On the Variability of Interlanguage Systems*

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This paper examines the way in which three different paradigms for the study of interlanguage handle the phenomenon of variability in interlanguage systems: a Chomskyan paradigm proposed by Adjemian (1976, 1981); the Monitor Theory proposed by Krashen (1976, 1981) and the Continuum paradigm proposed by Tarone (1979, 1982). The paper presents data from several studies showing that interlanguage speech production varies systematically with elicitation task; it compares the fundamental assumptions of each of these three paradigms with regard to their views of the nature of the system which underlies learner utterances and of the methodology appropriate to the study of this system; and it concludes that the Continuum paradigm accounts for the data better than the other two paradigms, because of its underlying assumptions.

1. INTRODUCTION

One phenomenon which must be accounted for by any theory of second-language acquisition is the phenomenon of systematic variability in the utterances produced by second-language learners as they attempt to communicate in the target language. Learner utterances have been shown to be systematically variable in at least two senses: first, linguistic context may have a variable effect on the learner's use of related phonological and syntactic structures (see Hyltenstam 1977, 1978; Dickerson 1974; Dickerson & Dickerson 1977). And, second, the task used for the elicitation of data from learners may have a variable effect on the learner's production of related phonological and syntactic structures. It is this second type of variation which I would like to consider in this paper, because it raises a number of interesting problems for a theory of interlanguage (IL).

In this paper, I will present data from several studies showing that IL speech production varies systematically with elicitation task; I will compare the fundamental assumptions of three paradigms for the study of interlanguage; and I will show that one of these paradigms accounts for the data better than the other two.

2. DATA ON IL VARIABILITY

The variation of IL syntax, morphology, and phonology due to the influence of elicitation task has been well-documented.

In syntax, for example, Schmidt (1980) found that learners from several native language (NL) backgrounds varied in their treatment of a rule allowing second-verb ellipsis in English, as in (1):

1 Mary is eating an apple and Sue Ø a pear.

In Table 1, we see that these learners never produced a sentence like (1) in free oral production. When asked to repeat such a sentence a few seconds after a native

Table 1: Variable Second-Verb Deletion in Four Elicitation Tasks for Nine Learners of English L2 (from data in M. Schmidt, 1980)

<table>
<thead>
<tr>
<th></th>
<th>Free oral production</th>
<th>Elicited imitation</th>
<th>Written sentence combining</th>
<th>Grammatical judgment</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Mary is eating an apple and Sue Ø a pear</td>
<td>0</td>
<td>11%</td>
<td>25%</td>
<td>50%</td>
</tr>
</tbody>
</table>

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speaker of English in an elicited imitation task, 11 per cent could do so (most supplied the missing second verb). When asked to combine two sentences with identical verbs, 25 per cent deleted the second verb. And, when asked to say whether sentences like (1) were grammatical in English, 50 per cent said they were. So these four different elicitation tasks seem to provide us with four different pictures of the status of this rule in the ILs of these subjects; this variability is systematic, with the occurrence of sentences like (1) increasing gradually from more casual free speech to more careful grammatical judgements. (Further evidence that IL syntax varies with task is provided by LoCoco, 1976.)

A similar pattern exists in an example drawn from a study on IL morphology. Fairbanks (1982) found that a Japanese learner of English almost never used the third person present singular -s ending in casual speech, producing utterances (2)--(4) and others like them:

1. x... if she have a ch-children ...
2. x Because she have to care their son ...
3. x He live with their ch...
4. x... if she have a ch-children ...

However, in his careful style, this speaker almost always supplied the ending—using it for both singular and plural verbs:

5. x... each store uh has er own price.
6. x Each store uh sells uh this transportation.
7. x Um some uh station says uh Minneapolis ... 
8. x Some parts of town uh has a lots of food and others has a lots of medicine.

Such style-shifting in IL morphology is not unusual. Krashen (1981) and others have shown in cross-cultural studies that elicitation tasks which give the learner more time produce different morpheme rank orders from tasks which don't. (For example, Larsen Freeman (1975) found that rank orders of morphemes produced by second-language learners varied across five tasks of 'speaking, listening, reading, writing and elicited imitation'. When rank orders on one task were compared with orders on another task, 'few statistically significant correlations were found' (p. 416). Krashen (1976) suggested that elicitation tasks which gave the learner more time and focused on form, not communication, produced morpheme rank orders in which the third person singular morpheme and the regular past past morpheme were more accurately produced than in other tasks, as these morphemes are more easily 'learned' consciously.)

Table II shows that IL phonology is also systematically variable. Dickerson and

<table>
<thead>
<tr>
<th>Percent correct /r/ productions</th>
<th>100</th>
<th>75</th>
<th>50</th>
<th>25</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>C/r/mid vowel</td>
<td>C/r/high vowel</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free speech</td>
<td>Dialogue reading</td>
<td>Word-list reading</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Dickerson (1977) found that Japanese learners of English produced /r/ with varying degrees of correctness, depending on whether they were speaking freely, reading a dialogue, or reading a word list. Correct production of TL /r/ occurred most frequently in careful speech and least frequently in casual speech.

Thus far, we have seen that systematic variability associated with elicitation task exists on the levels of syntax, morphology, and phonology. Further, so far it seems that the pattern is for the TL feature to be supplied more frequently in the careful styles elicited by some tasks, and less frequently in the casual styles of IL elicited by other tasks.

Table III: Realizations of the TH-variable in Arabic (L1) and English (IL) by All Subjects (R. Schmidt 1977)

<table>
<thead>
<tr>
<th></th>
<th>Reading passage</th>
<th>Word-list</th>
<th>Minimal pairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of interdental</td>
<td>Arabic (L1)</td>
<td>33%</td>
<td>6.4%</td>
</tr>
<tr>
<td>pronunciations (b as opposed to /r/)</td>
<td>English (IL)</td>
<td>54%</td>
<td>73%</td>
</tr>
</tbody>
</table>

The picture in Table III is more complicated than this, however. Here, the TL form [o] which occurs in the more careful IL style (elicited in a minimal pair task) is also a prestige variant of the NL, Arabic, and occurs in the more careful NL style. In this case, the same kind of style-shifting seems to occur when the learners perform the same three tasks in their NL and in their IL. We could even say that a sociolinguistic pattern is transferred from the NL into the IL here. Here, the [o] of the careful IL style may be both the TL (as in Table II above) and the NL prestige [o]. We will return to Table III shortly.

