Socio-cultural influences on the learning, use, and acquisition of communication strategies among Japanese EFL learners

Christian BURROWS*

ABSTRACT

Despite extensive research into the influence of communication strategy training on linguistic proficiency, an overwhelming majority has been conducted with learners whose L1 (both grammatically and typologically) and learning experience share common features with those from the L2 country. Predominantly focusing on structural or descriptive evaluation of error analysis the activities employed often dictate and limit the scope of learner lexical repertoire and interaction. Although substantial evidence (Færch & Kasper, 1983; Tarone & Yule, 1989) corroborates communication strategy teachability and acquisition, the order of application, how they are systemised, and the selective process involved in their selection remains less explored, especially among learners from collectivist countries. Is communication strategy use acquired uniformly or sequentially according to cognitive demands or socio-linguistic influences? Are some selected at the expense of others, and do any pose difficulties for Japanese EFL learners? The extent to which Japanese learners select, employ, and acquire communication strategies and the rationale behind their choices is the focus of this research paper.

Keywords: communications strategies, linguistic barriers, linguistic proficiency

I. Introduction

As no one individual’s linguistic repertoire or command of the language is flawless, interlocutors can encounter difficulty producing the appropriate expression or grammatical construction during interaction. Affecting also native speakers of languages, such instances do not exclusively originate from lack of linguistic proficiency but represent a ‘linguistic, retrieval, or proficiency shortfall’ (Oxford, 1990, p. 18). The means in which an individual manages to compensate between their communicate goal and their immediately available linguistic resources are known as communication strategies (henceforth CSs). Symbolising
attempts to incorporate a competence into the *interlanguage* (Selinker, 1972) they allow the interlocutor to transcend communication barriers, and represent a subset of language-use strategies which deal with language production problems. Proponents of CSs (Bialystok, 1990; Dörnyei, 1995; McDonough, 1995; Cohen, 1998) advocate their effectiveness in improving communicative proficiency by relating language competence, or knowledge of language, to the speaker’s knowledge of structures and features of the context in which communication occurs. Equipping Japanese EFL learners with purely the required language constructs is recognized as insufficient to adequately achieve language competency. Additional abilities are required that endow learners the capability to be able to use language proficiently and effectively in determining the most effective means of achieving a communicative goal. However, counteracting the process of CS application exist socio-cultural influences, unique to collectivist countries, exerting significant influence on the language learning process. Additionally, the uniqueness of the Japanese language furnishes further difficulty as language distance between L1 and L2 (in the case of English) ensures impediment due to grammatical and lexical dissimilarity.

II. Research Objectives

Recognition of a particular language learners’ ability to develop linguistically prompted studies to attempt the identification of techniques employed to assist with the cognitive, behavioural, and linguistic demands of language learning. Isolating these skills resulted in the identification, classification, and description of CSs. Subsequent research focused on the extent to which CSs could be acquired, in addition to their precise influence on linguistic improvement. Research findings acknowledged the constructive influence CSs exerted in aiding assorted features of linguistic development and improvement in overall communicative competence. While CS teachability has been demonstrated, the order of application, usage, and how they are systematised, remains less explored. CS research has predominantly been conducted with learners whose L1 (both grammatically and typologically) and learning experience share common features with those from the L2 country. The similarity could account for the success learners display in adjusting to the teaching methodology, and ultimately the acquisition of the strategies themselves. In contrast, Japanese EFL learners, more versed in teacher-centred learning approaches, and faced with a grammatically opposite L1 (in the case of English) are more likely to experience difficulty with CSs acquisition and adjusting to the autonomous learning environment in which they are learnt. Does a selective process occur which differentiates the different CSs due to their cognitive demands, socio-cultural or linguistic complexity? If so, the employment of which CSs proves problematic for Japanese EFL learners? The extent to which Japanese learners select, employ, and acquire linguistic CSs and the rationale behind their choice is the focus of this research paper.
The study addressed four major research questions while investigating the employment of CSs among Japanese EFL learners during meaningful interaction. While CS acquisition is recognised (cf. Nakatani, 2005; Satou, 2008), the degree of effectiveness is not within the scope of the research (i.e. acquisition rate). The four research questions address:

1. The impact of CS application on overall linguistic proficiency.
2. The extent of CSs utilisation during authentic interaction.
3. Can (any) linguistic improvement be accounted for by CS use? If so, how does CS use influence linguistic proficiency.
4. Japanese EFL learners’ CS application and the extent of socio-cultural influences on their choices.

III. Rationale for the research

It has been over 30 years since studies highlighted transitional competences (Corder, 1967; Selinker, 1972) employed during interaction to compensate for lack of language ability. Mostly addressing gaps in learner lexis and language production problems, few attempted to measure learner CSs during authentic, meaningful interaction. Research highlighting the beneficial influence CSs exert on communicative performance has primarily been conducted with elicitation techniques that can unduly influence both the type and quantity of CSs employed. Nakano (1996) shows restrictions imposed by the features of the task results in certain types of CSs being employed more than others. For ease of quantitative and qualitative assessment studies have mostly restricted observation to quantifiable activities despite the type of activity unduly influencing CSs use and frequency of use. The reduction of tasks to inauthentic interaction exposes researchers to the criticism that temptation to reduce language data to measureable entities, despite awareness of how the very process can distort the data. Among Japanese EFL learners, although considerable CS research has been conducted (cf., Sato, 1987; Iwai, 1992) much has restrictively employed tasks (e.g., picture description) that similarly elicit task-dependent, referent-determined CSs. Although the validity and reliability of using established strategy surveys has been discussed (cf., Oxford & Nyikos, 1989; Oxford, 1996; Hsiao & Oxford, 2002) few studies (cf., Sato, 2008) have dealt with reliable and valid strategy inventory for authentic interaction when interlocutors are linguistically and strategically unrestricted in facing communication problems.

