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Inter language and language universals

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INTERLANGUAGE AND LANGUAGE UNIVERSALS

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To Marina and my parents

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ABSTRACT

The field of interlanguage studies has made significant
headway in recent years by seeking to identify the direction
and nature of learners' development towards self-perceived
target language norms. The work has included analyses of
learner language systematicity, variability and complex
transfer phenomena. The present contribution offers a
discussion of the role of language universals in this
development, with the intention of extending insights into
interlanguage based on empirical research, observations of
language typology and linguistic theory. The potential role of
related principles for language learning and pedagogy is also
considered.

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INTRODUCTION

The idea of learners having their own second language (L2) systems has stimulated much of the recent research into second language acquisition (SLA). Such interlanguages (IL's) are complex and far from the static impression of learner language being more or less "correct", an attitude which, hopefully, is no longer the the norm. Language researchers and practitioners are now not only acknowledging the integrity of IL, but are taking more of an interest in the nature of its operation and development. My concern here is to focus on the involvement of language universals associated with these aspects, and to draw attention to their importance - something which is becoming increasingly recognised in the field.

There is arguably no established tradition as yet of developmental IL research, especially with regard to language universals. At the same time, the field seems to be either at the frontier or the forefront of SLA research , depending on differing perceptions of IL itself. It would seem clear, however, that if language universals are involved in determining and shaping IL, then the potential extent of that involvement must be discussed. The present dissertation is an analytical review of research and theory which attempts to offer such a discussion. Additionally, I hope that some useful applied insights emerge from the forthcoming chapters.

IL is regarded here as a description which has come into its own fairly recently. In Chapter One I therefore review the history of IL studies, selecting those areas which have proved most significant . Much of this research has involved, to a greater or lesser extent, consideration of language universals in IL. Such an involvement is therefore an underlying theme of the first chapter. Just as important, however, is the survey of IL variability, form-function models and the question of language transfer, all of which are expanded on.

Language universals themselves are focused on in Chapter Two. Chomskyan ideas on the one hand and the Greenbergian school on the other are summarized in particular connection with their clarification of the nature of linguistic/ language universals. It is first necessary to contrast the theory-driven (Chomskyan) model with the data-driven (Greenbergian) one, before seeking to combine certain aspects of the two approaches. There is common ground, particularly in the area of markedness, which will be covered at some length. Accordingly, the terms universal grammar (UG) and language universals will be observed at times to be interchangeable. This is not a confusion, but a way of indicating that there is an element of agreement between these two definitive approaches to modern syntax/ system.

The theoretical description provided is not intended to be overly technical. Reasons for including a syntactical analysis of utterances are based purely on the need to explore further the mechanisms and processes of acquisition/learning. IL is

the vehicle within which this exploration needs to proceed. This is the main purpose of Chapters Three and Four. Chapter Two closes with a brief consideration of phonological effects and non-syntactic markedness in discourse. I have chosen not to expand on suggestions and models of universal semantic hierarchies - such as Jackendoff's Thematic Hierarchy (1972) - giving more detailed coverage instead to studies involving IL syntax.

Chapter Three takes a necessarily detailed look at the consequences of markedness, since it is this aspect which has proved most fruitful in studies seeking to discover the operation of a universal factor in IL strategies. Much of this is due to the validity of Keenan and Comrie's findings concerning relative clause (RC) accessibility (1977). The studies surveyed in Chapter Four are also presented in detail. It is important to recount study methods and findings if claims of universal links are to be made. Empirical evidence remains fundamental in IL research. Statistical procedures are important in this respect, although they do not require undue attention in a work of this length.

The end of Chapter Four involves an inquiry into the place of studies based on the testing of grammaticality judgements. Central to this method is the notion of learner intuitions. In order to justify the evaluation of judgement-based studies, definitions of learner intuitions are discussed here, but not to any great extent.

An overriding aim of the dissertation is to illustrate how theory and empirical research can be seen in combination. Theories of acquisition in relation to syntax (embodied in Chomskyan linguistics) have a direct connection with IL production, at least to the extent that studies undertaken by leading IL researchers question such production. The area of IL-UG/language universals remains relatively unexplored, so any discussion of future directions in the field in the present context may be fairly contentious and controversial. Chapter Five, nevertheless, is an attempt to connect the subject more directly to learning and pedagogy. It seems encumbent on any proponent of IL-UG interaction to offer an indication of the increasingly applied potential of this exciting and increasingly important area of research.

CHAPTER ONE

IL BACKGROUND AND THE PLACE OF LANGUAGE UNIVERSALS

IL studies throughout the 70's and 80's have been concerned
primarily with systematicity, variability and transfer
phenomena in IL. A concern with language universals in IL has
emerged fairly recently in connection with these fields. This
chapter therefore traces the course of IL research fairly
broadly. An important distinction to make initially is that
between language use and language introspection. IL studies
in the former category are concerned with speaker knowledge
embodied in relevant language description. Those involved with
the latter category are concerned with models of competence.
In the literature, these can be identified as the rationalist
and function-form approaches respectively. Since our main
concern is to extrapolate implications for the involvement of
language universals in IL, it is not my intention to account
for these areas separately. They are viewed in a dual sense,
although not as a complete symbiosis: in keeping with one of
the principles of this discussion, areas of overlap and cross-
fertilization will hopefully be discovered, and links to
language universals developed.

1.1   The Contrastive Analysis Hypothesis and Error Analysis

The behaviourist theories attributed primarily to Skinner
(1957) emphasised the need to avoid errors as part of the
belief that learning comprised stimulus-response reinforcement
and the avoidance and prediction of errors. The strong form of
the Contrastive Analysis Hypothesis (CAH)
is loosely connected to this: the learner is regarded as
having more difficulty with elements different from his/her
native language than with those similar to it. The inadequacy
of this viewpoint has been confirmed by analyses such as that
of Eckman:

the CAH, even when applied to generative
descriptions, can correctly predict neither the
areas of difficulty nor the relative degree of
difficulty (1977: 320)

Error Analysis, in its resurgence during the late 60's, did

not evidence the same shortfalls as the CAH. Indeed, in

focusing attention on the explanation rather than the

prevention of errors, Error Analysis can be seen - at least

within SLA - as a precursor of the more involved consideration

of IL development. An important feature was the implicit

assumption of researchers such as Richards that some error

causation is universally-based.

1.2   Selinker and negative transfer

The seminal paper by Selinker (1972), more than any other

single contribution, established IL as a real language

category for learners explainable primarily in terms of

mentalistic processes within SLA. The basis for this

interpretation is the concept of UG and that adult

learners - not only children - are able to vary its parameters

in order to attain the structure of target language (TL).

Chapter Two includes a fuller discussion of Chomsky's UG and

the Language Acquisition Device (equivalent to Lenneberg's

latent language structure, to which Selinker refers).

There is, however, an alternative route for SLA in Selinker's

model,which exploits those mechanisms responsible for learning

other than language learning. Dulay and Burt (1977) termed

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this the cognitive organiser, resulting in creative construction. The five principle cognitive processes involved in learning a L2 are, according to Selinker,

1) Language transfer: transfer from L1 may be observable in some of the subsystems and features of IL.

2) Transfer of training: previous training patterns may result in certain (often less desirable) IL elements.

3) Strategies of second-language learning: the material to be learned may affect the nature of the IL.

4) Strategies of second-language communication: communicating with TL native speakers may directly affect the IL.

5)Overgeneralization of the linguistic material of the TL: TL rules and semantic aspects may be overgeneralized and reflected in the IL.

Central to Selinker's perception of IL development was the probability of L2 fossilization. While communication may place limits on the extent of learning (e.g. no more than is necessary), the main source of fossilization is seen as language transfer. Although it is possible that correct forms will fossilize, errors comprise the most typical feature of fossilization. The mainly negative connotations of Selinker's model were to diminish during the 70's and 80's. In retrospect, it would seem that the importance of UG (as in Selinker's basic interpretation of IL as an autonomous

language system) remained an integral feature of such
research.

1.3   Creative construction

Corder was one of the prominent names to take up the IL issue,
viewing IL as a means of moving toward the TL. He developed
(1978a) the idea of the IL restructuring continuum: all
learners with the same mother tongue follow the same path of
development in their IL. As an alternative to replacing NL
features during acquisition, however, Corder considered the
possibility of a recreation continuum, where acquisition very
similar to a child's L1 development involves the gradual
creation of the TL rule system. This reflects a much stronger
version of the "built-in syllabus" or "natural" route of
development which became a primary concern of researchers such
as Dulay and Burt. Along with others, including Krashen and
Larsen-Freeman, they were responsible for a number of cross-
sectional morpheme studies. Ellis summarizes their purpose:

> They were motivated by the hypothesis that
> there was an invariant order in SLA which was
> the result of universal processing strategies
> (1985b: 55)

The evidence of the morpheme studies has been criticised for
its superficiality (in SLA terms) because it comprises data in
support of an "accuracy order" rather than an "acquisition
order" (Ellis 1985b: 58). However, longitudinal studies
(phased at intervals over longer periods), while concerned
with grammatical morpheme acquisition, have also involved
other developmental aspects, including the effects of

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universals. Schumann's 1980 study of relative clause acquisition was one of the most important in this area (see Chapter Three for an expansion of RC significance).

The idea of transfer thus became a generally undesirable feature of much IL research. Selinker's highlighting of the systematicity of IL had helped cast doubt on the the idea of "error" in IL. The IL rules of the learner were instead available for systematic reference. The dynamic permeability of IL – a constantly changing language system – was, it seemed, closer to ideas of creative construction than to IL transfer strategies.

1.4 IL variability and positive transfer

Rutherford describes IL as

> fluid, malleable, sporadic, permeable, amorphous and dynamic (1984: 137).

In addition to this range of qualities, variability must be added. The increased interest in longitudinal studies, and a greater concern with process rather than product in IL variability research merits its consideration here. Such approaches have helped remind those in the field of the open-ended nature of current IL research, where the Universal Hypothesis may be given more credence. One of the foremost researchers into IL variability is Elaine Tarone. She regards herself as having

> viewed the IL through the lens of the target
> language, assuming that predetermined TL forms
> should occur in obligatory contexts for those forms,
> and tabulating the number of times such forms occur
> in such obligatory contexts
> (1988:11)

This incorporation of "positive" first language transfer underpins Tarone's main work, which seeks to define IL as systematically variable. Her IL continuum represents the social meaning of IL according to regularities - as opposed to rules - which are exhibited in a range of learner language styles.

Tarone's reference (1988) to the sociolinguistic transfer of [Θ] onto a more careful IL style from a prestige variant of Arabic (Schmidt 1977) points towards an interesting "double variant" idea, as does her consideration (1988) of the IL careful style of Thai learners (Beebe 1980), where the increasing use of prestige NL variants is evident.

With regard to UG, Tarone (1983: 156) notes that Schmidt's (1980) findings confirm the compliance of task-based learner IL with the constraint within UG on left verb deletion:

X Mary Ø an apple and Sue is eating a pear

She also acknowledges universal constraints on her own "style-shifting" paradigm of IL:

> 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
> (1983:156)

Ellis' claim that the Universal Hypothesis "ignores variability in interlanguage" would appear to be contentious; indeed, it would seem from Tarone's assertion that the field of IL studies as a whole should include a consideration of language universals.

