

לו של הגל קור:
תו – שאבוא אני



ז בראשו, וקהניו ז
זח, אמן אמן סלה"

GRAMMAR IN THE CLASSROOM THE CASE OF ISRAELI HEBREW

Shmuel Bolozky

University of Massachusetts/Amherst

MOST TEACHERS of a foreign language (FL) recognize that there is little correlation between the structures taught or drills performed in class and what is actually acquired by the student. Regardless of how many times one may teach and drill a particular grammatical structure, the average student's performance will not improve in direct relationship to the degree of instruction. Clearly, one should not conclude from this state of affairs that instruction must be totally excluded from second-language learning; claims that it is irrelevant appear to have been based on measurement or testing that is not methodologically sound (Doughty 1991). However, the inefficiency of drilling grammar leads most instructors and textbook authors to believe that texts introduced in class should not be restricted to the structure one wishes the students to acquire. Rather, one should select texts representing real-life situations, aimed at specific types of proficiency, in which the structures that need acquiring are included, but not in a disproportionate ratio to their share in normal, natural discourse. The assumption is that, given sufficient comprehensible input (e.g., Krashen 1985), most FL structure can be acquired inductively.

One may argue for minimizing grammar instruction in an *ulpan*¹-type, immersion environment, while concentrating on comprehensible input. Saturation, particularly with reinforcement from the linguistic environment

1. An *ulpan* is an intensive Hebrew school in Israel, designed for new immigrants.

outside the classroom, is very likely to be effective in such circumstances, even when direct instruction of grammar is minimized. However, avoidance of grammar instruction can hardly be realistic in FL instruction in the United States, given the limited exposure the typical American student has to the FL taught. Furthermore, students' individual capabilities and inclinations vary, and some find (or at least claim) that they learn FL best by acquiring its grammatical rules directly. So a certain degree of direct teaching of grammar is unavoidable. The question is how to do it most economically and most effectively.

1. *Principles Determining the Desirability of Direct Instruction of Grammar*

Pica (1985) and others have demonstrated that, for English as a second language, classroom instruction can accelerate acquisition of linguistically simple morphology, such as plural *-s*, but retard the learning of the linguistically more complex progressive *-ing*. Instruction of rules followed by deductive usage is straightforward when dealing with simple structures, whereas direct teaching of complex grammatical rules is tedious, confusing, and inefficient. It is more efficient for students to acquire complex structures by induction from the output. For teaching Hebrew as FL, Bolozky (1995, 1989) similarly argues for direct instruction of simple grammatical rules. Bolozky suggests that a grammatical rule may be taught when it applies widely, and that instruction of grammatical rules may be beneficial when regularities are formulated not in terms of underlying structure, but rather by means of transparent surface generalizations, even if such generalizations do not reflect natural linguistic phenomena. One may also consider teaching simple didactic tools that may not reflect actual linguistic processes, but are, nevertheless, based on some linguistic principles as a means to achieve instructional goals. Bolozky (1986) also argues that the benefits of grammar instruction may be considered when linguistic phenomena in the target language have (simple) parallels in the first language, and pointing to the similarity (or difference) may help in acquiring and internalizing such phenomena.

Although each of the principles involved can be motivated on its own, there is still the question of whether notions such as "rule complexity," "transparency," and "rule scope" can be more specifically defined, and whether it is possible to quantify them. Furthermore, one needs to ask whether first- and /or second-language acquisition can throw any light on the issue of "grammar in the FL classroom," and to consider the differences between processing or comprehending a grammatical structure in FL, and its role in production.

Learning FL is quite different from first- or even second-language acquisition in many respects. First-language acquisition involves children, with their innate capacity to acquire readily any language within the window of opportunity naturally available to them. That inborn capability is so powerful, that even with limited input, children can extract language structure and constantly modify it without requiring much feedback and correction. What is typically referred to as “second-language acquisition” also often involves children and, even if adults are concerned, the exposure to the second language is considerable and consistent. On the other hand, learners of FL are usually adults and their exposure to the target language tends to be minimal. That they are adults obviously means that the window of opportunity for first-language acquisition type is long gone. At the same time, however, it also means that the learners are at a mature cognitive stage, which may enable them to process structures children find difficult. Perhaps the most important difference is that first-language acquisition, and often second-language acquisition, is triggered by natural-language input, whereas in the FL classroom the input is not only limited, but is also arbitrarily imposed by the teacher. Consequently, it is questionable whether one may even consider a “natural” order of acquisition of FL structure, since introduction of FL structures is more dependent on teacher judgment than on what could potentially constitute a natural sequence of acquisition for the student.

This does not mean that there are no similarities between first/second-language acquisition and that of FL. There do exist some parallels, occasionally even in the acquisition order itself. Clark’s (1980, 1993) “simplicity principle,” for instance, would account for Hebrew-speaking children often adding the plural suffixes *+im* and *+ot* without modifying the stem and regardless of normative gender, as in:

- [1] *kapitim* “teaspoons” (cf. normative *kapiyot* < *kapit* “teaspoon”)
simlot “dresses” (cf. *smalot* < *simla* “dress”)²

or having all future *pa^cal* forms with the stem-vowel *o*, in analogy with the majority of *pa^cal* future forms:

- [2] *yilboš* “he will wear” (cf. normative *yilbaš*)
yilmod “he will study” (cf. normative *yilmad*)

(see Berman 1986). Later, children learn to adapt and modify these over-generalizations to conform to normative usage, identifying classes of excep-

2. *Simlot* is acceptable only in the construct state.

tions as well as idiosyncratic exceptions that must be memorized individually. Simplicity-motivated over-generalizations also can be documented for beginning learners of Hebrew as FL, in forms like *yilboš* and *yilmod*,³ as well as in:

- [3] *hanutim* “stores” (cf. normative *hanuyot* < *hanut* “store”)
šudentot “students”(f.) (cf. normative *šudentiyot* < *šudentit*
 “student”(f.))