Motivation for the research developed from frustration at a lack of student competence to surmount even moderate linguistic barriers during classroom interaction. Very little hindrance was required for student responses to be abruptly abandoned and students continue in the safety of their mother tongue. On occasion, this occurred despite the ‘unknown’ lexical item being commonly used in Japanese as a loanword. Did the difficulty represent a retrieval problem? What could explain the lack of negotiation or the failure to seek assistance to overcome this barrier – could this represent L1 influence, or did it simply
represent lack of communicative competence? More realistically, could lack of effort be ascribed as the cause? Abandonment of the conversation, or prominent use of L1 can account for lack of linguistic improvement and serves to reinforce a learning custom which avoids problematic constructs and lexicon through L1 reliance. Making students aware of ways to handle and overcome communication barriers through CS use was seen as an opportunity to maintain interaction and ultimately improve linguistic proficiency.

IV. Overview of communication strategy analytic frameworks

Research has assessed second language strategic use through contrasting CS definitions, in addition to assorted methods of elicitation, identification, and classification. The divergence in analytic perspectives has produced contrasting frameworks reflecting individual research ambition. Each distinctive conceptual perspective reflects progression away from original CS isolation and classification, to analysis of the functional, and then psycholinguistic aspects of oral communication. The perspectives are summarised in table 1.

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1. Initial classification of communication strategies

Recognition of variance within ‘transitional competence’ (Corder, 1967, p. 166) prompted initial research into learner techniques employed during language development. These error identification studies (Corder, 1967; Selinker, 1972; Vâradi, 1983, originally 1973) primarily posited features of interlanguage (Selinker, 19721) during the second language learning process. Their objective was to improve understanding of psycholinguistic structures and processes underlying L2 performance through the identification of temporal or makeshift behavioural events (Selinker, 1972, p. 210). Identification of the relevant internal strategies through observable data, however, proved ineffective as it afforded only a descriptive nature of speech production rather than the psychologically relevant data pertaining to second language learning (ibid., p. 211). Selinker’s principal contribution to early CS research comprised a classification of five processes.

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1 Selinker’s paper is largely restricted to descriptive aspects of ‘interlingual identifications’.
2 Corder (1967) uses ‘transitional competence’, and Nemser terms this competence ‘approximate systems’
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(mainly borrowed from L1) adopted as an interlanguage and recognised as fundamental aspects of second language learning between the mother tongue and target language. Initial labelling of behavioural events attempted during communication identified a linguistic competence selected upon recognition of an impediment to a communicative goal (Corder, 1967, 1983; Selinker, 1972; Vàradi, 1983, originally 1973). As a transitional competence (Corder, 1967) it demonstrates an underdeveloped linguistic repertoire resulting in a reliance on compensatory strategies to be able to accomplish a communicative intention. Selinker’s (1972) five central procedures are:

1. Language transfer
2. Transfer of training
3. Strategies of second language learning
4. Strategies of second language communication
5. Overgeneralization (adopted from Selinker, 1972)

The focus of subsequent empirical-based studies (cf., Tarone, 1977; Vàradi, 1983) shifted from identification of problem-solving devices to evaluation of communication-enhancing strategic language behaviour by assessing variability in linguistic performance. Studies confirmed a priori assumptions that insufficient linguistic resource necessitates utterances or message modification to achieve a communicative goal. Through structural or descriptive measurement of error analysis and dysfluency the ways learners compensated for linguistic insufficiency produced the first CS systematic taxonomy (Tarone, 1977), in addition to an early definition of what constitutes a ‘communication strategy’. Concepts of ‘systematic attempt’ and ‘problematicity’ were introduced as prerequisite conditions, recognition of which lead to the inclusion of CSs in models of communicative competence as constituents of strategic competence (Canale & Swain, 1980; Canale, 1983).

2. The interactional perspective

Following initial classification and empirical analysis, the focus of research moved from early conceptualisation of compensatory strategic language tools, to address the social and interactional function CSs play in the second language learning process (Tarone, 1983). Reflecting practical usefulness the ‘inter-individual’ approach (Kasper & Kellerman, 1997, p. 2) recognises ‘tools used in joint negotiation of meaning’ (Tarone, 1980, p. 20) and assesses observable behaviour in developing taxonomies ‘with implicit inferences being made about the differences in the psychological processing that produced them’ (Yule & Tarone, 1997, p. 19). The interactive nature of communication requires the inclusion of productive and receptive strategies of communication, thereby broadening initial classifications from word production exclusively to incorporating comprehension in phonological, morphological, syntactic and lexical elements of language production. Subsequent frameworks incorporated elements of interactional function, with
Tarone recognising a mutuality as joint efforts are made ‘to agree on a meaning where requisite meaning structures do not seem to be shared’ (Tarone, 1980, p. 178). Contrasting from early taxonomies, and distinguished from alternative problem-solving devices, they involve handling problems which have already manifested during the course of communication (Dörnyei & Scott, 1995, p. 177) by integrating requests for clarification and comprehension that seek to ‘clarify intended meaning rather than simply correct linguistic form’ (Tarone, 1980, p. 424).

Related to the interaction hypothesis (Long, 1983) the perspective predicts that interaction causes systematic interlanguage change by prompting discovery of gaps between learners’ knowledge and the input from interlocutors (cf., input hypothesis by Krashen, 1985; Krashen & Terrell, 1983) to produce comprehensible output. Canale (1983) eventually extends the parameters to incorporate every potential interactional attempt to cope with any language-related problem which enhances the effectiveness of communication (ibid., p.11). Although this definition is broader than restricting CSs to problem solving devices, the indefiniteness of ‘strategies in communication’ does not exclude such an extension. In contrast to the problem-orientatedness of early taxonomies, while not necessarily linked to the manifestation of problems, by specifying ‘...do not seem to be shared’ hints at problematicity also as a required condition.