1.5 The emergence of universals in explanations of IL complexity

As developmental research into IL comes increasingly into its own, so does the discussion of IL-UG/language universals (see Chapter Two for definitions of universals). We shall remain with the subject of language transfer in IL in analysing some of the most significant developmental findings and postulations of the 80's, at the same time considering ways in which language universals may also be involved. An important premiss here is that transfer and developmental influences be regarded as interactive (Zobl in Gass, 1984).

1.5.1 The function-form approach

A significant section of the literature on IL is concerned with the mapping of function and meaning onto linguistic form. This can be clarified as a specific type of transfer. Andersen's one-to-one principle (1984) is possibly the most convincing explanation of function-form transfer. His

development of a nativization theory provides much of the
groundwork for the principle. According to Andersen,

> [the learner] creates an internal representation
> of the language he is acquiring and the
> subsequent assimilation of ... of new input
> (1984: 85)

The same learner can go on to produce utterances where there
is one form for one meaning or function.

Andersen uses the following examples of Huebner's (1979) to
help illustrate the Principle. The first asserts that topic-
comment structures are favoured in IL:

> Keim tu hanalulu, isa fai faemilii
>
> "Five families came to Honolulu" (1984: 83)

In the example above, "isa" acts as a topic-boundary marker,
and "came to Honolulu" is the topic of the sentence. The
second example is that of a Hmong speaker who used his L1
equivalent of "the" (/dɑ/) only in situations where nouns were
assumed known to the hearer, and not in topics. As topics
occur first in Hmong sentences, not subjects, /dɑ/
became an initial marker of specific-reference noun phrases.

Hyltenstam's negation corpus in Swedish is also referred to by
Andersen. It indicated the tendency of a heterogeneous
immigrant group in Sweden to put negatives after auxiliary
forms before that of placing them after main verbs. Swedish is
virtually unique in allowing NEG placement to vary according
to the distinction between main and subordinate clauses.

Remaining with the Hyltenstam study, Hammarberg, (in

Hyltenstam and Linnerud, eds.) distinguishes between

"rudimentary" and "elaborating" solutions in developmental

learner language:

> Elaborating solutions involve the acquisition
> of categories, distinctions, functions of
> language use, or a structural complexity which
> the learner has not previously applied in the
> target language. A rudimentary solution is more
> or less undeveloped in these respects (1979: 7)

Despite the drastic range of languages amongst the test

subjects, Hyltenstam interpreted his results as proof that

learners, regardless of L1, start from a rudimentary system

and move on to an elaborating solution. In this case, the move

was from the NEG (AUX) main verb order (where main and

subordinate clauses were not differentiated) to V-finite NEG

in the first instance (the finite verb is always relevant for

NEG placement in Swedish, in both AUX and MV). This solution-

stage was overgeneralized by many learners.

Schachter and Rutherford (1979, in Gass 1984) note "an

overproduction of particular language forms (p.19-20) in L1

function to L2 form transfer, a category into which the

Swedish negation "waystage" would fall (and which the present

author can verify as a L2 Swedish speaker). Also on

overgeneralization, Bickerton (in Rutherford,ed., 1984) has

this to say:

> the speaker, having made an incorrect
> hypothesis about the role of a grammatical
> feature, cannot simply microadjust that
> hypothesis; instead of increasing production in
> the appropriate category, the speaker
> generalizes maximally and then prunes down his
> generalization, so to speak, until he achieves
> the appropriate fit (1984: 157)

1.5.2 Transfer and developmental influences

The Hyltenstam study is an example of implicational scaling.

Mclaughlin (1987:70) points out that this technique seeks to

imply that the existence of a certain feature in

subjects'speech implies the existence of other features in

their speech. Andersen (1978) also used the technique with

subjects from a variety of L1 backgrounds. Coupled with

characteristically problematic areas for teachers (such as

Swedish NEG placement or AUX system, NEG and question

structures in English) this approach can cast more light on

possible reasons why learners from widely-varying L1

backgrounds have difficulties. But Hammarberg (in Hyltenstam

and Linnerud) makes it clear that such illumination as there

is seems to reveal the interaction of

IL determinants including language universals:

> these are just the kind of structural areas
> where L2 has a complication which is unusual
> among languages, and most other languages have
> a simpler, less marked structural solution. We
> may then easily get the impression that L2
> acquisition must be a matter of a purely
> rudimentary/ elaborating approach according to
> a universal cognitive pattern, because learners
> with various L1's come up with similar
> solutions and proceed from simpler to more
> complex structures. However, the universal
> element may also be that languages tend to
> favour unmarked solutions (1979: 21)

IL in relation to more or less marked strategies will be developed in Chapter Three. What is also important, however, is that Hammarberg implies (and goes on to state) that while the world's languages in their typological arrangement also embody cognitive patterns which prioritize some IL structural strategies or solutions, L1-L2 transfer does seem to occur in low-complexity situations. It would seem, therefore, that IL developmental solutions are interactive with L1-based solutions.

Process-oriented transfer definitions have stressed the decision-making element of transfer strategies. This is dependent on L1-L2 proximity and L1 markedness degrees. A good example of the latter feature is semantic transfer. Kellerman (1979, in McLaughlin 1987) found that Dutch learners of English rejected more semantically marked sentences (like "He kicked the bucket") even though these may be possible in Dutch. Instead, unmarked sentences like "He kicked the ball" were regarded as more language-general, regular and transferable. It is difficult to entirely divorce such perceptions from language universals, and Gass notes that

> those elements which are universally 'easier'
> vis-a-vis the other elements are most likely to
> be transferred" (1984: 129)

1.5.3 Towards universals in transfer studies

It is worth summarizing some of the main phenomena
to have emerged from transfer studies which are adjacent to
what we may consider to be the direct effect of transfer.
Gass's survey (1984) is definitive in this respect. She
reviews research on seven main areas:

1) Different developmental paths

Zobl (1982) observes that Spanish and Chinese speakers of
English acquire the English article either more directly
(from Spanish) or through deictic this as determiner
(Chinese).

2) Delayed rule restructuring

Existence of similar forms in L1 and L2 can hinder the
elimination of those transferred forms from IL. Schumann's
work (1982) on no + verb forms in Spanish speakers of English
shows that these are phased out more quickly in other speakers
with L2 English.

3) Typological organization transfer

IL will not include L1 forms if there is no typological L1-L2
similarity; with typological links, transfer occurs to
differing degrees (Wode 1981).

4) Strategies of avoidance

Some expansion on Gass's reference to Kleinmann (1977) is
useful here. His tests attempted to ensure that nonuse of
structures could be attributed to avoidance, since

> actual errors the second language learner
> commits are only one clue, but by no means the
> only clue to the difficulty he is experiencing
> with the TL (in Ritchie 1978:
> 159)

In connection with this, Gass points out that Schachter (1974)
produces evidence of English relative clause avoidance in
speakers of non-right-branching languages (in this case
Chinese and Japanese).

5) Facilitation extension

A revealing study by Ard and Homburg (1983) on vocabulary
development involved form/meaning similarity between English
and Spanish lexical items produced by Spanish learners. More
importantly, in comparison with Arabic speakers, the same
learners generalized their good performance beyond clearly
similar test items:

> the nature of the native language affected
> language learning even where the conditions of
> language transfer were not met (Gass 1984: 120)

6) TL form overproduction

As we have already noted in relation to the Hyltenstam
corpus, Gass comments on this phenomenon as put forward by
Schachter and Rutherford. The researchers' own examples

involve the retention of L1 (topic-comment) discourse functions by Chinese and Japanese learners, i.e. in L2 syntactic forms such as existential _there_ in "There is a..." and extrapositional "It is fortunate that...".

7) Hypothesis modification

Acquisition constraints, faulty hypotheses and mistaken generalizations, according to Schachter (1983), arise from a learner's cumulative knowledge, comprising:

a. L1 and L (other)

b. TL acquisition

c. expected TL acquisition (prior knowledge)

8) Absence of bidirectionality

Transferability "decisions" are made by individuals, which make more dubious the notion of CAH-type bidirectionality in transfer. Swain, Naiman and Dumas (1972), for example, compare utterances of the following type by native English speakers learning French:

　　　　* La petite fille a trouvé les

　　　　"The little girl has found them"

It has not been proved that French speakers make parallel errors such as:

　　　　* The little girl them found

A possible explanation (on the basis of Kellerman 1979, 1983) is that L2 French speakers, in a similar fashion to L1 French speakers, acquire preverbial clitic use late because they are marked forms. The syntactic connection here is that such inconsistency can be explained (according to Zobl, 1980a) in terms of linguistic typology (les, for example, is a ' preverbial clitic not incorporated in normal SVO word order in French, as full nouns are). The fact remains, however, that "one cannot 'know', in the absence of comparative data, whether these are examples of language transfer or not" (Gass 1984:125).

The research on developmental IL and transfer has reached the stage where there is a greater interest in longitudinal studies "compared to cross-sectional studies based on short-span experiments); an empirically-based awareness is important if statistically groundless claims are to be avoided. This approach is gaining ground precisely because many of the transfer phenomena we have analysed have tended to complexify the IL issue to the point where the potential explanatory power of transfer itself might be regarded as inadequate. Comrie offers the theorists' view of the situation:

> the crucial examples are those where difficulty in acquiring a certain property cannot be attributed solely to the fact that native language and second language have different structures (attribution of errors to language contrasts) (in Rutherford, ed., 1984: 14)

A concern with language universals is one way of moving into the resulting vacuum of IL research. Two tendencies outlined by Gass, again in her 1984 paper, serve to exemplify this shift:

a) Transfer effects are most likely with those parts of linguistic hierarchies which are most accessible.

b) Transfer is more likely with more basic meanings, i.e. with those meanings closer to the "core" than farthest away from it.

These aspects - accessibility and markedness - fall into the general area of language universals, to which we can now turn in more detail.

CHAPTER 2

DEFINING LANGUAGE UNIVERSALS AND

DEVELOPING LINKS WITH IL

In the previous chapter intermittent mention is made of
language universals and Universal Grammar. Recent IL research
arguably reflects consensus in the field that language
universals embody the ideas of two schools of linguistic
thought which require some explanation. This will hopefully
serve to clarify an ongoing consideration of the involvement
of universals in IL.

2.1 The theory-driven perspective

The earlier work of Chomsky and the "transformationalists" has
now been superseded by Chomsky's Government-Binding Theory of
syntax. The basis for this remains the belief that humans have
an innate capacity to learn language . It cannot be the case
that the human brain places no limits on possible language-
forming hypotheses, thereby

> having no predisposition to analysing data in
> terms of one formal system rather than any
> other one (Comrie 1981: 2-3)

Instead, Chomsky proposes that there is a constrained
capability:

> The language faculty appears to be, at its
> core, a computational system that is rich and
> narrowly constrained in structure and rigid in
> essential operations (1986a: 43)

Such a system seems essentially to be what Chomsky means by the term Universal Grammar. UG is intrinsically interlinked to an innate, biologically endowed Language Acquisition Device (LAD). The innateness of UG and the LAD, by definition, is the same as species universality.

