

Applied Psychology

Individual, Social, and Community Issues

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COGNITIVE PROCESSES IN TRANSLATION AND INTERPRETING

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Cognition and the Evolution of Translation Competence

GREGORY M. SHREVE

Translation Competence

According to Dell Hymes, communicative competence is experience-derived knowledge that allows speakers to produce utterances (or texts) that are not only syntactically correct and accurate in their meaning but also socially appropriate in culturally determined communication contexts. Communicative competence also allows speakers to understand the speech (or texts) of their communication partners as a function of both the structural and referential characteristics of the discourse and the social context in which it occurs (Hymes, 1967).

As a starting point for this chapter, I would like to subsume *translation competence* under the general heading of *communicative competence*. Translation competence is a specialized form of communicative competence. It is both knowing about translation and about knowing how to do translation. It

is about producing translations that are well formed, referentially accurate with respect to source texts, and socially appropriate in their cultural contexts. Unlike communicative competence, translation competence is not homogeneously distributed among the linguistically enculturated members of a society. Not everyone can translate; those that learn how to translate do so by acquiring a history of translation experience. A major objective of this chapter is to discuss the nature of experience-driven knowledge of translation and to propose a model of its acquisition. There is general agreement in the literature that translation ability is not an innate human skill, but there is considerable disagreement about the nature and distribution of translation ability. What this boils down to is a question of what knowledge and skills it takes to translate and the number of people who can be said to possess them. Several positions have been taken.

Harris (1977) and Harris and Sherwood (1978) proposed the concept of natural translation, which is said to be an ability of bilinguals, that is, it is a derivative of bilingualism and appears as bilingualism develops. Lörcher (1995) characterizes their position as follows: "Harris and Sherwood emphasize that translation competence unfolds parallel to the development of bilingualism, and that the degree of translation competence increases automatically to the extent to which a child's ability to use the two languages involved develops" (p. 113).

The use of the term *natural* is significant because it emphasizes the fact that no special translation training is assumed. This form of translation competence emerges fully as a by-product of evolving bilingualism. In this sense, it can be considered a skill innate to bilinguals and distributed throughout the speech community to the same extent as bilingualism. Toury (1986) proposed a different notion of natural translation. Like Harris and Sherwood, Toury considers bilingualism the foundation of translation competence. Unlike those authors, he does not believe that translation abilities are a necessary derivative of bilingualism.

Harris and Sherwood imply that translation competence develops as a function of increasing competence in two languages. This means that communicative competencies in both languages necessarily intersect and that the point of intersection is translation competence. Toury believes that the intersection of dual language competencies does not necessarily create translation competence; it is an additional competence that does not appear solely because bilingualism progresses. Toury called this a "transfer competence," an ability to transfer texts. The ability to transfer texts implies knowledge struc-

tures that are not usually considered part of bilingualism. The notion of a third or transfer competence is echoed in Wolfram Wilss's (1976, p. 120) formulation. Wilss described translation competence as a union of three partial competencies: (a) a receptive competence in the source language (the ability to decode and understand the source text), (b) a productive competence in the target language (the ability to use the linguistic and textual resources of the target language), and (c) a supercompetence, basically defined as an ability to transfer messages between linguistic and textual systems of the source culture and linguistic and textual systems of the target culture.

Lörscher (1986, 1995) places himself midway between Toury and Harris and Sherwood. The natural translation concept of Harris and Sherwood assumes that translation ability appears as a function of bilingualism, but makes no claims about different forms of translation ability. Toury argues that translation competence does not develop automatically as a function of bilingualism, although bilingualism is a necessary condition for its appearance. Lörscher puts his emphasis on the appearance of different function-form combinations of translation competence. Natural translation is a result of a translation ability evidenced by bilinguals communicating in real mediating situations. This kind of translation, which he terms "rudimentary mediation" or "rudimentary translation," is sense oriented. It is based on the separation of sense(s) from source language form(s) and their recombination in target language forms. He distinguishes this from the translation competence of second language learners whose translation skills are typically, in his words, "deformed"—by accommodation to didactic rather than real communicative situations—and become sign, rather than sense, oriented. Finally, Lörscher views "professional" translation as a developed form of natural translation. Professional translation is evolved natural translation.

