Communication Strategies Revisited: Looking beyond Interactional and Psycholinguistic Perspectives

Vahid Rahmani Doqaruni*1, Hossein Najjari 2
1, 2Department of English, University of Gonabad, Gonabad, Iran
*Corresponding author: rahmani7@gmail.com

Received: 2014.12.8
Revisions received: 2015.6.24
Accepted: 2015.8.1

Abstract
Second language (L2) communication strategies (CSs) have traditionally been dealt with through either interactional or psychological perspectives. However, this paper is a critical attempt to question the status of the particular kinds of psycholinguistic and interactional approaches that currently dominate the field of second language acquisition (SLA). In this way, it expands the significance of CSs by examining the other important dimensions of language within L2 contexts that affect/are affected by CSs. The new paths to dealing with CSs proposed in this paper rely on three aspects. First, the abundant use of CSs in non-native teacher talk within L2 classroom contexts is dealt with. Second, the neglected role of discourse-based CSs in previous studies is taken into account. Third, the particular relevance of CSs to noticing function of output hypothesis is considered. By challenging prevailing views and concepts, and by critically examining theoretical assumptions, the ultimate goal is to argue for a re-conceptualization of CSs within SLA research.

Keywords: Communication Strategies; Critical Approach; Teacher Talk; Discourse-based Strategies; Noticing Function
Introduction

The study of second/foreign language (L2) communication strategies (CSs) has a respectable long history in the field of second language acquisition (e.g., Savignon, 1972; Selinker, 1972). Although researchers in the field of second language acquisition (SLA) have been far from convergence on the exact definition of communication strategies (Dornyei & Scott, 1997), Bialystok (1990) has provided a broad definition. She asserts that native and non-native speakers of any language sometimes attempt to find appropriate expressions or grammatical constructions when struggling to communicate their meaning. Here, a gap is created between what the individual wants to communicate and the immediately available linguistic resources. The ways in which he/she tries to fill the gap are known as (CSs).

The ability to use CSs constitutes strategic competence which is defined as "the verbal and non-verbal communication strategies that may be called into action to compensate for breakdowns in communication due to performance variables or to insufficient competence" (Canale & Swain, 1980, p. 30). This broad definition shows how versatile the CSs are. First, they are an invaluable means of dealing with communication trouble spot (or as Canale and Swain say, "breakdowns in communication"), such as not knowing a particular word, or misunderstanding the other speaker. Second, these strategies can also enhance fluency and add to the efficiency of communication which has been hindered by "performance variables". Knowing such strategies is particularly useful for language learners because they provide them with a sense of security in the language by allowing extra time and room to maneuver. Third, CSs offer learners sufficient opportunities to deal with their "insufficient competence" while maintaining conversation flow. In other words, these strategies allow learners to remain in the conversation, which provides them with opportunities to hear more L2 input and produce new utterances. Consequently, the use of CSs can have a significant learning effect for EFL learners and improve their linguistic competence.

This paper is an attempt to show that although both interactional (e.g., Corder, 1983; Rost & Ross, 1991; Tarone, 1980, 1983; Tarone et al., 1976; Varadi, 1980) and psycholinguistic (e.g., Bialystok, 1983, 1990; Faerch & Kasper, 1980, 1983; Kellerman & Bialystok, 1997) approaches to studying CSs
which currently dominate the field have been of considerable importance in shedding light on the issue, we may well revise our perspective now. One of the main reasons for this revision lies in the fact that previous literature has considered these two approaches as the sole two legitimate paths of research on CSs (for a comprehensive review see, Dornyei & Scott, 1997; and for a more recent review see, Nakatani & Goh, 2007) so that other equally important perspectives have not been adequately explored. This in turn has resulted in the limited scope of CSs research in the last three decades. Yet, a not less important reason for this revision lies in the over-theoretical nature of the previous literature. This has led to uncertainty on more concrete teaching-related issues regarding CSs. As one example, there does not exist a broad-based consensus among researchers on the teaching of CSs, even after such a rather enormous amount of research in this area (for pros see, Dornyei, 1995; Dornyei & Thurrell, 1994; Faerch & Kasper, 1986; Maleki, 2007, 2010; Nakatani, 2005; Tarone & Yule, 1989; and Willems, 1987; for cons see, Bialystok, 1990; Ellis & Barkhuizen, 2005; and Kellerman, 1991).

