



VARIABLE COMPETENCE IN SECOND LANGUAGE ACQUISITION: A PROBLEM FOR RESEARCH METHODOLOGY?

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This paper looks briefly at some of the issues involved in the Variable Competence approach to Second Language Acquisition, by defining what is meant by variable competence, and then looking at variable rules and how they are acquired. The implications for the classroom are briefly summarized as examples of the practical correlates of variable competence models. Most importantly, the article looks at why the research implications of variable competence models are not considered to constitute an appropriate framework for Applied Linguistic research in the fields of Language Testing and Second Language Acquisition. Finally, the defences which variabilists construct against criticism are considered. The positions of Tarone and Gregg are described in some detail, and the work of Ellis is also considered. The main argument of the paper is that acceptance of a variable competence model of second language acquisition would lead to a position in which no second language research could be generalized beyond the context in which it was conducted.

1. WHAT IS "VARIABLE COMPETENCE?"

The basic distinction between "competence" and "performance" drawn by Chomsky (1965) has been accepted by most students of Second Language Acquisition until recently. Competence is the speaker's knowledge of the language, while the speaker's use of this knowledge is performance, or "the actual use of language in concrete situations." (Chomsky, 1965: p. 4) Competence is fundamentally different from performance, but is said to generate performance. Furthermore, it is essentially only through performance that we may say anything about the nature and structure of competence.

A problem for the SLA researcher who accepts this distinction will always be how to describe competence when access always appears to be through performance, which is variable depending upon factors as diverse as the mood of the persons speaking, their physical setting, the topic of conversation, or the time of day! But the ultimate aim will be to describe the competence of the learner (just as Chomsky wished to describe the competence of an ideal native speaker-listener) and make statements about how the learner acquires that competence.

Variable competence models, on the other hand, abandon the traditional division in linguistics between competence and performance. Tarone (1983: pp. 147-152; p. 185) for example, argues

that “capability” underlies performance, and that this is heterogenous “knowledge” which, although internally consistent and describable, varies by speech style which in turn is related to the nature of the task being undertaken by the student, the interlocutor, and the topic (Tarone, 1987: pp. 35–40).

In other words, Tarone is claiming that there is no “homogenous competence” which underlies all language performance, but a variable or “heterogenous” competence or “capability”, which underlies specific instances of language performance in the real world. This basic position is also supported by Ellis (1985a: p. 1986), who is also committed to studying the ways in which the language performance of students varies depending upon the conditions in operation at the time of production.

2. WHY IS COMPETENCE SAID TO BE VARIABLE?

Tarone (1983, 1985) argues that interlanguage speakers shift the style in which they speak along a continuum from a careful style to the vernacular. It is when speakers are speaking in the vernacular that they are paying the least attention to what they say, and so this type of speech is said to be the least variable (Tarone, 1983: p. 151). Thus, according to this point of view, variability is linked to style-shifting, which is in turn linked to the amount of attention which is paid to speech in a given speech situation.

We have already pointed out the problem in maintaining the competence/performance distinction as drawn up by Chomsky: that we have to infer competence through performance. Researchers like Tarone and Ellis (1985a) who are more interested in performance than competence have assumed that any underlying “competence” must reflect the way in which performance varies: it too must be variable dependent upon similar factors to performance. Hence, Tarone (1983: p. 153) has ceased to use the word “competence” all together, and has begun to talk about “capability”.

This position seems to me to be supported by Douglas and Selinker (1985) and Ellis (1985b) who propose that there are several interlanguages, several capabilities, which depend on the “discourse domain” of the task.

3. VARIABLE RULES

So far, from this brief outline of variable competence models, it may be thought that the tenets are quite sound, and that if performance is all we have access to, there is no reason why we should not abandon the notion of competence all together. Gregg (1990: p. 370) has, however, argued that:

“The distinction between performance and competence has been with us for over twenty years now, and although not without problems or controversy, it has pretty much established itself in linguistic theory and (to a lesser extent perhaps) in acquisition research. And rightly so: making the distinction is simply a fundamental prerequisite to progress in the scientific study of language acquisition.”

It is only when looking at the issue of variable rules that the shaky foundations of variable competence models becomes more obvious.

The argument goes something like this: if there is such a thing as variable competence depending on style, which depends upon amount of attention given to language, which is in turn a function of the situation, then learners of a language must *acquire* variable rules which control the use of their interlanguage in all the situations which they come across. A variable rule, as Gregg (1990: p. 371) points out, amounts to:

“including a probabilistic element in the grammar of a natural language: where a normal rule states either that form F appears in environment E or under certain conditions C (or that either F or F’ may appear in E or given C), a variable rule states that F appears in E with probability P.”