Lörscher bridges an important gap between the extreme natural translation position and the strong strategic position taken by scholars such as Hönig (1988). Kiraly (1995) describes the strategic position as follows: "Translation [is] a principled strategic process that begins with a translation-specific textual analysis and results in a target language text with a specified, or at least specifiable readership, and a particular textual function" (p. 16). I call this the "strategic position" because it refers explicitly to consciously learning and learning to use explicit procedures to factor situational variables, such as language system differences, text-typological variation, and cultural conventions, into the translating process.

Development of Translation Ability

Lörscher describes an important realization when he recognizes the fact that translation abilities take several guises and that these guises are related to the communicative situations in which they occur and that they must serve. Translation ability is malleable, capable of being formed and of being deformed. Translation, like language, is a social semiotic. The particular sets of translation abilities used by bilinguals and other second language learners and speakers are integrally related to the social and communicative needs and contexts of interaction that the translation is required to serve. They are particular kinds of translation tasks calling for certain linguistic behaviors and for specific manipulations of form-function relationships across cultural boundaries. To the extent, then, that it is possible to classify different general contexts of translation, it is possible to identify corresponding clusters of translation abilities.

If we assume such an identification is possible, then one can develop a functional model of translation in which particular clusters of translation products, seen as forms of linguistic behavior, are taken to be reflections of particular social structures and specific communicative needs. The linguistic forms produced in translation can be related to specific configurations of translation task conditions. For instance, following Lörscher's argument, one such translation form would be evidenced by source-target relationships that are primarily based on sign-correspondences, what Lörscher has called lexical formulae. The linguistic products thus produced have a particular structural appearance. Other translation forms would be based more on sense-correspondences; yet other forms might be based on sense-correspondence plus functional adaptation plus text-typological adaptation. It is not my purpose here to delineate the possible forms of translation but to argue that there is no one form of translation, and that even in the same individual, translation is carried out in different ways under different conditions. This fact has been long recognized in translation studies.

Now the point that needs to be addressed is the following. If we take the bilingual and his or her natural translation as a starting point and assume a professional language user and professional translation as an ending point on a continuum, what kinds of things can we say about the knowledge of the forms and functions of translation as an individual progresses along that continuum? A few observations are in order. First, although there may be a

natural development of some sort of translation ability as a natural derivative of bilingualism, it is not necessarily the case that this rudimentary translation ability will evolve into some other more advanced translation ability. In fact, if we accept the notion of the functional adaptation of linguistic forms under the constraint of different translation tasks, then the whole notion of a rudimentary to advanced continuum of translation valorizes certain forms of translation while denigrating others. Forms and functions of translation evolve in conformance with the nature of the communicative tasks they are called to perform. For instance, the so-called rudimentary translation of bilinguals using their language in mundane domestic settings is perfectly consistent with and adequate for the communicative needs it is meant to fulfill.

Nevertheless, it is equally true that some individuals do develop the ability to produce several forms of translation; it is also the case that natural translators (bilinguals) who enter translation programs for training can develop the ability to translate in ways that are different than the forms of translation they started with. This implies that there are, or can be, specific influences that can motivate change in the form or forms of translation that an individual can produce; this ostensibly means that the individual's knowledge of translation and of how to translate has also changed. The widespread adoption of the notion of a translation competence indicates that there is general acceptance in the discipline that translation is a form of knowledge. In its rudimentary form, it may be a set of knowledge structures that arise naturally from the development of whatever cognitive structures are associated with bilingualism. But, as I have attempted to establish, the appearance of bilingualism does not explain the appearance of other forms of translation evolved under other circumstances. This involves so-called professional forms of translation, didactic forms of translation, and various developmental forms of translation that appear as stages during the progress of translation students at translation schools. The cognitive basis of professional translation may derive from cognitive skills shared with bilinguals, but we must make the case that other cognitive structures have been added and that a variety of specific transformations of the knowledge of translation and of how to translate occur if and when an individual embarks on a course of acquiring language experiences of a certain type, for instance, translation experience.