3. The psycholinguistic perspective

Criticism that theoretical discussion predominated over empirical CS research emerged highlighting the paucity of research assessing underlying processing mechanisms of language, thought, and communication (Ellis, 1985; Poulisse, 1990). Early studies, psycholinguistics argued, insufficiently related to theories of language use or development, and consequently failed to provide insight into the cognitive processes underlying CS use. This paradigm shift in language theoretical perspectives reflected increasing interest in the cognitive processes involved in foreign language learning. Inadequacies of product-orientated taxonomies restrictively focused on the surface linguistic structures of more complex, strategic language behaviour. Without understanding the cognitive-psychological dimension, it was argued, produced a proliferation of taxonomies of ‘ambiguous validity’ (Kellerman, 1991; Poulisse, 1987; Cook, 1993). The ‘intra-individual’ psycholinguistic view (Kasper & Kellerman, 1997, p. 2) focuses on cognitive mechanisms of referential strategies aims to provide process-orientated (Kellerman, et al., 1990) or psychologically plausible (Poulisse, 1993, p.163) descriptions of CSs (e.g. Poulisse et al., 1987; Kellerman et al., 1990; Kellerman, 1991; Bialystok, 1990; Poulisse, 1993; Kellerman & Bialystok, 1997) to assess ‘[t]he process of the selection of the properties of the referent that the speaker then encodes in order to solve his lexical problem and maintain his communicative intent’ (ibid., pp. 164-165). Arguing that language use is fundamentally strategic (cf., Kellerman & Bialystok, 1997) CSs are governed by the same principles operative in normal language use. Specifically, psycholinguistics compared L2 CSs to the referential strategies used...
by Ll users, concluding that L2 CSs constitute a sub-set of referential strategies (Bialystok 1984). Research at the University of Nijmegen (The Netherlands) argued the research ‘should reach beyond description to prediction and explanation’ (Kellerman et al., 1990, p. 164) to produce a process-based taxonomy characterised by being parsimonious (fewer categories), generalisable (independent of variations across speakers, tasks, languages and levels of proficiency) and psychologically plausible (Kellerman and Bialystok, 1997). Their taxonomies incorporate the planning preceding oral production in addition to the effects on the execution.

4. Expanded approach

A more expansive framework offered a comprehensive assessment means of product and process analysis. The expanded approach attempted to integrate previous perspectives by linking underlying mental operations (the psycholinguistic perspective) with the observable features of CS use (the product perspective). In accordance with Færch and Kasper’s framework (1983b) CSs constitute problem-management efforts that deal with language production problems at the planning stage of production. Problem-solving devices, however, are restricted to problems which have manifested themselves in speech. The integration provides a holistic framework for analysis and description of L2 communication problems and related behaviour.

V. Definitional criteria of communication strategies

Distinction in contrasting concepts of CSs, discussed during early formulation of defining criterion (cf., Færch & Kasper, 1984), focused on delimiting theoretical conceptualisation of strategic aspects considered necessary in coping with L2 demands (Savignon, 1972, p. 54). Subsequent confusion over the psychological processes of language production, and the linguistic products on which interactions rely, has contributed to a diversity of CS conceptualisation. Principally constituting linguistic responses through the selection of alternative structures, their primary function is the transcendence of difficulties (Tarone, 1980, p. 418) with language production problems between available linguistic resources and communicative intention. The definitional criteria of problematicity, learner awareness, and subsequent response has remained sine qua non for the majority of subsequent CS definitions.

1. Clarification of problem-orientedness

Symbolising insufficient linguistic reserve (Corder, 1983, p. 103; Vàradi, 1983, p. 82; Færch & Kasper, 1983a, p. 33; Poulisse, 1990, p. 22) adoption of problem-orientedness as a defining criterion is based on learners’ underdeveloped linguistic resource. Demonstrating ‘communicative ends outrunning communicative means’ (Færch & Kasper, 1983, p. 123) it has become the primary defining criterion of CSs (Dörnyei & Scott, 1997, p. 182). Essentially lexical in nature, precise explication of ‘difficulty’ extends from ‘a lexical shortcoming’ (i.e., a
‘gap’, Vàradi, 1983, originally 1973, p. 79) to more substantial ‘insufficiently developed interlanguage structures’ (Selinker, 1972, p. 212). Indirectly, linguistic knowledge deficit can cover the myriad of potentialities for language breakdown. The potential scope demonstrates difficulties arising not from limited linguistic knowledge exclusively, but also pertains to general cognitive (Færch & Kasper, 1983b, p. 33) and retrieval difficulties. Instead of demonstrating a resourcefulness and determination to proceed, it has been stigmatized as indication of learner inadequacy and dysfluency in interlanguage competency. Attempting precise distinction of the causes for the occurrence of CSs, Bachman’s model (1990) covers inadequacies of the when and how CSs are used without clarifying for what problem(s) they are employed. As Cook (1993) highlights, previous types of CSs ‘seem to reflect types of solution rather than types of problem’ (ibid. p. 124). Backman’s (1990) model includes:

1. Resource deficit: e.g., insufficient linguistic resource
2. Processing time pressure: e.g., fillers
3. Own-performance problems: e.g., self-repair, self-rephrasing and self-editing
4. Other-performance problems: e.g., negotiation strategies

Opponents of specifying problematicity as a defining criterion (cf., Bialystok, 1990) argue no distinct difference exists in the cognitive processes involved in communication (whether problems exist or not) as strategic use is not restricted to problem solving instances, but continuous with ‘ordinary language processing’ (ibid., p. 5). Although recognition is made that ‘clearly problematic’ (ibid., p. 4), they are typically used for problem-solving purposes in L2 communication which supports its use as a defining criterion. Poulisse (1990, p. 193) explicitly argues against this by emphasising ‘alternative means of expression’ can be employed even without recognition of a problem (ibid., p.194). However, she rationalizes they are employed ‘when linguistic shortcomings make it impossible for them to communicate their intended meanings’, which seems to indicate the existence of a problem or deficiency. Whether these are noticed or not relates to the issue of consciousness.