Table IV provides more detailed information on the kinds of structures which may occur in the IL careful style. Here, we see that Thai learners of English supply /r/ variably, depending on whether they are conversing or listing words. We see that in producing final /r/ in IL, the learners follow the general pattern we have noted, supplying more TL forms in the careful style (listing words), than in the casual (conversing): /r/ is 36.5 per cent correct in the casual style, and 72.2 per cent correct in the careful style. But in producing initial /r/ in IL, the learners violate the general pattern we have noted: they produce the correct TL form less (8.9 per cent) in their careful style and more (38.5 per cent) in their casual IL style. Furthermore, their careful style seems to be marked by more native language forms than the casual. It turns out that these NL forms are prestige variants of initial /r/ which are used more frequently in careful styles in Thai, the learners are using prestige NL variants to an increasing degree in their IL careful style. This may also be the process followed by the Arabic learners described in Table III—a process obscured by the fact that their prestige NL variant also happens to be the target form in English.

The data we have examined thus far indicate that the IL careful style (elicited by tasks like grammaticality judgements, word list reading, sentence-combining) may be characterized (a) sometimes by more TL forms than the casual style, and (b) sometimes by more NL prestige variants than the casual style (elicited in conversation). But what sorts of forms are characteristic of the casual style?
Table IV: Number and Percentage of Tokens for Each IL Variant of the R Variable in Two Different Speech Styles of Thais Learning English (L2) (Beebe 1980)

<table>
<thead>
<tr>
<th>IL variant</th>
<th>Speech style</th>
<th>Conversation</th>
<th>Listing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Initial R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j</td>
<td>TL variant (correct)</td>
<td>30</td>
<td>38.5</td>
</tr>
<tr>
<td>f</td>
<td>j'</td>
<td>2</td>
<td>2.6</td>
</tr>
<tr>
<td>w</td>
<td>New variants</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>t</td>
<td></td>
<td>2</td>
<td>4.4</td>
</tr>
<tr>
<td>e</td>
<td></td>
<td>1</td>
<td>2.2</td>
</tr>
<tr>
<td>i</td>
<td>JL variants (interference)</td>
<td>3</td>
<td>3.8</td>
</tr>
<tr>
<td>f'</td>
<td>i'</td>
<td>11</td>
<td>24.4</td>
</tr>
<tr>
<td></td>
<td>Totals:</td>
<td>78</td>
<td>100%</td>
</tr>
<tr>
<td>Final R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j</td>
<td>TL variants (correct)</td>
<td>9</td>
<td>4.6</td>
</tr>
<tr>
<td>f</td>
<td>j'</td>
<td>72</td>
<td>36.5</td>
</tr>
<tr>
<td>w</td>
<td>Possible NL interference</td>
<td>65</td>
<td>33</td>
</tr>
<tr>
<td>t</td>
<td>New variant</td>
<td>49</td>
<td>24.9</td>
</tr>
<tr>
<td>e</td>
<td></td>
<td>2</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Totals:</td>
<td>197</td>
<td>100.1%</td>
</tr>
</tbody>
</table>

Key to IL phonetics variants of R:

1. a retroflex continuant; considered correct (native) in initial or final position in American English; not native to Thai.
2. a more open, less retroflex, continuant; considered correct (native NY English) in final position but incorrect initially; not native to Thai.
3. a voiceless retroflex continuant; IL variant in initial position.
4. a retroflex, post-alveolar fricative; IL variant initial position.
5. an /i/ preceded by English labio-velar continuant; initial position IL variant.
6. a rolled fricative; IL variant in initial position.
7. a retroflex, post-alveolar lateral; IL variant in initial position.
8. an apico-alveolar or semi-alveolar clear lateral with flap-like quality due to tense articulation and sudden release; initial IL variant borrowed from Thai.
9. an apico-alveolar flap; initial position IL variant transferred from Thai.
10. an apico-alveolar trill; initial position IL variant transferred from Thai.
11. zero sound for post-vocalic R; final position IL variant either transferred from Thai or acquired from 'r-less' dialect of English.
12. mid-central vowel; final position IL variant either transferred from Thai or acquired from 'r-less' dialect of English.
13. labio-velar continuant; final position IL variant.
Data provided in a study by Felix (1980) contain the kinds of structures which may occur in the IL casual style. Felix found that German learners of English, when repeating drills in a formal classroom, consistently produced correct English (TL) negation. Their teachers always produced correct English negative patterns. However, on those few occasions when the learners were allowed to use English in conversation for meaningful communication, they produced these utterances:

9 It's no my comb.
10 Brita no this... no have...this...

Utterances (9) and (10) cannot be due to influence from either the NL or the TL. These patterns do not occur in German, and the students had never heard these structures in English. These structures, produced in the learners' less careful speech style, seem to be similar to simple structures which occur in many pidgin languages, in early child language acquisition, and in early untutored second-language acquisition.

Thus, the data we have examined thus far indicate that interlanguage does vary systematically with elicitation task, and, further, that when a task elicits a relatively more careful style, that style may contain more TL forms or more prestige NL variants than the relatively more casual style elicited by other tasks. The more casual style may contain structures traceable neither to the NL nor to the TL, structures which seem to arise spontaneously in the casual style and resemble structures which occur in pidgins, in early child language acquisition, and early untutored second-language acquisition.

3. THREE PARADIGMS FOR THE STUDY OF INTERLANGUAGE

The type of IL variability we have just seen is problematic for a theory of interlanguage because it raises the issue of whether or not a second-language learner's language is systematic, and if so, how. Interlanguage was originally defined by Selinker (1972) as a 'separate linguistic system' which was hypothesized to underlie a learner's attempted production of a TL norm (p. 214). Selinker explicitly rejected the use of certain kinds of elicitation tasks in obtaining data for the study of interlanguage. Specifically, he argued that the 'only observable data to which we can relate predictions' in a theory of second-language learning are 'the utterances which are produced when the learner attempts to say sentences of a TL'. Thus, Selinker explicitly rejected the use, e.g., of a learner's grammatical intuitions about his IL because these would only 'provide information about another system, the one the learner is struggling with, i.e. the TL'.

Since Selinker's proposal, of course, as we have seen, researchers have used a variety of elicitation tasks. Following Corder (1973), in fact, Schachter, Tyson, and Duff (1976) take the opposite position from Selinker, arguing that grammatical intuitions must be used to characterize interlanguage:

...we believe that NO attempt at the characterization of the learner's interlanguage which is based solely on collecting and organizing the utterances produced by the learner will be descriptively adequate (Chomsky 1965). We are interested in characterizing learner knowledge of his language, not simply learner production. (67)

One question which we now face is, since we have seen that different elicitation tasks produce variation in the second-language learner's production of IL structures, so that use of one or another task may lead to contradictory claims about the nature of the 'interlanguage system', what are the best data to use to
characterize IL? Even more fundamentally, what kind of system is it which can be hypothesized to underlie learner utterances, given the variation in the data?

