Since the elections of 1986 in Ohrid the following persons now serve as officers or members of Committees:

**President:** Thomas V. Gamkrelidze, Tbilisi
**Vice-President:** Pavle Ivic, Beograd
**Secretary/Treasurer:** Werner Winter, Kiel
**Editors:**
- **FoL:** Thomas V. Gamkrelidze, Tbilisi
- **FoLH:** Pavle Ivic, Beograd
- **Werner Winter, Kiel**
- **Wolfgang U. Dressler, Wien**
- **Jacek Fisiak, Poznań**

**Executive Committee:**
- Maria-Elisabeth Conte, Pavia
- Svenka Savic, Novi Sad
- Ruta Nagucka, Kraków
- Gilbert Lazard, Paris
- Francisco Marcos Marin, Madrid
- E. F. Konrad Koerner, Ottawa
- Harm Pinkster, Amsterdam

**Publications Committee:**
- József Molnár, Budapest
- Paul Valentin, Paris
- Jacek Fisiak, Poznań
- Martin Harris, Salford
- Irene Philippaki-Warburton, Reading
- Wolfgang U. Dressler, Wien

**Nominating Committee:**
- R. R. K. Hartmann, Exeter
- Georg Bossong, München
- Martti Nyman, Helsinki
- Anna Giacalone Ramat, Pavia
- Martin Harris, Salford

Correspondence concerning membership and other administrative matters should be sent to: Prof. Werner Winter
Olshausenstr. 40—60
D-2300 Kiel
West Germany

**Fees and payment modalities:**
The annual membership dues are DM 35.00; the admission fee is DM 9.00.

Payment should be made not later than 1 March of the year for which membership rights are desired to the following account:
Postal checking account nr. 2428 56-201, Postscheckamt Hamburg (Professor W. Winter, Kiel).

If payment is made in a currency other than German marks, the equivalent of DM 35.00 (or DM 9.00, respectively) should be increased by ten percent to cover conversion charges.

The question of how Hebrew is of interest from interrelated issues of nature of linguistic productivity, or between inflectional morpho-structure. The latter question is of crucial importance — as demonstrated in current Hebrew usage manifested by extreme instance of ‘diglossia’. The prescriptive or official usage manifested by e.g. Nahir 1978; Ravid in a survey of this area, inter alia, in the relations of interlanguage. Modern Hebrew affords a study on both extrinsic and internal structure. This study is of interest — as demonstrated in the present study. Devices that are official in Hebrew Language and grammars recommend...
PRODUCTIVITY IN THE LEXICON:
NEW-WORD FORMATION IN MODERN
HEBREW

RUTH A. BERMAN

1. INTRODUCTION

The question of how new words are constructed in Modern Hebrew is of interest from several perspectives. The topic bears on two interrelated issues of concern to current linguistic theory: the nature of linguistic productivity in general, on the one hand, and the distinction between syntactic and lexical productivity, or between the rules of grammar — including those of inflectional morphology — and the domain of the lexicon, on the other. The latter question is the topic of a separate study, based on data from noun-compounding in Modern Hebrew (Berman & Ravid 1986). Here, our focus is on lexical productivity as manifested in current Hebrew usage, as an extension of prior, related studies of my own and of others (Berman 1982; Berman & Sagi 1981; and especially Clark & Berman 1984). ¹

Modern Hebrew affords a particularly good case for analysis of this issue on both extraneous sociolinguistic grounds and for reasons of internal structure. Thus, the language represents a rather extreme instance of "diglossia" as between the puristic requirements of prescriptive or official norms compared with the actual colloquial usage manifested by native speakers of different levels of education — as demonstrated in field-studies by Donag-Kinrot 1978; Nahir 1978; Ravid in preparation; and Schwarzwald 1981 (and for a survey of this area, see Rabin 1984). This disparity is reflected, inter alia, in the relative acceptability of lexical innovations (Aloni-Feinberg 1974, Nir 1982). One question which will concern us in the present study, then, is the extent to which word-formation devices that are officially sanctioned — by the authority of the Hebrew Language Academy; by usage manuals and prescriptive grammars recommended for the schools; and by accepted lexic-
graphic practice — are reflected in the way speakers in fact construe new words in their language.