Chomsky includes in his theory an observation intended to corroborate these abstract principles: that a human being cannot learn an entire language system from the language environment alone. This is termed the poverty of the stimulus:

> it is a near certainty that fundamental
> properties   of the attained grammars are
> radically underdetermined by evidence available
> to the language learner and must therefore be
> attributed to UG itself   (1981: 3)

As   concrete examples of universally-determined constructions,

the following are provided:

a)   I wonder who <u>the men</u> expected to see <u>them</u>

b)   <u>The men</u> expected to see <u>them</u>

Radford's comment on these (idealized) examples involves L2

capability, which provides us with another pointer to IL

development:

> In the first example, the pronoun them can be
> interpreted as referring to the men, but not in
> the second example. Chomsky argues that neither
> children acquiring English as their first
> language nor those learning it as a second
> language have to learn the principles governing
> the interpretations of pronouns in such cases
> (1988:37)

2.2 Core grammar and markedness

UG capacity, Chomsky argues, determines a common universal

core of principles within abstracted natural language. Basic

word order is a core "option", in the sense that a native

speaker in a homogeneous speech community receives no evidence

to the contrary (this is indirect negative evidence; direct

negative evidence, i.e. conscious correction, is not a

significant factor in L1 acquisition because of a low

correction rate and children's lack of response). In English

there is subject-verb-object. A peripheral "option", on the
other hand, might be an irregular past tense form such as
went. En route to the child's mastery of such a construction,
therefore, "goed" or "wented" may be produced. This simplified
summary of core grammar and markedness can be followed by a
more elaborate definition from Chomsky:

> In a highly idealized picture of language
> acquisition, UG is taken to be a
> characterization of the child's pre-linguistic
> mental state. Experience – in part, a construct
> based on internal state already attained –
> serves to fix the parameters of UG, providing a
> core grammar, guided perhaps by a structure of
> preferences and implicational relations among
> the parameters of the core theory. If so, then
> considerations of markedness enter into the
> theory of core grammar (1981: 7)

The idea of this core-markedness continuum, in relation not
only to "preferences" but also to "implicational relations" is
of special interest, as I hope to show, when considered from
an IL perspective.

2.3   The data-driven perspective

The principal alternative to Chomskyan UG is the field of
data-driven proposals for language universals associated with
Greenberg and, more recently, Comrie. The basis for such
proposals is that the idea of Chomksyan innateness begs
explanation; it must be taken as given. It is considered more
important, given research limitations, to concentrate on
breadth of language coverage as opposed to Chomksyan depth
(concentrating characteristically on a single language

English). This involves analysing data from a wide range of the world's 4,000 or so languages. The idea of innateness is generally not accepted by those linguists in the Greenbergian school (except as "a possible eventual explanation" [Comrie 1981:27]). Chomksy's D-structure, which embodies the underlying constraints and mechanisms which shape the syntactic S-structure of sentences (i.e. possible produced sentences) as the product of language is largely abstract. Greenberg's analysis, by comparison, is concerned precisely with such surface ("S") structures, and is therefore more concrete.

2.4   Interpretations of universals

It is appropriate at this point to differentiate between two main types of universal: absolutes and universal tendencies (sometimes termed relative or statistical universals). A possible starting point for defining both types is to regard them, as Comrie does, as more or less extreme cases of "a statistically significant deviation from random patterning" (1981: 19). This is to say that we do not find fairly equal distribution of types along particular parameters (as would be dictated by logical possibility). An absolute universal, therefore, is such a deviation at its extremity (such as all languages having vowels).

Universal tendencies are of special significance in the present analysis. Basic word order, while a core feature in the Chomksyan single-language framework, also incorporates,

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from a data-based perspective, the universal tendency of subject preceding object. Fewer than one per cent of languages are exceptions (e.g. OVS Hixkaryana in Amazonia and VOS Malagasy). It is important to note another type of universal here: those which are implicational. These relate the presence of linguistic properties to one another.

Universal tendencies are a prime feature of Greenberg's views on universals of sentence structure (equivalent to GB S-structure). While Chomsky has previously rejected tendencies of this type, they are are now being treated as additions to absolute universals in that they tie in with the core-markedness continuum discussed earlier. Thus the Chomskyan absolute universal, where either determiners precede nouns and auxiliaries follow verbs, or determiners follow nouns and auxiliaries follow verbs (which can be conventionalized in a Chomskyan representation as $\bar{\bar{X}}$ --> Spec $\bar{X}$ $\bar{X}$), is now regarded as characterizing the unmarked case. The theory-driven and data-driven approaches therefore converge on this point. In Chomsky's GB theory "a core grammar with a periphery of marked elements and constructions" (1981: 8) is central. Furthermore, marked structures are regarded as independent structures. These now include hierarchies of accessibility. There is thus a justifiable link here with proposals such as the relative clause hierarchy which Keenan and Comrie (1977) observed employing the data-based approach. This would seem to suggest a relationship between the two camps in and around the area of markedness.

Our main concern here (and particularly in Chapter Three) is to implement our awareness of these common ideas of markedness

