite in that it separates the explicit-implicit paradigm from the controlled-automatic processing one and thus centres on the principle that new knowledge can be obtained either through intentional or incidental attention to specific characteristics in the input before it becomes internalised as generalisation. This information is readily available to one's consciousness in the case of explicit knowledge, while one becomes aware of it only through introspection in the case of implicit knowledge. However, both types can be automatised, so that an explicit piece of knowledge can be used consciously but with relative speed, while an implicit one can be used without awareness and conscious effort. As an additional point to support his position, Ellis (1997: 113) points out that the conflation hypothesis does not
account for cases where variability in learners’ performance can be explained on the basis of the type of knowledge that can be called for with respect to the required task and the time available.

Ellis defines his model as ‘weak’ because he contends that explicit knowledge converts into implicit knowledge especially in the case of non-developmental grammatical rules (Ibid: 115). This position is related to Pienemann’s (e.g., 1984; 1985) approach, whereby learners acquire certain structures of the target language only through pre-programmed stages in a stable order, though they can pick up at any time the non-developmental features. Therefore, Ellis’s weak interface position includes results from research into the stages of grammatical development of learners’ interlanguage which is based on the traditional distinction between syntax and lexis. Although the description of language that has emerged from corpus-driven studies rejects this dichotomy (e.g., Sinclair 1991; Hunston and Francis 2000, Tognini-Bonelli 2001), his position is a good starting point for justifying form-focused activities in a communicative language teaching environment. Furthermore, whether there is a developmental route for the acquisition of the lexico-grammar still needs to be demonstrated. Though Pienemann’s hypothesis considers learners’ initial acquisition of monolithic lexical chunks that are subsequently analysed into their constituent elements as a fundamental step (e.g., Pienemann et al. 1996), the focus of the approach is on the acquisition of morphosyntactic features of the language and does not take into consideration the critical role that semi-preconstructed language plays in native (and non-native) speakers’ production, as these prefabricated units seem to constitute about 50% of texts and take up conventionalised grammatical and pragmatic functions in discourse (Erman and Warren 2000). For this reason, it seems plausible to maintain that, as far as the acquisition of functionally meaningful chunks is concerned, there might be no pre-programmed developmental route, as these may be gradually acquired through exposure to target language discourse. Therefore, the position maintained here is that acquisition of meaningful lexical items in the form of lexical phrases (Nattinger and DeCarrico 1992), patterns (Hunston and Francis 2000) or extended units of meaning (e.g., Sinclair 1998; Tognini-Bonelli 2001) is fundamental to an expert command of the target language as this involves the gradual unfolding of the idiom-principle (Sinclair 1991: 110) in learners’ production. While knowledge of lexical items can either be explicit or implicit, here it is maintained that an explicit focus on these can be beneficial to learners in that it may both consolidate their implicit knowledge by facilitating their proceduralisation and be actually effective in transforming explicit into implicit knowledge.
In discussing the beneficial role of explicit knowledge on interlanguage development, Ellis (1997: 123) notes two crucial points: explicit knowledge may lead learners to notice features in the input that would otherwise be ignored and may help them to become aware of the gap between their output and the features they have noticed in the input. These two operations are not very different from those that are generally recognised as taking place in acquiring implicit knowledge (Ibid: 119). In particular, the two processes of noticing specific linguistic features in the input and comparing them with the ones that are typically produced by the learners on the basis of their interlanguage system are conducive to turning input into intake, that is they comprise the first stage through which the input is registered into long-term memory and becomes integrated into one’s interlanguage system. Corpus-based activities facilitate the development of implicit knowledge by implementing tasks that ask learners to notice particular features in a series of target language examples drawn from a variety of contexts and compare them with their usual output.

Furthermore, form-focused activities that are based on a corpus approach are not detrimental to meaning. On the contrary, as Bernardini (2000b: 227) points out, concordancing in the classroom is informed by a pedagogic view of the centrality of meaning. Indeed, she highlights how corpus-based learning activities are particularly suitable for a language pedagogy inspired by a ‘mediation’ view of meaning, where the latter is not considered intrinsic to language but a “pragmatic matter of negotiating an indexical relationship between linguistic signs and features of the context” (Widdowson 1990: 118). Therefore, by focusing on certain formal characteristics of the input through concordancing, learners observe how a given item behaves in its co-text and, thus, how it specifically contributes to the semantic and pragmatic layers of local and discourse meaning.

Focus on form has generally been considered as a response to a common criticism against the communicative approach: its exclusive focus on communication and learner fluency is often detrimental to accuracy (e.g., Williams 1995: 13). Though rooted in an approach to language learning that promotes conscious attention to input, corpus-based activities can provide a way of combining a focus on form and a focus on meaning and hence be favourable both to fluency and accuracy, in that they may promote control and acquisition of idiomatic usages of the foreign language, that is knowledge of those fixed and semi-fixed lexical items that are part of the expert speaker’s command of the target language (e.g., Pawley and Syder 1983; Sinclair 1991; Nattinger and De Carrico 1992). Hunston (2002b: 173) also contends that a corpus-based focus on pattern grammar is beneficial to
advanced learners’ accuracy and fluency as it may contribute to a reduction in
the non-idiomaticity of their production.