2. Issues of user consciousness

Recognition of CSs as plans intended to achieve a communicative goal (Færch & Kasper, 1983) has resulted in consciousness being considered a defining feature of CS use. Although stated as a requisite condition in the majority of main studies (Tarone, 1977; Vàradi, 1980; Færch & Kasper, 1983a; Poulisse, 1990) ambiguity still remains of exact terminological usage. To regard CSs as ‘consciously used devices’ compounds several interpretations of ‘consciousness’ as it can refer to an awareness of a language problem (cf., Vàradi, 1983, originally

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3 For Selinker CS-use are restricted to successful students only.
1973): the intent to solve the problem, or the repertoire of CS and the goal they may achieve. Vàradi (ibid.) argued the awareness is of a disparity or gap accompanied by a conscious attempt to overcome the obstacle through CS use. Similarly, Tarone (1977), although lacking clear terminological clarification, refers to a consciousness in terms of a choice being made upon realisation of insufficient linguistic competence. This represents an attempt to distinguish processes consciously selected from those that may have become automated or routinised devices (i.e., lacking full consciousness). Rather than existing or not, Færch and Kasper argue consciousness ‘is more a matter of degree than either-or’ (1983b, p. 35) with the degree of attention closely related to both the extent of automaticity and inherent task difficulty (Shiffin & Schneider 1977; Cohen, Dunbar & McClelland, 1990; Posner, 1994). This contributed to Oxford’s (1990a, p. 12) observation that eventually they become automatic (i.e. subconscious) and mirror related strategic skills, such as language learning strategies (LLSs) which can be similarly exist ‘either within the focal attention of the learners or within their peripheral attention’ (Cohen, 1998). The Nijmegen project reached identical findings via retrospection support showing that advanced learners can anticipate and solve problems ‘before they even started encoding their messages’ (Poulisse, 1993, p. 179). For Færch and Kasper (1983b) the potential for consciousness represents the degree of automaticity allowed by learner proficiency and leads to their distinction of the ‘potentiality’ (ibid., p. 36) of conscious plans for coping with communicative problems.

Clarification of the different applications of ‘consciousness’ and exclusion of ‘control’ is required to help reduce confusion of the use of consciousness as a defining criterion. Within the field of cognition the role of consciousness in behaviour in general is still an unresolved issue, and although it appears accurate strategic language behaviour can be captured, lack of explicitness has caused diversity in CS research (Dörnyei & Scott, 1997). The broad and multiple meanings of consciousness demand more accurate typology (cf., McLaughlin et. al.) which Schmidt (1994) demonstrates through deconstruction of ‘consciousness’ into four basic senses:

1. Awareness of a problem
2. Intentionality
3. Awareness of strategic language use
4. Control (conscious attention and effort)

3. The issue of responding

Instigated by recognition (i.e., ‘awareness’) of a problem, the resulting plan of action is devised to overcome the barrier to the communicative intention. The CS most appropriate to construct (in terms of achievability of goal) must first be determined before the execution phase conveys the message. Linguistic resource

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4 Vàradi’s terminology is hiatis
or lack of salience will be influential in which option is chosen and dictate which plans of action can be realistically converted into verbal plans (Corder, 1983, p. 15) and how successfully they can be executed. Exclusively reserved for linguistic difficulties (Færch & Kasper, 1983) this plan is separate from other problem solving devices (i.e., meaning negotiation, and repair mechanisms) which must be managed after the problem has surfaced during communication.

4. The working definition of communication strategies used in the research

Constructing the definition of CSs on problematicity and consciousness has been methodologically effective in delimiting and enhancing their usefulness, but taking them as defining criteria is controversial. As Bialystok (1990, p. 4) points out they can be employed in situations where no sign of problematicity exists. Although she (ibid.) argues these criteria are inadequate, she acknowledges the use of language strategically can be distinguished from ordinary usage. It is these three features which this research paper uses as a working definition of a communication strategy: first becoming aware of a linguistic obstacle, the subsequent plan to overcome this impediment, before finally executing the plan through CS use. As highlighted in the previous section, the degree of cognitive resource consumed by the application of CSs is directly related to learner ability to produce the forms (i.e. automaticity). If CSs are proceduralised until learners are no longer conscious of employing them they are no longer accessible for description though verbal reports and lose their significance as strategies (Ellis, 1994). They will be employed effortlessly by more proficient speakers and unperceived as overcoming speech problems when utilised. Conversely, less proficient speakers will employ more cognitive resource to compensate for the lack of automaticity (i.e. proficiency), making it easier to perceive when and why they are being employed and which CSs are employed. For the purpose of this research, reflecting both the linguistic aspect of communication in addition to the psycholinguistic features which the study aims to analyse, the working definition of CSs incorporates notions of both learner-centered and interactionist perspectives. They have come to represent not an overarching tactic, but a technique of choosing the best linguistic resources to advance communication, accordingly, they represent an offensive role (Little, 1999) in maintaining interaction and avoiding communication breakdown.

VI. The notion of communication strategy teachability

Theoretical CS perspectives also diverge pertaining to the desireability and attainability of formal CS teaching. The question of CS training and development through formal classroom instruction to increase awareness of their potential in solving communication problems remains a largely theoretical discussion as few studies in Japan have specifically considered CSs from a pedagogical point of view. Lack of valid and reliable empirical evidence limits knowledge of the pedagogic effectiveness of CS instruction for Japanese EFL learners. Belief in the value of CSs as a prominent element in speech production (c.f., Bialystok, 1990; Cohen,
1998; McDonough, 1995) and consequently an important element of natural discourse (Wagner & Firth, 1997, p. 342) requires they play a prominent role in language learning. Initial studies that identified and isolated characteristics of learners in their adoption of techniques to assist with the demands of language learning recognised that language, in addition to individual strategies, should be taught to equip learners of limited resources with the knowledge of ‘how good learners arrive at their answers’ (Rubin, 1990, p. 282). Proponents (Færch & Kasper, 1983, 1986; Wenden, 1985; Tarone & Yule, 1989, p114; Chen, 1990; Oxford, 1990; Dörnyei & Thurrell, 1991; Mariani, 1994; Rost, 1994; Dörnyei, 1995) therefore argue that pedagogically CS training is effective and beneficial in fostering awareness of CS use and developing strategic competence (Cohen 1990; Oxford 1990; Mendelsohn, 1994). Advocating the promotion of ‘greater awareness, less inhibition and purposeful language practice’ (Tarone & Yule 1997, p. 29) yet also recognising (ibid., p. 110) the pedagogical goal must be to teach not only practical nominal expressions, but also the linguistic resources needed to be able to employ CSs (i.e., knowledge). Opponents however, see little value of teaching skills which are considered essentially cognitive processes that have already matured through L1 experience, and therefore unteachable (Yule & Tarone, 1997, p. 28). The divergence of opinion regarding the desirability of directing teaching CSs revolves around two central arguments.