I'd like at this point to dispel the notion that professional translation is synonymous with either graduation from translation schools or the selling of

translation services on the open market. In the literature, there is some significant confusion about what professional translation means. I'd like to introduce a definition that clarifies the use of the word *professional* and say that professional translation is a form of constructed translation that can be acquired by only undergoing certain kinds of deliberately sought out communicative experiences. What I want to counterpose to natural translation is a set of abilities that cannot have developed naturally from bilingualism. They are sets of abilities (the term *sets* is used deliberately) because the mark of what I am calling "constructed" translation includes the ability to shift translation forms and produce different kinds of linguistic forms (translation products) called for by different circumstances.

Variation in Translation Performance

If constructed translation is counterposed to natural translation, then we set up a kind of evolutionary space. Movement within the space is not automatic or necessary and the end point is not a single cognitive set shared by all translators who arrive at professionalism. Indeed, the best mechanism to represent the development is a three-dimensional polygon of infinite volume because there is no way to establish an end state for translation ability (Figure 6.1).

The contents of this space are clusters of translating abilities, representing the translation form-function combinations typical of individuals with a certain history and range of translation experience and situations.

One of the problems with professional translation is that we assume that it is associated with specific translation forms and functions that we can easily define when we see them; yet there is little empirical evidence that professional translators translate identically. In an earlier study of reading for translation (Shreve, Schäffner, Danks, & Griffin, 1993), we found evidence that a variety of strategies were used by groups of graduate-level translation students. There were strategy differences even under experimental conditions where the task structure was controlled. Although there are certainly similarities to be identified in the products of constructed translators, these similarities can be ascribed only to congruence in range and extent of translation experience. Some of the divergences can be explained with reference to two factors.

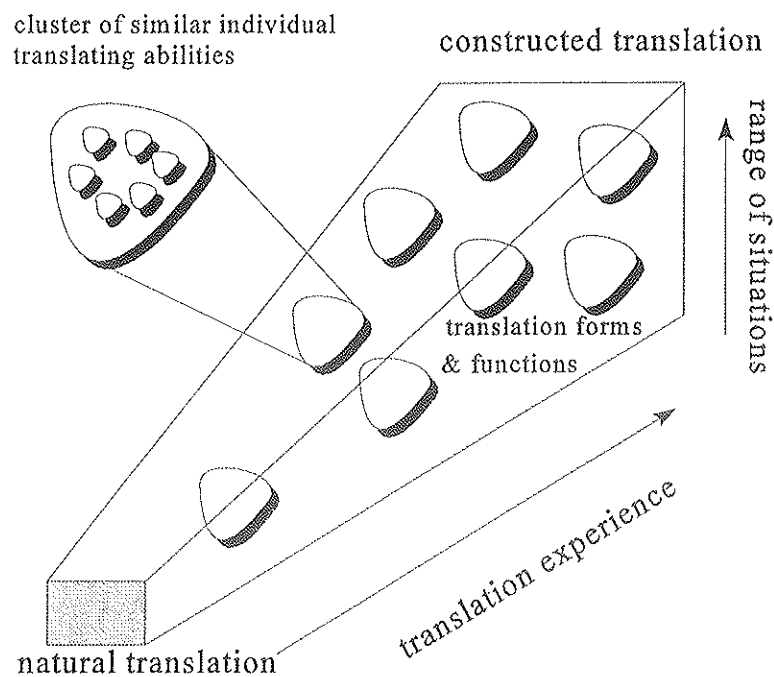


Figure 6.1. The evolution of translator competence.