In general, corpus-based activities can play a critical role in consciousness-raising tasks which require learners to deliberately attend to form and can have a deductive or an inductive format. Indeed, John's (1991) data-driven learning approach can be used in both modes, that is learners can be given a direct explanation of a linguistic phenomenon and then asked to identify it in a series of concordance lines or, vice versa, they can be provided with data they should analyse and make sense of by themselves. However, as Ellis contends (1997: 160), a deductive approach is based on a transmission model of education which may hinder the development of learners’ responsibility and autonomy. An inductive approach is generally preferred in that it best fits with a learner-centred environment such as, for example, Willis’s (1996: 53) framework for task-based learning. After carrying out goal-oriented tasks that are accomplished by using the foreign language, consciousness-raising activities lead learners to focus on some of the language features in the discourse in which they have been involved in the previous stages. Corpus data may thus highlight specific features of the input that may otherwise be overlooked.

In conclusion, corpora and corpus techniques are a resource for the language teacher who may decide to employ them in a traditional, ‘transmissive’, code-oriented classroom environment or may integrate them with communicative-oriented activities so as to promote both accuracy and fluency. The latter is certainly the best scenario for an appropriate pedagogy that considers the learner as an active participant in the target language learning enterprise. As Gavioli (1998: 43) has pointed out, the introduction of corpora-based activities in a learner-centred environment plays a central role in promoting learner autonomy, particularly if learners are allowed to take charge of their learning process and assume complete responsibility for its outcome. Finally, as far as second language acquisition theory is concerned, corpora applications fit well within a framework for the development of explicit knowledge of the target language that may be internalised and integrated with the learners’ interlanguage system.

3. Corpus tools and techniques: a brief survey

In this section a brief introduction to the most typical corpus techniques used in linguistic research is presented. This makes them the best tools for implementing discovery learning activities in the classroom, as they require
learners to take up the role of language detectives and explore authentic data to notice and learn how certain linguistic features are used in the language.

The information that is usually retrieved from a corpus for linguistic analysis is typically displayed in word-list or concordance-line formats. Word lists can be compiled on the basis of how frequent each word form is in the corpus. A common characteristic of frequency lists is that function words are usually on top, while content words are rarer and their position in the list may reflect the subject matter of the texts. A collocate tree is another type of word list in which only those words that typically co-occur with a keyword are listed. This is based on the concept of 'collocation'. Among the many definitions that have been given (e.g., Partington 1998: 15-17), the one provided by Sinclair (1991: 170), i.e. "the occurrence of two or more words within a short space of each other in a text", is particularly apt for automatic computation, since the 'short space' is further described as "a maximum of four words intervening" (Ibid). The procedure for identifying collocations is usually a built-in facility in various concordance programs, as it is for example in Wordsmith Tools (Scott 1996), and takes as a starting point the series of concordance lines for a given word or phrase that are retrieved from a corpus. As a second step it calculates a frequency list of the words that co-occur with the keyword. Finally, a statistical algorithm is thus needed to reveal those words that markedly co-occur with the keyword and makes the list more reliable. Useful discussions about the measures of significance can be found in Clear (1993), Stubbs (1995) and Barnbrook (1996: 87-101).

The second critical tool that can be used to search, retrieve and display information in a corpus is a concordancer. Concordance lines usually display a list of occurrences of a given word or phrase in a corpus together with its surrounding co-text. The most typical format is the Key-Word-In-Context (KWIC) with the investigated word or phrase in the centre of the screen and its linguistic context (usually five words) both to its left and right. Hunston (2002a: 42) illustrates the main types of linguistic analysis that can be made with concordance lines. First of all, though they do not give direct information about what is possible in a language system, concordance lines show what is typical and central in language use. This highlights the social dimension of language, that is, “the social practice retrievable in the repeated patterns of co-selection” (Tognini-Bonelli: 2001: 3). To express it in Saussurian terms, by emphasising what is typical in a language, concordance lines enable the observer to connect parole with langue and demonstrate how a given linguistic item is typically available for paradigmatic selection in discourse. An example of this is given in section 4.1 below. Secondly, concordance lines can shed light on the differences in meaning of near-
synonyms and polysemous words. This is illustrated below (see section 4.2) in the analysis of the differences in the usages of the near-synonyms small and little. A third type of analysis demonstrates how the meaning of a word is closely associated with its co-text. Hunston and Francis (2000) follow Sinclair (1991) in showing how lexis and grammar are not distinguishable and sense and syntax are associated. Both principles pinpoint the centrality of patterns and phraseology in English, i.e. the fact that each word typically behaves in a regular way in its association with other words and that this contributes to its specific meaning (Hunston and Francis 2000: 37). An example of this is also given below (section 4.3). Finally, concordance lines reveal more details in the behaviour of lexical items. In particular, contextual clues can reveal whether a word or phrase is connotated. This phenomenon has been called ‘semantic prosody’ by Sinclair (1991: 74), who described the typical behaviour of the phrasal verb set in, which is usually associated with subjects that refer to unpleasant states of affairs. In a certain sense, the typical association of this phrasal verb with such negatively loaded subjects has determined its acquisition of a ‘negative aura’, so that its negative connotation is usually expected. Louw (1993: 169) shows how the use of symptomatic also has an unfavourable prosody, while Stubbs (1995) adds the lemma cause to the list of negatively connotated words. However, he also demonstrates that there are words such as provide that are characterised by positive connotation. Stubbs elaborates the concept of semantic prosody by renaming it ‘discourse prosody’ and defining it as a “feature that extends over more than one unit in a linear string” (2001: 65). Discourse prosodies express speaker attitude and are discourse units with an identifiable pragmatic function. An example of discourse prosody is given below in section 4.3.3 in dealing with the unit centred on the lexical item step toward.