Having witnessed how interactional (with its emphasis on the interaction between interlocutors and negotiation of meaning) and psycholinguistic (in which the internal and cognitive processes are taken into account) approaches go through endless vicious circle, the main aim of the paper is to look critically at CSs research in an attempt to reduce the dogmatism which surrounds this concept, and which unfortunately forms a serious obstacle to sensible communication in the field. In this way, some of the more specific orientations toward this notion that have been either neglected in the previous literature or have the potential to shed light on CSs research due to their significance in the current SLA research will be proposed. It is suggested that it may be helpful to pay more attention to CSs in L2 teacher talk (Anani Sarab, 2004; Rahmani Doqaruni, 2015; Yaqubi & Rahmani Doqaruni, 2009). Yet, to add to the previous established frameworks on CSs, an emphasis on discourse view of CSs can be helpful (Clennell, 1995). In addition, the particular relevance of CSs study to Swain's (1995) noticing function of output hypothesis can be of considerable interest to future research. These issues are fully discussed after a comprehensive review of the trends and relevant literature from the last four decades that have been studied from the two well-known interactional and psycholinguistic perspectives.
Traditional Approaches

Five studies paved the way for the study of CSs in the 1970s, a new area of research within applied linguistics generally, and SLA specifically. Selinker's (1972) classic article on interlanguage, for the first time, suggested the term "strategies of second language communication" to refer to the ways in which foreign or second language learners deal with the difficulties they encounter during the course of communication when their linguistic resources are inadequate. At the same time, Savignon (1972) reported on a pioneering language teaching experiment involving a communicative approach, which, for the first time, included student training in CSs. In another study, Tarone et al. (1976) established the first systematic classification of CSs and defined communication strategy "as a systematic attempt by the learner to express or decode meaning in the target language, in situations where the appropriate systematic target language rules have not been formed" (p. 78). Varadi (1973; but published in 1980) and Tarone (1977) elaborated on Selinker's notion by providing a systematic analysis of CSs, introducing many of the categories and terms used in subsequent CS research.

As Yule and Tarone (1997) rightly state, the basic challenge remained essentially the same as that raised by Varadi (1973) more than two decades earlier when faced with a range of L2 referential expressions for the same observed object (i.e., balloon, ball, air ball, special toys for children): how do these observed creations help us better understand what is involved in second language learning and use? Generally, there have been two different groups in approaching this question, namely, interactional and psycholinguistic. Concerning the first approach, the external and interactional perspective of learners is dealt with and the focus is on the interaction between interlocutors and negotiation of meaning (e.g., Corder, 1983; Rost & Ross, 1991; Tarone, 1980, 1983; Tarone et al., 1976; Varadi, 1980). In contrast, in the second approach, the internal and cognitive processes are taken into account (e.g., Bialystok, 1983, 1990; Faerch & Kasper, 1980, 1983; Kellerman & Bialystok, 1997). For ease of reference, Yule and Tarone (1997) call the proponents of the first group "the pros" since they are profligate in their liberal expansion of categories and the proponents of the second group "the cons" since they are rather conservative, given their emphasis on parsimony. Due to their
importance in CSs research, a brief review of the studies of the leading scholars of these two opposing theoretical manifestations is represented in the following.

**Interactional Perspective**

Varadi (1973; but published in 1980) gave a talk at a small European conference which is considered the first systematic analysis of strategic language behavior. This talk dealt with message adjustment in particular and was deeply rooted in *Error Analysis*. Briefly, Tamas Varadi's classic paper, "Strategies of Target Language Communication: Message Adjustment", establishes a model of interlanguage production which focuses on the strategies the learners employ when they experience a "hiatus" in their interlanguage repertoire. In order to adjust their message to their communicative resources, the learners either replace the meaning or form of their intended message by using items which are part of their interlanguage, or the learners reduce their intended message on either the formal or the functional level.