VARIATION IN INDIVIDUAL COGNITIVE STYLES

First, there may be some variation introduced by processing characteristics of the individual translator. Some of these individual differences may be deeply rooted in the linguistic behavior of individuals that harks back to early first language acquisition (see, for instance, the work of Nelson, 1973, and her identification of the operation of referential/expressive modes of language acquisition). Bates and MacWhinney (1987) emphasize that it is important to determine whether “linguistic variation is correlated with dimensions outside of language proper: cognitive styles in problem solving and symbolic play, aspects of personality and temperament, and a host of social/environmental factors” (p. 185). It seems reasonable to suppose that various combinations of the cognitive styles that Bates and MacWhinney have associated with the general types referential/analytic and expressive/morphological might have

some influence on translation styles. Interesting questions in this regard—and I can only pose them because I know of no empirical work in this area—are (a) whether one of these styles predominates in individuals who later become translators, and (b) whether these styles appear to be equally distributed among translating individuals, and, if so, (c) what forms of translation appear to be associated with the difference in cognitive style. A particularly intriguing speculation in this regard is whether or not differential distribution of abilities to translate different kinds of texts (e.g., scientific/technical as opposed to literary texts) can be associated with underlying cognitive styles.

VARIATION IN TRANSLATION ACQUISITION HISTORY

An essential component of the use of the term *constructed* translation is that individuals who practice translation professionally have developed their abilities to do so deliberately. Beyond any cases of natural translation where rudimentary translation abilities can be said to arise as part of the cognitive array associated with bilingualism, other forms of translation generally can only result as a function of certain kinds of language experience. This language experience can be acquired in several different ways, for example, by completing translator training courses in translation schools, by receiving mentoring from another translator, or by independently seeking out and completing translation tasks. Within each of these general types, there can be extreme variation. It is abundantly clear, for instance, that there are many approaches to translator training (see the chapters by Kiraly and Gommlich, this volume) and any one of these varieties could introduce difference.

While I speculate that these general acquisition methods can be shown to induce measurably different translation skills, we will also find that there will be other patterns that will emerge. For instance, we may find that translators who have received mentoring will develop and exhibit translation skills that are isomorphic with those developed by students in translation programs with small classes and heavy emphasis on group translation, discussion of solutions, instructor feedback, and constructive criticism of solutions. The important point then is not the identification of the translation result with any discrete form of translator development, but the identification of certain patterns of translation skill acquisition (history of experience) and the variables associated with them. Some important variables might include (a) the nature of the communicative situation in which the translation activity occurs during acquisition (e.g., the distinction between didactic versus professional

translation); (b) the presence or absence—and, if present, nature—of a monitoring agent during translation acquisition (e.g., mentoring/training program versus independent acquisition); (c) the nature of the task cycle (e.g., presence, absence, and emphases on components of the cycle: task presentation, solution research, solution development, solution discussion and critique, and so on); and (d) the nature and amount of feedback associated with the task cycle of translation task presentation, solution development, solution discussion, and critique.

Variation in the form of translation can be due to variation in the kind of experience and the course of acquisition of that experience. There has been, once again, a dearth of empirical work in this regard, so it is not at all clear what the differences in translation form will be. But it seems logical to assume that an acquisition history that has been heavy on feedback and in which a full task cycle has been present will produce cognitive structures relevant for translation that are richer than those produced in situations where feedback is minimal and in which there is a sparse task cycle (e.g., critique component or research component are devalued or missing). The knowledge structures produced not only will be richer but, as I will argue later, will be organized differently.

Translation and Learning

Although certain fundamental cognitive style variables may account for some variation in translation, it is apparent that the history of acquisition of translation experience must play a significant role. Of importance here is the interaction of the translation experience and the individual's processing of that information. If we assume that translators learn from their experience, the relevant questions are these: "What are they learning?" and "How are they learning it?"

Let's first address the question, "What are they learning?" I'd like to assume at the outset the existence of bilingualism, and I'd like to look at bilingualism from a functional linguistic perspective. We want to assume that the translating subject has knowledge of two sets of form-function mappings. These two sets are not necessarily identically dense. There may not be—in fact, there is probably not—an identical number of forms in each set. Further, we may want to assume (see Figure 6.2) some sort of invariant functional base representing communicative functions that are cross-culturally present.