This implies that the speaker knows these probabilities within the rules, and that the rules can be acquired. Gregg (1990: pp. 372–373) makes the point forcefully that variable rules are a tool in sociolinguistics. They came from the work of Labov (1969) in his attempt to explain variation in Black English speech. Variable rules, with associated probabilistic statements have since become part of the armoury of the sociolinguist, but what Tarone appears to be claiming is that these rules have psycholinguistic reality and can be included as part of a theory of language and language acquisition. Gregg (1990: p. 373) further points out that the work of Tarone and Ellis does not contain a single example of a variable rule, and that the only examples of variation which are provided are phonological (Tarone, 1988). Gregg provides the following mathematical example for why it would be very difficult to provide lists of variable rules:

“Imagine, for instance, an IL in which there are ten forms that vary; for simplicity we will say that they are either allowed or disallowed in IL production. This would give us a capability continuum embracing 1024 (2¹⁰) possible different styles.”

Is it possible that L2 learners *acquire* such variable rules?

Gregg’s (1990: p. 374) solution is to say that we may be aware of the fact that we use some forms of language in some situations and not in others, but that this has nothing to do with *knowledge of language which we acquire*. A fairly long quotation here will give you a feel for the argument.

“I know, for instance, (1) that a sentence like *Mary ate an apple and Sue a pear* is grammatical. I also know (2) that I don’t talk like that. Further, I know (3) *why* I don’t talk like that: I grew up in an environment where talking like that could lead—according to the context—to good-natured raillery, ill-natured raillery, or bodily harm. (1) is part of my grammatical competence; (2) is an example of knowledge as justified true belief. How I came by that knowledge is perhaps a problem, but no different from the problem of how I know that I’ve never worn mismatched socks. Number (3) is perhaps part of what everyone likes to call “communicative competence”; it is hardly, in any case, grammatical knowledge. Number (2) is corrigible by counterevidence, for examples, tapes of my “free oral production”; (2), and consequently (3), might possibly change some day, for instance if I started hanging out in a different class of bar. But (1) is simply and uncompromisingly a fact. Here’s varied knowledge, if you will, but not variable knowledge.”

4. HOW DO LEARNERS ACQUIRE VARIABLE RULES?

If variable rules exist, and if they are not merely a tool to be used in sociolinguistics but are really part of our “capability”, then we have to acquire them. Tarone’s view is that the learner first *learns* new structures in the careful style of speech, and then at a later date these are produced spontaneously in the vernacular style.

The main problem with this seems to be with the “bit in the middle”, that is, what happens between the “learning” in the careful style, and the “spontaneous production” in the vernacular style. We are not presented with any account of this part of the puzzle. It does not really explain acquisition, merely suggests how it might occur.

There is another problem though. Variable rules contain statistical elements about the probabilities of occurrence in particular situations. We may, therefore, ask the question how we know that a variable competence rule has been acquired without testing students in large numbers of situations over many occasions in order to see if their usage of grammar rules coincides with the variable competence rules. My own view is that this would be a fruitless exercise, and would add nothing to the debate about how languages are learned.

5. WHAT WOULD THE IMPLICATIONS OF A VARIABLE COMPETENCE MODEL FOR THE LANGUAGE CLASSROOM BE?

The clearest statement of the implications of variability theory for the classroom and the second language teacher is found in Ellis (1987a). Ellis argues that findings from studies in variability in interlanguage have relevance to what is known as “accuracy” work and “fluency” work, within the areas of: syllabus design, teaching materials, and classroom practice. Here, we will summarize Ellis’s position.

5.1. *Syllabus design*

Recent trends in syllabus design have tended to favour an emphasis on meaning rather than linguistic form (Breen, 1987a, b). These syllabuses have become known as “Process” or “Negotiated” syllabuses. “Procedural” and “Task based” syllabuses also come into this category. Syllabuses which are based on linguistic forms or a notional/functional approach are referred to as “Product” syllabuses. Ellis (1987a: p. 186) argues that if you believe in variable competence, then you will be more inclined to select a Product Syllabus. The reason is that the Careful style is the most permeable: new forms move in to the Careful style first, when there is close attention to form. Only later do these forms appear in the Vernacular style. According to variable competence models, it is therefore possible to change interlanguage by the teaching of target language (TL) norms in the classroom.

One rider needs to be attached to this generalization: quoting the research of Pica (1985) Ellis does acknowledge that this preference for a Product syllabus may only extend to those forms where there is form–function transparency (e.g. Third person-s) rather than obliqueness (e.g. -ing). The point here is that Pica claims to have discovered that overt teaching of linguistic form is only effective when there is little mismatch between form and function.

5.2. *Language teaching materials*

Following on from the views summarized in 5.1, Ellis says that we need two kinds of teaching materials:

- Focused materials, which introduce and practise linguistic items selected from the TL.
- Unfocused materials, which will encourage spontaneous use of the linguistic items in the vernacular style.

