Interest in Conversation Analysis (CA) and its possible applications in the fields of language learning and language teaching has grown considerably over the last five years. There are now a range of publications which explore this area. The article therefore attempts to synthesise the current state of the research and identify the issues and problems that have arisen and those areas which are suitable for further research. This article starts with a brief introduction to CA methodology and then discusses the range of areas within the broad field of language learning and teaching in which CA has been applied: teaching languages for specific purposes; language teaching materials design; language proficiency assessment; language classroom interaction; NS–NNS (native/non-native speaker) talk; and code-switching. It then discusses the relationship between CA, Applied Linguistics and Second Language Acquisition, and examines the complex issue of what CA can contribute to the study of ‘learning’. The issues are illustrated by an example of a CA analysis of language learning processes. The article proposes that there are now three distinct approaches to the application of CA methodology to the field of language learning and teaching. The article concludes by positioning CA as a social science research methodology and considers possible future directions for research.

1. Introduction

Conversation Analysis (CA) is a methodology for the analysis of naturally-occurring spoken interaction. It is a multi-disciplinary methodology which is now applied in a very wide range of professional and academic areas. There have been a number of different conceptions of the relationship between CA and the broad field of language learning and teaching, and CA has indeed been applied in this field in many different ways. The recent and rapid growth in interest and publications in this area means that the time is ripe for a review of the current state of research.

This article starts with a brief introduction to CA methodology and then discusses the range of areas within the broad field of language learning and teaching in which CA has been applied. I then discuss the relationship between CA, Applied Linguistics and Second Language Acquisition and examine the complex issue of what CA can contribute to the study of ‘learning’. I conclude by positioning CA as a social science research methodology and consider possible future directions for research.

2. Conversation Analysis methodology

This section provides a very brief introduction to CA methodology for readers who are unfamiliar with it and stresses the very significant differences between CA and descriptivist linguistic methodology. Space precludes a full account here, but these are available in Levinson 1983; Heritage 1984; Hutchby & Wooffitt 1998; ten Have 1999; Seedhouse 2004. The discussion in this section is based on Seedhouse (2004).

CA was started by sociologists Sacks and Schegloff as a sociological ‘naturalistic observational discipline that could deal with the details of social action rigorously, empirically and formally’ (Sacks & Sacks 1973: 289f.). This article will not discuss the ethnomethodological principles which underpin CA due to space constraints; such a discussion is available in Heritage (1984) and Seedhouse (2004).

At the start we should be clear that there is a fundamental difference between the ‘CA mentality’ and the ‘linguistic mentality’ in relation to the status of language. CA’s primary interest is in the social act whereas a linguist’s primary interest is normally in language. CA, therefore, does not treat language as an autonomous system independent of its use; rather, it treats ‘grammar and lexical choices as sets of resources which participants deploy, monitor, interpret and manipulate’ (Schegloff et al. 2002: 15) in order to perform their social acts.
2.1 Aims and principles of CA

Talk-in-interaction has become the accepted superordinate term to refer to the object of CA research (Drew & Heritage 1992b: 4). According to Psathas (1995), CA studies the organisation and order of social action in interaction. This organisation and order is one produced by the interactants in situ and oriented to by them; it can therefore only be understood from the participants’ perspective. Since the emic/etic distinction is vital to this article, we need to define it at this point. According to Pike (1967: 37),

[...] the etic viewpoint studies behaviour as from outside of a particular system, and as an essential initial approach to an alien system. The emic viewpoint results from studying behaviour as from inside the system... Descriptions or analyses from the etic standpoint are ‘alien’ in view, with criteria external to the system. Emic descriptions provide an internal view, with criteria chosen from within the system.

What CA means by an emic perspective, however, is the participants’ perspective within the interactional environment in which the talk occurs. This is the CA understanding of ‘within the system’ and this explains why CA practitioners do not interview participants post-hoc about their understanding of the interaction.

The analyst’s task is to develop an emic perspective, to uncover and describe this organization and order; the main interest is in uncovering the underlying machinery which enables interactants to achieve this organisation and order. So one principal aim is to characterise the organisation of the interaction by abstracting from exemplars of specimens of interaction and to uncover the emic logic underlying this organisation. Another principal aim of CA is to trace the development of intersubjectivity in an action sequence. This does not mean that CA provides access to participants’ cognitive or psychological states (see section 4.5 below for a discussion of the CA perspective on socially distributed cognition). Rather, it means that analysts trace how participants analyse and interpret each other’s actions and develop a shared understanding of the progress of the interaction. Thus, CA practitioners aim ‘to discover how participants understand and respond to one another in their turns at talk, with a central focus on how sequences of action are generated’ (Hutchby & Wooffitt 1998: 14).

CA has developed its own subset of principles and procedures, which will now be discussed. As with other forms of qualitative research, the principles are not to be considered as a formula or to be applied in a mechanistic fashion. It is essential to adopt a conversation analytic mentality which involves more of a cast of mind, or a way of seeing, than a static and prescriptive set of instructions which analysts bring to bear on the data’ (Hutchby & Wooffitt 1998: 94).

Sacks’s most original idea, according to Hutchby & Wooffitt (1998), is that there is order at all points in interaction. This was an extremely radical idea in the 1960s as the dominant linguistic view was that conversation was too disordered to be studied. This idea leads to the concept of rational design in interaction: talk in interaction is systematically organised, deeply ordered and methodic. The principle of rational organisation is vital to an understanding of institutional discourse. Different institutions have different institutional aims and organisations of the interaction appropriate to those aims. Seedhouse (2004) applies these principles to L2 classroom interaction; see section 3.5 below.

A second principle of CA is that contributions to interaction are context-shaped and context-renewing. Contributions are context-shaped in that they cannot be adequately understood except by reference to the sequential environment in which they occur and in which the participants design them to occur. Contributions are context-renewing in that they inevitably form part of the sequential environment in which a next contribution will occur. As Heritage (1984b: 242) puts it, ‘[t]he context of a next action is repeatedly renewed with every current action’, and is transformable at any moment. CA has a dynamic, complex, highly empirical perspective on context; a broader discussion is available in Schegloff (1987) and Seedhouse (2004). The basic aim is to establish an emic perspective, i.e. to determine which elements of context are relevant to the interactants at any point in the interaction. The perspective is also an active one in which participants talk a context into being.

The third principle is that no order of detail can be dismissed, a priori, as disorderly, accidental or irrelevant (Heritage 1984b: 241). This principle follows from the first two and can be seen to underlie the development of the highly detailed CA transcription system, its minute analysis of the detail of naturally occurring data and its highly empirical orientation. There is a great deal to be said on the matter of transcription and there are inevitably some differences between linguists (particularly phonologists) and CA practitioners here. However, since these issues are not of central relevance to the argument here, the reader is referred to the detailed discussions in Hutchby & Wooffitt (1998), ten Have (1999) and Markee (2000). For illustrations of the benefits of CA transcription, see Hutchby & Wooffitt (1998) and Wei (2002). For present purposes we need only note the following:

- CA practitioners regard the recordings of naturally occurring interaction as the primary data;
- transcripts are designed to make the primary data available for intensive analytic consideration by the analyst and other readers;
- transcripts are inevitably incomplete, selective renderings of the primary data which invariably involve a trade-off between readability and comprehensiveness.
A data issue which is receiving increasing prominence is the question of what constitutes adequate primary data for CA studies. At the start of CA in the 1960s, the new technology of audio recording was the only one available and telephone conversation data were easily accessible. However, with the rise of video recording, it became possible to include non-verbal communication and gaze in transcripts as well as still photographs. Pioneering work in this area was undertaken by Goodwin (e.g. Goodwin 1984) and Heath (e.g. Heath 1986). CA aims to understand how social action is accomplished and claims that no detail of the interaction can be dismissed as insignificant.

It is therefore argued (e.g. Ford, Fox & Thompson 1996; Zuengler, Ford & Fassnacht 1998) that non-verbal communication and gaze are potentially important features of face-to-face interaction and should therefore be detailed in transcripts. Recent CA studies in the area of language learning which demonstrate the significance of non-verbal communication and gaze for our understanding of interaction include Zuengler, Ford & Fassnacht 1998; Mori 2003; Carroll 2004; Lazaraton 2004; Olsher 2004. The disadvantages of using extremely detailed non-verbal communication and gaze information are that they increase transcription time considerably and may render transcripts more difficult to read and less accessible to a general readership. However, the nature of data presented in CA studies has always been linked to technological developments and no doubt further developments will have an impact in this area.

The fourth principle which follows from this is that analysis is bottom-up and data driven; we should not approach the data with any prior theoretical assumptions or assume that any background or contextual detail are relevant. So in CA it is not relevant to invoke power, gender, race or any other contextual factor unless and until there is evidence in the details of the interaction that the participants themselves are orienting to them. So it is incorrect to say that CA does not consider background or contextual details; the point is that it does so only if and when close analysis reveals participants’ orientation to such details.

Another way of presenting the principles of CA is in relation to the questions which it asks. The essential question which we must ask at all stages of CA analysis of data is ‘Why that, in that way, right now?’ This encapsulates the perspective of interaction as action (why that) which is expressed by means of linguistic forms (in that way) in a developing sequence (right now).