These techniques play an important role in the language classroom as they are a means for realising learning activities that are centred on an inductive approach in which learners are true language researchers. However, they can be used in an effective way only after some training on how to manipulate data, pay attention to the most frequent/salient features and interpret results meaningfully. Indeed, one of the most common experiences of those who, for the first time, deal with even a relatively small number of concordance lines, which are generally considered as the standard mode of approaching corpora exploration, is to feel at a loss as they are confronted with an apparently chaotic display of words on a computer screen. In this case students and teachers must learn how to arrange data so as to retrieve meaningful patterns. Nevertheless, a positive aspect of this unavoidable initial training is the fact that high levels of technical know-how on the part
of learners and teachers in order to use the appropriate computer programs are not necessary. Computer applications such as Wordsmith Tools (Scott 1996) are user-friendly and incredibly useful for linguistic analysis.

4. Corpus techniques: from mediated activities to discovery learning

This section shows how the concordance lines retrieved from a corpus can be employed to investigate specific points of usage and thus play a critical role in engaging the learner in activities that make use of authentic target language examples through inductive, discovery-based procedures.

4.1 A focus on what is typical

The analysis of randomly collected concordance lines very often brings to the fore typical uses and meanings of a given lexical item. Sometimes what is typical is not what one would consider as prototypical. In the case of corner, for example, the prototypical meaning is that of ‘point where two sides or surfaces meet’. However, the metaphorical meaning(s) of a word may in time become frequent and, thus, tend to be just as or even more important than the referential one. In table 1 the lexical phrase (a)round the corner is shown in a sample of ten random lines from the Bank of English.

<table>
<thead>
<tr>
<th>Line</th>
<th>Sample Concordance Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tied and secure phase is around the corner.</td>
</tr>
<tr>
<td>2</td>
<td>Is always something new around the corner.</td>
</tr>
<tr>
<td>3</td>
<td>That a recession isn’t around the corner.</td>
</tr>
<tr>
<td>4</td>
<td>The next shock could be round the corner.</td>
</tr>
<tr>
<td>5</td>
<td>Disappointments are just round the corner.</td>
</tr>
<tr>
<td>6</td>
<td>And tax cuts were just round the corner.</td>
</tr>
<tr>
<td>7</td>
<td>The challenge has been compounded by cheaper machine is just around the corner.</td>
</tr>
<tr>
<td>8</td>
<td>Cure for cancer might be just round the corner.</td>
</tr>
<tr>
<td>9</td>
<td>His big break is just round the corner.</td>
</tr>
<tr>
<td>10</td>
<td>Nobody is sure how much by way of disappointments are just around the corner.</td>
</tr>
</tbody>
</table>

In the examples above all the lines are characterised by the metaphorical meaning of the lexical phrase in that what is highlighted is the possibility that something will happen very soon. This meaning cannot be separated from the phraseology in which (a)round the corner is embedded. Indeed, the phrase is usually placed at the end of a clause following the verb BE, with the phenomenon that is likely to happen as the subject of the pattern. This subject is expressed by an abstract noun (revolution, recession, disappointments) and typically indicates something that is viewed as (un)desirable from the speaker’s point of view. The general positive attitude of the pattern, which is also kept in the example in line 4 where the unfavourable connotation of
recession is contrasted by the negative polarity of the clause, indicates that it works as a pragmatic marker of speaker evaluation. Although these examples do not indicate what specific usages of the phrase (a)round the corner are incorrect, they certainly show how this is most commonly used in native production and can therefore be a model for language learners. In table 2 below a schematic outline of the lexical item centring around this phrase is presented.