1. Argument No. 1: Natural transferability

Despite learner ability to use CS effectively in L1, lack of salience in L2 necessitates training or ‘noticing’ (Najar, 1990) the repertoire of strategies available. Learner awareness and insight into L1 performance and CS instruction aids strategic transfer by providing training and opportunities for practice (Dörnyei, 1995, pp. 62-64). Opponents (Bialystok, 1990; Kellerman et al., 1990; Kellerman, 1991) believe cognition remains unaffected by instruction as adult learners have already developed strategic, transferable competence in L1. Furthermore, since transfer occurs automatically from L1 to L2, CSs transfer will also naturally occur without the need for concocted classroom instruction. In addition, as CSs represent reflections of underlying psychological processes, focusing on the surface structure will not enhance their use. Bialystok (1990) advocates development through ‘training aimed at mastering of analysis and control over the target language’ (ibid., p. 145) as ‘there is no justification for training in compensatory strategies in the classroom" (Kellerman, 1991, p. 158).

2. Argument No. 2: Teachability

CS-based instruction represents the intentional CS instruction alongside the L2 itself. Discussion originates from different interpretations of the notion of teaching and how explicitly CSs are taught. Proponents (Chamot et al., 1999; Cohen, 1998; Nunan, 1997; O'Malley & Chamot, 1990; Oxford & Leaver, 1996; Shen, 2003) agree on the importance of explicitness in their teaching. Although learners possess implicit CS knowledge, making them recognise aspects of their existing CSs use requires instruction (Færch & Kasper, 1983, p. 55). By learning
how to use CSs appropriately develops an ability to bridge gaps between formal and informal learning situations, between pedagogic and non-pedagogic communicative situations (ibid., p. 56) developing overall skills in conveying information (Tarone, 1984, p. 129). These instructional models share many features and concur on the importance of:

1. Awareness-raising: heighten awareness of the nature and potential of CSs.
3. Modelling: teacher demonstrations externalise the thinking process of CS use, in addition to highlighting cross-cultural differences.
4. Direct teaching: providing learners with linguistic devices to verbalize CSs.
5. Practice: adequate opportunities for practice "to help learners perform their competence rather than build it up" (Kellerman, 1991, p. 160).

VII. Empirical studies among Japanese EFL learners
Since 1999 17 major empirical studies have been conducted into CS use among Japanese EFL learners (all studies were conducted in Japan). Predominantly assessing the effects of CS instruction the majority have attempted to confirm how CSs are used in actual communicative situations (i.e. their influence on linguistic performance) and validate their benefits. Of these surveys the majority (n=12) report only positive findings, while a minority (n=3) report mixed results. Only two studies report finding only negative influences. The most common task format (n=9) (either monologue format, e.g., picture/cartoon/object description, or interactive dialogue format) compares L2 learner performance with native speaker performance in pre-post test conditions. Recommendations in 10 of the studies advocate direct CS instruction. All were conducted in an EFL context, with the number of participants (mostly university students, average age: 21) varying from 6 to 150 (average: 37). All studies report the length of CS training in weeks/number of classes rather than the actual time spent on CS instruction/practice. They vary from approximately 200 minutes (Iwai, 1990: 10 classes x 20 minutes) to 1000 minutes (Nakatani, 2005: 12 weeks x 90 minutes per week). Individual targets likewise vary but share several common features: formulaic expressions for CS use, especially of lexical strategies explicitly introduced and practiced systematically throughout studies. In addition to lexical targets, consciousness-raising activities were incorporated in 80% of the studies. Despite methodological differences, overall results showed CS instruction was effective in assisting linguistic competence (i.e., length of response, details, fluency). It must be recognised, however, that the positive effects of teaching CSs could be due to temporal, meta-cognitively controllable knowledge rather than meaningful progress in L2 learners’ interlanguage system. Although unanimous in highlighting the positive effect of CS instruction, they are inconsistent regarding its effect on the spoken performance.
1. Lessons taught

The instructional sequence developed (cf., Chamot et al., 1999; Chamot & O’Malley, 1994) has provided a useful framework for CS instruction. The sequence provides a five-phase recursive cycle for introducing, teaching, practicing, evaluating, and applying CSs. The five phases of the instructional sequence are as follows:

**Preparation:** Identification of current CSs use to develop metacognitive awareness of the relationship.

**Presentation.** Explaining and modelling the CSs.

**Practice.** Opportunity for practicing CSs with an authentic learning task.

**Evaluation.** Self-evaluation of success in using CS, thus developing their metacognitive awareness of their own learning processes.

**Expansion.** Determining the most effective CSs, and devise their own individual combinations and interpretations of CS.