### 2.2 Types of interactional organisation

A number of interactional organisations which were uncovered by Sacks, Schegloff & Jefferson (1974) and associates by grappling with their data can now be employed in analysis by CA practitioners. First, we should clarify that these organisations are **DEFINITELY NOT** the same as ‘units of analysis’ in the linguistic sense. Rather, they should be understood as interactional organisations which interactants use normatively and reflexively both as an action template for the production of their social actions and as a point of reference for the interpretation of their actions. We, as analysts, should use them in the same way. The organisations are part of the context-free machinery which people make use of to orientate themselves in indexical interaction i.e. we employ them in a context-sensitive way. Similarly, we are only able to interpret the context-sensitive social actions of others because there is a context-free machinery by reference to which we can make sense of them.

**Adjacency pairs** are paired utterances such that on production of the first part of the pair (e.g. question) the second part of the pair (answer) becomes **CONDITIONALLY RELEVANT**. If, however, the second part is not immediately produced, it may nonetheless remain relevant and accountable and appear later, or its absence may be accounted for. The adjacency pair concept does not claim that second parts are always provided for first parts. Rather, it is a **NORMAL frame of reference** which provides a framework for understanding actions and providing social accountability. So if we ask a question to someone who does not then provide an answer, we may draw conclusions about that person.

The notion of **PREference** issues from the organisation of the adjacency pair. Preference is **NOT related to** the notion of liking or wanting to do something, but rather involves issues of affiliation and disaffiliation in relation to social actions. As Heritage (1984: 265) puts it, ‘there is a “bias” intrinsic to many aspects of the organisation of talk which is generally favourable to the maintenance of bonds of solidarity between actors and which promotes the avoidance of conflict’. This structural bias manifests itself in preference organisation. For many adjacency pairs there are alternative second parts, so an invitation may be answered by an acceptance (preferred action) or a rejection (dispreferred action). These two options are performed in different ways. Preferred actions are normally delivered without hesitation or delay at the start of the response turn. Dispreferred responses are generally accompanied by hesitation and delay and are often prefaced by markers such as *well* or *uh* as well as by positive comments and appreciations. They are frequently mitigated in some way and accounted for by an explanation or excuse of some kind. As Heritage (1984: 269) demonstrates, the preferred responses to actions are **AFFILIATIVE** and conducive to social solidarity, whereas dispreferred responses are **DISAFFILIATIVE**. However, if the dispreferred action is packaged so as to minimise the degree of disaffiliation and conflict, e.g. by using accounts and excuses, then the degree of disaffiliation is minimised.
Sacks et al. (1974) provided the seminal account of the organisation of **turn taking** in ordinary conversation. This states a set of norms with options which the participants can select. The basis of the system is turn-constructional units (TCUs) and transition relevance place (TRP). At a TRP the norms governing transition of speakers come into play. Overlap occurs for a number of reasons and in a number of ways. The system of turn-taking is normative, so speakers may choose to perform specific social actions 'by reference to one-party-at-a-time, even though they are realized through designedly simultaneous talk' (Schegloff 2000a: 48).

Overlap, then, may be designedly used to intensify the affiliative or disaffiliative nature of particular social actions. In institutional settings, the organisation of turn-taking is constrained and related to the institutional goal, and this is the case in language classroom interaction (Markee 2000; Seedhouse 2004).

**Repair** comes into play whenever there are problems in the accomplishment of talk and may be defined as the treatment of trouble occurring in interactive language use. Trouble is anything which the participants judge is impeding their communication and a repairable item is one which constitutes trouble for the participants. Schegloff, Jefferson and Sacks (1977: 363) point out that 'nothing is, in principle, excludable from the class “repairable”'. Repair is a vital mechanism for the maintenance of intersubjectivity. It is of particular importance for L2 learners and teachers to understand how breakdowns in communication and misunderstandings are repaired, as repair in the L2 classroom tends to carry a heavier load than in other settings (Seedhouse 2004).

It is important to distinguish self-initiated repair (I prompt repair of my mistake) from other-initiated repair (somebody else notices my mistake and initiates repair). Self-repair (I correct myself) must also be distinguished from other-repair (somebody corrects my mistake).

Seedhouse (2004) suggests that interactional organisations of turn-taking, adjacency pairs, preference organisation and repair are often misunderstood by linguists to be a system of units and rules in the descriptivist linguistic sense and to constitute the methodology of CA. The interactional organisations themselves are stated in context-free terms, but the vital point is that participants employ these context-free organisations in a context-sensitive way to display their social actions. It is because the participants (and we as analysts) are able to identify the gap between the context-free model and its context-sensitive implementation that they (and we as analysts) are able to understand the social significance of the context-sensitive implementation. This is the basis of the CA claim to be able to uncover the emic perspective.

These interactional organisations were introduced in relation to ordinary conversation by Schegloff, Sacks and Jefferson. A number of studies (e.g. Drew & Heritage 1992a) describe how these interactional organisations are adapted to institutional goals in different institutional settings. Seedhouse (2004) describes how these interactional organisations are adapted to and used in language classrooms. For an extended illustration of how these organisations can be applied in a CA analysis of language classroom interaction, see Seedhouse (2004: 59–63).

### 3. Applications of CA in relation to language learning and teaching

After introducing the relationship between CA and Applied Linguistics (AL), I consider the latest CA and CA-informed research in the following AL areas: teaching languages for specific purposes; language teaching materials design; language proficiency assessment; language classroom interaction; NS-NNS (native/non-native speaker) talk; and code-switching.

A common theme in the research is that competence is co-constructed by the participants rather than being fixed and static. As we will see in sections 4.2 and 4.3, there are several different conceptions of CA and how it might be applied to language learning and teaching. The studies reported in this section include a wide range of conceptions of CA and CA-informed work.

#### 3.1 Conversation Analysis and Applied Linguistics1

Applied Linguistics (AL), by definition, has always focussed on applications. CA, by contrast, has only relatively recently begun to look closely at applications of CA (ten Have 1999, 2001; Heritage 1999; Hester & Francis 2001; Drew 2005; Richards & Seedhouse 2005). In his review of CA, Heritage argued that ‘part of the claim of any framework worth its salt is that it can sustain “applied” research of various kinds’ (Heritage 1999: 73), and he indicated that this aspect might feature prominently in developments within the discipline. However, the concept of application is by no means straightforward (Heritage 1999). According to Richards (2005), the model of application which is most consistent with the nature of CA is that of description leading to informed action. Some of the studies cited below (Packett 2005; Wong 2005) exemplify the use of this model.

The development of an applied dimension in CA and its fundamental concern with language as a form of social action suggest a natural link with AL. There is currently growing interest within the field of Applied Linguistics in CA methodology. This is evidenced by a growing number of publications in Applied Linguistics journals which use a CA methodology (Seedhouse 1994, 1997a, 1999a;

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1 I acknowledge the input received to this section by Keith Richards, University of Warwick.
Markee 1995; Jung 1999; Boyle 2000b; Carroll 2000; Hosada 2000; Wong 2000a, 2002; Mori 2002; Markee & Kasper 2004). Equally, there is growing interest in CA circles in Applied Linguistics, as evidenced by recent publications by Schegloff (2000b) in the journal *Applied Linguistics*, Schegloff, Koshik, Jacoby & Olisher (2002) in the journal *Annual Review of Applied Linguistics*, and Drew (2005). Schegloff et al. (2002: 14) note that ‘[a] small but increasing amount of CA and CA-informed research on talk in educational institutions directly addresses issues of interest to applied linguists’. Applied linguistics, which has its roots in language, finds its realisation through action, so a method of inquiry that brings together these two aspects as part of a coherent programme of investigation and description offers a perspective to which applied linguists should be particularly receptive.

There is evidence that the two disciplines are moving closer together; as Drew (2005: xx) puts it in his review of their relationship: ‘A few years ago, I would have said that AL and CA were wide apart; but now I think . . . that there is an increasing convergence between the two’.

### 3.2 Teaching languages for specific purposes (LSP and ESP)

The area of languages for specific purposes (LSP) can be informed by CA research on institutional or professional discourse. As Jacoby (1998a: 1) points out, LSP teachers have to prepare students to carry out spoken professional communication in a second language. However, the problem is that the LSP teacher sometimes has little idea of the type of spoken interaction which takes place in the target professional setting and the teaching coursebook often ‘doesn’t reflect the communication reality in which (the students) actually have to function’. If, then, the teacher wishes to provide students with a curriculum based on the real-world target professional communication norms, practices, and its own discourse ‘culture’, then he/she may need to research the professional setting. In this case, CA has much to offer in terms of the exploration of spoken interaction in professional environments. Jacoby (1998a, b) provides a very practical, step-by-step guide for LSP teachers in doing situated discourse research, including collecting and analysing discoursal data. Jacoby suggests (1998b: 9f.) several ways of exploiting discoursal data in the classroom:

- extract pedagogical content and criteria for communicative success from the data;
- bring in data samples to class for the students to observe, analyse and appreciate;
- compare commercial LSP teaching materials with the reality observable in the data;
- research findings may also feed into LSP curriculum, materials and assessment design.