Table 2. An illustration of the extended unit of meaning centred on (a)round the corner

<table>
<thead>
<tr>
<th>Abstract noun</th>
<th>BE</th>
<th>(a)round the corner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revolution</td>
<td>is</td>
<td>(a)round the corner</td>
</tr>
<tr>
<td>Recession</td>
<td>was</td>
<td></td>
</tr>
<tr>
<td>Disappointments</td>
<td>were</td>
<td></td>
</tr>
<tr>
<td>Tax cuts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big break</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Once more one may note that separating the metaphorical meaning of (a)round the corner from the whole lexical item highlighted above is not possible. Indeed, this meaning is better described as conventionally associated with the entire unit in table 2. Furthermore, this frame imposes restrictions at the lexical level in that it reduces the speaker’s paradigmatic choice in the subject position, thus showing how the lexical item illustrated in table 2 is not solely accountable in grammatical or lexical terms but involves both at the same time.

The analysis of concordance lines to observe the typical meaning of a word or lexical phrase is an important means for raising learner consciousness. By studying the examples above learners can become aware of the polysemic nature of even the most common, ‘concrete’ words and start to appreciate how the phraseological principle operates by associating patterns and meanings both at the semantic and the pragmatic levels.

4.2 A n investigation of near-synonyms

The following exercises involve the analyses of three series of concordance lines with the aim of raising learners’ consciousness about the linguistic behaviour of the near-synonymous adjectives small and little. Beginners of English usually get an immediate grasp of the general meaning shared by the two words. However, the subtler differences in meaning and usage are very often overlooked and may constitute a source of learner errors even at more advanced levels. Consciousness-raising activities such as the
following may therefore be a way of helping learners to focus on form and notice specific differences in the ways the two words are used. They could also become aware of how their implicit knowledge and their resulting output differs from native-like knowledge and may thus be induced to restructure their interlanguage system. The activities below follow a mediated approach and are tailored to lower-intermediate learners of English (CEF level - B1).

4.2.1 Exercise 1. An analysis of the adjective ‘small’
Read carefully the following ten lines and carry out the following activities:

1. What is qualified as small? Make a list and identify the common characteristic.
2. Which words are used to say how small something is? Make a list.
3. Re-write the lines where small is distant from the object which it qualifies. Can you find a common structure among these lines?
4. Can you find another typical relationship between small and the object which it qualifies?

1. Because submersibles often are very small, observers inside them must remain
2. My only roasting pan was too small to hold an entire roast!
3. Whale watching from small boats is very popular
4. Catch the fish in a small net and then dip the net and the fish
5. medieval rural churches were far too small to provide room for all the people
6. gained 10 pounds, and 10 pounds on a small person is serious; and if she
7. and the administration. Down a small hill lies a lake, complete with
8. These organisms are generally very small and poorly developed; some are
9. a man who has small hands, small feet, a receding chin and a culture
10. The class met in a small lecture hall

4.2.2 Exercise 2. An analysis of the adjective ‘little’
Read carefully the following ten lines and carry out the following activities:

1. What is qualified as little? Make a list and identify the common characteristic.
2. Which other words are used to qualify the same objects that you have listed above? Can you find a common characteristic?
3. What typical position in the clause characterises little and the object which it qualifies?
I saw a sweet little girl who looked about fifteen. You should be able to buy a nice little notebook, pen, pencil. There are two good inexpensive little restaurants here. Yesterday she said: 'I just want a nice little flat in Dublin. You have a pretty good little pocket microscope. When I finally buy my little house and settle down into it to deliver presents to every good little boy and girl throughout the world.

Yesterday she said: 'I just want a nice little flat in Dublin. You have a pretty good little pocket microscope. When I finally buy my little house and settle down into it to deliver presents to every good little boy and girl throughout the world.

Although the two adjectives are near-synonyms, their usage is different and awareness of when one form is preferable to another is fundamental for developing students’ accuracy. In the exercises presented above both...
adjectives qualify nouns denoting concrete objects or people, apart from examples 10 and 14 in exercise 3 where more abstract concepts are referred to. The choice of concentrating on concrete objects to exemplify the rules of usage of these adjectives is in line with Shortall (1999) who maintains that the prototypical use of a word is so important for language learners that this should be taught before its most frequent uses. This is particularly meaningful if these activities are aimed at students with a limited knowledge of the language. Therefore, it should be immediately clear that both adjectives denote the reduced size of objects and people. This is the common basis from which they can start to inductively discover important differences in usage which are linked to subtler differences in meaning; for example, the fact that little is often used with other adjectives is related to its connotative dimension, very often (but not always) conveying the idea of pleasantness and attraction.

The exercises are structured in such a way as to provide a considerable number of examples of how both adjectives are used. However the number of examples is not so high as to be overwhelming. Students can work on one task at a time, analyse how each adjective is used in its context and try to inductively work out general rules of usage. The questions are intended to guide the students in their observations. For this reason, some questions are aimed at making students aware of the use of submodifiers such as quite, too, and very with small or the use of other adjectives with little. The objective of the tasks is to exemplify the following grammar points:

1. position in the clause: little is only used in attributive position, while small is used both in attributive and predicative positions;
2. small is used with submodifiers that express the degree
3. little is used with other adjectives, while small is not
4. small has a comparative and a superlative form, while little has neither.