This suggests that simplicity may be just as important in FL acquisition. But there is a basic difference. It does not take long before children modify their over-generalizations, since they are constantly exposed to given forms of words in certain linguistic and/or pragmatic contexts, and thus readily acquire “familiarity with how classes of items pattern in a certain way on the basis of phonological, morphological or word-class, or semantic types of commonalities” (Berman 1986: 360). On the other hand, since the exposure of students of Hebrew as FL to Hebrew input is very limited, over-generalized forms may be irreparably internalized. So should we teach students of FL simplified rules that capture broad regularities, but will later be contradicted by exceptions and classes of exceptions? To circumvent the problem, texts could be introduced that do not contain exceptions, but those would not be natural, authentic texts, and as such would constitute bad models.

The fact that the principle of simplicity is at work in FL learning, as it is in first- and second-language acquisition, does not automatically guarantee its effectiveness as a teaching tool. It may be argued, for instance, that methodologically, it would be better to start with more complex structures, assuming that the capability to process related simpler ones would follow as an automatic corollary. Some research has shown that a proven accessibility hierarchy that is based on markedness may contribute to more efficient teaching of a second language. That is, if we know that a marked structure (or category) is less accessible than a related one, teaching the marked structure first may facilitate the learning of the related simpler, unmarked structure, in a sense providing it free. Keenan and Comrie’s (1977) “noun phrase accessibility hierarchy” posits a scale of relative-clause antecedents, from subject (least marked) to genitives or objects of comparison (most marked). Second-language researchers, such as Eckman et al. (1988), Gass (1979, 1982), and

3. Note that even non-native linguists can over-generalize here. Chomsky and Halle (1968: 356) quote *yilmod* as a prototype for the unmarked stem vowel of the imperfect. In Biblical Hebrew *yilmod* is marginally attested, but should be the last verb to use as a prototype.

Doughty (1991) claim that generalization of learning tends to occur in the direction of the less marked structure: teaching the more marked structures (e.g., relative clauses in which the antecedent is genitive) automatically improves the student's performance on the unmarked ones (e.g., relative clauses in which the antecedent is subject). But it is unlikely that similar procedures would benefit teaching of FL, because the learning circumstances and intermediate goals are different. If the learner is saturated with input, communication is achieved even when that input is complex. However, should the exposure to FL input be minimal, proficiency in the language and communication capability could take very long to establish if the initial input is complex. By resorting to simple inputs and simple instructional devices, minimal communication capability can be established right from the start, enabling the student to conduct simple conversations about himself, read, write, and understand simple texts, building up immediate self-confidence and realizing that he may, indeed, be able to reach a level of functioning in the target language. Overshooting with complex texts and structures is liable to destroy self-confidence and belief in one's capability to ultimately function in the language learned.

This all-important goal of building up self-confidence is also affected by negative feedback. Experienced instructors of FLs take care not to over-correct student oral errors, so as not to shake student confidence and retard whatever fluency has already been attained. Correction is exercised in measure; it is more appropriate in written work, where fluency is not as relevant. Even in writing, it is preferable to correct indirectly, hinting at how the student can correct on his own, by rewriting. There should be less effort to correct errors in reading and in listening comprehension, where fluency is also less of an issue. Comprehension versus production is also relevant to the question of direct instruction of simple grammatical rules, for a number of reasons. Whereas production starts from scratch, comprehension uses a good model, and there are facilitating contextual and grammatical clues. Also, as will be shown below, generalizations based on surface observations are often simple and straightforward; their production counterparts tend to be more complex. It is thus usually more efficient to teach surface generalizations for comprehension than it is to state production rules. And as noted above, to reduce the detrimental effect on fluency and self-confidence, correcting production errors involving generalizations that have been taught, particularly in oral production, should be minimized. Bolozky (1987, 1989) discusses one type of production error in detail. He asserts, in particular, that one should

avoid correcting oral production errors that are also found in Israeli speech, owing to their naturalness, in possessive sentences, such as:

- [4] *haya lo be^cayot* “he had problems”
there was (m.s.) to him problems (f.pl.)

cf. normative:

hayu lo be^cayot
there were to him problems

haya lo ḥaverim “he had friends” (m.pl.) vs. normative *hayu lo ḥaverim*

in demonstrative pronoun agreement, as in:

- [5] *ze ʔiša* “that’s a woman” vs. normative *zot ʔiša*

or in numeral gender agreement, as in:

- [6] *ševa^c šeqel* “seven(f.) shekels(m.)” vs. normative *šiv^ca šqalim*
“seven(m.) shekels(m.)”

so that student fluency and confidence can be maintained. Cataphoric reference of the *haya lo be^cayot* type is marked, and is normally avoided even in Biblical Hebrew. Gender agreement in numerals is marked as well (at least beginning with the number “3”), and the neutralization of the suffixed with the unsuffixed one in colloquial Hebrew is expected (see also Bolozky and Haydar 1986).