The relationship between CSs and meaning-negotiation mechanisms, for the first time, was presented by Tarone (1980), according to whom CSs relate to "mutual attempts of two interlocutors to agree on a meaning in situations where the requisite meaning structures do not seem to be shared" (p. 420). This definition is potentially broader than Tarone et al.'s (1976) earlier one. It represented an interactional perspective. In other words, CSs are seen as tools used in a joint negotiation of meaning where both interlocutors attempt to agree on a communicative goal. This interactional perspective covered various repair mechanisms, which Tarone considered CSs if their intention was to clarify intended meaning rather than simply correct linguistic form. Even though Tarone herself never extended the scope of her CS taxonomy to include interactional trouble-shooting mechanisms, other researchers did specifically list meaning-negotiation strategies among CSs (e.g., Dornyei & Thurrell, 1991; Willems, 1987).

Finally, Corder's (1983) survey, "Strategies of Communication", represents a markedly different way of defining CSs. According to Corder, CSs are used by a speaker when faced with some difficulty due to their communicative ends outrunning their communicative means. In other words, communicative strategies "are a systematic technique employed by a speaker to express his meaning when faced with some difficulty" (p. 16). He proposes two options for
classifying CSs into different types: either the speaker tailors the intended message to their linguistic resources or manipulates the available linguistic competence in order to make it consistent with the intended meaning. Corder calls the strategies produced by the first option "message adjustment strategies" and those by the second, "resource expansion strategies".

**Psycholinguistic Perspective**

Faerch and Kasper (1980, 1983) adopted for the first time a psycholinguistic approach to CSs and attempted to distinguish strategies from processes, procedures, plans, tactics, and so on. From this perspective, CSs are located within a general model of speech production, in which two phases are identified, the planning phase and the execution phase. Communication strategies are part of the planning phase and are utilized when learners are prevented from executing their original plan because of some communicative problem. Similar to Tarone's (1980) criteria, learners may choose avoidance by changing their original goal through some sort of "reduction" strategy. Alternatively, they may maintain their original goal through a substitute plan. This is referred to as an "achievement" strategy.

Bialystok (1990) believes that although considerable progress has been made through different approaches, the ultimate goal of integrating the observations into a coherent account of speech production has not been realized. According to Bialystok, the only solution to this problem is an approach based on the process of using language for communicative purposes. In this way, Bialystok's alternative cognitive framework of CSs is based on two cognitive skills: *analysis of knowledge* and *cognitive control*. Analysis of knowledge is defined as the ability to make some kind of alteration to the message content by exploiting knowledge of the concept. Strategies employed to accomplish this may include providing a definition of a concept or object, or engaging in circumlocution. Cognitive control refers to the manipulation of the method of expression by integrating resources from outside the L2 in order to communicate the intended message. Strategies employed to accomplish this may include use of the L1 or non-linguistic strategies such as miming.

Perhaps the most extensive series of studies to date into CSs was undertaken by the Nijmegen project throughout the 1980s and 1990s (Dornyei
& Scott, 1997). The Nijmegen Group researchers (i.e., Kellerman, Bongaerts, and Poulisse) also approached CSs from a psycholinguistic perspective and chiefly concerned with investigating a subset of CSs called "compensatory strategies". In the Nijmegen model, compensatory strategies will be one of two types, conceptual or code compensatory strategies (Kellerman & Bialystok, 1997). Conceptual strategies are those whereby the participant manipulates the concept of the target referent in an effort to explain the item and is consistent with Bialystok's (1990) notion of analysis of knowledge. Linguistic or code compensatory strategies are those where learners manipulate their linguistic knowledge.