4.3 One step towards proficiency: a focus on patterns and phraseologies

In this section an introduction to patterns and phraseologies in a discovery learning setting is presented. The key feature of such an environment is that learners have non-mediated access to corpus tools and corpora (either specialised, small corpora or large, reference ones) and are thus allowed to explore how English is used in different contexts within the framework of communicative-oriented project work. An additional benefit is that this provides an opportunity for learners to practise learning as self-instruction that can also be carried out autonomously outside the English classroom. Bernardini (2000b) reports her experience with university-level students who carried out an autonomous language project and states how the
positive aspects have overcome some inevitable negative ones. In general, in a discovery learning setting the learner’s role is that of language detective (Johns 1997), while the teacher’s role is that of language expert and facilitator in the use of corpus techniques. However, the teacher is also actively involved in the learning process through an increased awareness of how specific language features are used in a variety of contexts.

After the initial training in corpus techniques and tools, advanced learners of English can autonomously design and carry out a research study which is aimed at developing their knowledge of the interrelationship between lexis and grammar and form and meaning. As Sinclair has pointed out, there is a “close correlation between the different senses of a word and the structures in which it occurs” (1991: 53). His position implies that meaning is not strictly associated with a single word, but is distributed across the words that usually accompany it in a structure. In exploring Sinclair’s hypothesis, Hunston and Francis (2000) have formulated the concept of ‘pattern (of a word)’, defined as “all the words and structures which are regularly associated with the word and which contribute to its meaning” (Ibid: 37). An approach to pattern grammar, therefore, prioritises the behaviour of individual lexical items and highlights the association between form and meaning. It is therefore essential that learners notice and learn the different meanings associated with a word when this is embedded in various patterns. Moreover, as Hunston (2002b: 176) points out, it is important that learners are aware of patterns, since knowledge of how they work in the language is conducive to a proficient command of English.

Learners’ exploration of a corpus is in this case part of a research project in which they investigate the linguistic behaviour of a polysemous word to identify possible associations between its phraseologies and meanings. Here some of the most frequent patterns associated with step are considered. In particularly interesting cases, paradigmatic and syntagmatic procedures of analysis are shown. A sample of twenty-seven random concordance lines drawn from the Bank of English is presented in the Appendix. The project must be seen as introductory to pattern grammar, in that the three abstract patterns presented below are generalisations extracted from the sample concordance lines in the Appendix and are represented using the same conventions adopted by Hunston and Francis (2000: 44). However, it must be noted that the way in which Hunston and Francis (2000) use the concept of pattern enables generalisations that go beyond a given word and thus do not include its specific phraseologies. Here both phraseologies and patterns centring on step retrieved from the concordance lines in the Appendix are
considered, though the data are organised so as to pinpoint three abstract
general patterns (precisely, poss N, ord N, N towards n).

4.3.1 Set 1: **poss step**

The first set is characterised by the combination of a possessive (poss) and the word step as highlighted by the following lines:

1. through the trees. She quickened her step, some fifteen minutes later came to
2. I checked my step, turned on my heel and marched back.
3. adjust their gait or modify their step length to compensate. Experiments
4. darkness when it came was total. Her step faltered - a logical reaction to
5. Emily hastened her step to escape them. Their very presence

Here step refers to the way someone walks or to the process of walking. It must be noted that Hunston and Francis’s grammar identifies a more general pattern in the form **poss N** (Francis et al 1998: 73). This implies that the noun, conventionally indicated by N, is typically co-selected with a possessive, when referring to the way someone moves, speaks or looks. This pattern implies that there are other nouns which may be used in this pattern with this general meaning, as for example stride, gait, walk, pace, voice, expression, etc. This fact implies that a native speaker’s competence of the language involves the knowledge of several layers of abstractions involving the lexicogrammar and associating particular recurring word combinations with specific conventional meanings.

A syntagmatic exploration of the concordance lines involves the identification of more complex phraseologies that could be characterised by specific meanings. Two examples of this procedure are given below in the analyses of **watch poss step** and **spring in poss step**.

The two concordance lines below show that the first pattern is used here in the metaphorical meaning of ‘being careful in the way one behaves or acts’ and is typically associated with a warning or a threat.

6. with a warning to watch their step this season. Now Blackburn are under
7. You tell your Sandra to watch her step, “I said, ’or she might finish up

Other examples drawn from the Bank of English are presented here with their extended co-texts where this association of form and meaning is clearly illustrated:

Ex. 1 It was costing the Government too much money to care for them. But the Government can care for every person seeking political asylum. **Watch your step** Tony Blair and Jack Straw or you will be back on the opposition benches again.
Ex. 2 He admitted: ‘I’m desperate to land that British title but Littlewood is capable and rugged. He’s likely to come out all guns blazing at me and I’ll just have to be patient and watch my step. My training has been great and I’ve been working hard in the gym to iron out mistakes.’

Ex. 3 Nor is the brightest and the best taken as model. Sameness and uniformity are the rule. The prettiest girl -- born with extra power no one can control -- must especially watch her step. She can have nothing more because she already has so much. Very early, beautiful women learn not to flaunt their beauty. It arouses too much envy.