Thus, the special circumstances and needs of FL support the suggestion in Pica (1985) and in Bolozky (1989, 1995) that direct teaching of grammatical generalizations (and even invented didactic tools) be restricted to ones that are simple and transparent, and that such generalizations be ranked by scope and by the likelihood of their being contradicted by exceptions. Otherwise, grammatical structures should be introduced by induction from ample illustration through natural authentic input. The proposal made here is that the primary evaluation measure for simplicity/opacity/saliency be the number of steps involved in the presentation of a grammatical structure or generalization. Evaluation by number of steps also enables one to account for processing of FL structure being easier than its production, and could suggest different treatments of structure for didactic purposes, depending on whether production or processing is involved. It should be emphasized, however, that the teaching of structure is dictated by its occurrence in authentic natural texts, regardless of how complex the structure might be. If it happens that the sequence of introduction in FL corresponds to the order of first-language acquisition, we may regard it as supporting evidence for the naturalness of that

order, but first-language acquisition does not have direct implication for the FL situation *per se*, nor does relative simplicity. Simplicity as used here has relevance only to the question of whether to teach through deduction or induction, and merely suggests where the shorter deductive route may be taken when the opportunity arises—nothing more. It does not necessarily dictate order of presentation, for instance. If complex structures occur in the authentic input used at an early instructional stage, they will not be removed. They may or may not be referred to, but the generalizations involved will not be taught directly, owing to their complexity. In time, they will be arrived at by induction. Below are a few illustrations, some of which are taken from Bolozky (1995).

2. *Some Cases in which Direct Instruction of Grammar/Structure May Be Considered*

2.1. *Adverbs*

Adverbs are not subject to any gender or number agreement (i.e., are invariable):

- [7] *ˈoved / ˈovédet / ˈovdim / ˈovdot qaše* “work (any person/number/
gender) hard”
work, m.s./f.s./m.pl./f.pl. hard

This is a one-step generalization, with no exceptions regardless of whether processing or production is involved.

2.2. *Nouns Ending in +a*

Nouns ending in *+a* are feminine. This is also a one-step generalization. The only exception students may encounter is *láyla ʔov* “good night.”⁴ A related observation: gender marking is always regular in adjectives, even when the noun itself is marked irregularly—thus, a rule of thumb: adjectives reveal the “true” gender of a noun, and if the student is familiar with a noun phrase like *láyla ʔov*, it reveals the gender of the head noun.

Note that the generalization is that nouns ending with *+a* are feminine, not that feminine gender is marked by *+a*, since there are other feminine endings, such as *+it*, *+et*, and *+ut*, and numerous feminine nouns that are not marked by any suffix. Thus, while for processing or comprehension, only one step is

4. For instance, *ʃulya ʔaruž* “diligent apprentice,” belongs to a higher register than what students are likely to encounter.

involved, production may involve more, since to form a feminine noun-adjective NP, for instance, the learner must use the lexicon to determine the proper feminine suffix for that noun (null suffix included). The same applies to characterizing feminine marking in the verb system. In the present tense, for instance, *+et* marks a verb form as feminine, but in production there are other realizations: the *+at* variant of the gutturals and the *+a* of roots with a middle glide and of those with a final *yod*.

2.3. Unmarked Plural Suffixation

The generalization that the plural of the masculine is marked by *+im* and that of the feminine by *+ot* is perfect for the present tense paradigms in the verb system, where it has no exceptions: *kotvim* “write” (m.pl.) / *kotvot* “write” (f.pl.), *medabrim* “speak” (m.pl.) / *medabrot* “speak” (f.pl.), etc. It is obviously somewhat problematic in the noun system, owing to the numerous exceptions. *+im* is less of a problem; of the frequent words these students may encounter, there are only a handful of exceptions in which *+im* marks a feminine noun:

[8]	F.S.	GLOSS	PL.	F.S.	GLOSS	PL.
	ʔiša	woman	našim	mila	word	milim
	šana	year	šanim	pá ^c am	(one) time	pe ^c amim
	beza	egg	bezim	ir	town, city	arim

However, there are many more common masculine nouns that are marked for plural by *+ot*; such as:

[9]	M.S.	GLOSS	PL.	M.S.	GLOSS	PL.
	šulhan	table	šulhanot	kise	chair	kis ^o t
	halon	window	halonot	aron	cupboard	aronot
	qir	wall	qir ^o t	rehov	street	rehovot
	maqom	place	meqomot	av/áva	father	avot
	iparon	pencil	efronot	šavua ^c	week	šavu ^c ot
	maḥaze	play	maḥazot	ruah	wind; spirit	ruh ^o t
	luah	board	luhot	maqel	stick	maqlot
	halom	dream	halomot	malon	hotel	melonot
	or	light	orot	bor	hole	borot

For these exceptions, identifying the correct gender involves at least two steps. In forms such as

[10]	SING.	GLOSS	ADJ.	GLOSS	PLURAL NP	GLOSS
	<i>šulḥan</i>	table	<i>ḥum</i>	brown	<i>šulḥanot ḥumim</i>	brown tables
	<i>ʔor</i>	light	<i>ḥazaq</i>	strong	<i>ʔorot ḥazaqim</i>	strong lights

linear processing identifies the gender of the noun as feminine on the basis of the *ot*-suffix. When the following adjective suffix is *+im*, the gender identification is corrected to masculine. This in itself consists of two steps. The process involves an additional small step when vowel reduction is involved, since the singular noun form and/or the singular adjective form need to be identified in sequences like *meqomot reḥoqim* “distant places”:

[11]	SING.	GLOSS	ADJ.	GLOSS	PLURAL NP	GLOSS
	<i>maqom</i>	place	<i>raḥoq</i>	distant	<i>meqomot reḥoqim</i>	distant places
	<i>maqel</i>	stick	<i>kaved</i>	heavy	<i>maqlot kvedim</i>	heavy sticks

Admittedly, reconstruction from the reduced form is easy, but in cases of suppletion, the singular base may become quite opaque and difficult to identify:

[12]	SING.	GLOSS	ADJ.	GLOSS	PLURAL NP	GLOSS
	<i>ʔiša</i>	woman	<i>qatan</i>	little	<i>našim qatanot</i>	little women
	<i>ʕir</i>	town, city	<i>gadol</i>	big	<i>ʕarim gdolot</i>	big cities

Despite the relative complexity caused by exceptions to the *+im/+ot* generalization, it is still worth teaching directly, particularly owing to its very wide scope, which, as noted above, also covers all plural forms of the present tense paradigms in the verb system. For the majority of items, this is still a one-step rule. The exceptions in the noun system need to be memorized and, at least insofar as *+im* is concerned, seldom does the average student need to internalize more than the above list of exceptions. It is not clear whether it is worth bothering to define subclasses of exceptions with *+ot* so as to enable the student to predict at least some of them. For instance, many of the nouns ending with *+e* that are derived from a root with a final *yod*:

[13]	<i>maḥaze</i>	“play”	>	<i>maḥazot</i>
	<i>maḥane</i>	“camp”	>	<i>maḥanot</i>
	<i>ma^cale</i>	“uphill incline”	>	<i>ma^calot</i>
	but note <i>ma^case</i>	>	<i>ma^casim</i> .	

2.4. *Derived Adjectives Ending in +i*

In the adjective realm there is a clear case in which first-language acquisition order, or what a child might find to be complex, should not affect our decision as to whether to teach a particular morphological generalization directly. Adjectives derived by appending the *i*-suffix to nouns, the so-called *nisba*-type adjectives,⁵ are acquired quite late by Hebrew-speaking children, who master the passive participial resultative adjectives (*meCuCaC*, *CaCuC*, *muCCaC*) earlier, in spite of their greater morphological complexity. *Nisba*-type adjectives usually belong to a higher register, and apparently involve a higher degree of abstraction. There are good reasons, however, for early teaching of *i*-affixation to learners of Hebrew as FL. Although the most commonly used adjectives are not of the *nisba*-type, enough of them would occur in natural basic texts to justify introduction of the simple, one-step suffixation of *+i* to almost any type of base. Bolozky (1999) shows that in the noun/adjective system, *i*-suffixation is the most productive derivation device. If the target meaning involves a verb, *meCuCaC* is more productive, but in the noun/adjective system as a whole *i*-suffixation has no equal in productivity. Learners are quite likely to encounter *+i* that is appended to gentilic nouns (e.g., *ʔameriqáʔi* “American,” *yisreʔeli* “Israeli,” *ʔangli* “English,” *germani* “German”) quite early in their study and across many others as their learning progresses. For adults with developed cognitive capability *+i*-adjectives are very easy to learn: it is the most general device characterizing the quality of the base to which it is appended, and the suffix is prominent and clearly identifiable. Although *i*-suffixation is neither automatic nor totally predictable, semantically the end result is fairly predictable, and the linear derivation is simple, even when concomitant reduction is involved (as in *maqom* “place” > *meqomi* “local”).

2.5. *The Construct State and Abstract Nominalizations*

There are two other types of structures that are acquired late by children, owing to their relative complexity and (often) relatively high register: the construct state⁶ and abstract nominalization patterns of verbs. The construct state involves changes in the structure of the first nominal component, as in:

5. *Nisba* is a term from Arabic that refers to adjectives formed by *+i* suffixation for “minimal” attribution, generally denoting “having the characteristic of...” the base to which the suffix has been appended.

6. This is generally true of the construct state, but not necessarily. The construct

- [14] *ḥaverim šel/be kibuẓ > ḥavrey kibuẓ* “kibbutz members”
 members of/in kibbutz
ḥa-ʔiša šel ha-nasi > ʔéšet hanasi “the president’s wife”
 the-wife of the-president

Conceptually, the analytical alternative of having a preposition such as *šel* “of” between the two nouns makes the relationship between the two nouns much more transparent. Although the construct state does not necessarily present a problem for mature FL learners, it is not sufficiently simple to merit direct instruction. Exposure to a sufficient number of cases in natural texts and inductive learning may prove to be more effective. The relationship between abstract nominalizations and their related base verbs is also somewhat opaque. There is little point in actually deriving the nominalization *CCiCa* from its verbal base *CaCaC*, for instance, although it is possible to simply state that the two patterns are related and describe the nature of the relationship. Even then, one should be careful, since the relationship is not automatic. One obviously cannot always predict actual occurrence nor guarantee that the noun would be a proper gerund-type. Often, the nominalization would have a gerundive meaning, as well as a more specific, unpredictable one that is much more common, as in:

- [15] *CCiCa* *yašav* “sit” ~ *yešiva* “sitting; session; Yeshiva”
 yaẓa “come out” ~ *yeẓiʔa* “coming out; exit”
 qana “buy” ~ *qniya* “buying; purchase”
- CiCuC* *diber* “speak” ~ *dibur* “speaking; speech; utterance”
 ṭipel “take care, treat” ~ *ṭipul* “taking care, treating; treatment”
 ṭiyel “take trip, walk around” ~ *ṭiyul* “taking a trip, walking around; a trip, a walk”
- haCCaCa* *hisbir* “explain” ~ *hasbara* “explaining; propaganda”
 hikhtiv “dictate” ~ *hakhtava* “dictating; a dictation”
 hikhnis “let in” ~ *hakhnasa* “letting in; income”

state is common in fused compounds such as *beyt sefer* “school (= house of book),” as well as in common collocations with heads such as *ḥavrey...* “members of...,” *naʿaley...* “shoes of...”

Methodical introduction of such nominalization patterns might be effective at advanced levels, but at lower levels learning particular cases individually would be more effective.

Nominalizations ending with *+ut* would be better candidates for direct instruction. Although such patterns are also acquired late by children—as all nominalizations are—they have the advantage of a salient *+ut* suffix, as well as a reasonably transparent morpho-phonological relationship with the verb. Normally (see Bolozky 1999) *+ut* is a productive marker of abstract nouns in forms that are not verb-related; children already use non-verb-related *+ut* productively at the age of four (Berman and Sagi 1981):

- [16] *zmiʔut* “thirst” (< *zame* “thirsty”)
mazʕut “sweating (N)” (< *mazíaʕ* “sweating”)
keʕevut “being in pain” (< *keʕev* “pain”)
raʕut “wickedness” (< *raʕ* “bad, wicked”)
qosmut “magic” (< *qosem* “magician”)

When the *+ut* form is derived from a verb, *CiCuC* is a serious competitor of *+ut*, particularly when there are reasons to assume a relationship to *piʕel*. But *+ut* gerunds related to other verb bases are reasonably productive. In some of the patterns concerned *+ut* nominalization is a one-step process, as in:

- [17] Nominalizations ending with *+ut*, no change in the stem
- | | | | |
|-------------------|-----------------------------|---|------------------|
| <i>niCCaCut:</i> | <i>nifqad</i> “(be) absent” | > | <i>nifqadut</i> |
| | <i>nivʕar</i> “ignorant” | > | <i>nivʕarut</i> |
| <i>meCuCaCut:</i> | <i>mehuyav</i> “obliged” | > | <i>mehuyavut</i> |
| | <i>meyutar</i> “redundant” | > | <i>meyutarut</i> |
| <i>maCCiCut:</i> | <i>mazkir</i> “secretary” | > | <i>mazkirut</i> |
| | <i>manhig</i> “leader” | > | <i>manhigut</i> |
| <i>muCCaCut:</i> | <i>mugbal</i> “restricted” | > | <i>mugbalut</i> |
| | <i>mufraʕ</i> “disturbed” | > | <i>mufraʕut</i> |

In others, vowel deletion is involved, resulting in a two-step process:

- [18] Nominalizations ending with *+ut*, a stem vowel is deleted
- | | | | |
|-------------------|----------------------------------|---|---|
| <i>hitCaCCut:</i> | <i>hitqadem</i> “advance” | > | <i>hitqadmut</i> “advancing; progress” |
| | <i>hitnageš</i> “collide” | > | <i>hitnagšut</i> “colliding; collision” |
| <i>hiCaCCut:</i> | <i>(le)hikanes</i> “enter” | > | <i>hikansut</i> |
| | <i>(le)hitaqel</i> “bump (into)” | > | <i>hitaqlut</i> |
| <i>CoCCut:</i> | <i>honekh</i> “trainer” | > | <i>honkhut</i> |
| | <i>hoveš</i> “dress wound” | > | <i>hovšut</i> |

meCaCCut: *meyaled* “obstetrician” > *meyaldut*
mefaqed “commander” > *mefaqdut*⁷

Again the more specific, unpredictable meaning may overshadow the gerundive one, and many occurrences belong to a relatively high register. So direct instruction of verb-related *+ut* gerunds is a possibility, but should still be considered with caution.

2.6. Generalizations Involving Cataphora

Generalizations involving cataphora are always more complex than ones involving anaphora, since, in linear processing, cataphora requires a two-step process. Once the linearly farther referent is identified, the learner has to go back and reinterpret the pronoun, as in the possessive sentence (*hayu lo be^cayot* “There were to him problems” = “He had problems”) or demonstrative pronoun agreement (*zot ^ʔiša* “This(f.) is a woman”) noted in Section 1 above, and in other possessive structures like:

- [19] *ʔišt-o šel ha-nasi*
 wife-his of the-president
 “the president’s wife” ~ *ʔéšet hanasi* ~ *ha^ʔiša šel hanasi*
maskurt-am šel ha-sarim
 salary-their of the-ministers
 “the ministers’ salary” ~ *maskóret hasarim* ~ *hamaskóret šel hasarim*

Such possessive structures are at least as complex as their construct state variants, *ʔéšet hanasi* “the president’s wife” and *maskóret hasarim* “the ministers’ salaries,” respectively. It is thus doubtful that it would be advantageous to teach them directly.