CA methodology has spawned studies in a wide variety of professional settings, as evidenced in collections such as Drew & Heritage (1992a), Sarangi & Roberts (1999), Richards & Seedhouse (2005), and some papers in McHoul & Rapley (2001) and Boden (1994). Settings covered by CA studies include legal hearings, news interviews, visits by health visitors, phone calls to emergency services and help lines, psychiatric interviews, airplane cockpit talk, mediation and counselling. In some professional settings, then, there is already a body of CA research which can be exploited by LSP teachers, health care being the most prominent. As Barnes (2005: 113) points out, CA research covers not only the primary care medical interview (Heritage & Maynard 2005) but also a wide range of contexts including counselling (Peräkylä 1995) and health visitors (Heritage & Sefi 1992). According to Koshik (2000: 8), ‘CA research enables medical practitioners to understand ways in which both their own and their patients’ specific practices of talk influence outcomes of medical interviews’ and these insights can be integrated into LSP teaching.

Bowles (in press) suggests that CA research is an appropriate but neglected resource for LSP research and applications. Bowles focuses on openings of NS–NNS telephone interaction in service calls to bookshops. He identifies a need for description of the differences in sequencing conventions in different languages, the kind of language used to implement these and a method for identifying, explaining and practising sequencing difficulties. This would result in sequencing information modified for speakers of specific languages which could then feed into LSP materials and task design.

CA methodology can offer a description of the organisation of an institutional setting, for example, Atkinson & Drew (1979) and Seedhouse (2004). CA can identify sequence organisations which may be vital to the institutional business and which may need to be understood or learnt by novices as part of their induction. An example of a concrete and direct application of CA findings to the English for specific purposes (ESP) classroom is provided by Packett (2005). Packett works with students in Portugal who opt to study English as part of their journalism degree course and who are required to record a face-to-face interview for potential radio broadcast as part of their assessed course work. A key and problematic demand on these trainee interviewers is that they should manage the interaction for the benefit of the overhearing but absent audience. Packett identifies a **common insertion action** in which the interviewer departs very briefly from the question–answer turn-taking format in order to add a detail to a description given in the prior turn, specifically for the benefit.
of the absent audience. These insertions, according to Packett, are constitutive of ‘doing interview’ and directly linked to the institutional goal. An insertion action can be seen in line 7 of extract 1 below, which is an example of expert data used to teach students; see appendix 1 for transcription conventions.

**Extract 1**

1 Interviewer: .hh you say if you’d had ()
   Jo::hn’s some of John’s ()
2 > abilities or talents and he’d had some of yours <
3 which were those. Which would he’ve [liked to () between you
4 Interviewee: [.hhh well I think John-
   5 John er (0.2) John no::w (0.2) having obviously been married to
6 Chris an-an- an- =
7 Interviewer: =>Chris Evert yah. <=
8 Interviewee: =yeah, and basically living a lot in in the states . . .
   (BBC4, On the topes, 15.8.00)

These insertions are organised so as only minimally to interrupt the question–answer format of the interview and to redress the indexicality of the prior description. It was noted that in the learners’ assessed interviews this vital insertion sequence was often absent or delayed, which disrupted the flow of the talk. Both the expert data and the learner data were then used by Packett as classroom materials to demonstrate to students the use of the device in interaction. Packett’s paper serves as a model not only for CA-informed pedagogy, but also for CA research in language for specific purposes with the aim of linking sequences to the institutional goal. Future CA research in this area would seek to identify such institution-specific interactional patterns and employ them in teaching.

Bowles & Palotti (2003) compare calls by Italian speakers in Italy to those of English speakers in the UK. They also compare calls to a variety of institutions (‘workplace calls’) to those made to one specific outlet, namely a bookstore, in order to uncover any domain-specific features. Their analysis of an extensive corpus reveals:

- characteristics of workplace calls as opposed to ordinary telephone calls;
- characteristics of workplace calls in the two different languages;
- characteristics of calls to bookstores in particular;
- characteristics of calls to bookstores in the two different languages.

Their research suggests that this type of CA exploration of a corpus by domain and by language is likely to be of interest to LSP in terms of materials and task design.

Bowles (in press: 26) presents the central problem in the relationship between CA and LSP: ‘What CA data invariably reveals is a degree of detail and complexity in talk which is often daunting for the LSP analyst, who finds it difficult to turn the complexity of talk into practical, instructable materials’. However, Bowles sees this bridging of the CA–LSP gap as essential if LSP oral materials are to develop in terms of authenticity and validity.

### 3.3 Language teaching materials design

Language teaching materials frequently feature dialogues presented on audio or video together with a transcription. Issues relating to authenticity of dialogues are complex and have been hotly debated. However, in many countries around the world, materials writers continue (for a variety of reasons) to invent dialogues. CA is well positioned to portray the similarities and differences between invented dialogue and naturally-occurring or ‘authentic’ interaction, both in terms of ordinary conversation and institutional interaction. Wong (2002) provides a very clear example of an application of CA to an area of applied linguistics. She identifies four sequence types which typically occur in American English telephone conversations, namely summons–answer, identification–recognition, greeting and How are you? Examining the presentation of thirty inauthentic phone conversations in ESL textbooks, Wong (2002: 37) finds that the above sequences are ‘absent, incomplete or problematic’. CA research findings, such as the above sequence types, can be fed into future language teaching materials design.

Bernsten (2002) examined invented dialogues from 22 ESL textbooks to see whether pre-sequences occur in relation to invitations, offers and requests. Pre-sequences are very common and interactionally useful devices in talk—in—interaction (Levinson 1983; Seedhouse 2004). Bernsten found that the invented dialogues contained very few examples of pre-sequences. Possible uses of insights from CA in materials design are indirect and direct. In an indirect approach, materials writers would choose authentic, naturally-occurring dialogues for coursebooks to illustrate phenomena such as pre-sequences uncovered by CA. A direct approach would actually teach conversational sequences and phenomena.

The model used by Bernsten (2002) and Wong (2002) of comparing invented dialogues with what we know about naturally occurring interaction could be extensively applied to other aspects of conversation in future research.

CA studies have been published on talk in a range of languages and including non-native speakers. Examples of CA studies in non-pedagogical settings include those in German (Egbert 1996, 2005; Golato 2000), Finnish (Sorjonen 1996; Kurhila 2001, 2005), Swedish (Lindstrom 1994), Danish (Brouwer 2004),
CA and language learning


Such studies reveal similarities and differences in the organisation of talk in different languages which may then feed into comparative and contrastive analyses of two languages, as well as into language teaching materials design. To illustrate this point, Hopper & Chen (1996) compare telephone openings in Mandarin Chinese to those in English. We saw above that there are four sequence types which typically occur in American English telephone conversations, namely summons-answer, identification-recognition, greeting and ‘how are you’. Hopper & Chen (1996) found some similarities, in that the first three sequences regularly occur in Taiwanese telephone conversations. However, they also identify practices and linguistic resources which have not been identified in European languages. In particular, telephone callers in Taiwan use a variety of greeting tokens to index the state of their interpersonal relationship and intimate callers may speak before the answerer. Such findings can potentially feed into materials and task design aimed at learners with specific L1s learning specific L2s.

3.4 Language proficiency assessment

Language proficiency assessment is probably the area in which CA has had the greatest impact on practice so far, particularly in relation to the construction of competence. Previous CA-informed work in the area of oral proficiency interviews by Lazaraton (1997) and Young & He (1998) examined Language Proficiency Interviews (LPIs). Egbert points out that ‘LPIs are implemented in imitation of natural conversation in order to evaluate a learner’s conversational proficiency’ (Egbert 1998: 147). Young & He’s collection demonstrates, however, a number of clear differences between LPIs and ordinary conversation. Firstly, the systems of turn-taking and repair differ from ordinary conversation. Secondly, LPIs are examples of goal-oriented institutional discourse, in contrast to ordinary conversation. Thirdly, LPIs constitute cross-cultural communication in which the participants may have very different understandings of the nature and purpose of the interaction. Egbert’s (1998) study demonstrates that interviewers explain to students not only the organisation of repair they should use, but also the forms they should use to do so; the suggested forms are cumbersome and differ from those found in ordinary conversation. He’s (1998) microanalysis reveals how a student’s failure in an LPI is due to interactional as well as linguistic problems. Kasper & Ross (2001: 10) point out that their analysis of LPIs portrays candidates as ‘eminently skilful interlocutors’, which contrasts with the general SLA view that clarification and confirmation checks are indices of NNS incompetence, whilst their (2003) paper analyses how repetition can be a source of miscommunication in LPIs. In the context of course placement interviews, Lazaraton (1997) notes that students initiated a particular sequence, namely self-deprecations of their English language ability. She further suggests that a student demonstration of, or statement about, poor English language ability constitutes grounds for acceptance onto courses. Interactional sequences are therefore linked to participant orientations and goals. It is anticipated that some of the above issues may surface in the proposed research and that other, new phenomena may emerge.

CA can be employed to monitor the reliability and validity of assessment. Lazaraton (2002) presents a book-length framework for the application of CA to the validation of LPIs. Her rationale is that CA is able to shed light on the assessment process itself; this can complement the use of traditional statistical methods of test validation which focus on product, i.e. scores. Brown (2003) analyses two LPIs involving the same candidate taking the same test with two different interviewers. The two interviewers were shown to ask different types of questions, provide different types of feedback and to structure sequences of topical talk in different ways. The candidate’s communicative ability in the two interviews was rated differently by four raters. The study emphasises the need for interviewer training and standardisation of practices and critiques the robustness of the concept of communicative competence. In relation to testing in English for Specific Purposes (ESP), Jacoby & McNamara (1999: 213) critique the ‘primarily linguistic orientation of traditional assessment procedures’. They show that CA is able to locate what counts as communicative competence in specific professional contexts. CA research can clarify the advantages and disadvantages of assessment formats and inform the design of assessment tasks (Schegloff et al. 2002).