At present, at least three paradigms for the study of interlanguage seem to be emerging, each with a distinctly different conception of the nature of the IL system, the nature of variation in IL, and the best data to be used in studying IL. These are:

1. the Homogeneous Competence Paradigm, as described by Adjemian (1976, 1981), which applies a Chomskyian paradigm for the study of language to the interlanguage situation;
2. the Capability Continuum Paradigm, as described by Tarone (1979, 1982), which views IL as consisting of a continuum of styles;
3. the Dual Competence Paradigm, as described by Krashen (1981 and elsewhere), which is exemplified by the Monitor Theory.

In this section, I would like to examine some of the assumptions which underlie each of these three paradigms, and contrast them. In the process, I will evaluate the paradigms in terms of how well they account for the data we have just examined. A simplified outline of the assumptions of the three paradigms is provided in Appendix One.

In the following discussion, I presuppose that the immediate goal of research in the field of second-language acquisition is the description of the learner’s underlying grammatical and phonological capabilities (his interlanguage). I assume that in meeting this goal, linguists have the aim of producing a model of the underlying linguistic capabilities of the individual learner. Each individual’s linguistic capabilities are changing over time, so that the linguist must in fact produce a succession of models to account for each individual learner’s changing IL over time. I assume that examination of several such models of individual learner ILs will show that they share certain properties; no individual IL will be utterly idiosyncratic. It is clear, as Adjemian (1981) has pointed out, that the attempt to describe the learner’s IL is part of a larger goal, which is to develop a theory of non-primary language acquisition.

I believe that all three paradigms in our field share this general conception of the immediate goal of research. But they differ in their assumptions about the nature of the linguistic capability being modeled, and the place of variability in the model, and thus they differ in their assumptions about the best data to use in accomplishing their goal.

3.1 Paradigm 1: Homogeneous Competence
Paradigm 1 is essentially the Chomskyian paradigm applied to an interlanguage situation. The first three assumptions outlined below are assumptions which hold for the study of native languages—the fourth assumption asserts that these all hold for the study of interlanguages as well.

Assumption 1: Linguistic Competence. One goal of linguists is to construct a model of the linguistic knowledge, or competence, of an idealized speaker-hearer. The speaker-hearer here is a native speaker of the language, and is idealized in the sense that s/he is conceptualized as existing outside of any specific communicative situation, and as unaffected by such irrelevant occurrences as slips of the tongue, false starts, and so on. The speaker-hearer’s sociolinguistic knowledge—the knowledge of how to use different registers in different social situations—is not
relevant to the linguist's goal, which is to construct a model of the speaker-hearer's *purely linguistic knowledge*. This competence is assumed to be homogeneous—that is, it is the unvarying competence of an idealized speaker-hearer. This competence is accessible to a form of introspection, in that the speaker-hearer may use it to make judgements of grammaticality.

**Assumption 2: What Guides Language Behavior.** This competence also underlies the speaker-hearer's actual performance in speaking and hearing. That is, it is assumed that the *same* competence, or linguistic knowledge, which produces grammaticality judgements is also the competence which underlies the individual's speech production, for example. This follows logically from the assumption in (1) of a homogeneous competence—a single style speaker. C. L. Baker (1978), in an introductory syntax text, states Assumption 2 this way:

The approach that has been most widely adopted throughout the history of linguistic studies is to try to infer something about the unconscious rules of a language by studying the conscious judgements in which the rules are manifested.

In other words, the unconscious rules of a language which allow the production of utterances in that language are somehow manifested, or 'mirrored', in a speaker-hearer's conscious judgements about that language.

**Assumption 3: Linguistic Data.**

a. The *best* data to use to gain access to that linguistic knowledge consist of that set of sentences which the native speaker of the language judges to be grammatical, or ungrammatical, or ambiguous, or in a paraphrase relationship. That is, the linguist, guided by his theory, uses native speaker intuitions to select that set of sentences which s/he will use as data in constructing a grammar.

b. Other data, such as incidentally-observed utterances or even written texts, may be added to the basic pool of data provided by intuitions. A crucial point here is that because the native speaker-hearer is assumed to have a homogeneous competence, data from these various sources *may* be (and often are) combined indiscriminately to form a single pool of data, all of which may be used in constructing a model of the speaker-hearer's 'idealized competence'.

**Assumption 4: Interlanguage Competence, Data and Performance.** The same goal, and the same sorts of data, may be used in studying interlanguage—the linguistic knowledge which underlies a learner's attempted utterances in the TL. The researcher elicits the learner's intuitions on grammaticality in order to obtain a body of data to be used in constructing a model of the learner's linguistic knowledge in IL—a grammar.

... le besoin d'un modèle abstrait, idéalisé de la grammaire de l'apprenant ... a comme corollaire la nécessité de trier soigneusement les données sur la base desquelles on élaborera notre modèle. Ces données doivent être celles produites par les intuitions grammaticales de l'apprenant (par sa connaissance implicite ...), et non pas celles enregistrées par hasard au cours d'une entrevue, et qui resteraient non reproductibles.

... the need for an abstract model, idealized from the learner's grammar ... has as corollary the necessity of carefully selecting the data on the basis of which we will develop our model. These data must be those produced by the grammatical intuitions of the learner (through his implicit knowledge ...), and not those recorded by chance in the course of an interview, and which may remain non-replicable.

(Adjemian 1981, Introduction)
So, the linguist assumes here that the unconscious linguistic knowledge of the learner, like that of the native speaker, is manifested in the grammatical intuitions of the learner. For Adjemian, there is no difference between the task of the linguist modeling the linguistic knowledge of the native speaker, and the task of the researcher modeling the linguistic knowledge of the second-language learner. The same methodology may be used in both cases.

At this point, it may be worthwhile to stop and reflect on these assumptions in light of the IL data we reviewed earlier. Can the notion of the idealized homogeneous competence possibly be stretched to fit the second-language learner’s situation? In particular, Assumption 2—that the same homogeneous competence underlies grammatical intuitions and, e.g., speech production—seems incompatible with the data in Table I. For example, where the learners’ intuitions and their speech production seem quite different. Adjemian is left with the task of accounting for this variability while retaining the notion of the homogeneous competence.

Assumption 3a, that the best data are intuitional data, seems rather arbitrary. The intuitional IL data in Table I do seem to provide more evidence of TL influence than data from the other tasks given the learners. But in what sense are these data better than data from casual conversation, where we may find evidence of structures truly unique to the IL—that is, traceable neither to TL nor to NL? Assumption 3b, that one can indiscriminately pool different kinds of data in modelling competence, also seems untenable in light of the data. Can we possibly gain an accurate picture of IL competence by pooling the data in Table I? If we do pool it, do we give all styles the same weight? Is there an equation we can use to combine these data correctly?

There seem to be some problems with these assumptions in light of the data.

Assumption 5: How IL is Internalized. Although Adjemian (1981) does begin to deal with this issue, it is still not clear to me how it is that this homogeneous competence is considered to be acquired by second-language learners. As we shall see, the assumptions delineated thus far seem to be incompatible with the acquisition process.