2.7. The Future Stem Vowel in *pa^cal*

In the *pa^cal* verb pattern, the future stem vowel is *a* if the second or third radical of the root is guttural:

- [20] *tíš^ʔal* “you will ask” *tinhaq* “you will drive”
 /*tíš^{ma^c}/ > *tíš^{ma}* “you will hear” *tíš^{laḥ}* “you will send”*

A limited number of *a*-verbs (including some stative verbs that are too few to characterize as a separate group) will have to be memorized as such:

7. All *meCaCCut* items are considerably less natural than all other *+ut* nominalizations.

- [21] *tilmad* “you will learn”
tiškav “you will lie (down)”
tirkav “you will ride”
tiqtan “you will be/become small”
tigdal “you will be/become big, you will grow”

Otherwise, the future stem vowel is *o*, which accounts for the majority of *pa^cal* verbs. Essentially, we have two one-step generalizations, which definitely merit direct instruction. The desirability of identifying and teaching additional subgroups would depend on student level and teacher judgment. Such additional subgroups include: *e* for most cases in which the first or last radical is γ , as in *tešev* “you will sit” and *tiqne* “you will buy,” respectively; *u* for bi-radical roots such as *taqum* “you will get up” (*i*-cases like *tasim* “you will put” are too few to justify direct instruction).

2.8. Regularities Involving Spirantization

The spirantization rule (*beḡed keḡet*), if it is to be taught at all, should be introduced on the basis of surface distribution rather than as a pseudo-phonetic process attempting to recreate the historical alternation. Originally, the stops *p, t, k, b, d, g* simply became fricative after a vowel (i.e., $f, \theta, x, v, \zeta, \phi, \gamma$, respectively)—an assimilation of continuity from the vowel that was blocked only by gemination (the doubling marked by a *dageš forte*). In Israeli Hebrew, however, the process has lost most of its productivity, owing to considerable opacity caused by phoneme merger and loss, loss of gemination, etc. All one can do—if one chooses to do so—is speak of frequency of fricatives in certain (surface) environments that can be characterized by one-step generalizations, as at the end of the word:

[22]	SING.	PLURAL	GLOSS	SING.	PLURAL	GLOSS
	<i>rav</i>	<i>rabim</i>	much, numerous	<i>ʔarokh</i>	<i>ʔarukim</i>	long
	<i>kaf</i>	<i>kapot</i>	tablespoon	<i>zʔahov</i>	<i>zʔehubim</i>	yellow
	<i>rakh</i>	<i>rakim</i>	soft	<i>ʕezev</i>	<i>ʕazabim</i>	nerve

in the second segment of an initial consonant cluster:

- [23] *švira* “breaking” *šfira* “counting” *škhuna* “neighborhood”

after a prefix ending with a vowel (with some classes of exceptions, e.g., the future/imperative of *nif^ʕal*: *yibane* “will be built”):

[23]	PAST	GLOSS	FUTURE		PAST	GLOSS	FUTURE
	<i>baraḥ</i>	run	<i>yivraḥ</i>		<i>pataḥ</i>	open	<i>yiftaḥ</i>
	<i>katav</i>	write	<i>yikhtov</i>		<i>biqueš</i>	request	<i>yevaqaš</i>
	<i>piṭer</i>	fire	<i>yefaṭer</i>		<i>kibes</i>	laundry	<i>yekhaves</i>

and in certain *mišqal* configurations, for instance, the second consonant in *CiCCon+ot*, the plural of *CiCaC+on*, as in:

[24]	SING.	PLURAL	GLOSS
	<i>zikaron</i>	<i>zikhronot</i>	memory, mémoire
	<i>‘iparon</i>	<i>‘efronot</i>	pencil

Even in these environments there are a good number of exceptions, but most are characteristic of the casual or substandard register.

2.9. The et Rule

Another option can be considered. For the typical American student who has never been taught basic concepts such as “definite” or “direct object,” one might introduce a generalization involving a simpler surface observation regarding et : “insert et after a verb and before either a noun with $\#ha+$ ‘the’ or a proper noun.”

2.10. Economical Representation of Vowel Marks when Needed

The next case concerns orthography. Bolozky (1990, 1995) proposes a simplified didactic tool that, though not capturing a particular linguistic structure, is, nevertheless, based upon linguistic principles. At the initial stages of instruction—and at any later stage in the dictionary/glossary component—one can use partial vowel marking in which *plene*-writing is used for any *i* (*yod*), *o* (*vav*), or *u* (*šuruq*).⁸ *Segol* and *zere* are still marked to designate *e*, but any unmarked non-final consonant is interpreted as a transition to the vowel *a*, and a *šva* as the absence of a vowel. If it is difficult to pronounce a consonant cluster with *šva*, it will be realized as *e* (the minimal vowel of Israeli Hebrew). The proposal is based on the observation that *a* is the unmarked vowel of Hebrew and constitutes at least one-third of all vowel realizations in Israeli Hebrew. This proposal entails a number of advantages, primary of which is

8. To distinguish *o* from *u*, one can mark the *vav* for either of them. Since *o* is more common, we could mark *u* with the *šuruq* dot, to distinguish it from unmarked *vav*, representing *o*. *Vav* that stands for [v] is relatively rare (except for the conjunction *ve+* “and”); its instances can be memorized individually.

getting beginning students used to the idea that an orthographic non-final consonant usually consists of a consonant-plus-vowel, and that as such there is a good chance that it will be realized as a consonant-plus-*a*, unless it is followed by *yoḏ* or *vav* (the number of syllables with *e* is relatively small). The use of *šva* as the absence of a vowel, i.e., only as a zero, will not only inform the student where to close the syllable or to form a consonant cluster, as in