A theme which runs through the above studies of language teaching assessment is the contribution which CA can make to the study of competence, which has been accepted as fundamental to AL’s interests since the 1970s, when communicative language teaching shifted attention to issues of communicative competence and how this might be developed through teaching. The communicative competence model proved highly successful in broadening the scope of classroom teaching and applied linguistics. However, it has, like all methods before or since, been based on a deficit model; the purpose of language teaching, it is generally assumed, is to help students develop linguistic knowledge and skills that will enable them to overcome current limitations and develop their communicative competence to the level of the teacher or native speaker. Also, communicative competence has been a fixed and
static construct; as Mondada & Pekarek Doehler (2004: 502) point out, the traditional notion of competence is of ‘a phenomenon that is isolated from socialization processes’. CA offers a very different view of the nature of competence. Instead of working from the static assumption that competence is something that one has a fixed degree of at a point in time, CA presents competence as variable and co-constructed by participants in interaction. CA also provides a means of exploring the variable ways in which such competence is co-constructed in particular contexts by the participants involved. ‘Competence cannot be defined in purely individual terms as a series of potentialities located in the mind/brain of a lone individual, but needs to be conceived of as a plurality of capacities embedded and recognized in the context of particular activities’ (Mondada & Pekarek Doehler 2004: 502f.). CA studies such as Bloch (2005), Goodwin, Goodwin & Olsher (2002) and Carroll (2005) portray how inter-actants with minimal linguistic resources can nonetheless employ these resources skillfully and innovatively in interaction.

3.5 Language classroom interaction

A number of studies have examined issues related to language classroom interaction from a CA perspective, revealing subtle interactional practices which transform our perceptions of L2 learners and teachers. Olsher (2004) demonstrates how L2 learners in small-group project work may complete sequential actions through gesture or embodied displays. Koshik (2002) reveals how teachers use the pedagogical practice of designedly incomplete utterances in order to initiate self-correction by learners. Carroll (2000, 2004, 2005) challenges the general perception of L2 novice learners as incompetent communicators. Carroll uncovers their ability to make creative communicative use of their minimal linguistic resources and use sophisticated conversational micro-adjustments. Novice learners can precision-time their entry into interaction, recycle turn-beginnings to solicit the gaze or attention of partners and use vowel-marking as a resource for forward-oriented repair. Mori (2002) traces how a task-as-workplan (discussion with native speakers) is transformed into a task-in-process resembling a structured interview of question–answer exchanges. Markee (2005) demonstrates how learners working in pairs on a task carefully disguise their social talk from the teacher and are able to instantly switch between on-task and off-task talk. Markee (2000) portrays the progress of intersubjectivity during two tasks, one of which results in learner comprehension of the target item whilst the other does not.

Seedhouse (2004) applies CA methodology to an extensive and varied database of language lessons from around the world and attempts to answer the question ‘How is L2 classroom interaction organised?’ The main thesis developed in this monograph is that there is a reflexive relationship between pedagogy and interaction in the L2 classroom, and that this relationship is the foundation of its context-free architecture. This relationship means that, as the pedagogical focus varies, so the organisation of the interaction varies. However, this also means that the L2 classroom has its own interactional organisation which transforms intended pedagogy into actual pedagogy.

Seedhouse sketches the basic speech exchange system of four different L2 classroom contexts and portrays the reflexive relationship between the pedagogical focus of the interaction and the organisation of turn-taking and sequence. As the pedagogical focus varies, so the organisation of turn and sequence varies. He then describes how repair is organised within different L2 classroom contexts, specifying this in terms of (a) typical participants in the repair, (b) typical repair trajectories, (c) typical types of repair, and (d) typical focus of repair. There is a reflexive relationship between the pedagogical focus and the organisation of repair; as the pedagogical focus varies, so does the organisation of repair. There is then an illustration of how the interactional organisation can transform the pedagogical focus by examining a case of preference organisation in relation to repair in form and accuracy contexts.

The overall organisation of L2 classroom interaction is then outlined. The concept of the rational design of institutional interaction is employed to identify the institutional goal as well as three interactional properties which derive directly from the goal. The basic sequence organisation of L2 classroom interaction is presented, together with an emic methodology for its analysis. Seedhouse stresses the dynamic nature of context by exemplifying how the institution of the L2 classroom is talked in and out of being by participants and how teachers create L2 classroom contexts and shift from one context to another. The monograph portrays the L2 classroom as a complex, fluid, dynamic and variable interactional environment and provides a concrete example of how CA methodology can be applied to an issue of interest to language teachers and applied linguists. In order to understand the relationship between interaction and the process of language learning, it is vital to understand how the interaction is organised.

Seedhouse (2004) argues that, because of the diversity of L2 classrooms, one should not only specify the database on which L2 classroom studies are based in terms of number of lessons or fragments of lessons, but also in terms of the following background contextual factors, in order that the diversity of the database might be assessed: L1 of the learners; multilingual or monolingual classes; culture; country of origin; age of learners; type of institution; level of learners’ proficiency in L2. Seedhouse (2004: 85)
provides a table providing a brief description of the database underlying his study.

Studies of L2 classroom teaching have predominantly featured data from classrooms in which English has been the target language. However, a number of classroom studies have recently been published which feature a variety of target languages including French (Mondada & Pekarek Doehler 2004; Seedhouse 2004); German (Liebscher & Daley-O’Cain 2003; Kasper 2004; Seedhouse 2004); Chinese (He 2004); Japanese (Ohta 2001a, b; Mori 2002, 2004). It is to be hoped that this trend will continue and that data from an increasing range of target languages will be published.

3.6 Native speaker – non-native speaker talk

Interest in the CA analysis of NS–NNS or cross-cultural talk outside the classroom has developed in recent years, including Wagner (1996); Seedhouse (1998); Hosoda (2000); Wong (2000a, 2000b, 2005); Kurhila (2001, 2005); Egbert (2005); Gardner & Wagner (2004) is a major collection of work in the area of NS–NNS talk. It features talk in a variety of social, professional and educational settings and presents analyses of talk using Danish, Finnish, Japanese, German, French and English as second languages. Mondada (2004) reveals some of the complexities of analysing plurilingual NS–NNS talk. She reveals how, in her corpus of video-conferencing meetings between surgeons in several different European countries, ‘the working language of the meeting is never decided once and for all, but is constantly renegotiated’ (p. 31). For interactants (and hence for the analysis), NS and NNS categories may not be relevant; rather, they may present themselves as ‘experts’ or ‘seniors’ or ‘juniors’.

Seedhouse (1998a) provides a discussion of how CA methodology can be applied to the study of NS–NNS interaction. One cannot start from the assumption that the identities ‘native speaker’ and ‘non-native speaker’ are relevant to the talk. Seedhouse analyses an extract of NS–NNS talk. Working from the details of the interaction, these identities are shown to be procedurally relevant to the linguistic forms used, to the topic of the talk and to the interactional moves made. For example, the native speaker used minimalised, pidginised interlanguage forms when talking to the non-native speaker and thereby talked into being the relevance of the identities NS and NNS.

The CA study of NS–NNS interaction in non-pedagogic settings has broadened in recent years to include languages other than English, for example, German (Wagner 1996; Seedhouse 1998a; Egbert 2005), Finnish (Kurhila 2001, 2005), Danish (Brouwer 2004) and Japanese (Hosoda 2000). The field has also broadened to include the CA study of interaction between NNS and NNS using English as international lingua franca talk (Firth 1996; Wagner 1996; Mondada 2004), and Finnish as international lingua franca talk (Mazeland & Zaman–Zadeh 2004) as well as studies which compare the identical interactional phenomenon in NNS talk (Wong 2000a) and in NS talk (Schegloff 2000b) in English.

Carroll’s (2005) study demonstrates that a CA focus on sequence can sometimes reveal hitherto unnoticed aspects of the talk of NNSs. Japanese speakers of English as a foreign language (particularly at the novice level) often add vowels to word-final consonants, for example: ‘Oldest child-u is-u (0.21) um’:: twenty’. Generally, English teachers have treated this as a pronunciation problem, resulting from negative transfer from the L1. Whilst not disputing these origins, Carroll’s analysis of his data demonstrates that his subjects were employing vowel-marking as an interactional resource, particularly during forward-oriented repair (Schegloff 1979) or word search, as in the example below.

**Extract 2**

A: what-o what-o interesting-u (0.43) e:to school-u
to festival

(Carroll 2005)

According to Carroll, vowel-marking, in delaying the production of some next-item-due, serves to buy the speaker initiating the repair a little more time to achieve self-repair. Furthermore, vowel-marking alerts co-participants to the fact that a search is underway and to their possible role in resolving it.

In terms of application, Carroll suggests that training students in the use of interactionally equivalent conversational micro-practices, such as the use of *uh* and *um* would be helpful. Furthermore, Carroll’s micronanalysis reveals a previously unimagined degree of interactional sophistication in the way these novice NNSs employ their limited resources.