Ex. 4 The day after the incident, Baggio was forced to eat a large slice of humble pie with a TV apology to the Rolex refs. Poor old Dino will certainly have to watch his step in future matches in more ways than one.

Ex. 5 He’s been so lucky to get away with it until now, and it was only a matter of time before some ref took action. Now it’s happened once he’d better watch his step, or other refs will follow and he could end up in real bother.”

The lexical phrase spring in poss step is illustrated by the following concordance lines:

- Ex. 1 What you give comes back to you. It’s not your supporters who motivate you, but your enemies. They can give you a spring in your step.
- Ex. 2 I knew this was the missing piece of my life that I’d been searching for. I feel I’ve got a spring in my step and can take on the world now.
- Ex. 3 […] how can you possibly feel full of energy when you’ve just spent 90 minutes working your balls off? But it really does give you the most incredible boost. After each session I had a spring in my step and felt mentally able to take on the world. My increased level of fitness has transformed my life.
- Ex. 4 Geri, who is said to be worth £25million, seemed happier than I’ve seen her in years. She is relaxed and has a spring in her step. She is plainly besotted with Chris and I’m told the pair are rarely off the phone. They are like a couple of teenagers.

The meaning is also metaphorical and stands for someone’s ‘vigour and enthusiasm’. This item is rather common and is usually preceded by verbs indicating that someone possesses or regains physical strength and mental energy. Line 8 shows that this is not a fixed lexical phrase but that variation is allowed within the typical frame. A few examples below illustrate the association of form and meaning:
Ex. 5 Christy Feet Treats have something to put the **spring** back into your **step**. The range includes a Revitalising Foot Soak, Revitalising Scrub, Conditioning Cream and Cooling Liquid Talc (right).

The last example shows how lexical phrases which include polysemous words with a prototypical meaning can be exploited as puns in that the referential meaning can be implied by the larger co-text while the phraseology also retains its typical metaphorical meaning.

4.3.2 Set 2: **ord step**

This set is characterised by the combination of an ordinal (**ord**) and the word **step** as highlighted by the following lines. The pattern is expressed as **ord N** by Francis et al (1998: 107).

12 political picture. <p> Thus, my **first** step was to move from a narrow focus on
13 but education, nothing but the **first** step to something better: "43 <p> Such
14 and sense of self. The client's **first** step toward changing is often to become
15 words" that often serve as the **first** step in chains of retributive violence.
16 is a two-step process. The **first** step involves compiling a complete
17 someone to do good work. The **first** step in this process involves carefully
18 environmental quality. The **first** step is to develop a precise, operational
19 From that beginning comes the **next** step: envisioning the work of therapy and
20 of testing, to take the **next** step and raise questions about all women
21 described as the essential **next** step for herself was to become
22 of receiving relief; the logical **next** step would be involuntary sterilization

First and **next** are important collocates of **step**, respectively with a t-score of 62.61 and 47.97. In this phrase **step** refers to one stage of a process. A paradigmatic exploration of the pattern would involve the substitution of **step** with some other words that refer to the same meaning. A few examples drawn from the Bank of English are shown below:

playing Leeds; the old enemy. The **first** leg is at Old Trafford, the second is at
1st solo race after winning the **second** leg in record time. Martin’s vessel ALLIE
Identifying local needs is the **first** stage in a process that must continue with
much in my mind as I ponder the **next** stage of my ‘scientific career’. After uni
it went to the Lords for its **second** reading and this led to a clash between
the bill gets to its decisive **third** reading next year. Mr Smith is enjoying kee

In the examples above, the basic idea of a stage in a process is shown as being characteristic of the pattern **ord N** (of which **ord step** is an instance of realisation, though it is still abstract) and thus confirms the observation that there is a typical recurring association between given patterns and particular meanings.
4.3.3 Set 3: **step toward(s) n/v-ing**

This set is characterised by the combination of the word *step* with the preposition *toward(s)* and a following noun phrase or *ing*-clause as illustrated by the examples below. This is a clear example of the different types of generalisations that can be made on the basis of the analysis of large amounts of concordance lines. On the one hand, the word *step* is part of the lexical item **step toward(s) n/v-ing**, the meaning of which is characteristic of this phraseology and is illustrated below; on the other hand, it is also a specific realisation of the abstract pattern **N towards n** (Francis et al 1998: 228) distinguished by the fact that it is used to refer to progress and change (other nouns that can be used in this pattern with this meaning are, for example, *advance*, *move*, *push*, and *trend*).

In this phraseology the meaning of *step* is that of a stage in a goal-oriented process. The goal is usually presented in the noun phrase or the *ing*-clause following toward(s). On the left-hand side of the keyword there is an ordinal that indicates the position of the stage in an ordered scale (first, second, final, etc.) or an adjective that expresses the speaker's (or the writer's) evaluation of the importance of the move to reach the specific goal; in this case qualitative adjectives that express enthusiasm are typically found, i.e. huge, enormous, giant, massive. These foreground a common semantic field or ‘semantic preference’ that is associated with this phraseology.