A second extraneous factor which makes Hebrew of interest in this connection derives from the peculiar socio-historical circumstances attendant on the revival of Hebrew as a spoken vernacular in the past eighty to a hundred years. There has been an immense spate of new-word formation activity in the language — including the early efforts of Eliezer Ben-Yehuda, David Yellin, and other Hebraists in turn-of-the-century Palestine alongside of more contemporary innovations to cover computer, space-age, and technical terminology in general; current political, economic, cultural, and other media-oriented coinages; as well as slang and similar in-group usages developed among schoolchildren, soldiers, students, and the like.

Finally, in more strictly structural terms, the nature of word-formation is of interest in view of the kind of formal devices available to Hebrew speakers for this purpose. Thus, Hebrew is a relatively synthetic, rather than agglutinating or isolating language, with a complex system of bound morphology and a rich array of lexicalization devices, including the peculiarly Semitic method for forming new words by means of consonantal roots associated with a large, but finite, set of affixal patterns. The main devices serving this function can be ranked in terms of the relative degree of incorporation or separation of different morpho-syntactic constituents, as follows:

(1) Illustration of Major Devices for New-Word Formation in Hebrew

1. Zero-Affixation:  
   [Conversion]  
   menahel V=(he) directs, N=director
   bolet V=protrude, Adj=conspicuous

2. Fused Affixation:  
   [Root + Pattern]  
   nóhal CoCaC = procedure
   biite CCiCa = protuberance

3. External Affixation:  
   [Stem + Affix]  
   nóhal-iy = procedural
   bolt-ut = salience

4. Blending:  
   [Stem + Stem]  
   zrak-or = throwlite = projector
   rávell = traincable = cable-car

5. Compounding:  
   [Word + Word]  
   zorek diskus = discus-thrower
   rávelt taxit = train-under = subway

Against this backdrop Hebrew speakers compared to potential lexico-innovative and conservative speakers of Hebrew subjects aged 20—30 and 10 eleven subjects aged 61—70 years were tested in order to establish the degree of difference in their test results.

The test concerned the real words in Hebrew and potential lexico-innovative and conservative subjects aged 20—30 and 10 eleven subjects aged 61—70 years.

(2) A = Production

Subjects were asked to call a cart and a local place like the real words and potential lexico-innovative and conservative subjects aged 20—30 and 10 eleven subjects aged 61—70 years.

B = Selection

Subjects were asked to call a cart and a local place and to select the words like the real words and potential lexico-innovative and conservative subjects aged 20—30 and 10 eleven subjects aged 61—70 years.

C = Listing of

Subjects were asked to call a cart and a local place and to list the words like the real words and potential lexico-innovative and conservative subjects aged 20—30 and 10 eleven subjects aged 61—70 years.
speakers in fact con-

Hebrew of interest in
scio-historical circum-
as a spoken vernacular
has been an immense
language — including
vid Yellin, and other
ongide of more con-
nee-age, and technical
monic, cultural, and
and similar in-group
iers, students, and
the nature of word-
ontal devices available
brew is a relatively
ing language, with a
rich array of lexic-
tic method for form-
s associated with a
main devices serving
relative degree of
o-syntactic constit-

Word Formation in
directs, \( N = \text{director} \)
, \( \text{Adj}=\text{conspicuous} \)
rocedure
rubrance
lural

te = \text{projector}
ble = \text{cable-car}
ous-thower
in-under = \text{subway}

2. DESCRIPTION OF STUDY

Against this background, we undertook to investigate how native Hebrew speakers construe different classes of nouns in the actual and potential lexicon of their language. We constructed a test of innovative and conventional nouns, administered in writing to 28 native speakers of Hebrew — 18 college students or college-educated subjects aged 20—30, non-experts in linguistics and Hebrew language, and 10 eleventh-graders aged 17—18. There were no appreciable differences between the responses of these two groups, so their results are treated together below.

The test concerned five classes of nouns: (i) \text{Agent nouns} — like the real words \text{menahel} ‘boss, manager’, \text{xazar} ‘janitor’, \text{xudiant} ‘student’ (see n. 2 above); (ii) \text{Instrument nouns} — e.g. \text{misparayim} ‘scissors’, \text{iperon} ‘pencil’, \text{mazon-ktiva} ‘writing-machine = typewriter’; (iii) \text{Place nouns} — like \text{mis'ada} ‘restaurant’, \text{zadar-sheyma} ‘bedroom’; (iv) \text{Collective nouns} — e.g. \text{taklitya} ‘record-collection’, \text{geud} ‘troop’, \text{krukt-kadurged} ‘football team’; and (v) \text{Abstract nouns} — e.g. \text{t6har} ‘purity’, \text{aclut} ‘laziness’, \text{cima'on} ‘thirst’. Subjects were presented with three different tasks, presented in the following order:

(2) A = Production of innovative coinages — 40 items

Subjects were given definitions of words that do not exist in Hebrew — e.g. “What would you call a person that’s always hugging?” = \text{ha-marbe le-xabek}; “What would you call a collection of balloons?” = \text{osef shel balonim}.