Such CA research, then, reinforces a shift away from a linguistic deficit model focussed on individual performance towards a model in which communicative competence is seen to be co-constructed. In this model, many of the interactional competencies of L2 students, non-native speakers and speech-disordered patients can only be revealed through painstaking CA analysis.

3.7 Bilingual and multilingual code-switching

Recent years have seen a growth in the number of studies which have employed a CA approach to bilingual and multilingual interaction and to code-switching in particular (Auer 1998; Sebba & Wootton 1998; Stroud 1998; Gafaranga 2000, 2001; Gafaranga & Tørras 2001, 2002; Tørras 2002, 2005; Tørras & Gafaranga 2002; Wei 2002; Mondada 2004). Wei
(2002) provides an overview of the CA approach to bilingual interaction, in which ‘particular attention is paid to the way in which individuals strategically use the codes in their bilingual repertoires to achieve specific interactional goals’ (p. 159). Analyses must be demonstrably oriented to participant concerns and actions and aim to reveal the underlying procedural apparatus by which interactants themselves arrive at local interpretations of language choice.

Although there is a considerable literature on bilingual code-switching, relatively little CA research has been undertaken on code-switching in L2 classrooms. Code-switching as a methodical phenomenon in L2 classroom interaction is now starting to be researched using a CA methodology. Mori (2004: 537) shows ‘how code switching … serves as a resource for managing sequential boundaries, and at the same time, affects the ways in which their interactive activities are organized’. Kasper (2004: 551) shows how ‘code switching worked as one device by which the novice requested a target language action format from the L2 expert’. Üstünel & Seedhouse (2005) depict the relationship between pedagogical focus and language choice in the language teaching/learning environment of English as a Foreign Language (EFL) at a Turkish university. The study presents the organisation of code-switching which is teacher-initiated and ‘teacher-induced’. Transcripts of lessons were examined by relating incidence of code-switching to the pedagogical focus. An adapted version of the classic CA question (why that, right now?) was applied for interaction involving code-switching, namely why that, in that language, right now? The study demonstrates that code-switching in L2 classrooms is orderly and related to the evolution of pedagogical focus and sequence. Through their language choice, learners may display their alignment or misalignment with the teacher’s pedagogical focus.

4. CA and language learning processes

In this section I consider what CA may have to offer in relation to the broad field of study of second language learning. The section starts and finishes with a discussion of the relationship between CA and Second Language Acquisition (SLA). I also examine the different conceptions of the contribution of CA to the study of language learning processes and provide an example of a CA analysis of language learning.

4.1 CA and Second Language Acquisition

The late 1990s saw a CA-motivated debate on a proposed ‘re-conceptualisation’ of SLA (Firth & Wagner 1997, 1998; Kasper 1997; Long 1997; Gass 1998; Markee 2000, 2002; Van Lier 2000). Since SLA is a broad area, we should first clarify that CA’s only possible contribution would be to those areas of SLA which use spoken interaction (both inside and outside the classroom) as data. Some of the criticisms which Firth & Wagner (1997, 1998) make of SLA are as follows: SLA has neglected the social and contextual aspects of language use and their contribution to SLA processes. SLA is becoming a ‘hermetically sealed area of study’ (Firth & Wagner 1998: 92) which is losing contact with sociology, sociolinguistics and discourse analysis in favour of a psycholinguistic focus on the cognition of the individual. There is an etic rather than emic approach to fundamental concepts. The traditional SLA database is too narrow. Essentially the call is for a holistic approach which includes the social dimension and emic perspectives. Responses to Firth & Wagner’s (1997) article, a number of studies have been published which do incorporate social and contextual dimensions (e.g. Lantolf 2000; Hall & Verplaatse 2000; Ohta 2001a) and which have established a school of Sociocultural Theory within SLA. So we should note at the start of this section that (in contrast to the situation with AL) there has been controversy concerning whether CA has any role in SLA at all and if it does, what that role should be. We will now consider the relationship between CA and language learning and return to the relationship between CA and SLA at the end of this section.

4.2 Conceptions of CA in language learning and teaching research

Opinion is currently divided as to the relationship between CA and language learning and the status of CA. At the time of writing there are a number of competing and sometimes conflicting conceptions of how CA may or may not be employed in language learning and teaching research. From a temporal perspective, this lack of clarity is not a matter of major concern. CA itself only emerged in the 1960s, had no connection with learning, and in its genesis dealt exclusively with monolingual English data. It is only in the period 2000–2004 that publications have started to address the relationship between CA and language learning, culminating in the special issue of the Modern Language Journal in 2004 (Markee & Kasper 2004). As Gass (2004: 598) points out, the different articles in the special issue approach the relationship between CA and learning in very different ways. The common ground is that all studies use microanalysis of transcripts of classroom interaction. Kasper (2004: 551) ‘explores
some roles for CA as an approach to second and foreign language learning’ whereas He (2004: 579) is quite clear that ‘CA is not a learning theory’ and that ‘CA is not concerned with what is not observable’ (p. 578). Hall (2004: 608) notes that the studies are not ‘successful in making a collective case for CA’s potential as an approach to studies of language learning’. Larsen-Freeman (2004: 607) suggests that ‘saying that something has been learned, saying what has been learned, when it has been learned, and the reason it has been learned are big challenges for all SLA researchers, cognitivists as well as those who practice CA. Yet these are the challenges which CA researchers must confront if they want to move CA to the center of the field’.

4.3 Three approaches

In this section I propose that it now makes sense to identify three different approaches to the application of CA to the broad field of language learning and teaching.

In the ethnomethodological CA approach, data from language learning and teaching settings are approached in exactly the same way as any other data, following the principles and procedures described above. If it is evident in the details of the interaction that the participants are orienting to language learning in some way, then it is legitimate to invoke this in the analysis. For example, Koshik (2002) reveals how teachers use the pedagogical practice of designedly incomplete utterances in order to initiate self-correction by learners. The analysis is not linked to any learning theory and Koshik states (2002: 278) that her aim ‘is not to evaluate the pedagogy but to describe an institutional practice, showing how practices of ordinary conversation can be adapted for specialized institutional tasks’.

This approach would argue that the very strength of applying CA to the field of language learning and teaching lies in the fact that it is neutral and agnostic in relation to learning theories and teaching methods and reveals an emic perspective. Unless it is evident that interactants are themselves orienting to a concept, it is not legitimate to invoke it in an a priori fashion. Therefore, linking CA to any theory of learning in abstraction from a specific interactional environment is an inherently etic undertaking.

The sociocultural theory approach to CA is currently attracting a great deal of interest as it has the potential to offer a systematic approach of how to study the process of second language learning. This approach seeks ‘to use CA techniques as methodological tools that are in the service of different sociocultural theories of learning’ (Markee & Kasper 2004: 495). Mondada & Pekarek Doehler (2004: 504) outline the significant similarities between CA and sociocultural theory in a strong socio-interactionist perspective: ‘both of these frameworks converge in insisting on the central role of contextually embedded communicative processes in the accomplishment of human actions and identities as well as of social facts’. Young & Miller (2004), Brouwer & Wagner (2004) and Mondada & Pekarek Doehler (2004) propose to link a sociocultural view of development with a CA perspective on interaction. They apply to their data the notion of situated learning ‘according to which learning is rooted in the learner’s participation in social practice and continuous adaptation to the unfolding circumstances and activities that constitute talk-in-interaction’ (Mondada & Pekarek Doehler 2004: 501). Young & Miller (2004) conduct a longitudinal observation of revision talk, show that the participation framework changed over time and reveal the processes by which the student moved from peripheral to fuller participation. Brouwer & Wagner (2004) suggest moving away from the typical SLA conception of language in terms of individual cognition and an input–output approach to the acquisition of discrete linguistic (typically syntactic or lexical) items. They propose instead to focus on the development of interactional skills and resources and conceptualising language learning as a social process. They suggest that ‘learning is situated; learning is social; and knowledge is located in communities of practice’ and that ‘learning not only takes place in the social world, it also constitutes that world’ (p. 33).

The field of CA-for-SLA generally falls within this approach. The main difference with the previous approach is that the sociocultural theory approach to CA employs CA as a tool in the service of a theory of learning whereas ethnomethodological CA does not and is agnostic in relation to learning. What kind of entity is the sociocultural theory approach to CA? One way of understanding it is as follows. Sociocultural theory is a learning theory and CA is an empirical research methodology.

It is clear that there are a number of fundamental differences between sociocultural theory and CA, although of course there are similarities and mutual interests. The sociocultural theory approach to CA may be seen, from one perspective, as an attempt to reconcile these differences and to synthesise a learning theory with a research methodology. This approach, although exciting much interest at present, is relatively new. It remains to be seen whether the differences are insurmountable or whether this will become a major approach to research in language learning.

In the linguistic CA approach, interactional organisations or constructs which have been revealed by CA analysis are treated as ‘decontextualised coding categories’ (Wagner 1996: 231) and employed in linguistic or psycholinguistic SLA studies, typically within a quantitative paradigm. As Wagner (1996: 231) points out, ‘these concepts may very well lose their meaning’. For example, SLA research on modified interaction has quantified clarification
requests, confirmation checks, and comprehension checks. However, they are merely the social actions or functions performed by the repair and constitute only one small part of the overall organisation of repair in task-oriented contexts as described in this section. SLA research on modified interaction has therefore deprived itself of the analytical power of the CA approach to repair by using only one small and isolated component of this complex organisation. ‘Linguistic CA’, then, presents CA findings in a format in which they can be readily employed to isolate interactional phenomena for quantitative treatment.