[26] *katva* “she wrote” *ktivā* “writing” *katavt* “you(f.s.) wrote”

but will also—and this is its main advantage—provide us with the natural pronunciation of the *šva mobile* when required. In Israeli Hebrew one is naturally led to pronounce the orthographic *šva* as a vowel when a consonant cluster is formed that is hard to pronounce because of violations of sonority sequencing.⁹ The vowel *e*, the modern counterpart of the *šva mobile*, splits such clusters:

[27] *yladim* “children” > *yeladim* (cf. *klavim* “dogs”)
mtuqa “sweet” (f.s.) > *metuqa* (cf. *ptuḥa* “open” (f.s.))
lvanim “white” (m.pl.) > *levanim* (cf. *qṭanim* “small” (m.pl.))
nmukhim “short” (m.pl.) > *nemukhin* (cf. *gnuvin* “stolen” (m.pl.))
tʿufa “aviation” > *teʿufa* > *teufa* (cf. *tšuva* “answer.” Although the historical *ʿayin* is not realized, it is useful to regard it as a consonant slot)
tilmdu “you(pl.) will learn” > *tilmedu* (cf. *tiqnu* “you(pl.) will buy”)
meṭalfnim “phone” (V), (m.pl.) > *meṭalfenim* (cf. *medabrim* “speak” (m.pl.))

Note that the instruction to the students to “pronounce an unpronounceable zero *šva* as *e*” is linear, following the progress of reading. Thus, in the case of */tilmdu/*, the first *šva* is read as zero, resulting in *til*. Since the *šva* under the *mem* is unpronounceable as zero, *m* is realized as *me*, just as the *y* in */yladim/* becomes *ye*. All the generalizations the student needs to remember, then, are that the *šva* is zero and that any unmarked, non-final consonant is pronounced *Ca*.

The only disadvantage of this efficient method is the contradiction the student will face when using some standard dictionaries in which the zero *šva*

9. In sonority sequencing within a syllable, consonants rise in sonority from the beginning of the onset toward the nucleus, and decline in sonority from the nucleus to the end of the coda.

is often not represented. The teacher should consider whether the benefits of the proposed system outweigh this shortcoming.

2.11. *The Furtive-Pataḥ Rule*

In the partial vocalization system proposed above, there is no need for any of the symbols for *a*. One of them, however, may be reserved initially for a special use: the *pataḥ*, to signal the *pataḥ gnuva*, the furtive-*pataḥ* rule, simplified so as to facilitate its introduction to the student. It makes no sense to recapture the historical rule, which inserted the low vowel *a* before a word-final guttural (which is also low, like *a*) if that guttural was preceded by a non-low vowel. The rule itself is complex, and if one considers that the low consonants concerned are no longer low, or may not even exist, it would be easier to invent a simple rule of thumb: if you see a *pataḥ* under the last consonant of the word, pronounce it as if it had an ^ʔ*áleph* before it, which would result in an insertion of *a*, as in *rúah* or *noséa*.

3. *Generalizations Involving Comparison to the Learner's Native Language*

The following are generalizations made valuable by pointing to similarities with, or differences from, the learner's native language.

3.1. *Word Order within a Noun Phrase*

The instructor may point out that the Hebrew word-order within a noun phrase (noun–adjective–adverb) is equivalent to the organization of similar noun phrases in English (adverb–adjective–noun), except that it constitutes its mirror image:

[28] *sefer tov me'od* “(a) very good book”
 book good very

3.2. *Some Parallels between Inchoative and Causative Marking in English and Hebrew*

One should also consider the desirability of drawing a parallel between markers of causation and inchoativity (“becoming...”) in Hebrew and their English counterparts, say, for instance, between causation through *binyan* membership (be it *hif'il* or *pi'el*) and English *+ize#* or *+ify#*:

[29] *muḥašî* “concrete” ~ *himḥiš* “concretize”
 yafe “beautiful” ~ *yiḥpa* “beautify”
 šama^c “heard” ~ *hišmía^c* “vocalize”
 pašut “simple” ~ *pišet* “simplify”

and on the other hand, show that there are also cases, as in English, in which causation and inchoativity may be realized in the same surface form, as in some English verbs with the *+en* suffix:

- [30] *hišḥir* “blacken” (tr./int.)
hilbin “whiten” (tr./int.)
hišmin “fatten” (tr./int.)

3.3. *Hebrew Consonant Clusters Occurring in English Fast/Casual Speech*

It is also possible to facilitate the pronunciation of Hebrew clusters that do not occur in English by pointing to their existence in the casual/fast register of English. Thus, for instance, the clusters *pt*, *tm*, or *bn* normally are not allowed as syllabic onsets, and some English-speaking students find it difficult to pronounce them in words such as:

- [31] *ptuḥim* “open” (m.pl.) *tmuna* “picture” *bnay* “sons of”

It might be helpful to point out to them that such clusters do exist in their own English casual/fast speech:

- [32] p[ar]ticular p[o]tato t[o]mato b[i]noculars

3.4. *Strong-Verb Patterns in English as mišqalim*

An insightful illustration in this category is the comparison between discontinuous patterns of root-plus-*mišqal* and the so-called strong-verb patterns in English, which are also discontinuous.