Despite their usefulness, the psycholinguistic typologies of CSs developed by Bialystok (1990) and the Nijmegen group have been criticized by some researchers (Dornyei & Scott, 1997; Nakatani & Goh, 2007). It is argued that despite the fact that the psycholinguistic researchers have attempted to present their taxonomy within an encompassing theory of communication, they only deal with a part of CSs, namely those of a compensatory nature. Therefore, we may assume that they present a restricted and limited view of what a taxonomy of CSs would include. In other words, at the moment, the psycholinguistic models are restricted to lexical compensatory strategies only, excluding all other areas of strategy use (Dornyei & Scott, 1997). Nakatani and Goh (2007) contend "while this narrow focus allows researchers to concentrate on one clear aspect of learners' strategy use, a psycholinguistic perspective should, in our view, be broad enough to encompass research on other cognitive processes during speech production" (p. 208). Although Kellerman and Bialystok (1997) have made an important attempt to synthesize the Nijmegen taxonomy with Bialystok's (1990) framework in order to extend the psycholinguistic approach to cover other types of strategies, this new reclassification of CSs is still in its early stages.

Yule and Tarone (1997) summarize the duality of approaches taken by researchers – the "Pros" following the interactional approach and the "Cons" taking a primarily psychological stance – as follows:

The taxonomic approach of the Pros focuses on the descriptions of the language produced by L2 learners, essentially characterizing the means used to accomplish reference in terms of the observed form. It is
primarily a description of observed forms in L2 output, with implicit inferences being made about the differences in the psychological processing that produced them. The alternative approach of the Cons focuses on a description of the psychological processes used by L2 learners, essentially characterizing the cognitive decisions humans make in order to accomplish reference. It is primarily a description of cognitive processing, with implicit references being made about the inherent similarity of linguistically different forms observed in the L2 output. (p. 19)

**Beyond the Interactional and Psycholinguistic Approaches**

Before we proceed, a caveat is in order. The aim in this paper has never been to disparage the research under the name of CSs but to argue that a widened perspective in this area would be of considerable importance in the current SLA research. Arguments for the current psycholinguistic and interactional views are to a large extent speculative, plausible, and advanced with tenacious conviction. As the theoretical pendulum swung from one extreme to the other, each approach was followed by its opposite (Dornyei & Scott, 1997; Yule & Tarone, 1997). The Cons realized that the Pros have been producing too many taxonomies, so taxonomy was reduced to its least possible amount. Cognitive processes were seen to have been over-valued by the Cons, so the Pros gave their attention to more interactional phenomena. However, one approach failed to give sufficient importance to the other. Hence, there is a certain air of uncertainty about the whole "psycholinguistic/interactional" debate. Part of the trouble is perhaps that pragmatics (the study of what we do with language) is grossly over-valued at the moment, in the same way as grammar has been over-valued in the past. The new approaches to teaching language, especially communicative approach, are leading us to look at everything in functional terms. Thus, discussion of L2 communication strategies is better no longer be limited to a consideration of the two basic interactional and psycholinguistic concepts.

Rather than taking either interactional or psycholinguistic concepts as our starting point, therefore, we really need to look at CSs from other directions, asking ourselves "why is (non-native) teachers' talk filled with CSs?" or "how
can previously neglected discourse-based CSs serve to enhance our understanding of the strategic competence of language learners in their interlanguage?” or “what is the relationship between CSs and noticing function of output hypothesis?” Thus, the new paths to dealing with CSs proposed in this paper rely on three aspects. First, the abundant use of CSs in non-native teacher talk within EFL classroom contexts is dealt with. Second, the neglected role of discourse-based CSs in previous studies is taken into account. Third, the particular relevance of CSs to noticing function of output hypothesis is considered.