in relation to IL, while also maintaining the validity of
much of Chomsky's D-structure and alpha-movement (such as WH-
movement:

```
        What do you think she would say[what]).
         /                                    /
         <-----------------------------------
        "Deep" [D-structure] extraction
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In order to proceed along these lines, it has been important
to agree with Comrie (1981) that the two approaches discussed
in this section are not without areas of convergance and
mutual recognition.

2.5   An initial expansion of the IL-universal relationship

Any attempt to prove, or even to speculate, on the involvement
of language universals in second language learning needs to
include, as already indicated, a possible recognition of IL as
a natural language. If this is the case, universal constraints
will not be violated by systematic and dynamic IL's, just as
they are not violated by natural, "steady-state" languages.
Following Gass (1984), we can observe that IL's do not exhibit
sentences such as

        She decided Alice wouldn't mind

where she and Alice are coreferential. This is because Alice
is preceded and commanded by she. UG thus seems to be imposing
constraints.

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It is worth noting that some writers on SLA exercise more
caution in their labelling of what I am here referring to as
interlanguage. Ellis (1985b) also uses the term "learner
language", while Klein (1986) employs the neutral "learner
variety". That "interlanguage" as a term lacks such
neutrality, however, reflects the kind of "top-down"
perspective needed if any proposals of universal links are to
be tested. We may also disagree with Spolsky's stance on the
question of terminology:

> I see no _a priori_ justification for giving such
> a term to a cluster of varieties defined only on
> the basis of their dissimilarity from a
> socially recognized variety. It would be
> clearer, therefore, to treat the word
> "interlanguage" as an elegant variation of
> second language (1989: 35)

It is not necessarily the case that such an implied
intralanguage deviation would have to be considered as a
qualifier for interlanguage "status". Such a view depends on
how such watersheds are identified. Having said this, however,
the antithesis - that native languages are themselves
interlanguages - may also be given some thought.

To return to the possibility of an IL-universal relationship,
it must be regarded as one that needs to be tested
empirically. Nevertheless, other types of linguistic
judgements should not be excluded from the IL/L2 research:

> if we take natural human properties as forming
> the basis of at least some universals, then a
> violation of the universal on the part of an L2
> learner may cause us to question the universal
> itself (Gass 1984: 127)

2.5.1 Differing influences of universals

Gass and Ard (1984) consider the potential influence of differing types of of universal. Table 1 differentiates between absolute universals and statistical universals (universal tendencies). They are aligned with other variables, and their influence is estimated accordingly. Universals claimed to have emerged from diachrony, for instance, are not regarded as being of any real influence, whereas those connected with the cognitive/perceptual domain are. The Accessibility Hierarchy is a good example of the latter type of universal.

TABLE 1: Nature of Language Universals and their Potential
Influence on Second Language Acquisition

Statistical or Absolute	Source of Universal	Validity of Cr Age Hyp	Probability of influence	Remarks
Stat	Physical	Valid	Moderate	
Stat	Physical	Invalid	Moderate	
Abs	Physical	Valid	High	
Abs	Physical	Invalid	High	
Stat	Perc/Cog	Valid	Moderate	
Stat	Perc/Cog	Invalid	Moderate	
Abs	Perc/Cog	Valid	High	
Abs	Perc/Cog	Invalid	High	
Stat	LAD	Valid	Very low	SC only
Stat	LAD	Invalid	Moderate	SC only
Abs	LAD	Valid	Very low	SC only
Abs	LAD	Invalid	Moderate	SC only
Stat	NBLU	Valid	Low	
Stat	NBLU	Invalid	Moderate	
Abs	NBLU	Valid	Low	
Abs	NBLU	Invalid	High	
Stat	DBLU	Valid	Very low	
Stat	DBLU	Invalid	Very low	
Abs	DBLU	Valid	Very low	
Abs	DBLU	Invalid	Very low	
Stat	IBLU	Valid	Moderate	
Stat	IBLU	Invalid	Moderate	
Abs	IBLU	Valid	High	
Abs	IBLU	Invalid	High	

Key: Cr.Age Hyp.   Critical age Hypothesis

Perc/Cog   Perceptual/Cognitive

LAD   Language Acquisition Device

SC   Static competence

NBLU   Neurological basis of language use

DBLU   Diachronic basis of language use

IBLU   Interactional basis of language use

(Adapted from Gass and Ard, 1984)

2.5.2 Universals and phonology – an example

Eckman (1984) carried out a fairly complex study in order to prove that violation of universal constraints in IL's might be explainable through the contact that an IL has with both the TL and the native language (NL). The claim is based on Sanders' assertion (1979) that there is no rule where a voiced obstruent in word-final position induces the terminal insertion of a schwa [ə]. Japanese and Mandarin speakers learning English break this rule, since they produce the "schwa paragoge", with the respective NL's lacking word-final obstruents. Eckman explains this by saying

1) the problematic final consonant is placed in a less marked position (medial)

2) the addition means that the TL word conforms phonologically with NL constraints , at the same time removing the risk of deleting the final voiced obstruent in the canonical form which has been correctly learned (/rɛd/ is thus retained in [rɛdə])

We therefore find underlying forms obeying the exclusion rule, and a constraint against final obstruents in the same IL system. If Arabic were the NL involved, however, there would be no violation of the suggested schwa paragoge·universal constraint, as Arabic has word-final obstruents and any violation of Schwa Paragoge exclusion would thus result in an

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impossible IL; in such a case, the violation of the universal would not be accounted for by either NL or TL facts.

2.5.3   Universals in discourse - a preliminary look at markedness

A further non-syntactic example of IL-universal interaction is in the general psychological/pragmatic/discourse area. Comrie (1981) makes it clear that this field is not to be discluded from those seeking to ascertain the existence of universals from wide-ranging data. Rutherford (1982) provides a pointer in relation to this:

> the learner may well perceive L1 discourse-determined arrangement (e.g. topic-prominence, pragmatic word-order...as being less marked than L1 syntax-determined informative arrangement (i.e. S,V, and O permutations). At least it seems that transfer occurs with the first kind of arrangement and not with the second...Serious justification of all this, however, will depend upon a clearer notion of how markedness applies to higher levels of language organization, and specifically discourse (1982: 104)

Givòn (1983) develops this notion, proceeding to clarify his findings further in a cross-language study (1984, in Rutherford, ed.). His premiss is an interesting one:

> In the pre-syntactic universe of no grammatical morphology and no semantically based word order, what are the rock-bottom universals of coding the degree of topic continuity?(1984:126)

More "marking material", he claims, denotes less continuous topics in discourse. By this he means, for example, longer

phonological sequences used to code the topic. His "rock-bottom universal of topic-marking" is as follows:

COMMENT > COMMENT-TOPIC > TOPIC-COMMENT > REPEATED TOPIC
(ZERO   (ZERO
 TOPIC)   COMMENT)

If we agree with Givón that a basic psychological principle in human language is that we attend to our most urgent tasks first, then we might also agree that it is at the extreme left of the hierarchy where the topic is of the lowest urgency and thus totally predictable (processing the comment or new information remaining urgent). The topic (or old information) at the extreme right-hand position, however, is very unpredictable. This means that the most urgent task is the firm establishment of the topic. This would appear to be the case from Givón's transcripts of early SLA, e.g. from Hawaii-Korean English:

> ... diploma, my son got a high school diploma...
> (1984: 117)

(The same topic prominence is common in L1 children)

Although there is an apparent markedness explanation to such occurrences, Givon prefers to view topic-comment and comment-topic word-order relationships as "a reflection of a general psychological principle of task performance" (1984:124). In the next chapter, I concentrate on the analysis of IL syntax, primarily in recent studies, in order to bring to the fore the role of markedness in the present discussion.

CHAPTER 3

GENERALIZATION FROM MARKEDNESS

This chapter principally involves an examination of recent
theorizing and research which examines the possible
involvement of typological markedness in IL development.

3.1   Coreness and prototypicality

In Chapter One mention was made of Kellerman's (1979) study of semantically marked forms and their more likely rejection in transfer processes. Chaudron (1983) summarizes Kellerman's earlier studies (1978a), where subjects had to group lexical items according to similarity of meaning and rate them in terms of their "translatability" into English from Dutch. In the results, translation into English "break" was from a set of words in Dutch judged to match precisely a word-to-word translation. Words closer to what the learners perceived as the "core" meaning were chosen. In another study (1978b), coreness ranking – regardless of L2 study periods and age – was predictable on a five-point dissimilarity scale. While such tests may seem inconclusive, it is important to see the "coreness" idea as being connected to notions of "best lexical choice" (as developed by Rosch 1977, in Cook 1985). Taking Rosch's view, we might regard _terrier_ to be a better "dog word" than _lurcher_. This prototypical-categorization theory may be regarded as having connections with core and more marked lexical choice, although cross-cultural functions need to be considered. This is at least one way of attempting to explain the human trait of relating more strongly to what one perceives as prototypical words.

3.2 Projection as a basis for markedness generalizations

Researchers have addressed the question of markedness to differing degrees. If IL is taken as being a set of generalizations and hypotheses about the TL system, then markedness can be viewed as a sub-set of the language learner's assumed knowledge (Odmark in Rutherford, 1982). We can take "more complex" to indicate "more marked" in IL, as in other languages, and a scale of markedness can lead to prediction possibilities about order of acquisition. Zobl (1983c) first relates universal rule acquisition to a data-sifting model of markedness. This contrasts with what he terms the projection model which functions according to psycholinguistic predictions. In other words,the former model has certain limitations based on the fact that markedness conditions are contained exclusively within primary data relations grounded on the "assumed operating mode of the acquisition faculty" (1983c:297).

The representation of this (Model 1 in Figure 1) obviously differs from the projection model (Model 2), in that new unmarked forms can be determined from primary data by projection, but not by a data-sifting strategy (thus Z emerges in connection to X,Y... in Model 2, whereas X,Y.. can only be reflected in learner competence in Model 1, not extended to the emergence of other unmarked forms). The most important inference we can make from this in relation to our present concerns, is that implicational universals connect with markedness in the projected acquisition of unmarked (or, by