B — Selection of innovative items — 30 items

Subjects were asked to select 30 out of a total of 52 items, 10 each as best suited to be names of: a person that does a certain job; an instrument, utensil, or machine; and a location, respectively.

C — Listing of conventional words — 35 items

Subjects were asked to write down the first 5 or 10 words came to their minds for each of the five classes of nouns noted above.
The items used as the basis for new coinages in Part A were taken from a list of 40 common verbs used in a prior study of how children and adults comprehend and produce innovative agent and instrument nouns in Hebrew (Berman, Hecht & Clark 1982), while the forms provided in Part B were based on findings of this study combined with the devices typically associated with the various classes of Hebrew nouns, as further specified below. In general, the questionnaire was constructed to test a series of hypotheses about the lexicon in Modern Hebrew, deriving from the following sources:

- Examination of entries for these different classes of nouns in sources concerned primarily with more normative written usage, including a major standard monolingual Hebrew dictionary (Even-Shoshan 1979); a Hebrew-English dictionary based on frequency counts (Balgur & Dagut 1975); listings of Hebrew noun patterns (Avinery 1976, Barkali 1964, Rabinowitz 1947); and studies of specific classes of nouns (Du Nour 1979, Ghusa 1981, Ornan 1979);
- Results of small-scale studies of how speakers coin new terms for specific subclasses of nouns conducted by students of mine in the context of class projects in lexicology; and
- Results of a prior study of 60 children aged three to twelve years and of 12 adults on an oral task requiring them to construct and to interpret innovative agent and instrument nouns in Hebrew (Clark & Berman 1984).

3. HYPOTHESES AND FINDINGS

Below we present the main findings of the questionnaire outlined in (2) above, from the point of view of: the options preferred for coining new terms (Section 3.1); how these accord with normative dictates (3.2); the role of the conventional or well-established lexicon (3.3); types of structural devices favored by speakers (3.4); the status of compounding as a word-formation device (3.5); and the relative transparency or distinctiveness of the different noun classes we examined (3.6).

### 3.1 Preferred Options

We assumed that speakers form new nouns in their language across a random collection of a reasonable amount of agent and instrument tasks. On the other hand, diverge considerably from the major devices provided in Part B of the test to find most suitable forms (if required) by the major responses, as set out in Table 3.1. Coinages for the six are not included in the category. Over 10% of the most highly favored forms of (Part A), given in percent.

<table>
<thead>
<tr>
<th>Device</th>
<th>Most highly favored res.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CaCCan</td>
<td>zablon</td>
</tr>
<tr>
<td>Stem-an</td>
<td>stolkan</td>
</tr>
</tbody>
</table>
| Verb-an        | melish
| Final-an       | . . .                    |
| m-Verb         | melishik                 |
| miCCeC         | malaik                  |
| miCCeCajet     | malaik                  |
| . . .           | sadran                   |
| iya/yada       | rakoni                   |

(0) Note: Horizontal class of nouns. Figures
es in Part A were taken
study of how children
ative agent and instru-
Clark 1982), while the
ings of this study com-
ted with the various
es of hypotheses about
the following sources:
ent classes of nouns in
ative written usage, 
word dictionary (Even-
 based on frequency
brew noun patterns
); and studies of spe-
1981, Orman 1979);
ferent aspects of the
, Attias 1980, Berman
8; Nir 1982; Ravid
akers coin new terms
students of mine in d
aged three to twelve
ng them to construct
ent nouns in Hebrew

NGS
uestionnaire outlined
ptions preferred for
ord with normative
l-established lexicon
akers (3.4); the
vice (3.5); and the
the different noun

3.1 Preferred Options

We assumed that speakers' preferences with respect to new-word formation in their language would not be haphazardly distributed across a random collection of devices, and that there would be a fair amount of agreement among subjects across the different tasks. On the other hand, we felt that speakers' choices might diverge considerably from official norms for new-word formation, and that this discrepancy would be more apparent when speakers were required to innovate freely by producing forms of their own (Part A of the test) than when they were asked to select or judge most suitable forms (Part B). These assumptions were largely borne out by the major response-patterns on the first part of the questionnaire, as set out in Table 1 below.