Assumption 6: IL Variability. Adjemian says we may expect to see a difference between that set of sentences which the learner judges to be grammatical in IL, and that set of utterances which the learner himself produces. This is because, in speech production, the IL is permeable to invasion from other rule systems.

L’apprenant produira parfois des structures qui seront agrammaticales par rapport à la grammaire de son IL. C’est-à-dire, la systématité interne de sa grammaire—IL sera violation; Ce phénomène est dû au fait que l’IL est perméable (Adjemian 1976) et permet à des règles de la L1 de se glisser dans son système, ou permet des sur généralisations de ses propres règles.

(The learner will, on occasion, produce structures which are ungrammatical with respect to his IL grammar. That is, the internal systematicity of his IL grammar will be violated. This phenomenon is due to the fact that IL is permeable (Adjemian 1976), permitting the rules of the L1 to creep into the system, and also permitting overgeneralization of its own (IL) rules.)

(Adjemian 1981. 3.3)

This paradigm, then, assumes that there will be variation between data produced by learner intuitions (on the basis of which his ‘IL grammar’ is written) and some of the learner’s utterances using the IL. Adjemian’s way of maintaining the notion
of homogeneous competence and also accounting for variability is to argue that the homogeneous competence is permeable to invasion from other linguistic systems in the production of utterances. We see now that utterances are not produced by the underlying IL competence alone, but also by other linguistic systems which have invaded the IL system in performance. (Here then we may have another reason why utterances may not be the best data for the study of the underlying IL rule system: utterances are viewed as reflecting not only the IL rule system, but also other invading rule systems. Intuitions, on the other hand, are apparently assumed to provide more direct access to the underlying IL system in its least permeable form.)

The problem with this solution is that it does not adequately account for the data. The data indicate that, if anything is permeable to invasion from TL and NL, it is the careful style and (in Table I) grammatical intuitions. The casual, conversational style of the learners who produced utterances (9) and (10), on the other hand, seems to be signally impermeable to influence from the TL and NL. The data seem to show the opposite of what this paradigm would predict.

Assumption 7: IL Universals. Interlanguage, as a natural language, must obey the constraints of language universals. Since, in Chomsky's framework, universal similarities among languages occur as a direct result of mental constructs shared by all competences, and since ILs are competences, they also must evidence those same universal similarities.

Assumption 8: Uniqueness of ILs. In the process of constructing this model of IL, using intuitional data as primary, Adjemian notes that the model of IL being constructed is qualitatively different from models we build of native languages in three important ways: the IL may stop developing before reaching identity with the TL (fossiltization); the IL may actually regress to an earlier stage of development (backsliding); and, as we have just noted, the speech performance of the individual may evidence systematic rules not found in the model we have constructed on the basis of intuitional data (permeability). These characteristics are claimed to be unique to IL—to be qualitatively different from characteristics shown by native languages.

Researchers such as Arditty and Perdue (1979) have convincingly argued that all three characteristics exist in cases of native language dialect contact. To call these processes 'sociolinguistic' in the case of native language dialect contact but 'purely linguistic' in the case of interlanguages, as Adjemian does, seems arbitrary. Yet, this is a position Adjemian is forced to take if he is to maintain his fundamental assumption of homogeneous competence in the face of the existence of these clearly linguistic processes in IL.

Note in summary that in Adjemian’s Paradigm 1, the learner’s competence is considered to be homogeneous and most accessible to a kind of introspection, in that learners have grammatical intuitions which the linguist may use as data in modelling that competence. Variation is a phenomenon which occurs in speech performance and not in the grammatical intuitions on the basis of which the 'grammar itself' is written.

As I have pointed out, problems arise when the Chomskyian theoretical framework (as expressed by Adjemian) is applied in this way to the case of second-language acquisition (SLA). The case of SLA violates several assumptions which are basic to this framework. With SLA, the task is to describe and explain a
grammar which is not native; which results from contact between a native language and another language, with possible constraints from universals; and which is in formation, and therefore seems to have heterogeneity built into it. This linguistic paradigm's notion of the ideal speaker-hearer with a homogeneous competence, able to provide intuitions of grammaticality which lead to an understanding of that which underlies performance, seems to be antithetical to all the basic facts which characterize the second-language learner's situation. Certainly Paradigm I cannot account for the interlanguage data we have examined in this paper.

3.2 Paradigm 2: Capability Continuum

Paradigm 2, which is presupposed in my own work (Tarone 1979, 1982), that of Dickerson (1974) and others, seems to me to account for these data the best. This paradigm differs in important ways from the homogeneous competence paradigm just described. Perhaps most important is the difference in the way in which the two paradigms conceive of the underlying system which is being modeled, and the consequent differences in their view of the nature of variability, and their different notions of the best sort of data to use in studying IL.

As I have pointed out elsewhere (Tarone 1979), this paradigm is founded on the assumption that the axioms of Labov's (1969) Observer's Paradox apply to interlanguage. I repeat the first three axioms, which are most relevant to our current discussion:

a. There are no single-style speakers. Every speaker shifts linguistic and phonetic variables as the situation and topic change.

b. It is possible to range the styles of a speaker along a continuous dimension defined by the amount of attention paid to speech.

c. In the vernacular style, where the minimum amount of attention is given to speech, the most regular and systematic of phonological and grammatical patterns are evidenced. Other styles tend to show more variability.

(Lebov 1969)

We shall return to these axioms in the course of our discussion.

Assumption 1: IL Capability. The learner's IL Capability is that which underlies, or guides, the regular language behavior of the second-language learner. The term 'capability' is used instead of the term 'competence', because 'competence' refers to the sort of linguistic knowledge described in Paradigm I, a knowledge accessible almost in its entirety to a form of introspection in that grammatical judgements may provide the linguist the most accurate data on it. In Paradigm 2, 'capability' refers not to 'linguistic knowledge' which is reflected in grammatical intuitions, but rather refers more broadly to that which underlies all regular language behavior. The full scope of the learner's IL capability is not assumed to be completely reflected in data provided by introspection. IL capability consists of that which underlies regularities in learner production and perception, writing and reading, as well as making judgements on grammaticality. The regularities in the learner's IL behavior may be described, and the underlying capability of the learner modeled—though it must be pointed out at once that this model is different from the grammar proposed by Adjemian in Paradigm I; in analogy to Ilkonen's (1978) terminology, the grammar of Paradigm I may be said to be composed of rules (normative standards of behavior), while the model of
Paradigm II may be said to be composed of regularities (patterns which underlie phenomena in observed behavior).

The learner's IL capability as defined in this paradigm is not assumed to be homogeneous (single-style), but rather heterogeneous, made up of a continuum of styles. Following Labov (1969), we may say that any linguistic system must be viewed as consisting of a continuum of styles.