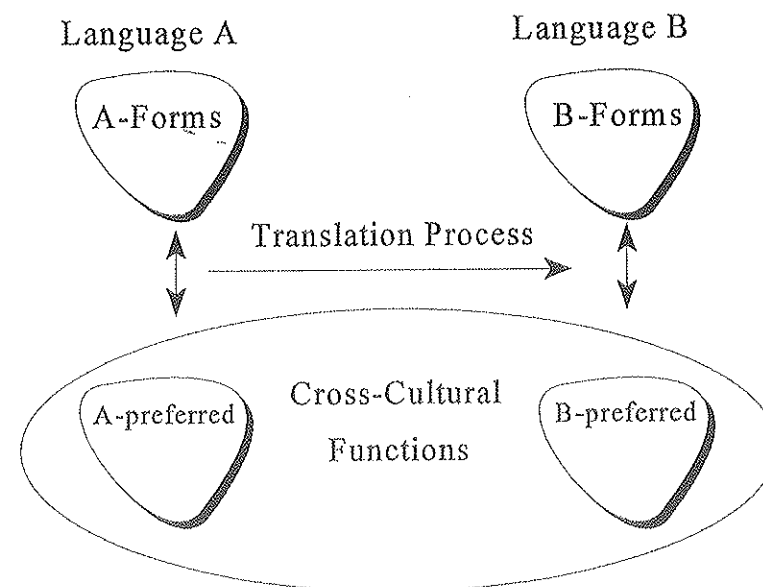


Figure 6.2. Translation as a mastery of form and function across languages.

There are also variations in communicative functions, or at least variations in the frequency of appearance of functions, that are relatable to cultural context, for instance, politeness and social status signaling functions between Japanese and English.

To understand what an individual does when he or she translates, we have to interpret the arrow labeled "translation process" in Figure 6.2. Any particular text represents a particular mapping of linguistic forms and their semantic potentials onto the specific meanings and communicative intentions associated with the communicative interaction to which the text is related. In translation, a new text needs to be produced, using the linguistic forms and semantic potentials of the target language. The translator has to negotiate or mediate a new mapping of target language (TL) or B-language forms to whatever meanings and intentions are preserved and preservable from the original text. This process is to a large extent guided by the translator's ability to decode meaning and intent from the source language (SL) or A-text using mappings already acquired, but can be influenced by other factors including

changes in audience, changes in communicative intent, and other translation variables. The translator has to understand both sets of mappings, and this is the bilingual aspect of translation. But even more important than receptive and productive competencies in the A (SL) and B (TL) languages, the translator has to understand how to remap. At one level, when an individual learns to translate, he or she is able to map mappings. The translator chooses new mappings in the B-system for the B-text that have specifiable relationships to the text-encapsulated mappings in the A-text. The conditions for choosing the mappings may be the communicative equivalence of the mappings, but there may, in fact, also be a number of other decision variables guiding the selection. I'd like to note that Wilss's supercompetence and Toury's transfer competence are explicit recognitions of this ability (Toury, 1986; Wilss, 1976).

Now, with respect to the development of translator ability, what we are really talking about is change in the nature of the mapping process. The distinction in the different forms of translation may be associated with differences in the characteristics of the mapping. The different mapping abilities are in turn derivable from the nature of the acquisition history because they are learned. All translation ability is learned; even the rudimentary translation ability of bilinguals derives from the parallel or consecutive learning of the second language. One way of looking at translation ability is to look at it as a set of schemata for remapping across culturally bound form-function sets. These translation schemata are knowledge organizational structures stored in memory, and they undergo successive transformation or modification during the processes of learning (Rumelhart & Norman, 1978, p. 37). During the process of learning to translate, translators develop more specific, more detailed, and more inclusive schemata for remapping. Originally, as in rudimentary translation, the schemata may be evolved only to deal with specific kinds of remappings; in fact, the translation is not so much rudimentary as it is reflective of the kinds of translation situations in which it occurs. The remappings called for are related to function-form complexes or registers that involve, for the most part, subject domains (topics) and interactions that are restricted to everyday situations in domestic life.