implication, less marked) forms once that marked (or, by

implication, more marked) forms have been acquired and fixed

through data input.

FIGURE 1.   MARKEDNESS MODELS IN SLA

Data-Sifting
Model

Primary data   Faculty   Competence
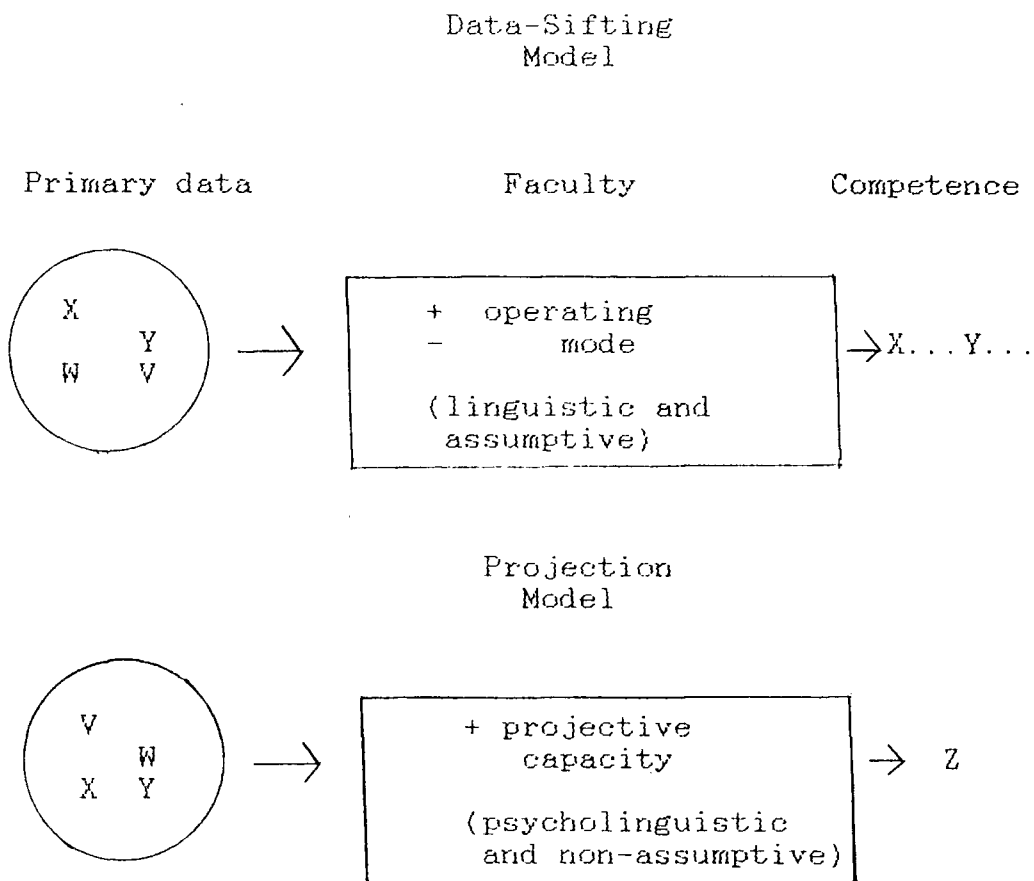
Projection
Model

(Adapted from Zobl 1983c)

Zobl's model helps explain what has been termed the

"projection problem", i.e. that

> the ultimate state of linguistic knowledge
> attained by the learner about the target
> language far exceeds the data to which he or
> she has been exposed in the course of learning
> (1983c: 296)

We can now review some experimental studies dealing with

this tendency.

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3.3 Strategies of relative clause formation in English

There would seem to be a perceptual basis to the formation of relative clauses (RC's) which involves language universals. Keenan and Comrie (1977) discovered an implicational hierarchy of RC construction. The claim is that the Accessibility Hierarchy has universal application, being evident in RC data from approximately 50 languages. The most accessible position is at the beginning of the following linear representation:

Subject (SU) > Direct Object (DO) > Indirect Object (IO) > Object of Preposition (O PREP) > Possessor (POSS) > Object of Comparison (O COMP)

Examples of RC's in English are:

The woman who lives there (SU)

The woman who I like (DO)

The woman who I spoke to (IO)

The club to which I belong (OPREP)

The member whose number I gave you (POSS)

The student who I'm bigger than (OCOMP)

A language that relativizes on any given hierarchical position also relativizes on all positions to the left of it (higher on the AH). All languages relativize at SU position but we are not able to determine where relativization ceases further down the hierarchy (i.e. further to the right). The implicational nature of the AH has stimulated an increasing interest in RC

formation with a view to establishing the extent to which
language universals are involved.

3.3.1 An overview of Gass's contribution

The SLA process, according to Gass, is influenced by
universals in different areas of language use. L2 acquisition
of RC's, she claims (1979, 1980, 1983), is "primarily governed
by universal phenomena" (Gass and Ard, in Rutherford, ed.
1984: 43). Her study as a whole consisted of three tests given
six times over a four-month period to seventeen adult learners
of English from ten different language backgrounds. The
diversity of their RC types is shown in Table 2:

TABLE 2. CROSS-LINGUISTIC RELATIVIZATION

Languages	Relativizable Positions					
	SU	DO	IO	OPREP	POSS	OCOMP
English	X	X	X	X	X	X
French	X	X	X	X	X	
Portuguese	X	X	X	X	X	
Italian	X	X	X	X	X	
Arabic	X	X	X	X	X	X
Persian	X	X	X	X	X	
Thai	X	X	X			
Chinese	X	X	X	X	X	
Korean	X	X	X	X	X	
Japanese	X	X	X	X	X	

(Adapted from Gass and Ard, 1984)

The authors review two of the three tasks set:

1) Sentence-combining: the combination of two sentences with
one noun phrase (NP) in common, to form one sentence in
English with a RC. The first sentence was a matrix sentence
with the head NP as either a subject or object of its own
sentence. The common NP in the second sentence was in one of
the six AH positions . There was a total of 12 sentences (all
combinations). Figure 2 shows that trends predicted by the AH
were followed, with the exception of POSS relativization. The
unique nature of the POSS coding in English (e.g. ...whose
car...) can help explain this, as can its possible perception
by learners as a unitary feature (e.g. in ...whose car I
borrowed..., whose car may be regarded as the single DO of
borrowed. We can also note at this point that Gass's study had
possible shortfalls because it was not truly longitudinal.

FIGURE 2. RELATIVIZATION RESULTS
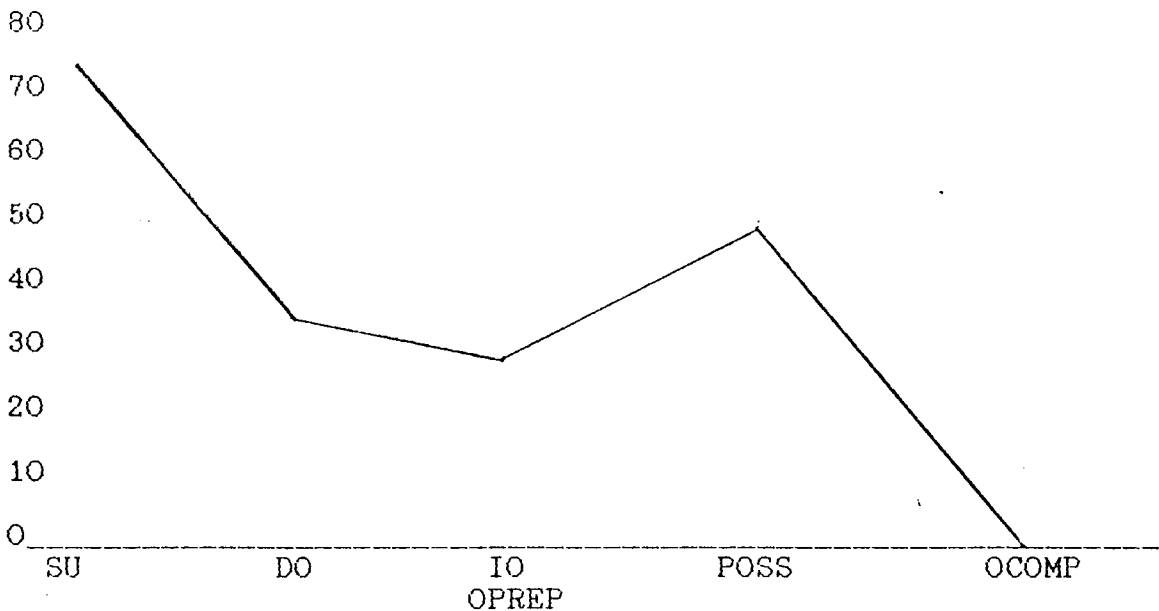
Schachter and Kleinmann's research on avoidance was referred
to in Chapter One. In checking avoidance, Gass, interestingly,
was able to draw up a virtual mirror image of the results for
AH ordering (see Figure 3). This suggests greater difficulty
at the lower positions on the AH. Universal principles can
again be singled out as the main influence. The POSS exception
in the case of both AH correlation and avoidance, however,
indicates NL and TL influence alongside that of the universal.

FIGURE 3. AVOIDANCE OF RELATIVIZATION
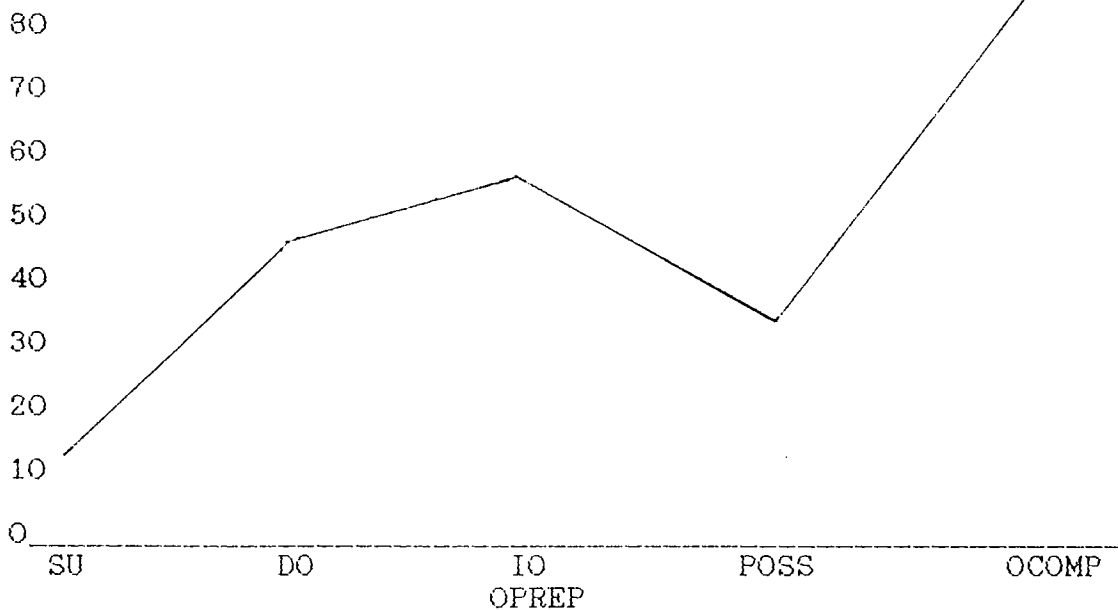
Figure 4 shows the results from subjects' free writing.
Although some positions were not relativized, AH orderings
were clearly followed.

FIGURE 4. RELATIVIZATION IN FREE WRITING
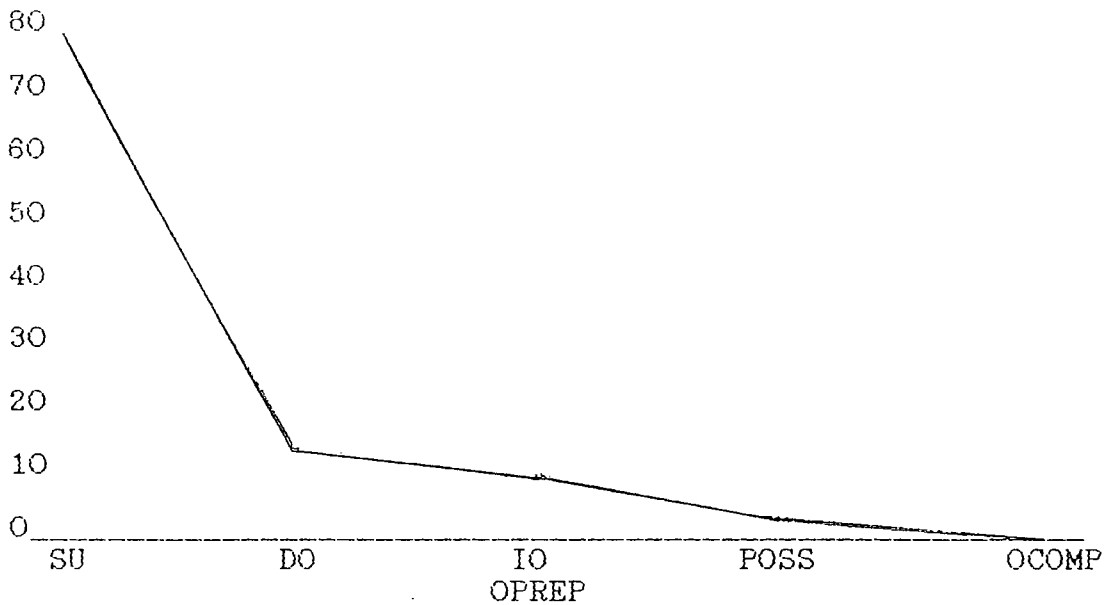
(Figures adapted from Gass and Ard, 1984)

These results again act as support for Gass's claim that there is a relativization universal involved in L2 selection of RC use. This is developed more fully in the next section.

3.3.2 A contemporary study of markedness in IL

The AH can also be viewed in terms of markedness: RC formation at the SU position is the least marked point on the hierarchy, with relativization at the OCOMP position only. To gauge the degree to which they generalized their instruction, their results were compared with those of a control group which had been taught RC's from a standard text (where SU, DO and OPREP relativization was presented in sequence). More generalization occurred with subjects who had relativized at the single position than with those working from the text.

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Before considering the methodology of Eckman et al (1988) we need to consider their motivation for taking the research further. They take three questions as their starting point:

1)   Which TL aspects will be most easily acquired?

2)   Which TL aspects will be least easily acquired?

3)   Which learned TL aspects will lead to the greatest generalization from those structures learnt to other structures?

The authors equate "learnt" features with "taught" features, and take "learning" to be in an instructional setting. Since they find this compatible with the acquisition of their title, we can best regard their stance as being one of interface between learning and acquisition , i.e. not ostensibly supportive of Krashen's now-controversial "dual knowledge" paradigm, separating "monitored" learning from acquisition (some of the learning/pedagogical implications of this paper are taken up in Chapter Four).

Eckman (1977) links levels of difficulty in SLA to levels of typological markedness. The latter, as we have seen with the AH, involves the cross-linguistic presence of a relatively more marked feature implying the presence of another feature; intra-linguistically, however, the presence of this relatively less marked feature does not, in its turn, necessarily imply the presence of that marked feature which is otherwise present across a range of languages. The former point - concerning

levels of difficulty - is covered by Eckman's Markedness

Differential Hypothesis (MDH):

> The areas of difficulty that a learner will
> have with a given TL can be predicted on the
> basis of a systematic comparison of the NL and
> TL, such that:
>
> a) those areas of the TL which are different
> form the NL and relatively more marked than in
> the NL will be difficult;
>
> b) the degree of difficulty of any aspect of
> the TL which is different from the NL and
> relatively more marked than in the NL will
> correspond to the relative degree of markedness
> that aspect;
>
> c) those aspects of the TL which are different
> from the NL, but which are not more marked than in
> the NL will not be difficult.
>   (Eckman et al 1988: 4)

The rationale for these claims is that individuals, having

learnt a more advanced or difficult aspect of any field,

learn, by virtue of inclusion, less difficult but related

aspects. With regard to learning, being able to handle the

most marked TL aspects should facilitate the learning of the

less marked structures.

SUBJECTS AND METHOD

Four groups were involved:

1)   Relativization at SU only

2)   Relativization at DO only

3)   Control group (non-RC instruction)

The use of three experimental groups was intended to determine

in which direction generalization was, and if it was in one

direction only.

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Pre-test.   Twenty-one pairs of sentences were to be combined
in a written pre-test; of the twenty-one newly-formed
sentences, seven were combined with each of the three
relativization strategies being tested (at SU, DO and OPREP
positions). The sentences were of the following type:

a)   A   Albert heard the dog

     B   The dog chased the children into the field

     --> Albert saw the dog that chased the children into the
          field

          (SU relativization)

c)   A   We saw the car

     B   Bob recommended the car to Alex

     --> We saw the car that Bob recommended to Alex

          (DO relativization)

b)   A   Jenny knew the family

     B   They gave the car to the family

     --> Jenny knew the family who they gave the car to
          (OPREP relativization)

The indexed NP in each A sentence is identical to one of the
sentence B NP's. This is shown in the following
representation:

A   NP V NP

B   NP V NP Prep. NP

Gass and Ard (1980, in Eckman et al) offered some evidence in
support of head NP position being linked to levels of
difficulty in second language RC formation.

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Type of instruction. The instructional groups were formed after an accompanying warm-up exercise which was not related to the relativization task. The four groups each had nine subjects (four Arabic speakers, three Spanish speakers, one Japanese speaker and one Korean speaker).

The three experimental groups were instructed only on the relativization position assigned to them (SU, DO or OPREP). The control group was instructed on non-RC sentence-combining areas. Modifiers were explained to the experimental groups in advance of three relativization activities where sentences or ideas were to be combined, modifying the first idea or sentence with the second. The markers which (for things), who/whom (for people) and that (for both) were introduced for use.

The activities comprised:

1) Interrelated short sentences with sketches accompanied by a short story (appropriate for SUB, DO or OPREP relativization depending on which experimental group was receiving instruction). Students identified the common phrase in each pair , then substituted the second co-referential element with that, which or who, and coupled the sentences.

2) Listening to a new story comprising several pairs of sentences, again targeted to groups according to relativization position. These needed to be combined and produced orally.

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3) A third story in sentence pairs to be read and re-written with RC's. Near-identical lexis was used, and teacher monitoring ensured re-instruction where necessary.

The post-test was given two days after instruction; twenty-one sentences to be combined in the same manner as the pre-test task.

Test scoring.   Only the correct target sentence production was taken into consideration and only errors related to appropriate RC formation were counted. While this guideline did not include, for instance, using what for that, it did score as errors combinations in the wrong order, of the type:

> They rented the house
>
> Emily put some furniture in the house
>
> They rented the house that Emily put some
> furniture in
>
> X   Emily put some furniture in the house that
> they rented

Eckman et al claim that the subjects understood the sentence-combining instruction, and that avoidance was the best explanation for incorrect combinations. The main reasons for this are:

1)   25% maximum on incorrect combinations

2)   These involved DO and OPREP relativization