Therefore, the lexical item constitutes an extended unit of meaning that has a clear pragmatic function in that it shows the speaker's attitude towards the matter under discussion. Tognini-Bonelli identifies extended units of meaning as “multi-word units [...] defined by the strict correlation existing between a node and its context. [...] Only when they have reached their pragmatic function can they be seen as ‘functionally complete’” (2001: 19).

This definition matches Stubbs's one for discourse prosody (2001: 65) as expressing speaker's attitude and pragmatic meaning.

Table 3 below illustrates the unit of meaning thus identified. The adjectives belonging to the two different semantic fields are given in separate cells.

Table 3. An illustration of the extended unit of meaning centred on step toward(s)
Furthermore, the two types of adjectives can occur in the same extended unit of meaning, showing how patterns can overlap. This phenomenon of syntagmatic combination between patterns is called ‘pattern flow’ (Hunston and Francis 2000: 207ff). Overlap between patterns is the result of a word with a pattern of its own being part of another pattern. This is illustrated by line 25 above:

<table>
<thead>
<tr>
<th>adjective</th>
<th>step toward(s)</th>
<th>goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>a major</td>
<td>step toward(s)</td>
<td>a solution</td>
</tr>
<tr>
<td>the biggest</td>
<td></td>
<td>self-government</td>
</tr>
<tr>
<td>a massive</td>
<td></td>
<td>retaining the title</td>
</tr>
<tr>
<td>a giant</td>
<td></td>
<td>Super League safety</td>
</tr>
<tr>
<td>a big</td>
<td></td>
<td>winning</td>
</tr>
<tr>
<td>a huge</td>
<td></td>
<td>claiming his third title</td>
</tr>
<tr>
<td>a big</td>
<td></td>
<td>a unified Europe</td>
</tr>
<tr>
<td>a vital</td>
<td></td>
<td>a step toward(s)</td>
</tr>
<tr>
<td>another</td>
<td></td>
<td>establishing full</td>
</tr>
<tr>
<td>a further Israeli</td>
<td></td>
<td>diplomatic</td>
</tr>
<tr>
<td>the first</td>
<td></td>
<td>negotiating with the PLO</td>
</tr>
<tr>
<td></td>
<td></td>
<td>getting back to normality</td>
</tr>
</tbody>
</table>

This final step has shown that patterns contribute to textual structure and follow-up studies may take up this knowledge to investigate how they contribute to the creation of specific types of discourse.

The analysis carried out in section 4.3 has highlighted the fundamental role of phraseology and pattern grammar in one’s knowledge of the language. The examples analysed here have been randomly retrieved from the Bank of English, which is a 450-million-word corpus of written and spoken native-speaker English. It is important to underline the random nature of the search, as one may think that the concordance lines in the Appendix have been specifically selected to highlight the phraseologies noted above. My selection of the lines has been limited to the first ones that contained the three patterns prospected by step, as my aim was to pinpoint their role in language description and teaching. The dimension of the corpus enables a thorough exploration of the language and a special focus on the pervasive phenomenon of idiomaticity. Furthermore, since the corpus is a record of
the English language produced by native speakers, it emphasises performance as conventional, social behaviour, that is, as standardised practice that is likely to assume particular recurrent formal, semantic and pragmatic features which can be described at various levels of delicacy and complexity. Here it suffices to note that making learners aware of (and possibly well-informed about) how one's production and comprehension of the language is informed by idiomaticity would probably stimulate their curiosity and motivation to learn and possibly contribute to improve their proficiency.

4.4 Summing up

In section 4 some of the most relevant corpus techniques of analysis based on concordance lines have been considered, together with ways of exploiting them in the ELT classroom. Therefore, through concordance analyses of some everyday words such as corner, small, little and step typical uses of lexical items involving these words and their specific meanings have been foregrounded. The lexical phrase around the corner has been characterised by its metaphorical meaning that highlights the speaker's generally favourable attitude towards what is discussed. Activities of this type, initially guided by the teacher, enable the learners to notice how meaning is correlated with form as this pragmatic function seems associated with this lexical phrase as a whole and not to any of its specific constituent elements. Two types of activities that introduce learners to exploring concordance lines are then discussed. In the first type learners' consciousness of key differences in the use of small and little is raised through mediated tasks. These have been designed so as to facilitate learners' inductive extraction of data from which they can proceed to generalisations. Activities of the second type are non-mediated, since there is no direct teacher involvement in the selection of the material to be analysed. Learners can plan their project work with the assistance of their teacher, who can thus act as facilitator and language expert in the classroom. The critical point in a discovery learning framework is that learners take charge of (and responsibility for) their learning process and autonomously investigate linguistic points that are important for them and their target language acquisition. Here an exploration of some concordance lines for the polysemous word step has been shown as a way of introducing learners to pattern grammar and illustrating the potential of linguistic investigation that can be unfolded by observing such lexico-grammatical phenomena as semantic preference, discourse prosody and extended units of meaning.
5. Conclusion