As translators begin to market their skills, they expose themselves to different and more varied translation situations. Their understandings of the task and its complexities changes. If we assume that the natural translator has schemata for translation, then every time such a translator translates, the translation event is interpreted as an instantiation of the general schema for that event type. The event is added to the schema and enhances its strength.

Yet, the argument here is that schemata change. During the course of acquisition history, certain translating events, or the cumulative effect of those events, can cause translation schemata to change. There may be a number of learning models to account for what happens. If one follows Rumelhart and Norman, then it is the information value of certain events that changes the schema. Schemata are developed by the gradual accretion of information. The contours of the event itself place some structure on the memory representations of the events; as new events occur that cannot be accounted for in the existing schema, the schema may be modified or tuned. Certain information may not be able to be accounted for even by tuning. In this case, a new schema may emerge and/or a new organization may be placed on the existing schema, a process called restructuring.

Restructuring often takes place only after considerable time and effort. It probably requires some critical mass of information to have been accumulated first. In part it is the unwieldiness and ill-formedness of this accumulated knowledge that gives rise to the need for restructuring . . . [W]hen existing memory structures are not adequate to account for the new knowledge, then new structures are required, either by erecting new schemata specifically designed for the troublesome information or by modifying (tuning) old ones. (Rumelhart & Norman, 1978, pp. 34, 45)

One of the things that happens in the case of translation is that over the course of time and under the influence of more (and more varied) translation tasks, the conception of translation changes—is forced to change. The translator's very understanding, or first-order theory, of what translation is, changes. This is a cognitive change in a specific domain and not a general cognitive change; it is a domain-specific restructuring (Carey, 1985). Some of the issues at stake here are addressed in the knowledge acquisition literature on novice/expert cognitive shifts. There are two interpretations of the kind of domain-specific restructuring that takes place. The first is the "weak restructuring" position, and the second, the "radical restructuring" position. In the weak restructuring view, the differences between novice and expert schemata are primarily ones of relational richness; the so-called experts represent more and different relationships between concepts than novices do, and they organize their knowledge using more abstract relational structures. In the radical restructuring view, the expert actually has a different theory of the event or process represented in the schemata. The schema is not just more abstract or richer, it is different in terms of structure and in its conceptual constituents.

These restructurings need not be mutually exclusive and it is likely that both occur during knowledge acquisition in a specific domain.

This realization is an important one. Underlying some views expressed in the translation literature has been the assumption that novice-professional differences are related to improvements in performance, largely due to the development of automatic processing (Schneider & Shiffrin, 1977). One view of the progression of translation ability would be simply that skills possessed by novices are essentially the same as those possessed by professionals. For instance, in the novice, translation skills are conscious, controlled processes, while in professionals, the tasks are routinized or automatic. Improvements in speed and product can be traced to the freeing of processing capacity. The development of a capacity-free process is an attractive explanation for improvements in performance. If enough elements of a task become capacity-free, then attention can be turned to other components of the task, for example, higher-level text processing once sentence-level operations become automatic. However, it is equally likely that efficiencies can be achieved as much by the restructuring of the task as by the freeing of capacity.

Cheng (1985) gives an example using an arithmetic problem: Find the sum of ten 2s. A subject who knows addition, but not multiplication, would have to perform nine addition operations to find the answer. If the same person learns multiplication, she could solve the same problem by looking at the 2×10 entry in her memory. A multiplication operation would be equivalent to nine addition operations. The gain in efficiency is not the result of nine addition operations performed capacity-free. The nine addition operations are not performed at all; performance has been improved by shifting to an entirely new procedure. Krings (1986b) started with a hypothesis of increasing automaticity; he found instead that the opposite was true. In many cases, professional translators were exhibiting higher levels of conscious control. It is most likely that they were not simply doing faster and more automatically what novices do, they were doing their translation differently.