Seedhouse (2004) argues that a form of ‘linguistic CA’ has diverged from ethnomethodological CA. There is now a common misconception among a number of linguists that doing CA is a matter of transcribing talk and then identifying or coding patterns of turn-taking, adjacency pairs, preference organisation and repair, with the ethnomethodological principles and the dimension of social action entirely absent. There is description of superficial linguistic features rather than an analysis of the social action which is accomplished by the deployment of linguistic resources. Cameron (2001) demonstrates how wide the gulf has now become between linguistic CA and ethnomethodological CA. Taking Cameron (2001) as the archetype, the typical features of introductions to linguistic CA are as follows:

- no representative examples of actual CA analysis are provided;
- there is no mention of any of the ethnomethodological principles which are the fundamentals of CA methodology (Heritage 1984; Seedhouse 2004);
- the reader is likely to form the impression that interactional organisations are the methodology of CA and are a system of units and rules to be applied etically in the same way as in a descriptivist linguistics approach;
- there is no indication that participants employ these context-free interactional organisations in a normative, context-sensitive way to display their social actions;
- hence the reflexive connection between social action and language is entirely absent.

It may well be argued that ‘linguistic CA’ is not CA at all and should have a different designation; my argument would be that it is an amalgamation of CA constructs and a linguistic mentality.

4.4 Language learning issues

CA studies have impacted in a number of ways on several issues related to language learning. Studies have critiqued the notion of ‘task’ employed by the task-based approach to language teaching and learning. A number of CA works (Mori 2002; Kasper 2004; Mondada & Pekarek Doehler 2004: 504; Seedhouse 2004, 2005b) demonstrate that there can be significant differences between the task-as-workplan and the task-in-process and reveal learners to be active agents, who transform tasks-as-workplans into tasks-in-process on a moment-by-moment basis (Markee & Kasper, 496). Mondada & Pekarek Doehler (2004: 505) therefore insist ‘that (tasks) cannot be understood as stable predefined entities’. Seedhouse (2005b) suggests that this can cause serious problems with validity in task-based research. The construct ‘task’ has a split personality, namely the task-as-workplan and task-in-process. If we pose the question which of these is the construct used for conceptualisation by SLA research, the answer is that it is predominantly the task-as-workplan. If, however, we pose the question whether SLA research gathers interactional data from the task-as-workplan or the task-in-process, the answer is that data are gathered from the task-in-process, because that is the actual communicative event which generates interactional data. What is purported to be measured/researched is conceptualised in terms of task-as-workplan, whereas what is actually measured/researched derives from the task-in-process. This threat to validity can only be overcome by switching the conceptual and methodological focus to task-in-process; CA can help to accomplish this shift.

CA studies have also furthered our understanding of how ‘[l]earners and teachers construct their identities in and through their talk . . . these identities are quite permeable and are deployed by members on a moment-by-moment basis as a resource for making particular types of learning behaviour relevant at a particular moment in a particular interaction’ (Markee & Kasper 2004: 496). Richards (in press) draws on Membership Categorisation Analysis (MCA) and ‘demonstrates how shifts in the orientation to different aspects of identity produce distinctively different interactional patterns in teacher-fronted talk’.

4.5 An example of a CA analysis of language learning processes

In order to illustrate some of the issues and concepts discussed and to exemplify CA analysis of language learning processes, I will now analyse extract 3. A CA analysis would normally cover the areas described in section 2.4. Here, I do not present the initial stages because of space constraints. However, see Seedhouse (2004: 59–64) for a full analysis of similar data. Since the discussion is explicitly concerned with language learning processes, it should be classified as broadly within the sociocultural theory approach to CA.

EXTRACT 3

(The teacher has been asking learners to talk about their favourite movies)
1 L: Kung Fu.
2 T: Kung Fu? you like the movie Kung Fu?
The analysis will be divided into three stages. Firstly, what can we say about the learner's actual developmental level or current ability in L2? We can note in lines 3 and 5 that his grammatical resources are fairly limited. Nonetheless, the learner is able to make use of these limited resources to nominate a sub-topic (line 1), to develop the sub-topic (line 3) and to turn the discussion to his own fighting abilities (line 5). Although it can be challenging for children to interact with the teacher in a classroom setting, even in the L1, we can see that L is able to use the turn-taking and sequence organisations of the L2 proficiently. L constantly needs to analyse T's turns. From the learner's perspective, it is not just a matter of understanding the propositional content of what T says in the L2; it is also a matter of analysing what social and sequential action T is performing and what an appropriate social and sequential action in response would be. So we can see that L skilfully manages to co-construct meaning with T in the L2 from his limited grammatical resources.

Secondly, what can we say about the learning environment in terms of input to the language learning process and facilitation of upgrading as a result of the interaction? Line 6 reads: 'you know how to fight with your hands?' We will break its contribution down into four points. Firstly, the utterance places the sequence within the teacher's overall pedagogical plan for the lesson, which was to allow the students to share their ideas and possibly generate some new vocabulary words within the context of the discussion (Johnson 1995: 23). Secondly, it may promote positive affect and motivation in that the teacher engages with the ideas and personal meanings which the learner chooses to share and produces a conversational action of confirmation check which validates the utterance. Line 6 also displays interest in the learner's extra-curricular abilities. It then demonstrates confidence in the learner by returning the floor to him with the question. Thirdly, it makes it possible for the other learners in the class to follow the topic of the interaction (the others are explicitly addressed in line 10) and to receive correctly formed linguistic input. There is no evidence in the transcripts as to whether the other learners have done so or not. However, Ohta (2001) shows (by recording and transcribing the private talk of individually microphoned students in a classroom) that students are capable of using recasts in which they are not personally involved as negative evidence and of displaying uptake in their private talk. Fourthly, and most importantly, there is positive evaluation of the propositional content of the learner utterance followed by an expansion of the learner utterance into a correct sequence of linguistic forms or embedded correction. In terms of input, the teacher provides a corrected version of the learner's turns in line 5 whilst retaining a focus on meaning. As Johnson (1995: 25) points out, this form of correction and expansion is highly reminiscent of adult–child conversation. The technique being used by the teacher here is often termed scaffolding (Johnson 1995: 75). The SLA literature terms this action a recast and it conforms to Long, Inagaki & Ortega's (1998: 358) definition of recasts.

Ohta defines Vygotsky's Zone of Proximal Development (ZPD) in relation to SLA in the following terms: 'For the L2 learner, the ZPD is the distance between the actual developmental level as determined by individual linguistic production, and the level of potential development as determined through language produced collaboratively with a teacher or peer' (Ohta 2001: 9). What we can see in this extract, then, is how a ZPD is talked into being through the organisation of the interaction. Specifically, we see a neat juxtaposition of the learner's actual developmental level in line 3 (‘yeah...fight’) with the target NS level produced by the teacher in line 6 (‘you know how to fight with your hands?’). We also see the learner producing, with the teacher's help, utterances which are moving up the scale in line 5 (‘I fight...my hand’) and line 7 (‘I fight with my hand’). There is some evidence, then, of learner noticing and uptake of the embedded correction/scaffolding/recast in this case.

So from the perspectives of SLA psycholinguistic theory, L1 acquisition studies and Vygotskian social constructivist educational theory, there is agreement that such sequences are beneficial. A CA analysis demonstrates the same point. The distinctive CA contribution is to show how learning is constructed by the use of interactional resources and to explicate the progress of their learning and their socially distributed cognition or intersubjectivity (see below). From a broader perspective, Seedhouse (2004) suggests that CA is able to explicate the reflexive relationship between pedagogy and interaction and hence how learning takes place through the interaction.

Thirdly, how does the process of instructed L2 learning progress? Seedhouse (2004) suggests that the canonical way in which an L2 lesson progresses is that the L2 teacher introduces a pedagogical focus and the learners produce specific linguistic forms and patterns of interaction in the L2 in normative orientation to
the pedagogical focus. The teacher then evaluates
the learners' turns and progresses the lesson in a
particular direction on the basis of that evaluation.
So, in the above extract, we can see that the teacher
analyses the learner's contribution positively and
continues to promote the learner's nominated topic.
The point is, then, that we as analysts have access
to the same interactional evidence of the learners'
learning states as the teachers have\(^2\) as well as
access to the steps the teacher takes in reaction to
such evidence. In other words, we have access to
the same emic perspective of the learning process in
interaction to which the teacher has access. CA, then,
gives access to socially-distributed language learning
processes. As with cognition, this is only one part of
the whole picture, but a useful one nevertheless. It
should be made quite explicit at this point that CA
does not claim to be able to establish the cognitive
state of individuals in isolation. What it is able
to portray and explicate, however, is the progress
of intersubjectivity or socially distributed cognition
(Schegloff 1991). CA aims to 'identify ways in which
participants themselves orient to, display, and make
sense of one another's cognitive states (among other
things)' (Drew 1995: 79). The point is, then, that the
interactants in extract 3 are displaying to each other
(and to the rest of the class and to the analyst) their
understanding of each others' utterances by means
of, and by reference to, the organisation of turn-
taking, sequence and repair. This demonstrates what
Schegloff (1991: 152) means by 'the embeddedness,
the inextricable intertwinedness, of cognition and
interaction'. The CA analysis not only demonstrates
what understandings the interactants display to each
other, but also how they do so by normative reference
to the interactional organisations. In other words,
we gain access to their displays of understanding to
each other in the same way that they gain this access,
i.e. by reference to the interactional organisations;
this is what is meant by developing an emic perspective.