The former could loosely be said to correspond to “accuracy” activities and the latter to “fluency” practice, as we currently understand these terms (Brumfit, 1984).

5.3. Classroom practice

The immediate effect of accepting the variabilist position on the teacher is that we no longer need to be worried about students not immediately acquiring language which we teach. We can be secure in the knowledge that sooner or later, what we do will have an impact, when the forms we present will spontaneously erupt in the use of the vernacular style. Secondly, we should not compare the language produced by students on any task type with the language produced on any other task type, whether this be in teaching or testing. We know that interlanguage is variable across task types, so there is no purpose in introducing comparisons (Dickerson, 1975).

This leads us to the most important implication (Ellis, 1987a: p. 191) that the classroom is a place for interaction. If each situation is unique, each task different, then the classroom must be extremely rich in interaction types. As Ellis says, "The stylistic continuum is both the product and the reflection of participation in different types of discourse ranged along the planned/unplanned continuum".

6. THE IMPLICATIONS OF VARIABLE COMPETENCE MODELS FOR RESEARCH IN APPLIED LINGUISTICS, WITH SPECIAL REFERENCE TO THE INTERPRETATION OF TEST SCORES

In 5.3 above, your attention may have been caught by the view that you should not compare the performance of a student on any language task to performance on any other language task. To make such a comparison theoretically *assumes* that an underlying homogenous competence is generating that performance, and that although the performances will be different due to situational factors such as task, topic, interlocutor etc., we may see through to underlying competence. *If there is no underlying competence, merely variable competence or capability, then all we see is all we see, and there is nothing else to see.*

Skehan (1987: p. 200) accepts the implications of this for testing, arguing that the problem for language testers working within this paradigm is one of sampling. The implications for testing theory are almost as difficult to imagine as the implications for teaching! Each test would be a test of performance in the specific situation defined in the facets of the test situation, just as each classroom task would only provide practice in whatever that task was practice of. *We would never be able to generalize from one task to another, from one test to a situation external to the test, or from one classroom exercise to another, to infer that language acquisition had taken place.* Research would also look very different. Each project could only describe the situation as encountered in terms of the factors under which that research was conducted. The more you need to know about slightly different situations in which variable rules may operate (or interact in some horribly endless network of patterns) the more individual studies you would have to design. And never able to generalize!

Much of what has been written on the subject of designing tasks for productive oral language tests, has stressed the view that they should contain as wide a range of task types as possible (Upshur, 1971; van Weeren, 1981; Shohamy, 1983, 1988, 1990; Shohamy *et al.*, 1986). If the argument for such developments is that there is variability in expected discourse outcomes, and that students (and teachers) should be encouraged to practice and use a variety of speech styles, then the process of increasing the range of task types used in tests (within the bounds of practicality) is one which should be applauded. However, if the argument is that *scores from one*

task type can only be generalized to scores on the same task type, then tests and other data collection instruments will become trivial in the extreme. The matter of generalizability is one which should be considered, initially, within the field of rating scale construction, rather than task design and coverage. It is the rating scale which describes the *competence* to be measured through the performance, unless the assumption is that the rating scale descriptors may only refer to facets of the testing situation. In this latter situation, which is predicted by variable competence models, the facets of the testing situation and the rating scale descriptors are inextricably fused together.

This would bring with it a further problem, which is that validity studies cannot be carried out with ease once score interpretation is confounded with test method facets (Bachman and Savignon, 1986; Bachman, 1988). Validating constructs rests on the assumption that competence underlies performance, and without the distinction, there are no constructs which exist independently from the testing situation. Validity, under variable competence models, would consist solely of content coverage (and the ubiquitous face validity), reducing test theory and Applied Linguistic research which requires data collection methods (tests!) to the level of description. Test construction and evaluation would be merely a matter of sampling.

The arguments thus far have been presented at a theoretical level, for the amount of research conducted so far into the extent to which test scores vary with task type has been very limited, and those which have been conducted have used rating scales to obtain the scores which contain descriptors where reference is made to the task type. Hence the rating scale fuses the trait and the other facets of the testing situation. Fulcher (in press) used a variety of task types, but insisted that scores were collected on instruments which only referred to hypothesized features of constructs resident in competence. Under these circumstances, no task outfit statistics, as calculated in the Rasch Partial Credit model, were significant. This indicated that tasks in themselves did not greatly alter generalizability coefficients, and this was confirmed in a G-study of the same tasks.