Certainly it is the case that some differences between novice and professional translators are related to increasing automaticity; but it is also almost certainly the case that most important differences and improvements in performance are related to the development of more efficient paradigms for translating. Empirical research in translation supports some of the elements of a restructuring view of the evolution of translation competence. Jääskeläinen and Tirkkonen-Condit (1991) report that one of the differences they found between professional and nonprofessional translation is task

aspect, that is, what part of the translation task is focused on as significant. Krings (1986b) also pointed out several other differences, for example, differences in dictionary-use strategies between professionals and nonprofessionals and differences in numbers of translation solutions considered (as reflected in think-aloud protocol verbalizations), and so on. Other expert-novice differentials reported in the literature include scope of the translation unit, retention and discarding of initial translation solutions, retention versus transposition of the syntactic structure of the source, concentric versus linear progression through the text, and so on. The empirical differences indicate qualitative differences in the knowledge organizational structures associated with doing translation, that is, with the remapping of A-text form-function complexes onto B-language, B-text complexes.

Change Mechanism: Competition and Translation

Assuming for the sake of argument that the differences between natural translators and professional translators can be assumed to be differences in translation schemata that have developed under pressure from the dictates of specific translation/communicative needs, an important question remains to be addressed. What is the mechanism that drives the change? We have already argued that the change is not a necessary one. This means that unless the individual seeks out and finds appropriate translation experiences, it is not necessary that translation schemata will restructure. Although I have no empirical evidence for this, I would hazard to guess that in any given set of translation circumstances, for example, the rudimentary translation of the bilingual, the mere accretion of translation experience, in the absence of any fundamental change in the nature of the translation/communicative situation, is not enough to motivate restructuring. This means that the key to isolating the change mechanism must derive from certain candidate or combinations of candidate change sources. Some of these change sources were outlined before, and it is certain that they constitute only a partial list: (a) change in range of communicative situations in which the translation occurs, (b) presence/absence/appearance and influence of a monitoring agent, (c) change in the nature of the task, (d) the appearance of incentives (motivations) to focus on particular aspects of the task cycle over others, (e) changes in the nature and amount of feedback, and (f) perhaps most important,

changes in the goals and expectations of the translator. The sources of change introduce variation in the perceptual environment or ecology of the translation; they induce translators to recognize and use new elements of the perceptual environment to derive information relevant to the accomplishment of the translation task. As the input to the task changes, the task processing changes.

There are two crucial aspects to any consideration of translation learning. First is the nature of the data, and second is the role of the organism in shaping and adapting to the shape of the input (Bates & MacWhinney, 1987, p. 158). The model of translation learning proposed here is data-driven. That is, the acquisition history, characterized by change factors such as communicative range, monitoring agents, task structure, and so on, is considered to be the crucial element in determining the state of the translation knowledge in any individual translator. The model is also active because it does not assume that the learning individual, in our case a translator, is passive in shaping the process of acquisition. He or she is constantly seeking cues from the translation environment that help to achieve translation goals. These two tenets, in addition to the fundamentally functionalist orientation, are elements of an important model of language learning, the competition model. To what extent can models of language learning, such as the competition model of Bates and MacWhinney (1987) and MacWhinney (1987a, this volume), be adapted to account for patterns of learning translation and for the emergence of the different forms of translation?

I would like to make the case that they are highly adaptable. MacWhinney himself speaks to his own ideas of the relevant intersections of competition with translation studies (see his chapter, this volume), but I would like to conclude this contribution with some observations of my own. A central claim of the competition model is that "human beings possess psychological mechanisms that bring them in tune with the validity of cues in their environment. Cue validity is assessed within a specific task domain" (Bates & MacWhinney, 1987, p. 65). Considering the statement that cue validity is assessed in a particular task domain, then text comprehension and text production in the context of a translation task involve the processing of textual cues. The cues are processed not only with respect to their status as indicators of underlying communicative function (as part of the comprehension task) but also with respect to their relationship to the translation task at hand. During the translation process, elements of the ecology of the translation—the perceptual environment of the task—can be taken to have information value for the

completion of the translation task. To the extent that some property of the translation environment is both available and reliable to be used in a decision-making process, we can say that the property has cue validity. Paraphrasing Bates and MacWhinney (1987, p. 164), *cue validity* is the product of *cue availability* (how often the piece of information is offered during a decision-making process) and *cue reliability* (how often the cue leads to a correct conclusion or decision if it is used).