Psychology, SLA and CA do not have any means
of establishing a direct window into an individual's
cognitive state whilst they are engaged in L2 class-
room interaction. We do need to try to conceptualise
what this might mean in practice, though; what
factors are involved in an individual's cognitive state
in such a stream of interaction? Looking at line 5 of
extract 3, L is not merely producing an utterance in
the L2; any utterance is a document on many levels,
and Seedhouse (2004) suggests that L2 classroom
interaction in particular operates on a number of
levels simultaneously. The utterance is a display of
the learner's analysis of the prior utterance of an
interactant; it performs a social action in response and
it positions the learner in a social system. It displays
an understanding of the current context (sequential,
social and L2 classroom context) and also renews it.
It documents the learner's cognitive, emotional and
attitudinal states: Note that this does not mean it
gives a direct window into these states. In the specific
case of the L2 classroom, the learner's utterance may
in addition be delivered in the L2 and may thereby
document his/her actual developmental level as
well.

Thus, we can see that a part of what is meant by
the cognitive state of a learner involved in L2 classroom
interaction is inextricably enmeshed and engaged
with the unique sequential, social and contextual
environment in which he/she is engaged. It is argued
that this part of the individual's cognitive state can
be portrayed emically in situ, that is, in that unique
sequential environment. This is not to suggest that
this process involves much like the whole picture, nor
that the methods employed by SLA and psychology
are not useful in portraying other aspects of the full
picture in relation to cognition. The point to be
made, however, is that CA is able to make a major
contribution to the SLA project in terms of the
portrayal of socially-distributed cognition (Markee
2000: 3). Ohta (2001) demonstrates how socially-
distributed cognition can work in the L2 classroom.
Recasts are not necessarily just responses by the
teacher to one learner. Ohta shows (by recording and
transcribing the private talk of individually micro-
phoned students in a classroom) that other students
can use recasts in which they are not personally
involved as negative evidence and display uptake
in their private talk. Moving the focus back to
the general relationship between cognition and
interaction, Schegloff (1991: 154) suggests that 'the
structures of interaction penetrate into the very warp'
of cognition, so that, for example, an 'understanding-
display' device (i.e. the next-turn-proof-procedure)
is built into the organisation of turn-taking and
sequence. In the same way, if we wish to fully
understand the processes of cognition in relation to
instructed L2 acquisition, it is vital to understand
how L2 classroom interaction is organised (Seedhouse
2004).

Brouwer (2003) provides an example of how
detailed CA examination of interactional data can
increase our understanding of learning processes.
Brouwer examines word search sequences between
NS and NNS and develops a distinction between
word search sequences which act as language learning
opportunities and those which do not. Lazaraton
(2004) produces a microanalysis of gesture and speech
used by a teacher during vocabulary explanations and
concludes that 'classroom L2 learners receive con-
siderable input in nonverbal form that may modify
and make verbal input (more) comprehensible'
(p. 111). Together with the analysis of extract 3,
these studies demonstrate that what we call 'language

\(^2\) Although we do not have access to all of the cues which the
teacher does, e.g. non-verbal ones.
learning’ is inextricably embedded in classroom interaction.

4.6 The relationship between CA and SLA

We now return to the thorny and unresolved question of the relationship between CA and SLA, which we broached in section 4.1. The question may best be tackled if we divide CA up into the three approaches identified earlier. First, the SOCIOCULTURAL THEORY CA APPROACH is generally compatible with the sociocultural theory school of SLA, with the provisos given in section 4.3, and is now becoming known as CA-for-SLA (Markee 2000). This approach is the one which is exciting the most interest at present and is likely to be the main growth area in the future.

In the second, LINGUISTIC CA APPROACH, decontextualised CA interactional organisations or constructs may well continue to be employed in quantitative SLA studies and isolated interactional features may continue to be quantified. However, Seedhouse (2004, 2005b) suggests that CA may be used as a preliminary stage to ensure the validity of quantification of interactional features. He suggests that if (psycholinguistic) SLA wishes to use naturally occurring discourse as data for quantification and to assure the validity of the process, then it will need to separate its research processes into two stages and to change its focus of analysis from the task-as-workplan to the task-in-process. The first stage would involve the following:

1) Conduct an emic, holistic analysis of each extract as an instance of discourse in its own right.
2) Adopt qualitative, emic concepts of validity, reliability, epistemology etc. in relation to the discourse which it uses for input which are different to, and separate from, those which it uses for the quantification stage. These concepts are outlined in section 5 below.
3) Any definitions used in the study (including that of the 'task’) would have to be generated inductively, bottom-up from the data. In other words, a shift to the task-in-process would be necessary.
4) Adopt a perspective on the homogeneity and heterogeneity of discourse which at present it lacks, together with a model and methodology for analysing these.
5) Adopt a perspective on socially-shared cognition and learning.

In the second stage the analysed interactional data (e.g. recasts) could be used for quantitative treatment with their construct validity assured. CA is able to provide all that is necessary for the first stage of the process, so there is a clear role which CA can play in that part of the SLA project which relates to spoken interaction.

In the case of the third approach, the ETHNOMETHODOLOGICAL CA APPROACH, it is unclear whether there will be any further rapprochement with SLA. Those CA practitioners who have been interested in adapting their practices to the agenda of SLA may already have moved to the sociocultural theory CA approach. By contrast, those who have preferred so far to adhere to strictly ethnomethodological practices may be unlikely to make alterations in future to relate their research to SLA issues.

5. CA as a social science research methodology

It has already been argued that CA is very different to research methodologies typically employed in linguistics. Larsen-Freeman (2004: 603) suggests that ‘CA has not occupied center stage in SLA research because its ontology and epistemology have differed from mainstream views’. It is therefore important to understand what kind of methodology CA is. Seedhouse (2005a) positions CA in relation to social science research methods and concepts such as validity, reliability, generalisability, epistemology, quantification and triangulation. The goal of developing an emic perspective on naturally occurring interaction means that CA has had to develop procedures which are sometimes rather different in many ways to mainstream research methodologies. CA’s aim to develop an emic perspective on talk means that many of its assumptions and practices will necessarily be radically different from research methodologies operating in an etic paradigm.

Peräkylä (1997: 206) identifies the key factors in relation to RELIABILITY as the selection of what is recorded, the technical quality of recordings and the adequacy of transcripts; ten Have (1999) provides a very detailed account of this area. Another aspect of reliability is the question of whether the results of a study are repeatable or replicable (Bryman 2001: 29), and the way CA studies present their data is of crucial significance here. Many research methodologies do not present their primary data in their publications and hence the reliability of major sections of the researchers’ analyses is not available for scrutiny. By contrast, it is standard practice for CA studies to include the transcripts of the data, and increasingly to make audio and video files available electronically via the Web. Furthermore, because CA studies (as exemplified in this collection) display their analyses, they make transparent the process of analysis for the reader. This enables the reader to analyse the data themselves, to test the analytical procedures which the author has followed and the validity of his/her analysis and claims. In this way, all of the analyses of data in this collection are rendered repeatable and replicable to the reader in so far as this is possible.
We will now consider three kinds of validity in relation to qualitative research: internal, external and ecological validity (Bryman 2001: 30). **Internal validity** is concerned with the soundness, integrity and credibility of findings. Do the data prove what the researcher says they prove or are there alternative explanations? Many CA procedures which seem strange to non-practitioners are based on a concern for ensuring internal validity whilst developing an emic perspective, which reflects the participants’ perspective rather than the analyst’s. How do CA analysts know what the participants’ perspective is? Because the participants document their social actions to each other in the details of the interaction by normative reference to the interactional organizations, as explained above. We, as analysts, can access the emic perspective in the details of the interaction and by reference to those same organizations. Clearly, the details of the interaction themselves provide the only justification for claiming to be able to develop an emic perspective. Therefore, CA practitioners make no claims beyond what is demonstrated by the interactional detail without destroying the emic perspective and hence the whole internal validity of the enterprise.

Ten Have (1999: 27) details a number of aspects of CA practice which often astound non-practitioners. These can be explained (from one angle) as being absolutely necessary in order to maintain validity in an emic perspective. The first aspect ten Have mentions is obsession with ‘trivial’ detail. However, since the emic perspective can only be portrayed by reference to the minute interactional detail, this is vital. Secondly, CA does not tend to use existing theories of language, society, psychology etc. to explain the interaction. This would replace the emic perspective with an analyst’s perspective, unless it can be shown in the details of the interaction that the participants themselves are orienting to such theories. Thirdly, CA allegedly refuses to take context into account as it declines to invoke ‘obviously relevant’ contextual features such as participants’ social status, gender, race etc. Since there are an indefinite number of ‘external’ aspects of cultural, social or personal identity or context which could be potentially relevant to any given instance of talk-in-interaction, an emic analysis must show which of these innumerable, potentially relevant characteristics are actually procedurally relevant to those participants at that moment; this can only be accomplished by analysing the details of the interaction.