**Teacher Talk Dimension**

Since researchers have so far treated CSs as independent and isolated units of analysis, the possible collaboration of the interlocutor in the strategic communication of the meaning process has drawn little or no attention at all. In other words, the previous research has focused overwhelmingly on individual production, as compared to achievement of comprehension and the mutual construction of discourse (Williams et al., 1997). Communication strategies have thus been generally studied as part of the learner's use of the language and not as the product of the interaction taking place between a learner and, at least, one other interlocutor (Fernandez Dobao & Palacios Martinez, 2007). However, following Yule and Tarone's (1991) claim that for a comprehensive understanding of strategic communication, attention needs to be paid to "both sides of the page", i.e. to the actions of both learners and interlocutors, scholars, such as Firth and Wagner (1997; also Wagner & Firth, 1997), have tried to describe strategic communication as an interactive activity. In these studies, CSs are analyzed as elements of the ongoing and co-constructed context of the interaction and their communicative function is established by taking into account the actions of all the conversational participants, not only students. It does not need just be the L2 student who is felt to have inadequate linguistic knowledge in classroom interaction; it may be the teacher (Rampton, 1997). As Willems (1987, p. 354) asserts, "all of us [teachers] – and not just our pupils – have a natural tendency to use communication strategies when communication problems arise".

The latter argument is of particular importance in EFL classroom contexts where non-native English speaking teachers perform their task. Ideally we
assume that all language teachers have an acceptable proficiency in English, but it is worth noting that many of the language teachers are themselves second/foreign language speakers and lag behind their very own linguistic knowledge (Medgyes, 1994, 2001; also for a comprehensive review of non-native English speaking teachers' research see, Moussu & Llurda, 2008). Reves and Medgyes (1994) state, "because of their relative English language deficiencies, non-NESTs [Native English Speaking Teachers] are in a difficult situation: by definition they are not on a par with NESTs in terms of language proficiency" (p. 364; emphasis added). Likewise, it has frequently been argued that communicative language teaching may be placing too much of a strain on non-native teachers (e.g., Mousavi, 2007; Pennycook, 1994). Medgyes (1986) in his paper discusses the non-native English teachers' problems with the communicative approach in an EFL setting as the following:

For all their goodwill, native speakers are basically unaware of the whole complexity of difficulties that non-native speakers have to tackle. Native-speaking teachers tend to ignore, among other things, the fact that a great proportion of the energy of their non-native colleagues is inevitably used up in the constant struggle with their own language deficiencies, leaving only a small fraction attending to their students' problems. (p. 112; emphasis added)

Therefore, "it is appropriate to think of a great number of language teachers as language learners–albeit advance ones" (Horwitz, 1996, p. 366).

In this way, CSs become important not only for their function as support for facilitating the understanding of the second language learner but also, at the same time, as a resource for helping the second language speaking teachers (Anani Sarab, 2004). In their attempts, Anani Sarab (2004) and Yaquabi and Rahmani Doqaruni (2009) applied CSs to non-native English speaking teachers since they thought that this has the potential for throwing a fresh perspective to teacher talk. Studying teacher talk from this new perspective, they have been able to demonstrate that non-native English speaking teachers use CSs in their talk with students with substantial but different frequencies, which was shown to be the function of their focus of talk in different phases of their lessons. In
other words, they claimed that teacher talk, and the use of CSs in their talk, can reveal and make explicit to a large extent the conditions and consequences of teaching and learning principles in classroom contexts. Cullen (1998), considering this issue, believes:

While the question of how much teachers talk is still important, more emphasis is given to how effectively they are able to facilitate learning and promote communicative interaction in their classroom through, for example, the kind of questions they ask, the speech modifications [such as communication strategies] they make when talking to learners, or the way they react to student errors. (p. 179)

Moreover, Anani Sarab (2004) states that the importance of teacher talk relies on two aspects: first, its role as a source for L2 learning; second, its role as a key interactional constituent of the language learning context. In his own words,

The implications [of teacher talk] are of interest generally in contemporary language teaching, and of course for teacher education and teacher development. This interest is motivated by the growing recognition of the role of teacher talk in determining the patterns of interaction and in effect the learning opportunities provided for the learners. The consensus is that through the investigation of teacher talk and classroom interaction we can come to a better understanding of the teaching-learning process. (p. 1)