2. Setting and subjects

The study was conducted from April 2014 to August 2014 at the private Kwansei Gakuin University, Japan. Twenty-five, first-year undergraduates (10 males and 15 females; average age: 19) participated as subjects in the experiment. All students were enrolled in the fourteen-week Advanced English Oral Communication course (90 minutes three times per week) which is a compulsory class as part of an English language curriculum. English language classes are streamed according to student placement scores on a written English exam (SLEP) taken at the commencement of the semester. Overall English speaking proficiency ranged from high-beginner to low intermediate (TOEIC® scores ranging from 350 to 450; [0–990 score range]; average score: 450). Consistent with false-beginners, detailed syntax knowledge belies weak speaking proficiency despite increasing emphasis placed on communicative language learning in secondary education. Each student, who had completed approximately six years English study prior to university, took an initial speaking proficiency test (IELTS scale) conducted with the author. The correlation between the oral pretest and the placement test was 0.123 using the Pearson product-moment correlation statement of the statistical relationship between the two sets of scores. The average score for both the experimental and control groups was 83% (mean: 68%, SD: 8.2).

3. Data collection instruments and procedures

The nature of interaction necessitates a combination of multiple collection methods for accurate and robust CS use measurement. Empirical data collection involves a combination of observed interaction and student feedback upon task completion. Statistically proven measurements of linguistic features (e.g. word count) address observed interaction, while underlying cognitive processes were evaluated through extensive student feedback. Although the limitations of
assessment procedures are recognized, they provide valuable insight into the observable and unobservable data required for a comprehensive assessment of linguistic and cognitive influences exerted on CSs selection and application. The data collection instruments composed of:

1. Interview
2. Questionnaire
3. Verbal reports
4. The initial interview

Initial evaluation of linguistic proficiency was conducted through paired student interaction. To allow an impressionistic evaluation, the elicitation method composed of student interviews. In order to meet the conditions required for ‘authentic’ interaction, the procedures employed were in accordance with Bygate et al’s (2001) definition of a ‘contextualized, standardized activity which requires learners to use language, with emphasis on meaning, and with a connection to the real world’ to elicit data (p. 112). Adoption of this type of activity was to negate criticism that tasks can fail to elicit real-life communication evident in other research purposefully designed to elicit the use of CSs, such as picture reconstruction (Bialystok, 1983); face-to-face conversation (cf., Færch & Kasper, 1983a); conversation with native speakers (Haastrup & Phillipson, 1983). If researchers are interested in carrying out their research in a natural setting, it will be:

...difficult to control and the results are often problematic to interpret. If a particular phenomenon is the object of the study, such as the use of strategies for referential communication, one may have to wait days for any spontaneous emission of relevant data. Further, natural data are the product of a myriad of factors over most of which the researcher has no control and many of which the researcher is unaware (Bialystok, 1990, p. 161).

Students were informed (all oral and written instructions were provided in Japanese) that a ‘correct’ answer was not being solicited in terms of opinion, and were encouraged to express themselves freely. To relieve affective factors (student anxiety, nervousness) it was also emphasized that data constituted the author’s private research and in no way affected their class grade. Students were under no obligation to participate and made aware of this choice. The interviews, which were video recorded, took place in a separate classroom with only the author in observance of the interaction. All interactions were later transcribed and details of the discourse were analysed quantitatively. Notification in advance of the presence of the video camera was given, and in order to minimize the impact of its presence each weekly class was recorded.
The initial interaction was analysed for the quantity of speech production (number of words per c-unit) and the extent students exhibited different patterns of CS use. A rating was assigned that represented an impressionistic rating of overall linguistic proficiency (according to the IELTS scale) on a nine-point scale (1=weak, 9 = fluent). The assessment scale consists of nine different levels and evaluates the ability to interact with the interlocutor, as well as flexibility in developing dialogue. The interrater reliability of the pretest, estimated by Cronbach’s alpha, was .896, a high degree of co-efficiency. To counteract potential scoring bias, in recognition that being a resident in Japan for over 10 years allows me to comprehend aspects of communication which someone unaccustomed to Japan would not perceive, two independent native English teachers experienced in EFL (Cambridge ESOL examinations) co-rated sample recorded interviews on an identical scale. The inter-reliability coefficients were 0.7125 for ‘English proficiency’, in addition, the Kruskal-Wallis test (non-parametric) for small samples was conducted on the rankings of the three raters to determine if ‘teacher’ had any main effects on the ratings. The results confirmed no teacher effect on the ratings (p=1.1711 for ‘English proficiency’), so the average score of the three assessors was the rating assigned to each group.

5. The final interaction

Upon completion of the 30-week course students participated in a final observed interaction that allowed additional assessment of CS selection and application. In recognition the ‘Hawthorne effect’ cannot be entirely eliminated different tasks were used for the pretest and the posttest to avoid improvement of scores through familiarization with the test content. It was again emphasised the research was not attempting to measure English linguistic proficiency and that findings were intended for private research purposes only. To combat the significance of rehearsed answers reoccurring, students were only provided with outlines of the topics, as without an element of preparation it was felt that speaking proficiency would be insufficient to provide the research data required. Cards describing hypothetical situations (e.g. travel-related scenarios) were distributed, with students given five minutes to prepare an appropriate role-play. The activity replicates interactive activities students are regularly asked to perform in their weekly lesson. The interaction was concluded upon agreement an ‘acceptable’ conclusion had been reached. Similar to the initial interview students were graded on their linguistic proficiency using an identical grading scale. All interactions were similarly conducted in a separate classroom with only two students and the author present. Independent raters were asked to watch a representative sample of interactions and allocate a score from 0~9 on an identical scale. No information was provided to the independent raters beforehand regarding student proficiency level, they were simply asked to provide an impressionistic assessment of students’ overall proficiency. All interactions were video-recorded and transcribed to allow score verification by independent raters.
Analysis of the discourse allowed for measurement of:
1. The quantity of speech production (number of words per c-unit).
2. The degree of achievement and reduction strategy use.
3. The effectiveness of CSs employment in overcoming linguistic barriers.

6. Retrospective verbal recall

Identification of CSs based on surface features was combined with the learners’ retrospective comments on their task performance (cf., Poulisse 1990; Poulisse et al., 1987). The unobservable nature of numerous CSs dictates that comprehensive data collection is unobtainable through observation entirely. Revealing the underlying thought processes and covert strategic thinking requires further assessment methods (Gass & Mackey, 2000). Retrospective verbal recall requires learners to reflect on their performance with the feedback serving as an introspective model.