Coinages for the six items intended to yield Abstract nouns are not included in Table 1, since this proved to be a problematic category. Over 10% of the items received "no response" blanks — as compared with only 4% no responses across the other categories;

<table>
<thead>
<tr>
<th>Table 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most highly favored response types in the production of innovative forms (Part A), given in percentages for four different classes of nouns [N = 28]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Device</th>
<th>Noun Class</th>
<th>Sample responses</th>
<th>* Items:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CaCCan</td>
<td>*</td>
<td>zebkan hugger</td>
<td>48.2</td>
</tr>
<tr>
<td>Stem-an</td>
<td>*</td>
<td>stelkan fleer</td>
<td>7.9</td>
</tr>
<tr>
<td>Verb-an</td>
<td>*</td>
<td>miskakan looker</td>
<td>27.5</td>
</tr>
<tr>
<td>Final -an</td>
<td>*</td>
<td>. . . . . . . . . .</td>
<td>83.6</td>
</tr>
<tr>
<td>m- = Verb</td>
<td>*</td>
<td>makacec cutter</td>
<td>7.1</td>
</tr>
<tr>
<td>maCCeC</td>
<td>*</td>
<td>madotk lighter</td>
<td>21.4</td>
</tr>
<tr>
<td>miCCeC</td>
<td>*</td>
<td>miskak run-place</td>
<td>8.6</td>
</tr>
<tr>
<td>mi/m/aCCeC/et</td>
<td>*</td>
<td>mokudo eating-utensil</td>
<td>26.4</td>
</tr>
<tr>
<td>. . . iya/yada</td>
<td>*</td>
<td>sadraninya arranging-place</td>
<td>94.9</td>
</tr>
<tr>
<td>. . . rokaiyyda train-collection</td>
<td>*</td>
<td></td>
<td>30.8</td>
</tr>
</tbody>
</table>

6) Note: Horizontal lines mark off the most favored responses for each class of nouns. Figures entered between lines are sums of several subclasses.
and subjects interpreted these as adjectives in over 20% (35 out of 168) of their responses — giving either real words, e.g. matox 'sweet' for the quality of something 'tasty' (Hebrew ta'im), marixa 'soothing' as the quality of something 'blue' (kazol), meyuxan 'antiquated' for the quality of a thing that is old (yashan — with the same root), or else novel adjectives such as yashin 'old-y', or participial-like forms — e.g. menuxax 'shorted' for the quality of a person who is short (namuz). In general, results on this subset yield a very mixed picture, as follows. Around 40% of the coinages took one of three forms commonly used for abstract nouns in Hebrew, thus: 22% were given the suffix -ut, as in innovative te'im-ut 'taste-ness', raz-ut 'thin-ness'; another 10% (17 words) got the ending -on as an external suffix (e.g. nemux-on 'short-ness') or as part of an affixal pattern, e.g. kizalon 'blue-ness', as in conventional shiga'on 'madness', (but 11 of these were non-innovative — the single item razon, which is the conventional word for 'thinness'); and another 12 words (7%) took a vowel-internal C6CVC — e.g. innovative nómez 'shorty-ness', t'6am 'taste-ness', rózi 'thin-ness'. Other answers included items ending in -an — mostly (16 out of 24) for the single item defined with a verb rather than an adjective to name the quality of a person who is constantly falling (nafel), as well as numerous more idiosyncratic forms, depending on the particular input item in each case. It thus seems that this noun class — at any rate as represented in the task at hand — did not evoke any single response or class of responses as most favored for new-word formation. In the subset of “abstract” nouns, rather, inter-subject agreement was manifested in the high number of identical answers given to a specific item — as noted for conventional razon 'thinness' and innovative nafan 'faller/falling' above.