3)   Incorrect combination always led to relativization at a
a higher AH position.

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4) Pronoun and relativized NP retentions counted as errors.

These were of the type:

X   Mary used the car that Jim sold it to Susan

X   The student kept the pen that the teacher
     left the pen on his table

These errors did not involve actual RC structure but were noted. Multiple errors in combined sentences were counted as single errors.

Results and their significance

Using a variance analysis, the pre-test did not provide evidence for any initial difference between groups, although there was a clear difference in performance on RC construction. One result, however, contradicted the predictions of the MDH: which OPREP RC-type performance differed from SU and DO-type performance, there was no statistical difference between SU and DO relatives. Regarding separate group performance, no single RC structure was preferred by any of the groups. Concerning the pre-test, the four groups differed significantly. Table 3 summarizes total errors, according to RC structure, for both tests:

TABLE 3. RELATIVIZATION ERRORS

Pre-test				Post-test		
	SU str.	DO str.	OPREP str.	SU str.	DO str.	OPREP str.
SU group	34	36	42	4	25	38
DO group	32	32	42	10	12	38
OPREP group	35	39	42	0	4	1
Control group	27	30	42	23	30	42

The pre-test results were in line with MDH predictions, i.e. the worst performance was with relativization at the OPREP position. The post-test results show that the OPREP group achieved the best score, followed by DO, SU and Control. Group performance in relation to relativized position (see Figure 5) indicated that performance reflected instruction, there was no generalization towards OPREP position, and almost all generalization was directed towards less marked constructions. This appears to support to a significant extent the claim that

> maximal generalization of learning will result
> from the acquisition of relatively more marked
> structures. Such generalization will be
> unidirectional, and will be in the direction of
> those structures which are relatively less
> marked. Thus, if only a single structure of a
> set of implicationally related structures is to
> be taught, maximal generalization will result
> from teaching that which is most marked (1988:
> 12)

FIGURE 5. PERFORMANCE ON RELATIVIZATION TESTS

Mean difference
in score
between pre-test
and post-test

Relativized position

Key

——————— SU group

— — — ∙ — — DO group

∙ — ∙ — ∙ — ∙ OPREP group

∙∙∙∙∙∙∙∙∙∙∙ Control group
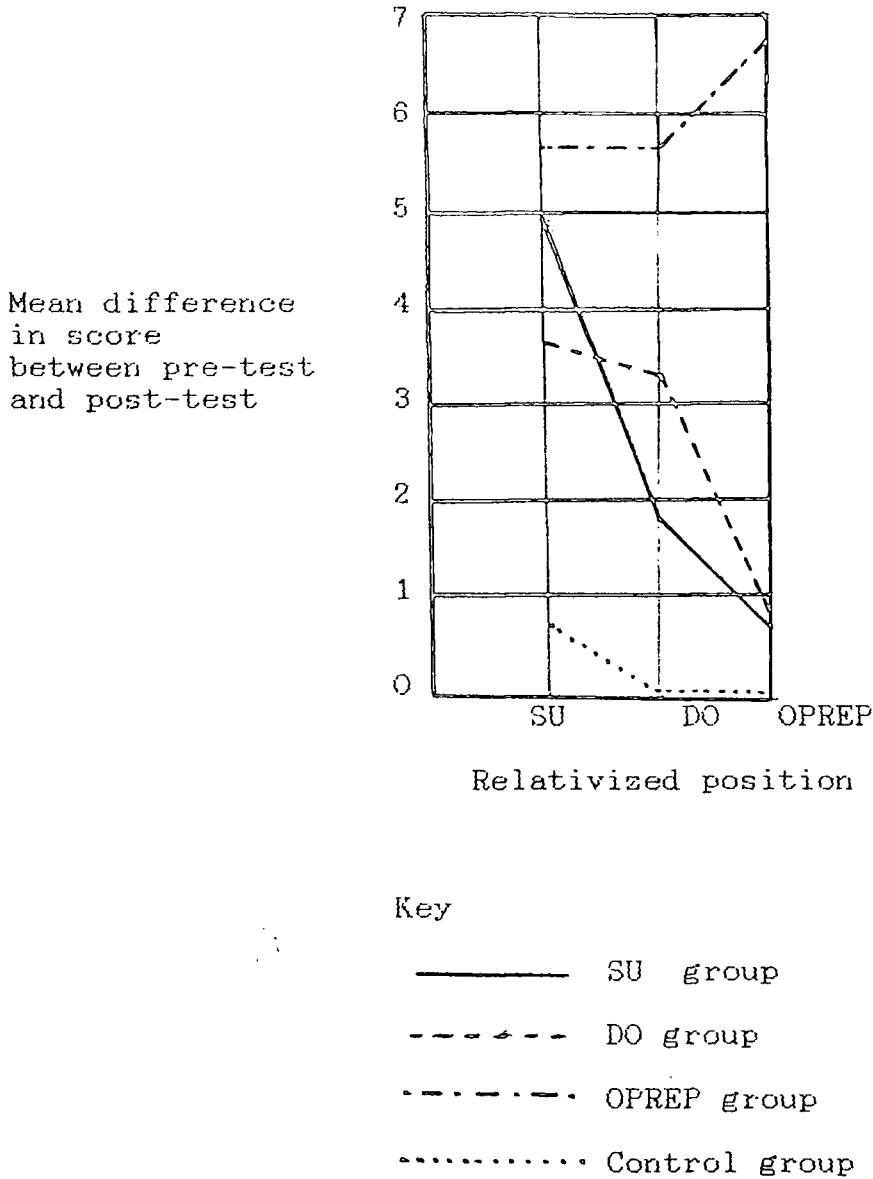
The authors stress that they do not regard generalizations
due to markedness as a good reason to exclude the teaching of
less marked structures. Interestingly, they suggest a further
study where markedness levels correspond to length-
of-instruction period. Thus, in a one-hour lesson, SU might
receive ten minutes' teaching, DO twenty and OPREP thirty
minutes. This would appear to reflect one of the authors'

implicit principles - that while much insight can be gained from noting the effects of markedness/universals in IL production of various kinds, there is no single etiology behind IL capability.

CHAPTER FOUR

UNIVERSAL GRAMMAR ACCESS AND
GRAMMATICALITY JUDGEMENTS IN PERSPECTIVE

While this chapter closes with a discussion of the place of "grammatical intuitions" in IL, it is important first of all to complement the preceding examination of markedness studies with a review of some other important IL-UG research. Two UG constraints are now considered in the context of specific IL developmental studies.

4.1   The rightward-movement constraint

Ross (1967, in Ritchie,ed. 1978) proposes a constraint on rules involving rightward movement - the Right Roof Constraint (RRC):

> Surface strings in which an element has been
> moved to the right of the sentence in which the
> element originated are ill-formed (Ritchie
> 1978:36)

To give an example,

The building which used to be there had gone

is an original sentence from which the following examples of
re-sequencing are possible:

a) That the building had gone which used to be there
   came as quite a shock

b) That the building which used to bwe there had gone
   came as quite a shock

the following, however, is ungrammatical:

c) * That the building had gone came as quite a shock
   which used to be there

Ritchie sought to examine whether adults retain the RRC as a
UG constraint, and gave questionnaires to an experimental
group of native Japanese speakers and a control group of
native English speakers. Degrees of grammaticality were
tested in order to discover whether the learners were able to
differentiate between RRC-constrained correct sentences and
those violating the RRC constraint. As Japanese has no
rightward movement, evidence of such differentiation would
indicate that the learners had access to the RRC. Performance
was clearly much better than chance, proving to a reasonable
extent that the learners (who have no such controls in their
own language) had access to the RRC universal. Ritchie's
claim is that linguistic universals are intact in the adult.
His linking of L1 universals with IL production is necessary
if UG effects are to be found. His comment that·L1-L2
universals require an "exhaustive investigation" has been
partly realised by the increasing interest in IL-UG. We can

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now move on to examine a final study, as a recent example of this.

4.2 Bley-Vroman et al – learner intuitions and WH-movement

The studies of concern to us here have primarily been concerned with a consideration of structural features. Bley-Vroman et al (1988), in their own analysis of WH-movement in IL, make an important comment as to the validity and purpose of this approach:

> It is, of course, fairly clear that neither first nor second language researchers are interested in the structural properties of learners' utterances as such; rather, the intrinsic and ultimate goal of any serious aquisition research is to find out something about the mental structures and processes that make learning possible, and about their interaction with the learner's input and environment (1988: 2)

Credible developmental IL studies – rather than only studies of comparison between L1 and L2 utterances, they argue, need to further the relationship between mind and language. It is here where Chomskyan theory is central:

> If Universal Grammar is a characterization of a specific innate system of cognitive structures that enables the child successfully to master the child's native language, we may ask whether this system of cognitive structures is also operating in the second language learner (1988: 4)

This is a question which has also been integral 'to the present analysis of IL and language universals, and which we can now relate to Bley-Vroman et al's thoroughgoing attempt to

ascertain the extent to which UG is in fact of any

significance in describing the nature of IL.

The authors' criteria for identifying a UG presence in L2

learners of English is Chomsky's "poverty of the stimulus"

concept (in Chapter 2), guiding much L1 acquisition research.

As an example, they consider interrogation interchanges of the

type:

a) David saw something strange last night

b) What did David see ø last night?

In b) above, the WH-phrase has become sentence-initial, having

moved from the gap position. Children, it seems, learn this

without any problem. However, something else they learn is not

to produce sentences such as d)

c) Janet noticed that Bob left early yesterday

d) * Who did Janet notice that Bob left ø
       yesterday?

The ungrammaticality of (d) is a result of violating the

subjacency principle (Chomsky 1973, in Bley-Vroman et al).

This basically stipulates that

no element may be moved over more than one
categorial node of a specific type (1988: 4)

S ("surface sentence") and NP are categorial and bounding

nodes in GB-theory. With regard to (d), Who did janet notice ø

would be grammatical, as only one node (S) is bridged by the

WH-element. As it is, (d) comprises the (ungrammatical)

bridging of one S node ([Janet noticed]) and one $\bar{\bar{S}}$ node ([that Bob left]).

The RRC examined in the previous section concerned a specific type of subjacency. With regard to WH-movement, children use input data in moving WH- phrases to sentence-initial position, but are subject to the constraint of subjacency which disallows this process in certain constructions.

By conducting grammaticality tests in English with speakers whose language has no syntactic WH-movement, it is possible to discover whether UG is accessible in the IL of such learners. Bley-Vroman et al used Korean - an appropriate language, where the Korean equivalents of sentence-types like the preceding example of (d) are grammatical forms. An example from the paper is the following:

Mary-ka nu-ga mul-sil ize hen-ninji ril shimsırwı -hamnikâ?

Mary who what yesterday did wonder Q

"What does Mary wonder who did yesterday?" (1988: 5)

If, on the other hand, native Korean speakers are able to distinguish between sentences in English like (b) and (d) above, then it would seem that they have access to UG, and that this is the explanation for their perception of such a contrast.

Subjects and method

The authors, as with Ritchie's study, distributed a
questionnaire. A total of 92 Korean native speakers were
involved, all of them relatively advanced in English; there
was a lot of variation in the group as a whole. In addition,
34 native English speakers acted as controls. The 32 randomly-
placed sentences were to be judged according to "intuitional
responses of grammaticality" (1988: 7-8). Of the thirty-two,
fifteen were grammatical and seventeen ungrammatical. Each
involved WH-movement to sentence-initial position, and each
either obeyed or violated constraints on WH-movement. The
sentences were in three categories: Subjacency, the Empty
Category Principle and grammatical control sentences.

Results and their significance

These were compiled according to 1) overall performance of
subjects, 2) performance on individual sentences , and 3)
judgement contrasts of individuals. Table 2 shows individual
sentence results. Pre-movement WH-positions have been added
in parantheses, signified by ø.

TABLE 4.   TYPES AND RESULTS OF WH-MOVEMENT TESTS

% Correct responses

	NNS	NS

Subjacency

1. WH- islands

* What does Bill want to know whether John has already sold ∅ ?	87	74
* What does Tim wonder where Nancy put ∅ ?	85	97
* Where did Bill want to know who put the book ∅ ?	88	100

2. Complex NP's

a) Factives

What did Bill think that the teacher had said ∅ ?	54	94
What did John realize he could not sell ∅ ?	55	97
* What did Sam believe the claim that Carol had bought ∅ ?	79	100
* What did John hear the news that the mayor would do ∅ ?	72	97

b) Relative Clauses

* Who did John buy the house that ∅ had recommended to him ?	90	100
* Where did Bill visit a friend who had just arrived from ∅ ?	71	100
* What did the police arrest the men who were carrying ∅ ?	92	100

c) Coordination

* What did John find the ball and ∅ ?	88	100
* What does John like to eat tomatoes and ∅ ?	72	97

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ECP

1. Subject/Object Asymmetries

a) Superiority

I can't remember who ∅ did what.	83	100
* She forgot what who said ∅.	75	94

b) That-trace Effect

What did Frank say that Judy would like to read ∅ ?	59	100
Who did Ellen say Max thought ∅ would pass the test ∅ ?	30	87
* What did John say that ∅ would fall on the floor, if we're not careful ?	71	48

c) Sentential Subject Islands

What kind of book is it necessary to read ?	72	90
* What sort of food is to digest ∅ easy ?	70	97

2. Prep Phrase/Adverbial Islands

Which bed does John like to sleep in ∅ ?	89	97
* What time will Mary arrive before ∅ ?	85	55