[...] it is not easy to get inside the ‘black box’ of the human brain and find out what is going on there. We work with what we can get, which, despite the limitations, provides food for thought [...]
(Grenfell and Harris, 1999, p. 54)

Consequently, immediately upon completion of the role-play students were asked to reflect on how they interacted during the interaction. The immediacy of the questionnaire aims to record initial reactions when the information is most salient to maximise reliability, validity, and generalisability of the findings. Students were informed to describe the emergence, existence, overcoming of any CPs encountered, particularly regarding the message they intended to convey and what was eventually conveyed and how they overcame the problem. Video-recording of the interaction was used as a recollection cue to enhance the completeness and accuracy of recollection. Instructions were given to verbalise only what was clearly remembered without guessing or inferring, and to provide details of thought processes during the interaction, and not assessment of the interaction itself. All answers were recorded in Japanese and transcribed. Although concerns over the accuracy of the data are recognised, RVRs provide access to student reasoning processes and responses underlying cognition, response, and decision making. Although students are not be able to articulate precise explanations for all linguistic processing the quality and amount of verbalisation confirmed the usefulness of the technique as a means of legitimate inferences.

7. Quantitative analysis procedures of CS application

Transcribed data were subjected to a quantitative analysis and coded based

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5 Variousley labeled as retrospective interviews/reports, stimulated recall interviews, questionnaires, and think-aloud protocols concurrent with a learning task.
on the type of CS represented. Quantitative analysis determined the extent to which they can be clearly differentiated, how much learners rely on them, and whether a preference exists or correlation of such preferred strategies (Tarone 1977 p. 194). Identification involves distinguishing explicit strategy markers (i.e., metalinguistic comments expressing a problem; appealing for help; hesitation; pauses; false starts) and other overt signs which can confidently be assumed to indicate problems (Bialystok, 1990, p. 24). However, the highly developed proficiency of advanced learners enables prediction of problems and planning in advance so that their performance leaves minimal traces of the use of CSs (Willems, 1987). Consequently, relying on strategy markers exclusively would leave covert strategies undetected.

‘General CSs’ apply to CSs which manage General LCPs and were coded only once for each learner. ‘Specific examples’ of CSs (i.e., individual instances of CS) deal with specific CPs and were coded every time they were identified regardless if employed more than one time on the same CP. The first calculation involves a frequency count for each coded (sub-)area and category. Simple descriptive statistical analysis, such as the calculation of the mean and standard deviation, was conducted on the results. Distribution of figures across learners was also checked for anomalies and outliers which might have skewed the data. The effectiveness of CSs was calculated as a rate in percentage (i.e. number of effective instances of a CSI. Furthermore, the ratio of the frequency of CSs to the corresponding LCPs was also calculated for each (sub-)area for any salient pattern that may have particular research and pedagogical implications. This calculation revealed several of the CSs categories infrequent and idiosyncratic so only the most frequent categories would be included in the analysis of individual categories. Those identified 5 times or less for General CSs, and 10 times or less for Specific CSs were excluded.

Sample data were submitted to independent observers. It consisted of a set of excerpts from the lessons which included a representative sample of the strategies identified and coded by the researcher. The length of the excerpts was determined by the amount of context required to interpret accurately the type of the strategies used in each excerpt. It varied from one exchange to a sequence of interrelated exchanges. The observers were also provided with a handout in which the categories were defined and illustrated with examples. A copy of the transcription symbols was also enclosed. After they had completed the coding and returned the handouts, the frequency of agreements and disagreements were tabulated on a two-dimensional matrix referred to as a ‘confusion matrix’. The inter-observer agreement was calculated as a proportion of agreement (P) following the procedures described in Robson (1993, pp. 222-223).

VIII. Results and Discussion

Results of the quantitative analysis of data attained are presented below. These pertain specifically to the four research questions already stated. That is, CSs influence; CSs utilization; the extent of CSs adoption.
Research Questions 1: *The impact of strategy use on overall improvement in linguistic proficiency.*

Analysis of language proficiency modification during both pre- and posttest was conducted using paired-samples *t* test (two-tailed) (see Table 2). The findings reveal that, unlike Nakatani’s conclusions showing significant training group improvement (gain: 1.38), results show a more modest gain in speech scores (mean gain: 0.63, *t* = 3.03, *p* < 0.4). Revealingly, the average gain for the control group surpassed that of Nakatani’s research (gain: 0.25) which suggests improvement without the need for CS instruction. The difference between the gains for Nakatani for the two groups was 1.08 compared with 0.47 which reveals less CSs acquisition and use among the experimental group. This appears despite the fact that Nakatani’s students appear to be considerably lower level.

Table 2.
Results of *t* tests on Test Score Gains between the Two Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Df</th>
<th>Pretest (M, SD)</th>
<th>Posttest (M, SD)</th>
<th>Gain</th>
<th><em>t</em></th>
<th><em>p</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategy Training Group (n = 20)</td>
<td>21</td>
<td>4.00 (0.86)</td>
<td>4.63 (0.72)</td>
<td>0.63</td>
<td>3.03</td>
<td>.04</td>
</tr>
<tr>
<td>Control Group (n = 20)</td>
<td>18</td>
<td>3.65 (0.67)</td>
<td>4.03 (0.60)</td>
<td>0.38</td>
<td>0.89</td>
<td>0.87</td>
</tr>
</tbody>
</table>

An alternative means of quantitatively assessing performance includes analyzing the length and grammatical complexity of test responses. Speech production refers to the quantity (words) students use in their answers. The duration of answers (c-unit) has been shown as a means of assessing overall oral competence. The results (see Table 3) indicate the problem of under-elaboration among students. Reflecting a socio-cultural influence it illustrates a reluctance of learners to use the test opportunity to display their linguistic ability. Conversely, without constant questioning, the learner relies on the minimum information to convey their message.