Thus, since all dimensions of classroom process, such as giving instruction, questioning, disciplining students, providing the feedback, implementing teaching plans and achieving teaching goals, involve teacher talk and it plays many roles in L2 classrooms (such as those mentioned by Anani Sarab, 2004), study on teacher talk has always been one of the most important parts of classroom research. However, although teacher talk has been of considerable interest in understanding and attempting to develop second language teaching pedagogy (e.g., Chaudron, 1988; Cullen, 2002; Thornbury, 1996; Walsh, 2002; Yanfen & Yuqin, 2010), little attention has been paid to a very significant aspect of teacher talk, that is CSs.
**Discourse-based Dimension**

To add to the two established frameworks on CSs discussed earlier in this paper (psycholinguistic and interactional), Clennell (1995) proposed a discourse view of CSs. In fact, Clennell's (1995) concept of discourse-based strategies came from Faerch and Kasper's (1984) notion of advance planning. Although Faerch and Kasper are well-known for their psychological problem-solving view of CSs, these researchers actually acknowledge that advanced learners have the ability to predict an interaction problem in advance and venture to solve it beforehand in order to assure a higher degree of smoothness and fluency in the speech. In their own words, "advanced learners, who are capable of planning longer units, can often predict a communication problem well in advance and attempt to solve it beforehand, as part of the normal planning process" (Faerch & Kasper, 1984, pp. 60-61). The idea of advance planning was grasped by Clennell (1995) a decade later and he proposed a pragmatic discourse perspective of CSs. His typology of discourse-based CSs differs from the other more familiar typologies of CSs which only focus on the use of verbal and non-verbal strategies to overcome specific lexical difficulty or to negotiate communication breakdown. In his opinion, CSs should not be seen relevant only when the need for conversational repair arises, but that CSs have the potential to make easy exchange of key information to lessen breakdowns in communication. This definition is broader than the restriction of CSs to problem-solving devices – therefore going beyond the two psycholinguistic and interactional approaches. In this respect, Clennell's (1995) message-enhancing CSs are in accordance with an influential definition of CSs by Canale (1983). Strategic competence is seen as one of the main four components of overall communicative competence, and consists of:

… mastery of verbal and nonverbal communication strategies that may be called into action for two main reasons: a) to compensate for breakdowns in communication due to limiting conditions in actual communication or to insufficient competence in one or more areas of communicative competence; and b) to enhance the effectiveness of communication. (Canale, 1983, p. 12)
It is just this second part of Canale's (1983) definition that Clennell (1995) believes has mostly been neglected in the previous literature on CSs. Clennell (1995) considers the strategies in Faerch and Kasper's (1984) and Tarone's (1980) typologies as "local lexically based compensatory devices that learners operate to overcome specific obstacles in the process of communication" (p. 6) and put them under Category 1 improvisation/avoidance strategies in his reclassification of CSs. Besides lexical strategies, Clennell (1995) recognizes two other categories that aid conversational maintenance and are defined as discourse-based strategies. Category 2 strategies are negotiation/interaction strategies and are used when participants in an interaction negotiate communication breakdown through the use of clarification requests and comprehension checks. These discourse strategies play a compensatory role in communication. However, Category 3 strategies are used to enhance the effectiveness of communication. These collaboration/planning strategies make easy exchange of key information through the use of topic fronting, tonicity and lexical repetition.

It is interesting to note that the role of specific discourse-based strategies such as negotiation of meaning has been an important object of study for a long time in SLA research and a considerable number of studies have been conducted on the learning effects of interlocutors' mutual attempts to avoid and repair impasses in the target language (e.g., Doughty & Pica, 1986; Long, 1983; Pica, 2002; Pica & Doughty, 1985; Varonis & Gass, 1985). For example, Varonis and Gass (1985) define negotiation of meaning as strategic behavior for solving interaction problems and Long (1983) divides an interlocutor's signals for negotiation of meaning into comprehension checks, confirmation checks and clarification requests. Previous literature has proved that through employing such strategies for negotiation, learners can receive comprehensible input and have opportunities for modifying their output. In other words, learners can comprehend and produce messages beyond their current interlanguage receptive and expressive capacities through negotiation of meaning.