Elsewhere, our hypothesis of “agreement” is largely confirmed by how subjects performed when deriving innovative nouns from verbs. This is overwhelmingly the case for the 10 agent nouns items randomly distributed across the 40 definitions constituting Part A: Over 80% of these coinages ended in the syllable -an — exactly corresponding to the clear preference for this ending shown in innovative agent nouns in our earlier, oral study (Clark & Berman 1984). Such forms also account for nearly a quarter of all the Instrument nouns coined as well, although these yielded a more varied picture than the agents, as follows: Around one-quarter were forms ending in -an; another quarter were masculine nouns with a prefixal m-; and a quite suffix (stressed variety of forms typical discussed below. P1 feminine nouns with ventional option of other non-native half of all the innov

Beyond these main class manifested at k Agents — 5.5% be Instruments — 11.5 (e.g. zapar-it for m- — 10% forms with responses varied, coined for the six c — 4.5%; real words compounds — 3.5%.

Clearly, then, resp asked to coin names across the five class and abstract states but showed a consid the subjects. Moreover, accord only partially innovators (Section (3.3 below).

3.2 Comparison with Ours next hypothe fully in accord with t for coining ne CaCaC for agent-occa for an 'amplifier'; miC0Ct mirpa'a 'clinic'; and ceCaCe 'pipeworks', test, where subjects vative forms with r
tives in over 20% either real words, e.g. tasty' (Hebrew ia'im, meaning 'tasty' (Hebrew ta'im), or thing 'blue' (ka'zel), ing that is old (yashan 'thing that is old (yashan 'thing'), or items such as yashin umaz 'shorted for the 'thing').

In general, results on allows. Around 40% of only used for abstract suffix -ut, as in innovative other 10% (17 words) nemux-on 'short-ness') 'blue-ness', as in con- were non-innovative internal C6CVC — ste-ness', rōzi 'thinny- an — mostly (16 out rather than an adject- stantly falling (note'), ms, depending on the seems that this noun sk at hand — did not as most favored for trac" nouns, rather, the high number of as noted for conven- 'fatter/falling' above. ' is largely confirmed innovative nouns from he 10 A g e n t noun definitions constituting in the syllable -an — for this ending shown a study (Clark & Berly a quarter of all the these yielded a more round one-quarter were as masculine nouns with a prefixal m-; and a quarter were words with prefixal m- and a femi-nine suffix (stressed -a or unstressed -et). This reflects the greater variety of forms typical of instrument nouns in general — as further discussed below. Place nouns also selected as high as one-third feminine nouns with prefixal m-; another third took the less conventional option of suffixal -iya — an ending which together with other non-native feminine endings such as -iyda accounts for over half of all the innovative Collective nouns as well.

Beyond these main trends, as shown in Table 1 above, each noun class manifested at least one other relatively favored response, thus: Agents — 5.5% benoni (present-tense, participial) verb forms; Instruments — 11.5% various suffixes including -iya and also -it (e.g. zapa-rit for a machine used for digging = la-xpor); Collectives — 10% forms with plural endings or other suffixes, etc. Other responses varied, coming to around only 10% of the Part A forms coined for the six different noun classes, as follows: No answer — 4.5%; real words (i.e. failure to innovate) — 4%; blends and compounds — 3.5%.

Clearly, then, responses given by a large group of native-speakers asked to coin names for a variety of items, randomly distributed across the five classes of agents, instruments, places, collectives, and abstract states were by no means unmotivated or haphazard, but showed a considerable degree of clustering or agreement among the subjects. Moreover, as we note further below, these responses accord only partially with the specifications of official or normative innovators (Section 3.2) as well as of the conventional lexicon (3.3 below).

3.2 Comparison with Normative Requirements

Our next hypothesis was that innovative coinages would not be fully in accord with the prescriptive requirements as to the "desired" forms for coining new terms in each lexical class — for instance, CaCaC for agent-occupations — e.g. pasal 'sculptor', ganan 'garden-er'; maCCeC for instrument nouns — e.g. mazlag 'fork', magher 'amplifier'; miCCaCa for place-nouns — e.g. mis'ada 'restaurant', mirpa'a 'clinic'; and CaCeCet for collectives — e.g. tayestet 'squadron' canoret 'pipeworks'. We assumed that responses in Part B of the test, where subjects were required to judge the suitability of innovative forms with respect to nouns in the different classes rather
than to coin new items themselves as in Part A, would be a truer reflection of self-conscious norms for how words "should" be constructed. And this, in fact, proved to be the case, as shown by the breakdown of results for Part B of the test, where subjects were required to select for each of the three classes — Agent, Instrument, Place — 10 items out of the innovative forms presented to them (30 out of a total 52).