* What did Albert put money in the box during ∅ ?	93	84
* What does John eat hamburgers because he likes ∅ ?	95	97

3. Specified Subject Constraint

What did Mike see pictures of ∅ ?	47	100
* What did Mary hear Bill's stories about ∅ ?	70	94

Sentences used as controls

1. Who/Whom

Who does John want to see ø ?	79	100
Who should I give the bracelet to ø ?	80	90

2. Long movements

What did John think Carol wanted her mother to give to the postman ø ?	65	97
Which apple did Mary say it would be easy for us to cut ø ?	72	90
Which information would it be possible for Mary to persuade Susan to tell the reporters ø ?	67	68

3. Preposition-stranding

Where is the person that I want you to talk to ø ?	84	100
What did Sally ask her younger brother to look at ø ?	88	100

Key: NNS - non-native speaker
     NS - native speaker

(Adapted from Bley-Vroman et al 1988)

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The sentence results are, to a significant extent,

representative of the results as a whole. Non-native speakers'

performance was fairly consistently better than chance -

subjects did not guess at random. Bley-Vroman et al do not

accept that previous training could have resulted in the

performance of their adult subjects. They therefore propose

that their findings tend to disprove the strong form of the

Fundamental Difference [L1-L2 distinction] Hypothesis:

> Our conclusion is therefore that adults appear
> to have some sort of access to knowledge of UG,
> and this knowledge is used in the development
> of foreign language acquisition (1988: 26-27)

The authors recommend the replication of their study and, more

importantly, the development of "explicit theoretical models

which have at least some chance of explaining the general

picture which seems to be emerging" (1988:27). It is also

important, however, to give further consideration to the

approach and techniques of such test-based studies, and it is

to this point that we can now turn our attention.

4.3   The viability of metalinguistic judgements

It needs to be stressed that IL is determined by a number of

competences, as opposed to a single competence. I have thus

far taken a view of universals in this light - that we should

regard their involvement as one of many possible factors in

any description (or putative definition) of IL. If this is the

case, it is important to consider to what extent the idea of "intuitions of grammaticality" is a distinct and reliable yardstick for establishing the degree of involvement in IL of language universals (or any other determinant).

4.3.1   Justification for grammaticality tests

Checking levels of grammaticality in the utterances or written production of L2 speakers is, in the main, a consequence of Chomskyan influence on the testing procedures oflinguists; native speaker competence is characterized by a linguistic theory, and therefore needs to be referred to when testing the theory. Chaudron recognises that intuitions are used idiosyncratically, but that this limitation, together with other variables in native speaker evaluations, does not invalidate the usefulness of grammaticality judgements, even though they

> must be employed cautiously, with full regard
> for the fact that they are complex behavioral
> phenomena, subject to variation of their own
> from as yet unknown sources (1983: 344)

Many researchers regard metalinguistic judgements as an explicit way to confirm data in support of acquisition/performance theories. Chaudron claims that best viewed as workable in three main areas:

1) The identification of differences between language stimuli through the indirect route of responses.

2) The abstraction from language use/metalinguistic awareness (the judgement abilities themselves).

3) The analysis if NL-TL interaction complexities in IL.

The Eckman et al, Ritchie and Bley-Vroman studies, plus Gass's work with university students, all involved subjects of several years' formal English learning. It seems fair to assume that such subjects had developed far enough toward TL proficiency to sufficiently match "the experimenter's 'objective' norms" (Chaudron 1983:370).

4.3.2 Judgements, intuitions and universals

Grundy et al (1989) differentiate between grammaticality judgements and intuitions. They claim that while the former involve metalinguitsic knowledge of what is structurally well-formed, the latter are essentially learner perceptions of native speaker capability. Chaudron, in implying the shortfalls of metalinguistic judgements, seems to touch on a similar area:

> grammaticality, acceptability, and
> meaningfulness, for instance, are not socially
> uniform concepts (1983:370)

Studies which include native speaker subjects as controls can reveal the shortcomings of grammaticality judgements. Attempts to explore UG in IL by such means have clear limitations, as in the case of the experiment by Bley-Vroman et al:

> If access to UG explains why the nonnative
> speakers did better than chance, what explains
> why they did not do as well as the native
> speakers? (1988: 27)

L2 speakers'attitudes towards the TL are undoubtedly a crucial element in any evaluation of linguistic ability. Chaudron and Grundy et al refer to the major contributions of Gardner and Lambert (e.g. 1972) in this connection. It is a difficult task, however, to "correlate attitude and linguistic intuition" (Grundy et al, 1989:4). The former would seem to rest in the area of soft data , the latter lending itself more easily to hard data-type analysis. Indeed, Grundy et al conclude form their statistical findings that their own study

> fails to show in any decisive way that the
> linguistic reality we call intuition affects or
> is affected by the social or cultural reality
> we call attitude (1989:38)

The same study seeks to find a UG accessibility/attitude link through incorporating the "indeterminate" half of SLA ability (Schachter et al, 1976) in their approach. The authors include here

> marked but grammatical structures low down on
> accessibility hierarchies which we expect to be
> outside our subjects' 'internalized grammars'
> (1989:10)

This allocation is a very interesting one, and defines a learner's readiness to "reach out to a marked periphery" (1989:4) as a reflection of attitude/acculturation level. Eckman et al's fundamental explanation of competence based on

markedness conditions (or, in the broadest sense, UG) is a question at the core of the IL/universals debate.

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We can now follow the analysis of several studies by a consideration of such findings for language learners. Any attempt to do this, however, obviously needs to acknowledge in advance individual identification with the TL as a central feature of IL, even if this - as has been noted - is extremely difficult to quantify.

CHAPTER FIVE

LANGUAGE UNIVERSALS IN SECOND LANGUAGE LEARNING

The findings of researchers in the area of RC's and UG constraints/parameters, as we have seen, have provided at least a modicum of evidence to suggest that L2 learners (or IL speakers) have some mental property which subjects their linguistic capability to universal constraints (such as that of WH-movement) and gives them access to structural elements in the marked periphery (such as RC relativization low down on the AH). This final chapter goes on to develop links between various universal phenomena and language learning.

5.1   PRO-drop as evidence of UG in IL

The existence of a phenomenon such as PRO-drop/retention
raises the question of UG parameters in IL. Parameters set by
UG would seem to operate in IL - not only L1 - acquisition. A
fairly common example of this in the literature is the PRO-
drop parameter. This is an open parameter relating subjects
and verbs in Chomksyan syntactic government. In Finnish, there
is variation between, for example, first and third person
pronoun structures:

a)   (minä)   ajan   töihin

        (I)   drive   work-to

        "I   drive   to work"

b)   se   ajaa   töihin

        it   drives   work to

        "he/she   drives   to work" (vernacular)

In (a), the PRO-drop is arguably the unmarked form, as pronoun
retention is optional. In (b), however, a pronoun is used.
Languages like Spanish and Italian are entirely PRO-drop,
while others, like English, are not.

It would appear to be the case that there is direct access to
UG if one considers that the native English speaker has only
to notice the presence in his/her IL of sentences which can be
translated as "Will come [it]" and so on, in order to sense
that there is PRO-drop activation in Spanish. L1 Spanish
speakers, however, need to notice the absence of such

sentences in English in order to sense that there is no PRO-drop activation in English. The logic of this may seem at first contrived, yet it seems to make sense that it is easier to notice the presence of something than its absence.

Universal learning principles merge with the effect of language universals in this case: an open UG parameter is successfully "set" in one direction but less successfully so in the other because of universal factors of perception. We can connect such evidence with Cook's suggested observation delimiting the differences between L1 and L2 learning:

> the apparent discrepancies are caused either by
> accidental or necessary differences in the
> situations, or by non-linguistic differences in
> the learners' minds, rather than by anything in
> the language process itself (1985: 9)

In other words, just as there is no tabula rasa for children learning their L1, neither is there one for L2 learners. Universals operate in both types of language learner; cognitive and situational factors, according to Cook, are what make the difference.

5.2   Re-setting the PRO-drop parameter

Having noted that there is an open UG parameter of PRO-drop, and having considered a logical explanation for its easier transfer in one direction than in the other, we can now close the circle of UG effects by postulating that there is the potential for a universal, by definition, to be "tapped"

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universally. In the present context (continuing our English-Spanish comparison) that means a two-way, not a one-way, application. Cook comments on this possibility:

> If Universal Grammar is directly accessible to the L2 learner, it should not affect a Spanish learner of English that the two languages have fixed the PRO-drop parameter differently; he simply needs the proper triggers to fix it anew. However, if it is not directly accessible, he can approach English only through the value of the parameter for Spanish. The question of whether L2 learning recapitulates L1 learning can be narrowed down to considering whether L2 learners' grammars reflects the principles of Universal Grammar, and whether parameters are still free to be fixed in a second language from triggering evidence (1985: 9)

The coincidence of parameter settings and the "triggering" nature of L2 data already available explains why it is easier for a L1 speaker of a SVO language to learn another SVO language or, to give an example for the latter alignment, for a L1 speaker of a non-PRO-drop language to learn a PRO-drop language. In answering Cook's question concerning the fixing of free parameters "not accounted for", as it were, Rutherford considers the type of evidence necessary to activate possible triggering potential. If the Spanish learner of English produces a question of the type "Is too warm this place" rather than "This place is too warm?" we might like to consider what could help such sentences to be phased out of IL. The author refers to Hilles (1986) and Hyams (1983) in observing that the PRO-drop (or null-subject) parameter is perhaps a cluster of properties including not only the PRO-drop phenomenon per se but also the status of will, may, can and other modals, in addition to the "dummy" elements it and there. The latter items are "syntactic place-holders" and if