However, to our knowledge, these conceptions have been largely absent in empirical studies of CSs and discourse-based strategies that are under the name of CSs have not been previously considered in the area (for exceptions see, Nakatani, 2010; Ting & Phan, 2008). In fact, as Yule and Tarone (1991)
emphasize, the research literature discussing the negotiation of meaning in L2 communication (for a review see Pica, 1994) has been entirely independent of CSs studies. It is in this situation that Ting and Lau (2008, p. 30) state, "research into the use of discourse-based communication strategies is preliminary, [and] further research on the use of these discourse-based strategies by learners with varying levels of language proficiency would be needed". In this way, it seems that now it is the time for SLA researchers to show how an expanded typology encompassing not only problem-solving strategies but also message-enhancing strategies can serve to enhance current understanding of the strategic competence of language learners in their interlanguage. Doing this, an enlightening future can be envisaged. For example, considering that discourse strategies do not require an extensive vocabulary and use of complex syntactic structures, researchers can prove that less proficient learners can be taught to repeat words or phrases with a rising tone to seek clarification or a falling tone to confirm correct interpretation of the message or even to aid conversational maintenance. Moreover, since topic fronting is an important feature of L2 learners, it is again the researchers' responsibility to help us understand whether the learners can maximize the message-enhancing potential of this communication strategy.

Noticing Function Dimension

In a seminal article, Swain (1985) argued that comprehensible input may not be sufficient for successful second language acquisition, but that opportunities for non-native speakers to produce comprehensible output are also necessary. In this way, Swain (1985) proposed a hypothesis relating to the second language learner's production comparable to Krashen's comprehensible input hypothesis. She termed this hypothesis as the "comprehensible output hypothesis" for SLA. Swain argued that comprehensible output is the output that extends the linguistic repertoire of the learner as he/she attempts to create precisely and appropriately the meaning desired.

Swain (1995) later, refining the comprehensible output hypothesis developed in Swain (1985), proposed three different functions of output in SLA. First, it is hypothesized that output promotes "noticing". That is to say, "in producing the target language (vocally or sub-vocally) learners may notice a
gap between what they want to say and what they can say, leading them to recognize what they do not know, or know only partially" (pp. 125-126). A second way in which producing language may serve the language learning process is through hypothesis testing. That is, "producing output is one way of testing a hypothesis about comprehensibility or linguistic well-formedness" (p. 126). Thirdly, as learners reflect upon their own target language use, their output serves a metalinguistic function, enabling them to control and internalize linguistic knowledge. She states, "my assumption at present is that there is theoretical justification for considering a distinct metalinguistic function of output" (p. 126).

Of particular relevance to CSs study is Swain's noticing function of output hypothesis which clearly states that language production enables learners to notice the gap between what they can say and what they want to say when they formulate the target language (notice that this definition is the same as the Bialystok's (1990) definition stated earlier in this paper). Addressing this function of output, Swain (1995) argues that,

...under some circumstances, the activity of producing the target language may prompt second language learners to consciously recognize some of their linguistic problems; it may bring to their attention something they need to discover about their L2. (p. 126)

In other words, Swain (1995) believes that output gives rise to noticing. She states, "to test this hypothesis (function), one would need to demonstrate that learners may, on occasion, notice a problem (even without external cueing) through, for example, implicit or explicit feedback provided from an interlocutor about problems in the learners' output" (p. 129). She further asserts,

It seems to me that there is ample evidence from the communication strategy literature (for example, Tarone, 1977; Faerch and Kasper, 1983; Bialystok, 1990; Kellerman, 1991) that learners do notice problems as they speak, and do try to do something about them. (p. 129; emphasis added)