Table 3.
Comparison of the Two Group’s Production Rate on Pre- and Posttest by *t* tests

<table>
<thead>
<tr>
<th></th>
<th>Strategy Training Group (n = 20)</th>
<th>Control Group (n = 20)</th>
<th><em>t</em></th>
<th><em>p</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>M (SD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>1.89 (0.51)</td>
<td>1.67 (0.58)</td>
<td>0.9</td>
<td>ns</td>
</tr>
<tr>
<td>Posttest</td>
<td>1.99 (0.47)</td>
<td>1.88 (0.67)</td>
<td>0.87</td>
<td>ns</td>
</tr>
</tbody>
</table>

Research Questions 2: *Student CSs use during interaction*

As part of the analysis of student speech production, the extent to which recordable CSs were employed was also measured. It is recognized that the
reliability of measurement is partially subjective and that reliability and accuracy of CSs use can significantly influence data analysis. However, results indicate a clear preference for reduction-type strategies. Whether this represents a deliberate choice of the learners, or the result of lack of success at cognitive retrieval processing ability requires clarification.

Table 4. Means and Standard Deviations of Strategy Use on Pre- and Posttest

<table>
<thead>
<tr>
<th></th>
<th>Strategy Training</th>
<th></th>
<th>Control</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>Achievement Strategies:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Help-seeking</td>
<td>0.45</td>
<td>0.6</td>
<td>0.85</td>
<td>1.5</td>
</tr>
<tr>
<td>Modified interaction</td>
<td>1.35</td>
<td>1.8</td>
<td>2.52</td>
<td>1.5</td>
</tr>
<tr>
<td>Modified Output</td>
<td>0.59</td>
<td>0.8</td>
<td>1.55</td>
<td>1.9</td>
</tr>
<tr>
<td>Time-gaining</td>
<td>0.45</td>
<td>0.9</td>
<td>1.58</td>
<td>1.0</td>
</tr>
<tr>
<td>Maintenance</td>
<td>1.36</td>
<td>2.1</td>
<td>3.22</td>
<td>2.1</td>
</tr>
<tr>
<td>Self-solving</td>
<td>0.83</td>
<td>0.6</td>
<td>1.59</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4.98</strong></td>
<td><strong>6.8</strong></td>
<td><strong>11.31</strong></td>
<td><strong>9.0</strong></td>
</tr>
<tr>
<td>Reduction Strategies:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Message Abandonment</td>
<td>15.3</td>
<td>3.5</td>
<td>11.9</td>
<td>5.5</td>
</tr>
<tr>
<td>First-Language-Based</td>
<td>1.58</td>
<td>2.2</td>
<td>1.5</td>
<td>0.8</td>
</tr>
<tr>
<td>Interlanguage-Based</td>
<td>5.53</td>
<td>3.8</td>
<td>6.2</td>
<td>3.8</td>
</tr>
<tr>
<td>False Starts</td>
<td>4.86</td>
<td>4.2</td>
<td>4.3</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>27.27</strong></td>
<td><strong>13.2</strong></td>
<td><strong>23.9</strong></td>
<td><strong>15.1</strong></td>
</tr>
</tbody>
</table>

Research Questions 3: Can any improvement be accounted for by the use of CS? If so, how does CS use effect speaking proficiency.

In order to assess whether any correlation existed between students who performed well on the posttest (scores over 85%) and CS use, a correlation study was conducted. The results (see Table 5) indicates a strong correlation between the students’ test performance and CSs employment. This supports the theory of the beneficial influence on speaking performance through CSs use.

Table 5. Correlation between posttest scores and communication strategy use

<table>
<thead>
<tr>
<th></th>
<th>Achievement strategies</th>
<th>Reduction strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
<td>r</td>
</tr>
<tr>
<td>Experimental group</td>
<td>3.02</td>
<td>4.56</td>
</tr>
<tr>
<td>Control group</td>
<td>2.96</td>
<td>3.59</td>
</tr>
</tbody>
</table>
Research Questions 4: Japanese EFL's CS adoption and the extent of socio-cultural influences on this choice.

Within the framework of psycholinguistic theory of speech production, the learners experienced problems in all phases of speech production, from conceptualization to articulation (Levelt, 1989, 1993, 1999; de Bot, 1992; Dornyei & Kormos, 1998). Based on the definition of CSs as the learners' "conscious plans" to deal with communication barriers, the identification of CSs (based on the student feedback) clearly indicated their intention to deal with the problem. However, the data shows a high preference for avoidance strategies which is consistent with other research findings. The author hypothesizes that this is the result of a conscious decision to overcome mental retrieval difficulties that could be more prevalent in collectivist countries. Based on the lexical access to syntax and morphophonology in Levelt's model, learners could avoid using the problematic lexical item and employ avoidance techniques as compensation for this failure.

IX. Conclusion

The findings, based on descriptive statistics, indicate increased use of interaction strategies improved students' communicative interaction (measured quantitively). More revealingly, the results also showed that of the twenty strategies taught more than half were regularly unused during interaction. However, of those employed a clear sequential order could be observed which indicates Japanese EFL learners do not learn CSs randomly, but a determined cognitive process occurs allowing them to acquire the skills in a comparable sequence. It is proposed this results from an over-reliance on reduction-type communication strategies due to cognitive retrieval difficulties which stem from socio-cultural influences. From the results of this paper and other research into communication problems it is clear that most problems occur due to linguistic related difficulty. As many as 90% of CSs (Satou, 2008) are selected to deal with lexical problems. How learners cope with these difficulties depends on their ability to process word retrieval during the planning stage of word production. The extent to which socio-cultural factors influence this process requires clarification, especially in terms of collectivist learner learning experiences. Finally, pedagogic suggestions are made to provide EFL Japanese learners with more opportunity to develop productive vocabulary and communication strategies to raise their socio-pragmatic awareness of the L2 interactional conventions. It is proposed that if Japanese EFL learners are aware to use CSs it can offer greater opportunities to improve their speaking proficiency through development of an understanding of how to overcome CPs barriers.

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