Table V: Interlanguage Continuum

<table>
<thead>
<tr>
<th>vernacular style (more pidgin like)</th>
<th>style 2</th>
<th>style 3</th>
<th>style 4</th>
<th>style n</th>
<th>careful style (more TL/NL like)</th>
</tr>
</thead>
<tbody>
<tr>
<td>unattended speech data</td>
<td>attended speech data</td>
<td>various elicitation tasks: elicited imitation, grammatical intuition data</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any system—including an IL system—has its own careful style, which we may define as that style produced when the speaker pays the most attention to language form. It is this style which is probably modeled by the grammar of Paradigm I. In comparison, Paradigm II views the capability of the speaker of an IL as also including a 'vernacular' style, which (following Labov) we may define as that style produced when the speaker pays the least amount of attention to language form. The capability of the speaker of IL includes both the careful and the vernacular styles of the system, and the intermediate continuum of styles which makes up the system of IL. The regularities evidenced in each style in the continuum may be described and modeled, and these models may be systematically related to one another in our final complete description of the IL capability continuum. This IL is systematic in two senses: (1) it is describable and ultimately predictable in terms of a set of variable and categorical rules; and (2) it has internal consistency (Tarone 1982).

Paradigm II maintains at least one of the distinctions between underlying IL capability and IL behavior that Paradigm I maintains between competence and performance. The underlying IL capability is an abstract linguistic system which is inferred to exist apart from any particular instance of its use; this system consists of a range of styles, any one of which a speaker may use, for a variety of psychological and social reasons.

However, note two fundamental differences between Paradigms 1 and 2 with regard to the nature of the system being modeled by researchers. First, Paradigm I considers competence to be 'idealized', inherently homogeneous and invariant: while Paradigm 2 views capability as heterogeneous, consisting of a range of styles. Second, Paradigm I views IL competence as best reflected in data provided by a form of introspection, whereas Paradigm 2 views IL capability as only partially and sometimes minimally reflected in introspective data. I will show that Paradigm 2's conception of the nature of the underlying IL system will enable us to postulate a notion of variability which will help us to account for the data better than Paradigm I can.

Assumption 2: What Underlies IL Language Behavior. It is the continuum described in Assumption 1 above which underlies IL behavior. Following the second axiom of Labov's Observer's Paradox, we may say that the portion of the continuum which underlies a particular instance of regular learner performance is determined primarily by the degree of attention which the learner pays to
language form in that instance. Note that it is only regular IL behavior which is accounted for here; slips of the tongue, and irregular occurrences of language behavior, are not to be accounted for by the underlying continuum. In Table I, for example, a description of the regularities occurring in free oral production does not contain second-verb ellipsis; a model of this part of the continuum would not show this regularity. On the other hand, grammatical judgement behavior does allow second-verb ellipsis, but does so variably; a model of this part of the continuum would show a regularity permitting variable second-verb ellipsis. A complete description of the IL would systematically relate these models to one another, showing the way in which regularities vary as a function of attention to form.

A major difference between Paradigms 1 and 2, with regard to what it is that actually underlies learner performance, is that Paradigm 1 (because of its assumptions about the nature of IL competence) is forced to assume that it is not only IL competence which underlies learner performance, but also other linguistic systems which ‘invade’ the learner’s competence. But surely if other linguistic systems are able to ‘invade’ in this way, they must be known to the learner in some sense, and thus be part of her linguistic knowledge, or competence. The status of these ‘invading systems’ vis-à-vis IL competence is unclear. Perhaps because of this, Paradigm 1 does not make clear predictions about what happens when systems invade: the process does not seem to be rule-governed in any sense. Paradigm 2’s solution is more elegant: there is a single, systematic continuum which underlies a learner’s behavior. This continuum is systematically describable in a way which the ‘invading systems’ approach does not seem to be. (Even if Paradigm 1 were to use optional rules to describe these invading systems (Adjemian, personal communication), it would not have the predictive power which variable regularities may provide.)

Assumption 3: Data Used to Study IL. Observation of learner utterances when minimum attention is paid to language form will provide data about the vernacular—only one style within the range of styles which make up the learner’s IL. Observation of learner utterances when maximum attention is paid to form will provide data about a more careful style, in the opposite direction on the learner’s IL continuum. Elicitation of learner judgements of grammaticality encourages the learner to pay attention to language form than when producing utterances; hence, intuitions of grammaticality provide data on another part of the continuum.¹⁰

Note here again, how Paradigms 1 and 2 differ. Paradigm 1 takes intuitional judgements of grammaticality as providing the primary data for the study of IL, but may indiscriminately include other data (texts, anecdotal evidence, recorded utterances). Paradigm 2, on the other hand, while it may include grammaticality judgements, considers these to provide information about only one style of IL, that is, one part of a continuum of styles. Paradigm 2 demands the use of many kinds of data (ranging from tasks like reading word lists, texts, combining sentences, elicited imitation to conversation in circumstances requiring more or less attention to language form), data which must be kept separate in order to provide information about each style which makes up the continuum of the IL system.

Assumption 4: Nature and Cause of IL Variability. That variability in the
regular language behavior of second-language learners which is associated with the use of different elicitation tasks is caused by style-shifting along the IL continuum, which in turn is caused by variable shifts in the degree of attention which the learner pays to language form. (See Tarone 1982 for a discussion of the role of attention in style-shifting of this kind.) The various styles of the IL may be described and related to one another in terms of a set of underlying variable and categorical regularities.\textsuperscript{12} So in Table II, the regularity of /r/ production is almost categorical in reading word lists: /r/ is supplied almost 100 per cent of the time. But /r/ is supplied only 50 per cent of the time in free speech, where we assume that the learners are paying less attention to speech form; the regularity has become more variable in this style.

At any one point in time, as the learner style-shifts as a result of paying more attention to language form, some categorical regularities may become more variable, and some variable regularities may become more categorical, as they are increasingly influenced by the TL (or NL, prestige forms). In Table II, a variable regularity becomes more categorical as the learners style-shift towards a more careful IL style. If, in the initial stages of learning, the IL vernacular included a categorical regularity specifying 0 supply of /r/, then we might speculate that style-shifting toward a more careful IL style would have entailed making that categorical regularity more variable, by beginning to supply a small percentage of /r/.

It is important to point out here a major difference between Paradigms 1 and 2 with regard to the nature of the variability which both paradigms agree exist. Paradigm 1 believes IL to be most permeable to invasion from other rule systems (most variable) in speech performance—that is, in actually using the IL—and least variable in the generation of grammatical intuitions. Paradigm 2 takes the opposite stance. Taking the third axiom of Labov’s Observer’s Paradox as being applicable to IL, it views the IL vernacular as being primary in the sense of being most stable and consistent (see Tarone 1982, for a discussion of these attributes); the vernacular style should evidence fewer target language or native language forms than a careful style (as accessible to intuitions, for example), and thus have greater internal consistency.