their functions are learnt along with basic modality, then the production of the obligatory subject in English might become more frequent. The principle behind this claim can now be discussed in the language-learning context

5.3 Consciousness-raising

The preceding section, in its concern with triggering the operation of language universals, thereby activating pathways to learning, is connected to the area of consciousness-raising (C-R). That is, the syntactic principles and patterns which we have termed language universals need to be related to universal processes of learning (Rutherford 1987:14). The idea of re-setting the PRO-drop parameter is possibly an example of activating a latent principle. To exemplify a universal process of language learning, we need only look at the necessity for a L2 speaker to produce an intelligible IL. By violating language-specific rules, the IL speaker is actually applying language-general principles (or language universals). This is shown in the following formulation adapted from Rutherford:

UG BASE IN IL + EXPOSURE TO NEW LANGUAGE = LANGUAGE LEARNING

This is not to say that there are not many other factors involved, or that such a combination leads to all L2 language learning in an individual.

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Consciousness-raising is used here to mean

> the deliberate attempt to draw the learner's
> attention specifically to the formal properties
> of the target language
> (Rutherford and Sharwood Smith 1985:274)

The main argument in support of C-R is that the L2 learner

requires that learning element which will increase the range

of data that is available to her/him. We may wish to view   C-

R as that element. It makes available

> data that are crucial for the learner's testing
> of hypotheses, and for his [sic] forming
> generalizations...in a somewhat controlled and
> principled fashion (Rutherford 1987: 18)

C-R - defence or justification?

By contemplating a role for C-R in the language classroom I

am proposing a response to certain learning-teaching

realities:

1) Pedagogical recommendations of the 80's have at times

amounted to an over-reaction to the perception that focus

on form is a given aspect of all language teaching.

(Such a stance, indeed, would negate the validity of the

present dissertation inasmuch as linguistic theory and its

concern with language form is integral to IL studies).

2) While methodological nomenclature has changed, grammatical

C-R has been present throughout the history of language

teaching (Rutherford 1987). The reappraisal of C-R

> derives in large part from the solid grounding
> of contrastive research in current versions of
> linguistic theory that for the first time make
> it possible to compare languages not in terms
> of the operation of specific (and often poorly
> motivated) transformational rules, but rather
> in terms of the new differential application
> across all languages of a relatively small set
> of universal principles (Rutherford and
> Sharwood Smith 1985: 280)

3) Perhaps most important, and related to point (2), is the

self-perception of many learners that some form of

grammatical consciousness-raising is a defining factor of any

language teaching. This is not to say that many learners do

not recoil at the prospect of "grammar teaching" per se

(even though others may enjoy the very same component).

Instead, learner expectations of "order" in a course or lesson

may well include individual perceptions of what I have termed

consciousness-raising. The extent to which this is tied up

with motivation and even self-fulfilling prophecy is

debatable; what is quite clear, however, is that many capable

and experienced practitioners - no matter how committed or

open to the benefits of, say, communicative and problem-

solving methodologies - frequently encounter attitudes,

requests or demands reflecting in one way or another a concern

with the form of the second or foreign language they are

learning. Much of the research reviewed in this dissertation,

moreover, can be important in providing

> principled guidance in decision-making with
> regard to possible grammatical candidates for
> C-R (Rutherford and Sharwood Smith 1985: 280)

Bearing in mind the general definition of C-R above, we can

now briefly explore the role of specific language universals

in consciousness-raising for the IL speaker-learner.

5.4   Language universals as facilitators - traces in RC's

The "generalizations" mentioned above by Rutherford can be
related to those generalizations which emerged from the
studies by Eckman et al. They also bear some relation to the
evidence of UG accessibility in the paper by Bley-Vroman et
al.

To turn to the first of these contributions, involving the RC
Accessibility Hierarchy, it is interesting to note that the IL
speaker may quite frequently leave pronominal traces in RC's.
This appears to match relativization positions hierarchically,
so that a trace or retention implies traces at all positions
lower in the AH, but not necessarily in higher positions. Gass
and Ard (1984), in addition to categorising RC construction
both hierarchically and cross-linguistically, also denote the
fact that pronominal retention in, for instance, Arabic and
Persian applies "downward" from the IO position (the DO
position has optional retention).

It is not a fault of the learner that traces are retained - it
is in fact an extremely useful procedure which is vital in
relativizing at lower AH positions. In more complex RC's it is
even more common in the IL of L2 English speakers (English
ordinarily leaves no pronominal traces). When the element to
be relativized is deeply embedded it is more difficult for
many IL speakers to discard traces. The following might

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therefore be a learner utterance (determining formation provided first):

    a)   a man [I think [that a man can help you]]

    b)   a man who(m) I think ∅ can help you

When the support of redundant elements is no longer needed to the same extent, IL can be said to be progressing, phasing out difficulties through generalizations within a framework of markedness relations.

5.5   UG constraints

Researchers have begun (e.g. Belasco 1985, in Rutherford 1987) to consider the value of UG constraints in pedagogy and L2 acquisition, although the question of precisely how to develop such initial interest is clearly a demanding one. As more attention is paid to features such as the possible universal accessibility to WH-movement described in Chapter Four, more indications may emerge as to how various findings can be reflected in, say, teaching Koreans, Japanese and other learners who lack syntactic WH-movement. This is not the place to expand on postulations, as the area remains relatively unexplored. Nevertheless, we can close with a few general pointers as to where learning and pedagogical advances may be made through an awareness of UG-IL.

5.6   A future role in ELT

Much of the theory and many of the findings we have reviewed
have certain implications for language learning and pedagogy.
A cross-sectional survey of published ELT materials today
would not reflect much of the relationship which can be seen
to exist between IL and language universals. IL itself also
requires more recognition as a highly autonomous natural
language or, failing this, an understanding that IL has as
much integrity as any other language. This is not to say that
practitioners are not already aware of this. Indeed, the
cumulative teachers' knowledge of classroom IL no doubt far
exceeds that of the IL researchers. SLA research has become
increasingly accessible to teachers and materials developers
over the last decade or so. Future trends may also reflect an
awareness of the possible effects of language universals on
the production and strategies of learners.

5.6.1   Testing and IL

It is interesting to note that, in connection with their
findings on WH-movement, Bley-Vroman et al noted that there
was "no significant correlation" with the TOEFL test, which
suggests that it does not test features or items on the
conscious basis of links with language universals. It is,
admittedly, a lengthy process to begin absorbing research

findings and reflecting them in test design. Nevertheless, this does happen, as is observable with changes in the Cambridge Certificates. As testing incorporates more of a response to communicative needs, it also needs to respond to the increasing awareness of the nature of IL.

5.6.2 IL-UG and English for Specific Purposes

ESP is an appropriate area to explore the effects of language universals in learner language for at least two practical reasons:

1) Small group possibilities

Much ESP is in small groups or on a pair or individual basis. In relation to our previous consideration of language universals and consciousness-raising, there are many opportunities to concentrate more on the progress of individuals, checking their own perception of their language needs, tempering these at times to increase confidence, then considering how, for instance, principles of markedness may be introduced into the teaching methodology.

2) Materials and syllabuses

The high motivation of many ESP learners means that there is possibly greater scope to consider ways of incorporating into materials development insights into IL-UG/language universals. A lot of good material is presently being published in the field, including course books and supplementary materials which take into account current developments in SLA and

cognitive/problem-solving approaches. A concern with
universals cannot claim to provide a "correct" structural
order. Indeed, there would not appear to be one, as White
(1985b) points out in a critique of the morpheme studies:

> The finding of universal morpheme acquisition
> orders...does not help us to determine aspects
> of the acquisition of syntax, nor do they seem
> to fall out from any theory as to what the
> universals might be (in Rutherford 1987: 31-32)

Even so, an awareness of, for instance, markedness and
hierarchies of accessibility could influence the presentation
of various structural points and word sets in the context of
the learner's environment. This may eventually be reflected in
both materials and syllabus design. The learning conditions in
ESP may be very conducive to introducing methodology
influenced by findings in the IL-UG area.

CONCLUSION

The vast majority of second language learners do not attain TL competence which can truly be equated to native speaker levels. This seems to indicate that L1 and L2 acquisition processes are quite different. Nevertheless, learners would appear to activate a pre-existing mental structure of some kind. The studies reviewed in the preceding chapters offer some evidence to support the claim that adults, in developing L2 competence, have a type of access to UG knowledge. The involvement of theory-driven and data-driven explanations of language universals in the markedness principle combine with findings in RC-accessibility studies to pinpoint markedness in language as a promising area for further research. The possibility of UG constraints operating cross-linguistically and the principle that the re-setting of UG parameters could be achieved by the provision of triggering evidence also merit further examination and development. In moving from the applied to the actual, basic suggestions were made for an involvement of the UG-IL field in ELT. If practitioners in adult foreign language instruction are moving towards better-defined roles as facilitators, it would seem consistent that any facilitating capacity of language universals in the IL of learners be held in sight.

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