One important theoretical objection that can be levied against a corpus-driven approach to language learning is the level of detail that it implies in language description. Would it be appropriate to delve into a corpus to uncover particular phraseologies associated with a specific word and leave aside aspects of grammar that have traditionally been considered as fundamental? Answering this question would require at least another paper. Here it suffices to say that the central point to be dealt with is the nature of competence, that is, the way in which a change in the methodology of analysis determines a different theoretical outlook on a phenomenon. An analytical method based on a very limited number of invented examples deemed grammatical solely on the basis of native speaker’s intuition may prompt the conviction that competence is essentially explainable in terms of knowledge of sentential syntax, while leaving lexis and what else does not fit into the model on the periphery. On the contrary, if the analysis is founded on large numbers of authentic examples produced by native speakers in real communicative contexts, then it is plausible to conceive of one’s competence (provided the clearcut distinction between competence and performance be maintained) less in terms of syntax-based possibility and more in terms of lexically-driven, context-related, conventionally sanctioned language actions that are undoubtedly part of one’s knowledge of the language, but have only be observed recently with the help of large electronic corpora. Here the focal point is not what can and cannot be done with the language, but what is actually done as observed through attested instances of use. As Sinclair contends, “The new evidence suggests that grammatical generalisations do not rest on a rigid foundation, but are the accumulation of the patterns of hundreds of individual words and phrases” (1991: 100). Theories are not ontological realities, they are constructed with the aim of helping us to make sense of the world. Positing syntactic knowledge as the only relevant one for acquiring competence of a language without questioning its basis is equivalent to promoting it to the status of a Platonic idea. Corpus evidence has shown that there is more to one’s grammatical knowledge of English than what has been so far hypothesised. Therefore, the question of the centrality of phraseology no longer seems to be a contentious matter. There is enough evidence to show that one’s mastery of the language, and thus one’s communicative ability, is centred on the meaningful, appropriate uses of lexical phrases, patterns and extended units of meaning learned and exploited in actual discourse.
The aim of the present paper has been to discuss and show how corpus techniques can be used to highlight instances of realisation of the idiom principle in actual language use and employ them in classroom teaching. I have here made an attempt to explain how a corpus-driven approach to language learning can fit into SLA and ELT theories. In particular, it has been pointed out that phraseologies and patterns retrieved from concordance lines show distinct associations between form and meaning, so that their analysis on the part of learners fosters consciousness-raising on language use characterised by a concurrent focus on form and meaning. The position statement of this paper is that explicit knowledge thus obtained can become implicit and be integrated into one's interlanguage. Furthermore, since developmental routes are usually proposed for the acquisition of grammar, here it is maintained that it is possible for learners to proceed from explicit to implicit knowledge of lexically-driven meaningful patterns without any developmental constraints by following the path through which input is assumed to become intake, that is by means of the processes of noticing features in the input and comparing it with one’s existing knowledge. Finally, it is maintained that the acquisition of meaningful lexical items is fundamental to an expert command of the target language and this should not be overlooked if our aim is to promote learners’ effective communicative ability.

The final part of the paper is devoted to demonstrating how corpus-driven techniques based on concordance lines extracted from the Bank of English can effectively be used in English language teaching to pinpoint specific uses of particular lexical items.
Corpus techniques at work in the ELT classroom

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Appendix. A list of random concordance lines sorted according to pattern

1. through the trees. She quickened her step, some fifteen minutes later came to
2. I checked my step, turned on my heel and marched back.
3. adjust their gait or modify their step length to compensate. Experiments
4. darkness when it came was total. Her step faltered - a logical reaction to
5. Emily hastened her step to escape them. Their very presence
6. with a warning to watch their step this season. Now Blackburn are under
7. You tell your Sandra to watch her step. *I said, "or she might finish up
8. back. The spring was gone from his step. He fell into his chair, rather than
9. a smile on my face and a spring in my step. Gee, it's great to be in this town!
10. election. But the spring in his step and the smile on his face gave the
11. sharper edges, put a spring in his step and turned a lion of a journalist
12. political picture. <p> Thus, my first step was to move from a narrow focus on
13. but education, nothing but the first step to something better."43 <p> Such
14. and sense of self. The client's first step toward changing is often to become
15. words" that often serve as the first step in chains of retributive violence.
16. is a two-step process. The first step involves compiling a complete
17. someone to do good work. The first step in this process involves carefully
18. environmental quality. The first step is to develop a precise, operational
19. From that beginning comes the next step: envisioning the work of therapy and
20. of testing, to take the next step and raise questions about all women
21. described as the essential next step for herself was to become
22. of receiving relief; the logical next step would be involuntary sterilization
23. solve the problem, but it is a major step toward a solution. The buildup of
24. Israeli officials say it is another step toward establishing full diplomatic
25. because it is an important first step towards developing a better treaty.
26. important, it is a further Israeli step toward negotiating with the PLO,
27. aromantics say it is the biggest step towards self-government since Prince