These are very strong reasons for not wishing to accept the tenets of a variable competence model or working within such a framework, irrespective of any other issues involved. Maintaining the distinction between competence and performance does make a great deal of sense in any scientific enquiry. The consequences of not maintaining the distinction do not bear thinking about, as I have tried to explain. These consequences are the opposite of scientific enquiry, or, as Gregg (1990: pp. 377–378) so eloquently puts it:

“The variable competence model, unfortunately, explicitly erases the line between linguistic knowledge and linguistic output. This means that the variabilist is committed to the unprincipled collection of an uncontrolled mass of data, running the real risk that the object of study will become, as Roger Brown once put it, cognitively repellent.”

It should be added that although issues in Second Language Acquisition have a direct bearing on testing theory, and tests often provide the data used in building theories of Second Language Acquisition, there has been little discussion of the overlap areas between the two (although, see

the SLART-L electronic network discussions of overlap areas, 11–12 April, 1994). This is unfortunate, for issues in language testing research and SLA are often inextricably entwined.

7. HOW WOULD TARONE AND ELLIS RESPOND TO SUCH CRITICISM?

Tarone (1990) takes the offensive, rather than attempting to answer the issues raised by researchers such as Gregg. Tarone argues that the position taken by Gregg is “rationalist”, in that it states that much of competence is not acquired at all, it is innate. So a learner comes to the process of acquiring a second language with most of the baggage already available. Then, all the learner needs is to get input data which interacts with the innate knowledge to produce second language competence. Tarone (1990: p. 393) claims that:

“... the rationalist explanation of acquisition is, first, that much of competence is not acquired at all, but is innate, and second, that a language acquisition device combines relevant pieces of input with this innate knowledge in some unknown way to produce acquired rules. It seems fair to say here that this approach does not seem to provide much of an explanation of the details of the acquisition process itself.”

My problem with such arguments is that to attack an attacker, although often claimed to be the best form of self-defence, smacks of insecurity when we come to the world of academic work. My fears are further heightened when, in discussing the competence/performance issue, Tarone (1990: p. 395) lists a number of scholars who (at least appear) to support the variabilist (she calls herself a “variationist”) position, and states that attempting to maintain a distinction between competence and performance implies the claim that there are linguistic “facts” which exist independently of the particular circumstances in which language is used, and the individuals who are using the language. She then writes: “Such scholars, perhaps motivated by “physics envy”, are trying to turn the study of language into an exact science”.

This relates directly to the comments in Section 6 above. I am neither a rationalist nor a variationist, but I am frightened of the implications of the position of the latter: the possibility of infinite relativity. It is, therefore, interesting to see Tarone attacking Gregg as having a “physics fixation”. It should be acknowledged that (a) for any kind of research at all there must be some solid ground to stand on, (b) without the ability to generalize any research which is done is essentially meaningless, and (c) physics is not an exact science anyway (see, for example, Chalmers, 1982, 1990).

Ellis’s (1990) main defence is that the study of variability is motivated by the need to examine the “use” of the language for educational purposes, rather than the concerns of linguistics *per se*. And indeed, variability due to task or style is a legitimate area for research. The problem, as we have seen, is failing to distinguish between competence and performance. Ellis (1990: pp. 387–389) deals with this by claiming that “What a learner does *systematically* is the best evidence we have for what she knows about the L2 and what she has the ability to use.” (Italics in the original.) Ellis’s point is that all SLA research uses performance data, and that once we look at performance data we are presented with variability: “There is no foolproof procedure available to the researcher for determining competence on the basis of examining performance. Is it not safer, more honest, to acknowledge this?”

Ellis sees the argument about whether a mentalist (Chomsky) or a functionalist (variabilist) theory can best account for data in Second Language Acquisition, and clearly believes that the variabilist approach provides the better fit. Again, it is quite easy to agree with Ellis that study of the learners' systematic behaviour is our best evidence as to what competence is like, and we can accept the view that all we ultimately have access to is performance data. *However*, this does not lead automatically to the conclusion which Tarone and Ellis urge upon us, that variability is all there is, and no evidence has so far been presented which suggests that it does.

8. CONCLUSION

It would not seem to me that the variable competence model of Second Language Acquisition is a fruitful road to travel down. This does not mean to say that the work of researchers like Tarone and Ellis is in vain. The insights which they provide as more and more data is produced on how students perform in even more specific situations will be relevant to discriminating between what is contextually determined and what resides in competence.

For those researchers who are interested in competence, this is an important process. It was mentioned at the beginning that the main problem has always been tapping competence without the hindrance of performance. Knowing more about performance factors is essential in the process of trying to remove the veil. Nor do we wish to suggest that there is only one way of doing research. This would clearly be foolish.

However, Applied Linguistics interested in language testing or Second Language Acquisition research should not be side-tracked into a research paradigm that does not admit of generalizability. This seems to be the ultimate destination of researchers committed to variable competence models.

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