Dickerson (1974) was the first to suggest that the IL vernacular is the most consistent of the IL speech styles.

When the native speaker is angry, or otherwise emotionally involved, or very relaxed, his speech will be the casual style—a return to the most well-learned and consistent linguistic patterns in his repertoire. Although we have no examples of casual speech from the Japanese learners, it is suggested that they, too, have an IL counterpart of their NL vernacular. It is formed during their earliest experience with the TL. The IL vernacular is an internally consistent, but variable system. As a variable system, it is not characterized by categorical nontarget output from its variable rules, although some rules may be categorical. But the system as a whole is expected to display a high but stable proportion of nontarget rule output. This stable system forms the base line of variability.

(Dickerson, pp. 6.15–6.16)

The disagreement between Paradigms 1 and 2 is precisely on which portion of the continuum to take as the primary area of investigation: which style do we view as primary, so that movement away from that style is viewed as evidencing increasing inconsistency?
In fact, the pattern we have observed in the data is that the more careful style is more permeable to TL and NL. As the learner pays increasing attention to language form, we may observe increasing evidence of TL and NL forms in his utterances. The style in which the learner pays least attention to language form is the style with least evidence of 'invasion' by other language systems, and the most evidence of structures which, like examples (9) and (10), seem related neither to NL nor to TL, structures which seemingly arise spontaneously and which share features in common with pidgins, early child languages, and other 'simplified' languages (Ferguson and De Bose 1977). I have argued elsewhere (1982) that these research results so far support my own, and Dickerson's, claim that it is the vernacular IL style which is the most consistent and least permeable to outside influence (from TL/NL). This claim is empirically testable by means of future studies which gather more IL data from a variety of elicitation tasks, and keep the data from these tasks separate in order to analyse the relative influence of TL, NL, and 'pidgin-like' structures in each body of data.

In summary, then, Paradigm 2 views the IL vernacular style as that style which is least 'permeable' in the sense of being more internally consistent, and evidencing fewer structures of the NL or TL. For Paradigm 2, the vernacular style is the primary area of investigation. Paradigm 1, in contrast, views the IL careful style (as reflected in the grammatical intuitions of the learner) as being the least 'permeable', and takes this as primary. The data we have examined in this paper support Paradigm 2 rather than Paradigm 1.

Assumption 5: How IL is Internalized. Paradigm 2 allows for two means of internalization of IL. In one means, the learner spontaneously produces simple structures in the vernacular style. So, for example, sentences like (9) and (10) may be produced spontaneously by all second-language learners in their unattended speech, regardless of the NL or the TL involved. Further, some regularities may be produced earlier than others, so that a tendency toward a universal order of acquisition of such structures may be evidenced, particularly in the vernacular style. Krashen (1981) and others have presented a great deal of evidence from morpheme studies in support of this claim, arguing that all learners regardless of NL 'acquire' morphemes in English in roughly the same order. (See Paradigm 3's Assumption 4 for details.) The other means of internalization is described by Hyltenstam (1978):

We can expect a new rule—adjustment to the target—to appear first in data with a high degree of formality where the learner has an opportunity to monitor his performance. In time, the adjustment can be expected to spread to less formal types of performance, and in the last instance, it will show up in informal oral production.

(p. 6)

That is, on the continuum outlined in Table V, a target language structure is incorporated into the IL by moving from right to left, from the careful style toward the vernacular style. There are not enough longitudinal data at present to show this sort of movement actually taking place. Dickerson and Dickerson's data (Table II) might be claimed to show evidence of this sort of progress; however, theirs are not longitudinal data, so are ultimately not useful in this regard. Longitudinal studies are needed. Paradigm 2 would predict that while TL structures move over time from the careful style towards the vernacular, as part of the process of acquisition, those IL structures which spontaneously appear in the
vernacular style would gradually be replaced by them.

**Assumption 6: IL Universals.** It should be clear from the discussion so far that Paradigms 2 and 1 agree that IL should obey the constraints of language universals. Paradigm 2 would assume that no styles of IL should show systematic violation of constraints which govern possible structures in natural languages—for example, constraints on possibilities for center embedding, coordinate deletion, pronominal anaphora, and so on. To date, the research evidence supports this assumption. So, for example, M. Schmidt (1980) found that none of the learner ILs in any task violated the universal constraint against left-verb deletion:

\[
11 \times \text{Mary } \text{of an apple and Sue is eating a pear.}
\]

Gundel and Tarone (1982) similarly found that second-language learners never violated either the Pragmatic Condition on Anaphora, or the Structural Condition on Coreference, in their use of pronominal anaphora.¹⁵

**Assumption 7: Uniqueness of ILs.** Unlike Paradigm 1, Paradigm 2 does not claim that the three properties of fossilization, backsliding, and permeability are unique, or qualitatively different, characteristics of ILs. It is clear that backsliding, permeability, and fossilization are all phenomena which occur in dialect conflict situations within the same language, and some of which occur in first-language acquisition.

To summarize, then, Paradigm 2 defines IL as the abstract system which guides the regular language behavior of the second-language learner. This capability is hypothesized to be an abstract linguistic system consisting of a continuum of styles; the system exists apart from any particular instance of its use. That portion of this continuum which underlies a particular instance of regular learner behavior may be determined by the degree of attention which the learner pays to language form in that instance. This view of underlying IL system results in several assumptions in Paradigm 2 which differ from Paradigm 1, which have been outlined above.

3.3 Paradigm 3: Dual Knowledge

Paradigm 3 has been implied in work by Krashen (1981 and elsewhere) and others. Paradigms 2 and 3 share several important assumptions, and are much closer to each other than either is to Paradigm 1. However, there are several important assumptions which differ between these two paradigms, and these differing assumptions result in differing abilities to deal with the data. In general, Paradigm 3 will turn out to be only a partial model, in that it is unable to account for the full range of variability in interlanguage systems.

**Assumption 1: Two Knowledge Systems.** In Paradigm 3, there are two completely independent systems of knowledge which make up the IL of the second-language learner: an implicit knowledge system which consists of the unconscious knowledge of how to produce utterances, and a metalinguistic knowledge system which consists of knowledge about the language being learned. Krashen terms the second body of knowledge the Monitor; the Monitor is accessible to conscious introspection and may be described by the learner in terms of consciously formulated grammatical rules. These two knowledge systems seem to be homogeneous in Krashen's formulation; that is, each body of knowledge seems to be made up of a single set of invariant rules.

Note the fundamental differences between Paradigms 3 and 2 with regard to the
nature of the system being modelled by the researcher. Paradigm 3 views the system as essentially two independent systems, each of which is apparently homogeneous, and only one of which actually generates utterances (the implicit system). Paradigm 2 views the system as a single continuum of styles, all of which are related to one another, and all of which may underlie utterances. We shall see that these different views of the nature of the system being modelled will lead to different treatments of variability.