- [33] Discontinuous word formation patterns in the English verb system:
 speak-spoke-spoken, freeze-froze-frozen, steal-stole-stolen,
 weave-wove-woven;
 swim-swam-swum, drink-drank-drunk, shrink-shrank-shrunk,
 sing-sang-sung, sink-sank-sunk, ring-rang-rung, spring-sprang-
 sprung, stink-stank-stunk;
 grow-grew-grown, blow-blew-blown, know-knew-known,
 throw-threw-thrown;
 bind-bound-bound, find-found-found, grind-ground-ground,
 wind-wound-wound;
 drive-drove-driven, write-wrote-written, ride-rode-ridden, rise-
 rose-risen, arise-arose-arisen, strive-strove-striven, smite-
 smote-smitten, bestride-bestride-bestridden;
 take-took-taken, shake-shook-shaken, forsake-forsook-forsaken.

Thus, for instance, in the first group, the discontinuous related *mišqalim* would be $C(C)\bar{i}C-C(C)\bar{o}C-C(C)\bar{o}Cn$, and the roots *spk*, *frz*, *stl*, *wv*. Students can be told that had English contained more patterns of the strong verb type, with many more items realized in each, its morphology would have been closer to (discontinuous) Hebrew word-formation.

Some instructors of Hebrew have doubts regarding the usefulness of comparing aspects of the target language to the native language. They feel that, instead of helping the student, pointing to structural similarity may, in fact, be detrimental. It could either confuse the learner, who is hardly aware of the structure of his own language, or it might legitimize additional, inappropriate dependence on structures from the native language, resulting in the transfer of unwanted, wrong constructions. Neither has happened in my experience, but proper testing—with control groups, in a number of colleges and over a number of years—is certainly called for.

4. Conclusion

The question of whether to teach grammar directly or not does not have a simple yes-or-no answer. It depends on a variety of considerations, such as complexity, scope of application, degree of surface transparency, saliency, methodological usefulness/efficiency, and the existence of parallels in the native language. Most importantly, it should be tailored to the specific audience and the instructional context in general. Some of these notions, particularly simplicity, transparency, saliency, and efficiency may also be quantified according to the number of processing steps necessitated by the proposed rule.

REFERENCES

- Berman, R.A. 1986. *The Acquisition of Hebrew*. Part 3 of *The Cross-linguistic Study of Language Acquisition Vol. 1: The Data*, D.I. Slobin (ed.). Hillsdale: Erlbaum.
- Berman, R.A. and I. Sagi. 1981. *Al darkhey tezurat ha-milim ve-hidušan be-gil za'ir* (Word formation and neologisms at a young age) [Hebrew]. *Hebrew Computational Linguistics* 18: 31–62.
- Bolozky, S. 1986. Awareness of linguistic phenomena in the native language and its implications for learning Hebrew. *Bulletin of Higher Hebrew Education* 1/2: 14–17.
- . 1987. On the teaching of gender in Hebrew numerals and other phenomena simplified in semi-standard native speech. *Bulletin of Higher Hebrew Education* 2/1: 7–11.

- . 1989. Grammar simplification strategies in the teaching of Modern Hebrew and the natural approach. *Bulletin of Higher Hebrew Education* 3:1/2: 15–19.
- . 1990. *Al simun hatnu^cot a ve-e ve^cal simun he^cder tnu^ca baktiv šel ha^civrit haḥadaša* [Hebrew]. *Lashon Ve'Ivrit* 5: 34–37.
- . 1995. Direct instruction of grammatical structure to students of Hebrew as a foreign language. *Bulletin of Higher Hebrew Education* 7/8: 30–38.
- . 1999. *Measuring Productivity in Word Formation: The Case of Israeli Hebrew*. (*Studies in Semitic Languages and Linguistics* 27) Leiden: E. J. Brill.
- Bolozky, S. and A.F. Haydar. 1986. Colloquial gender neutralization in the numeral systems of Modern Hebrew and Lebanese Arabic. *Al-'Arabiyya* 19: 19–28.
- Chomsky, N. and M. Halle. 1968. *The Sound Pattern of English*. New York: Harper and Row.
- Clark, E. 1980. Convention and innovation in acquiring the lexicon. *Papers and Reports on Child Language Development* 19: 1–20.
- . 1993. *The Lexicon in Acquisition*. Cambridge: Cambridge University Press.
- Doughty, C. 1991. Second language instruction does make a difference. *Studies in Second Language Acquisition* 13: 431–69.
- Eckman, F., L. Bell and D. Nelson. 1988. On the generalization of relative clause instruction in the acquisition of English as a second language. *Applied Linguistics* 9: 1–20.
- Gass, S. 1979. Language transfer and universal grammatical relations. *Language Learning* 29: 327–44.
- . 1982. From theory to practice. In M. Hines and W. Rutherford (eds.), *On TESOL '81* (pp.129–39). Washington D.C.: TESOL.
- Keenan, E. and B. Comrie. 1977. Noun phrase accessibility and universal grammar. *Linguistic Inquiry* 8: 63–99.
- Krashen, S.D. 1985. *The Input Hypothesis: Issues and Implications*. London: Longmans.
- Pica, T. 1985. Linguistic simplicity and learnability: Implications for language syllabus design. In K. Hyltenstam and M. Pienemann (eds.), *Modelling and Assessing Second Language Acquisition*. Clevedon: Multilingual Matters.