**External validity** is concerned with generalisability or the extent to which the findings can be generalized beyond the specific research context. All CA studies in effect work on the particular and the general simultaneously; by analysing individual instances, the machinery which produced these individual instances is revealed. For example, Seedhouse (2004) suggests that the reflexive relationship between pedagogy and interaction is a generalizable, indeed, universal feature of L2 classroom interaction because it relates directly to the institutional goal, which is always the same wherever L2 classroom interaction is taking place.

In relation to epistemology, CA is based on ethnography, whose fundamental principles are described in Seedhouse (2004). From a broader perspective, ethnography can be located (Lynch 2000) in a phenomenological paradigm, which considers that ‘it is the job of the social scientist to gain access to people’s “common-sense thinking” and hence to interpret their actions and their social world from their point of view’ (Bryman 2001: 14). Ethnography’s ontological position can be associated with constructionism or the belief that ‘social phenomena and their meanings are constantly being accomplished by social actors. It implies that social phenomena and categories are not only produced through social interaction but that they are in a constant state of revision’ (Bryman 2001: 18).

The short and simple way to present the CA attitude to quantification would be to state that CA is a qualitative methodology which tries to develop an emic perspective, so quantification is generally of peripheral interest to CA practitioners. It has often been mistakenly reported that quantification is prohibited in CA. However, informal or methodological quantification has been widely used from the beginnings of CA. Schegloff et al. (1977), for example, report self-correction as ‘vastly more common than other-correction’. The classic statement of the CA position on quantification is Schegloff (1993), who warns specifically against premature quantification in relation to superficially identifiable interactional phenomena, which will tend to divert our attention from detailed analysis of individual instances. As Schegloff (1993: 114) puts it, ‘[q]uantification is no substitute for analysis’. Nevertheless, Heritage (1999: 70) considers the likelihood that CA will become more quantitative during the next period of its development and identifies (1999: 404) a number of possible uses for statistics in CA.

6. Conclusion

There are a number of difficulties in attempting to compile a comprehensive review of the literature in this area. It is quite common for authors employing a CA methodology to make no mention of this in their title or abstract. Sometimes, CA is combined with other approaches. Also, the boundaries differentiating a CA study from a non-CA study are quite fuzzy and poorly defined. A number of studies are characterising themselves as ‘CA-informed’ or ‘CA-inspired’ as opposed to ‘purist’ or ‘hard-core’ CA. I have identified in this study three different approaches to CA in the field of language learning, and these classifications are in themselves controversial.
Looking to possible future directions for CA research in the area of language learning and teaching, it is a safe assumption that it will examine a wider range of languages being learnt and taught in a wider range of teaching and learning contexts. In the classroom, we can expect to learn more about classroom talk as 'a nexus of inter-related speech exchange systems' (Markee 2000). In some areas of language learning and teaching the potential of CA has only recently started to be explored, particularly in relation to teacher training, LSP/ESP, materials design and code-switching. It is likely that there will be a significant increase in the number of studies in these areas as the applicability of CA becomes clearer. By contrast, in areas such as language proficiency assessment and classroom interaction, a great deal more research has already been done and book-length studies are available. Another likely growth area is research into technology-based forms of synchronous communication, e.g. webchat, and their implications for language learning. Publications have started to appear in this area, e.g. Negretti (1999). It is questionable, however, how many of the basic principles of CA can be applied to such a medium.

One area of CA research into language learning which is expected to grow considerably in coming years is that of longitudinal studies which document the development of interactional patterns in learners over time. Studies so far demonstrate the promise of this approach. Young & Miller (2004) conducted longitudinal observation of revision talk, noted that the participation framework changed over time and 'demonstrate processes by which the student moved from peripheral to fuller participation' (p. 519). Hellermann (forthcoming) traces the development of the interactional practices of two learners in an L2 literacy class over three terms of study. The investigation demonstrates how the learners (with different L1s) are socialised into classroom interaction practices and how their ability to participate in these practices evolves. Brouwer & Wagner (2004: 44) examine the development over a period of 2 months of a Japanese learner of Danish: 'The differences between early and later encounters are found in the complexity of the emerging structures which build on earlier talk and topics and where we can see increasing displays of understanding by both participants. Learning a second language, then, may be described in terms of increasing interactional complexity in language encounters rather than as the acquisition of formal elements'. They conclude that 'instead of describing encounters rather than as the acquisition of formal growth produced by an ever-increasing base of well-trained researchers. By contrast, a sudden 'boom' in superficial studies aimed at immediate applicability will inevitably lead to the 'bust' stage of the cycle.

Appendix 1

Transcription conventions

A full discussion of CA transcription notation is available in Atkinson & Heritage (1984). Punctuation marks are used to capture characteristics of speech delivery, not to mark grammatical units.

| [ ] | indicates the point of overlap onset |
| ] | indicates the point of overlap termination |
| = | a) turn continues below, at the next identical symbol |
| (b) | if inserted at the end of one speaker's turn and at the beginning of the next speaker's adjacent turn, it indicates that there is no gap at all between the two turns |
| 3.2) | (an interval between utterances (3 seconds and 2 tenths in this case) |
| ( ) | a very short untimed pause |
| word | underlining indicates speaker emphasis |
| e:r the::: | indicates lengthening of the preceding sound |
| - | a single dash indicates an abrupt cut-off |
| ? | rising intonation, not necessarily a question |
| ! | an animated or emphatic tone |
| , | a comma indicates low-rising intonation, suggesting continuation |
| . | a full stop (period) indicates falling (final) intonation |

CAPITALS especially loud sounds relative to surrounding talk

| o o | utterances between degree signs are noticeably quieter than surrounding talk |
| ↑ ↓ | indicate marked shifts into higher or lower pitch in the utterance following the arrow |
| > < | indicate that the talk they surround is produced more quickly than neighbouring talk |
| ( ) | a stretch of unclear or unintelligible speech |
| (guess) | indicates transcriber doubt about a word |
| .hh | speaker in-breath |
| hh | speaker out-breath |
| → | arrows in the left margin pick out features of especial interest |
Paul Seedhouse

Additional symbols

(T shows picture) non-verbal actions or editor’s comments

ja ((tr: yes)) non-English words are italicised, and are followed by an English translation in double brackets

[gibee] in the case of inaccurate pronunciation of an English word, an approximation of the sound is given in square brackets

[æ] phonetic transcriptions of sounds are given in square brackets

<> indicate that the talk they surround is produced slowly and deliberately (typical of teachers modelling forms)

X the gaze of the speaker is marked above an utterance and that of the addressee below it. A line indicates that the party marked is gazing towards the other; absence indicates lack of gaze. Dots mark the transition from nongaze to gaze and the point where the gaze reaches the other is marked by X

T: teacher
L: unidentified learner
L1: identified learner
LL: several or all learners simultaneously

Note: Those extracts for which the author has had access to original audio and/or video tapes have been transcribed according to this system. Other extracts are reproduced as they originally appeared with occasional modifications to achieve standardisation.

Appendix 2

Resources for CA research into language learning and teaching

Seedhouse (2004) suggests that because of the great variety of L2 classrooms, it is important for CA researchers in AL and SLA to have access to a large and varied classroom database. Fortunately, technology can facilitate this in some respects. It is becoming increasingly common for published research studies to include transcript data and for student theses to include not only transcripts but also video or audio data. It is also now simple for researchers to pool data by emailing transcriptions, audio and video data as attachments. Playback machines with foot pedals can help with transcription. Software is now becoming available which claims to transcribe speech and/or digitised audio and video files, but their suitability for CA research has not yet been evaluated. Websites such as Childes (<http://childes.psy.cmu.edu>) demonstrate how data in transcript, video and audio formats can be pooled to create a very large database as a resource for future research. Such a website for AL/SLA interactional data would be of great benefit. Some commercial packages are available which have L2 classroom data suitable for CA research. Lubelska & Matthews (1997) and British Council (1985) have collections of videos of L2 lessons from various countries together with basic transcripts.

Training in CA methodology

In section 4.3 we saw that it is quite common for linguists to acquire a ‘linguistic’ version of CA which employs interactional organisations in isolation from the ethnomethodological principles. Seedhouse (2004) suggests that this version is not capable of conducting CA analyses of data correctly. It follows that, if CA is to be integrated into the projects of AL and SLA, it will be necessary for researchers in these areas to have access to proper training in CA. Markee (2000: 50) suggests that ‘learning to become a skilled CA researcher minimally entails completing at least one year of course work in CA, ideally followed up by a continuing apprenticeship with an established CA practitioner’. Fortunately, the number of universities offering modules and programmes in CA is increasing, as is the number of introductory texts on CA (Hutchby & Wooffit 1998; ten Have 1999; Markee 2000; Seedhouse 2004). Ten Have’s text includes training exercises.

A number of websites now have resources available for training. Ethno/CA News at <www2.fmg.uva.nl/emca> has details of courses, conferences, publications, bibliographies, links to four email discussion lists and downloads for characters used in transcripts. It also has links to an online CA tutorial, to software for transcription of video data and to sample sound and video files and transcripts. Conversation Analysis.Net at <http://www.conversation-analysis.net> has extensive data corpora. The Childes website at <http://childes.psy.cmu.edu> has extensive procedures and tools for CA analysis along with an enormous database. Schegloff’s homepage at <http://www.sscnet.ucla.edu/soc/faculty/schegloff/> has a transcription module, sound clips and access to his classic publications.

References