Assumption 2: What Guides IL Behavior. In Paradigm 3, the learner’s implicit knowledge system actually initiates IL utterances in performance. The learner can modify the output of the implicit ‘grammar’ by invoking rules from the metalinguistic knowledge system (the Monitor) under certain conditions: (1) when the learner has enough time to do so; (2) when the learner is focused on form; and (3) when the learner consciously knows the grammar rule in question. Thus, in this paradigm it is at times the implicit knowledge system alone which underlies IL behavior, and at times it is the implicit knowledge system modified by the metalinguistic knowledge system which does so. Metalinguistic knowledge is available to the learner only as a Monitor, and cannot initiate utterances. The Monitor can only modify, or filter, the utterances generated by the implicit knowledge system. While Krashen does allow for some self-correction in language behavior by means of the implicit knowledge system (as this also occurs in one’s native language), there is little said about this phenomenon. The primary focus of Paradigm 3 is on the distinction between the implicit knowledge system and the metalinguistic knowledge system.

Note the difference among paradigms here. Paradigm 1 assumes that competence is accessible to a different sort of introspection—the ability to have grammatical intuitions, not the ability to consciously know the grammatical rules. Paradigm 1’s competence is the knowledge which ‘generates’ learner utterances; Paradigm 3 postulates a truly metalinguistic knowledge system which does not initiate utterances. For Paradigm 3, it is only the implicit knowledge system, not accessible to introspection, which initiates utterances. Both Paradigms 3 and 1 share the notion of two (or more) grammatical systems underlying interlanguage behavior under certain circumstances; however, they differ in their characterization of the competing underlying grammatical systems, and in their assumptions about the circumstances in which behavior is produced by two, rather than one, linguistic systems.

Paradigm 3’s Monitor is more or less equivalent to the most careful style on the continuum in Paradigm 2; the two paradigms differ in that Paradigm 2 assumes a single, systematic continuum underlying all learner language production, a continuum that is describable by a single linguistic system, while 3 postulates two distinct systems underlying language production.

Assumption 3: IL Data. Paradigm 3 gathers data on the nature of each of the two knowledge systems. Data on the implicit knowledge system consist of those utterances produced (orally or in writing) by the learner when the learner has (a) not had much time, (b) was not focused on form, and/or (c) did not consciously know the grammatical rules involved. Data on the metalinguistic knowledge system consist of utterances produced when the learner is asked to think about correct grammatical form, is given lots of time to self-correct, and can be shown to consciously know the grammatical rules involved. Krashen (1981) and others have
done many studies eliciting these two broad categories of data. There does not, however, seem to be any attempt to gather data relevant to variability within the implicit knowledge system itself: rather this implicit knowledge system seems to be accessible to any data gathered in any situation, in any mode (oral/written)—as long as criteria (a)-(c) are met. Of course these methods of data collection follow logically from what these researchers are interested in showing—that there is a dichotomy between language produced under conditions considered appropriate for Monitor use, and other conditions. Variability under these other conditions is apparently not relevant within this paradigm.

Assumption 4: How IL is Internalized. The implicit knowledge system is unconsciously ‘acquired’ by the learner, in the same way in which native languages are acquired by children. This acquisition process is characterized by a fairly stable order of acquisition of structures, so that all acquirers regardless of NL tend to internalize the same structures early and the same structures late in the acquisition process. The well-known morpheme acquisition studies have been used to provide support for this view of acquisition. Krashen’s claim is that these more or less universal stages of acquisition are totally unaffected by teachers’ attempts to teach the learner structures out of order. The metalinguistic knowledge system, on the other hand, is consciously ‘learned’ by means of memorization of explicit rules and practice with error correction. No invariant order of learning is claimed. Such consciously learned material is available to the learner only as a Monitor; it cannot initiate utterances. It is unclear in this theory how structures which have been learned, and are therefore part of the metalinguistic knowledge system, become part of the implicit knowledge system, since these two systems are viewed as being completely independent.

Paradigm 2, on the other hand, has the advantage of providing a mechanism whereby structures may first be incorporated into the careful style, and over time move along the continuum until they are incorporated into the vernacular style. In Krashen’s terms, Paradigm 2 has a mechanism for showing how learned structures become acquired. Both paradigms allow for ‘acquisition’, the unconscious internalization of structures into the IL vernacular, and both predict a similarity across ILS, independent of NL and TL influence, in the structures thus internalized, as opposed to structures internalized into the careful IL style, which are drawn from the particular NL and TL involved.

Assumption 5: Nature and Cause of IL Variability. In Paradigm 3, the only variability which is accounted for is the major dichotomy between the learner’s behavior when Monitoring, and when not Monitoring. This dichotomy is considered to be due to the use or non-use of the metalinguistic knowledge system. That is, Monitoring, or the conscious application of grammatical rules, is conceived of as an either-or option, not as a continuum. While Monitor Theory also allows for another kind of monitoring—paying attention to language form—this notion is not developed to any great extent, nor does it have any impact on the way in which implicit knowledge is conceptualized (i.e., implicit knowledge is homogeneous), or result in any care taken to distinguish among various kinds of data gathered in un-Monitored learner language. Herein lies the major difference between Paradigms 2 and 3: Paradigm 2 is concerned with accounting for variability in IL along the full range of speech performance, and conceives of the underlying IL capability as an unbroken continuum of speech styles. It views the
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4. CONCLUSION

Interlanguage data from several studies have been presented, which show that IL behavior varies systematically with elicitation task. This variability of IL is problematic for a theory of interlanguage because:

a. use of one or another task may lead to contradictory claims about the structure of interlanguage, so that we must decide what are the best data to use to characterize IL; and

b. the kind of linguistic system hypothesized by the theory as underlying these learner utterances must be able to account for this variability. A model of this system must accurately describe and become capable of predicting the systematic variability which takes place.

A review of three paradigms for the study of interlanguage has shown that the different assumptions these paradigms make about the nature of the underlying IL system lead to different decisions about the best data to use to characterize IL. The data gathered within each paradigm tend to reinforce that paradigm’s basic assumption about the nature of the underlying IL system being modelled.

It has been argued that the data presented in Tables I–IV can be described and predicted best by a model of IL which follows the assumptions of Paradigm 2. The other paradigms cannot account for these data so well.

More data of the sort in Tables I–IV, and examples (9)–(10), are needed in order to validate the claims of one or another of these paradigms relative to one another. In particular, longitudinal studies which use a variety of elicitation tasks, and keep the data from these tasks separate from one another, may most effectively be used to determine in a principled way which of these three paradigms is most adequate for the study of interlanguage.