It seems that part of what is important to consider here is what the translator is paying attention to and factoring into the translation process. If the translation process involves, as we claim, the mapping of form-function relations across cultural systems, then the cues that are significant are those that affect the translation decision-making process (leading to communicatively and situationally adequate translation decisions) and that can be abstracted from the perceptual environment of the translation process.

One explanation for some of the differences between professional and novice translators could be explained on the basis of the availability of translation cues. For instance, a major distinction between professional and nonprofessional translation often noted in the literature is the failure of novices to produce culturally appropriate stylistic and text-typological markers in the target text. It can be argued that one of the reasons this does not happen is that the cues are unavailable to the novices. The translation studies literature has long noted the fact that novice translators appear to translate in the microcontext. Given their focus on small translation units, novices rarely cross sentence boundaries, and they do not note stylistic cues and cues related to global textual cohesion and coherence. It is interesting in this regard to note that many or most of the global cues are probably processed during text comprehension, but this is another task and there is no guarantee that they are used or are available in the translation task. The novice translator does not (as yet) attach any importance to the cues relative to the translation task. I note the sentiment voiced by Bates and MacWhinney (1987) that the goals and expectations of the perceiving organism play a central role in determining what is learned, and, I dare say, what cues will be used for any particular task. The novice translator has different expectations of the process. This may mean that there is a selective attention on certain kinds of translation cues, for example, lexical cues, at the expense of others. A similar sentiment is expressed by Kiraly's (1995) emphasis on the role of translator self-concept in guiding translation. The implication here, of course, is that cues important in the translation task are available, but this is no guarantee that they will be learned,

that is, that the relationship between the cue and the goal state will be recognized.

The explanation for this is reasonably simple. Bates and MacWhinney, in their discussion of cue validity, note that some tasks—for example, determining agent-object/agent-patient relationships in discourse—are relatively frequent, thus the cues for accomplishing the task—transitive structures, preverbal positioning, for example—make these cues very strong. This cue strength is a function of both cue validity and task frequency. The cue is available, it is reliable, and the language user has had repeated affirmations of the reliability. A major distinction between professional and novice translators is the frequency of certain kinds of tasks. Because of differences in the frequency of so-called professional tasks (the novice has no experience of them), the novice translator knows less about the validity of the information presented by the cue. In connectionist terms, the novice attaches less weight to the piece of information relative to the translation goal. Bates and MacWhinney (1987) infer from this that “cues for highly infrequent tasks will be learned relatively late as compared with cues for frequent tasks” (p. 165). This is apparently what happens with translators and from this it is possible to infer that movement within the translator ability space is related primarily to the nature, range, and frequency of translation tasks over the course of a translator’s acquisition history.

7

Think-Aloud Protocols and the Construction of a Professional Translator Self-Concept

DONALD CHARLES KIRALY

The Instructional Performance: Focus on the Product

In a recent publication, I identified a “pedagogical gap” in translation skills instruction, epitomized by a passive classroom atmosphere and a lack of communicative, student-oriented educational techniques (Kiraly, 1995). I referred to several published accounts of translation skills instruction at two universities in Germany and one in Canada, where students played an overwhelmingly passive and receptive role in translation practice classroom activities. The traditional technique for teaching translation skills, in which an instructor chooses and distributes a text to the students, who translate it alone at home and then read aloud sentences extracted from their rough solutions for scrutiny by the instructor, appears to be a persistently prevalent pedagogical technique. This standard procedure has been aptly described as a *performance magistrale* (Ladmiral, 1977)—an “instructional performance.” This instructional performance, far from being an effective, efficient technique for