The main reasons underlying our focus on the noticing function of output hypothesis are its important theoretical and pedagogical implications.
Theoretically, according to Swain (1995), the noticing function of output is closely related to the issue of CSs in second language acquisition. Pedagogically, a fair amount of research has taken into account and tested output and its noticing function (e.g., Iwashita, 2001; Izumi, 2002; Izumi & Bigelow, 2000; Izumi et al., 1999; Pica et al., 1996; Shehadeh, 1999, 2001; Swain & Lapkin, 1995; Van den Branden, 1997) but no study has already dealt with this notion in relation to CSs research. However, considering the Swain's claim, it seems that output hypothesis and its noticing function is applicable to the use of CSs in L2 learners' language. In other words, it seems that there is a relationship between noticing function of output hypothesis and CSs. In this way, our understanding of this issue can be further advanced once we identify meaningful ways of investigating noticing function of output hypothesis within the realm of CSs. Therefore, it might be helpful to attempt to shed some light on this issue by asking the following questions: what is the effect of CSs on the noticing function of output hypothesis? Or vice versa, what is the effect of noticing function on the use of CSs?

Conclusion

It has been argued, in this paper, that the psycholinguistic and interactional theories of CSs, in so far as it makes sense, are largely irrelevant to L2 teaching. This does not mean to belittle the value of such exercises; both of the approaches are powerful ones, and (if used intelligently) can generate interesting, lively, and useful work. It is truly recognized that an enormous amount of research effort has gone into the CSs area and that some progress has been made. However, the information conveyed should ideally have some relevance and interest for L2 teachers (as the main consumers of research in SLA). Hence, we shall probably benefit from the future approaches to CSs research, especially if we can keep our heads, recognize dogma for what it is, and try out the more specific approaches without giving up useful older ones.

In conclusion, many papers have examined the predominant view of CSs within SLA research through psycholinguistic and interactional dimensions but they have failed to account in a satisfactory way for (non-native) teacher talk dimension. In addition, research has previously neglected other important factors affecting/affected by CSs such as discourse-based CSs and noticing
function of output hypothesis. As such it is imperfect, and obviates insight into
the nature of language. By challenging prevailing views and concepts, and by
critically examining theoretical assumptions, our ultimate goal is to argue for a
reconceptualization of CSs within SLA research. The reconceptualization
requires a significantly enhanced awareness of the other important dimensions
of language within L2 contexts such as teacher talk, discourse-based CSs, and
noticing function of output hypothesis.

References
Iranian Journal of Applied linguistics, 7 (2), 1-44.
Bialystok, E. (1983). Some factors in the selection and implementation of
communication strategies. In C. Faerch & G. Kasper (Eds.), Strategies in
Interlanguage Communication (pp. 100-118). London: Longman.
Canale, M. (1983). From communicative competence to communicative language
pedagogy. In J. C. Richards & R. Schmidt (Eds.), Language and
communication (pp. 2-27). London: Longman.
Canale, M., & Swain, M. (1980). Theoretical bases of communicative approaches to
perspective. Prospect, 10(3), 4-20.
Strategies in interlanguage communication (pp. 15-19). London: Longman.
Cullen, R. (1998). Teacher talk and the classroom context. ELT Journal, 52 (3), 179-
187.
Cullen, R. (2002). Supportive teacher talk: The importance of the F-move. ELT
Journal, 56 (2), 117-127.
Quarterly, 29(1), 55-85.
Definitions and taxonomies. Language Learning, 47(1), 173-209.
Journal, 45(1), 16-23.


Kellerman, E. (1991). Compensatory strategies in second language research: A critique, a revision, and some (non-)implications for the classroom. In R. [Footnote: Add the name of the book or the name of the editor if necessary.]
Phillipson, E., Kellerman, L., Selinker, M., Sharwood Smith, & M. Swain (Eds.), *Foreign/second language pedagogy research* (pp. 142-161). Clevedon: Multilingual Matters.


Biodata

**Vahid Rahmani Doqaruni** is a Ph.D. candidate in TEFL at Ferdowsi University of Mashhad. He is currently a lecturer in English language teaching at the University of Gonabad. His major research interests are teacher education, action research, mixed methods research, second language acquisition, and task-based language learning and teaching.

**Hossein Najjari** is an Assistant Professor at the University of Gonabad. His areas of interest include language teaching, ESP, and curriculum design. He has published two books and several research articles in international journals. He is currently the Head of Department of English Language Teaching at the University of Gonabad.