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NOTES

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1 While the notion of interlanguage is considered in theory to concern itself with both the speech production and the speech perception of second-language learners, in fact, most research is done on speech production. This is probably because it is easier to study speech production in an interlingual domain, and much harder to find ways of studying what learners are perceiving. The paradigms discussed in this paper should be taken to refer to speech production only; their relevance to speech perception remains to be investigated.

2 Subsequent discussions may be found in Tarone, Frauenfelder, and Selinker (1976):

There exists a separate linguistic or psycholinguistic system (interlanguage) which forms in the mind of the learner and which may take the form of pidgin and which may develop into a separate dialect in its own right. This system draws on both the NL and TL as well as other sources for its surface forms.

... in this paper we call learner speech 'systematic' when it evidences an internal consistency in the use of forms at a single point in time...

3 Nemser (1971) and others have argued that interlanguage is to be described not as a language of the individual, but rather as a language with its own speech community. I find it difficult to distinguish this notion of IL from the notion of pidgin. Further, if one looks at a classroom filled with students who speak several native languages, and make different errors in attempting to speak a target language, it is hard to imagine how this group might be called a 'speech community' ... though I would still want to say that each individual still is using an interlanguage in attempting to communicate in the TL.

4 It is not clear at all that in fact this approach is the one 'most widely adopted throughout the history of linguistic studies'. Rather, it seems that analysis of written texts for underlying regularities was an approach rather more widely adopted.

5 It should be pointed out here that this third assumption does not logically follow from the first and second. In theory, one could use another source of data to model the native speaker's competence. But in fact all three assumptions have usually been accepted as a unit by those who use the Chomskyan paradigm. (I am grateful to Gerald Sanders for making this point.) The usual rationale for preferring intuitional data is that other kinds of data are subject to random 'performance' flaws like slips of the tongue, or to sociolinguistic variation not of interest to the linguist. Intuitions, on the other hand, have been viewed as basically independent of the influence of social situation. Recent work by Carroll et al. (1981) has called this last view into question.

6 Adjemian (personal communication) states that the linguist does usually use these observed and elicited bits of data to provide additional support to the primary data (presumably, intuitional data). Victor Hanzeli (personal communication) comments, 'This model admits data other than intuition as relevant, but they have proof value only on the "lowest", observational level of adequacy, as counter examples.'

7 My thanks to Kate Winkler for providing English translations of Adjemian's (1981) paper.

8 The same objections can of course be raised to the use of this paradigm for the study of first language acquisition as well. Because this paper focuses on problems for the study of second language acquisition, the objections are stated here solely in terms of the SLA situation.

9 Itkonen (1978) uses these terms in discussing a different, and much broader, issue—the theoretical foundations of autonomous linguistics. I am grateful to Michael Kac for pointing out this analogy.

10 How continuous is the continuum? How many styles should it contain to be truly considered a 'continuum'? This, it seems to me, is an empirical question. The point is, that if we work within a paradigm which postulates the existence of a continuum, then we will design our studies in such a
way as to test that postulation; instead of pooling results from various elicitation devices, we will try to keep these results separate and examine them to determine whether indeed they relate to one another as predicted. Allwright (personal communication) points out that it may turn out that intuitions of grammaticality will actually fall off at the end of this continuum—that is, there may be a real dichotomy between what learners judge grammatical in some cases, and what they can actually perform, even in their most careful style. This would occur if a learner could judge a TL sentence grammatical, but be utterly unable to produce that sentence even with maximum attention paid to speech form. Or, more likely, it would occur if one could perceive a sound as being a correct TL sound, but be unable to produce it. This problem returns us to the question of how perception in IL relates to production in IL (see footnote 1).

11 Other kinds of variability do occur. For example, learners may master more than one register of the TL, and use these appropriately in formal or informal situations. The sort of style-shifting I discuss here is different from this kind of register-shifting, though it may be related to it. The sort of style-shifting I discuss here may take place within a single register of the TL; indeed, since most second language learners in the classroom are exposed only to one register of the TL, it is very likely that they know only one register. They may pay greater or less attention to language form as they use that register. As more registers of TL are mastered, the sort of style-shifting I discuss here may interact with register-shifting, just as it must in the native language.

12 Here, the reader may want to refer back to the distinction between rules and regularities (Section 2.2 and footnote 9) in considering a question raised by Sanders (personal communication): ‘what is the speaker really doing here? . . . applying a rule 50 per cent of the time because he knows that 50 per cent /l/ occurrence is right for free speech?’ The ‘regularities’ of Paradigm 2 describe patterns in observed behavior which are regular, and do not presuppose anything that the learner ‘knows’ about which forms are ‘right’. In Itkonen’s framework, rules may be viewed as ‘normative standards of behavior’ in this way, but regularities may not. Rather than presupposing anything about the speaker’s knowledge about what is correct in his language, regularities describe what s/he knows how to do in the language.

13 The case of phonology may be somewhat different from the case of morphology and syntax, in that we would expect the basis of anecdotal evidence that the casual style for phonology should be most closely identified with the NL, and the careful style identified with the TL—except for cases of prestige NL variants, as we have seen. However, data like that of Johansson (1973) show that certain trends seemed to be present in IL phonology independently of NL influence. In particular, in her study, higher Swedish (TL) vowels and some long and back vowels seemed to be difficult for all learners, regardless of NL; there was a general tendency among all learners, regardless of NL, to ‘move from the extreme higher and lower positions in the articulation area toward the middle height, the tongue’s rest position’ (p. 151). One would want to know whether this tendency were more pronounced in casual styles than in careful styles; Paradigm 2 would predict that it would be.

14 While the data seem to provide evidence that both TL and NL (prestige) structures may be incorporated into the superordinate style, it seems intuitively clear that only the TL structures would move along an IL continuum towards the vernacular style. This is because the NL structures are prestige structures, and belong to the superordinate style in the native language; the use of NL prestige forms in the IL superordinate style is the result of a kind of language transfer in which we would expect the transfer to hold only for similar styles of the NL and IL—i.e., the superordinate. Incorporation of NL prestige forms into other styles by means of movement along the continuum would seem (intuitively) strange.

15 The Pragmatic Condition on Anaphora (Gundel 1978a, b) proposes that the use of a pronominal anaphor will be felicitous if and only if its referent is activated, that is, if the speaker’s and addressee’s attention is focused on the referent. The second-language learners in the study (Gundel and Tarone, in press) obeyed this condition in that they seemed to know, in the same way that native speakers know, that a pronoun should not be used unless the speaker has reason to believe that the hearer’s attention is focused on the referent.

The Structural Condition on Coreference (Ricehart 1976) proposes that two NPs cannot be
co-referential if one is in the syntactic domain of the other and is not a pronoun. Second-language learners obeyed this condition in that they never produced a sentence like:

he, said that Eric, would be back in an hour.

where he and Eric are co-referential.

**Thanks to Jan Smith for originally pointing out this distinction to me.**

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