Table 2
Distribution of forms selected as innovative items suited to three classes of nouns (Part B), given in percentages for five morphological categories (N = 28)

<table>
<thead>
<tr>
<th>Morphological Categories*</th>
<th>-an</th>
<th>ma-(-a)</th>
<th>mi-(-a)</th>
<th>lya</th>
<th>CVOCO</th>
<th>Verb</th>
<th>Total**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent</td>
<td>49%</td>
<td>1.3%</td>
<td>-</td>
<td>10.7%</td>
<td>19.3%</td>
<td>80.2%</td>
<td></td>
</tr>
<tr>
<td>Instr</td>
<td>11%</td>
<td>42.5%</td>
<td>10%</td>
<td>3%</td>
<td>16.0%</td>
<td>98.4%</td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td>1.8%</td>
<td>28.8%</td>
<td>40%</td>
<td>16.7%</td>
<td>5.7%</td>
<td>1.0%</td>
<td>94.1%</td>
</tr>
</tbody>
</table>

Note: *Each of these 5 morphological categories was represented by 10 items. Percentages in the table were calculated out of the total number of items selected for that category. Thus, if each of the 28 subjects selected 10 agent nouns, then the total responses = 280 for agent nouns.
** The fact that the totals do not add up to 100% is due to occasional selection of other forms presented on this part of the test, outside of the six options listed here — e.g. kosh-ut 'failing-ness', pikaxon 'clever-ty.'

The findings for Part B show a clear trend to differentiation between the three noun classes: Over 40% of all responses selected words ending in -an for Agents, words beginning with ma- for Instruments, and words beginning with mi- for Places. On this task, however, speakers selected a variety of innovative forms well beyond the range of those which they deployed in creating coinages of their own in Part A. Specifically, in the previous task, subjects had conspicuously avoided options which are less "transparent", in the sense of manifesting overt one-to-one relations between a given lexical class of noun and a given stem-external affix to denote that class (and see further Section 3.4 below). Yet here, in Part B, many of the option nouns were -an plus vowel alternation.

The distinction in Part A and the more "in Part B is yielded further discussed

The distinction in Part A is yielded further discussed here.

Distribution of forms present

<table>
<thead>
<tr>
<th>Class</th>
<th>Agents</th>
<th>Instruments</th>
<th>Places</th>
</tr>
</thead>
</table>

These findings are established by careful analysis such as those listed that the official coin
Part A, would be a truer v words “should” be con- the case, as shown by the test, where subjects were
- Agent, Instrument,
forms presented to them
items suited to three classes five morphological categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Form</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent</td>
<td>CaCCan</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Word/Stem-an</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Others:</td>
<td></td>
</tr>
<tr>
<td>Instrument</td>
<td>maCCeC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>maCCeCs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>...an</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Others:</td>
<td></td>
</tr>
<tr>
<td>Place</td>
<td>miCCa(s/t)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>maCCeC(s)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>...ty</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Others:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class</th>
<th>Form</th>
<th>Part A (production)</th>
<th>Part B (selection)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agents</td>
<td>CaCCan</td>
<td>48</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Word/Stem-an</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Others:</td>
<td>17</td>
<td>50</td>
</tr>
<tr>
<td>Instruments</td>
<td>maCCeC</td>
<td>19</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>maCCeCs</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>...an</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Others:</td>
<td>41</td>
<td>46</td>
</tr>
<tr>
<td>Places</td>
<td>miCCa(s/t)</td>
<td>21</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>maCCeC(s)</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>...ty</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Others:</td>
<td>34</td>
<td>10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class</th>
<th>Form</th>
<th>Part A (production)</th>
<th>Part B (selection)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agents</td>
<td>CaCCan</td>
<td>48</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Word/Stem-an</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Others:</td>
<td>17</td>
<td>50</td>
</tr>
<tr>
<td>Instruments</td>
<td>maCCeC</td>
<td>19</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>maCCeCs</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>...an</td>
<td>25</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Others:</td>
<td>41</td>
<td>46</td>
</tr>
<tr>
<td>Places</td>
<td>miCCa(s/t)</td>
<td>21</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>maCCeC(s)</td>
<td>20</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>...ty</td>
<td>22</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Others:</td>
<td>34</td>
<td>10</td>
</tr>
</tbody>
</table>

These findings are not consistent with what we had evaluated as the normatively preferred devices for the different noun classes, as established by careful examinations of word-lists and other sources such as those listed at the end of Section 2 above. We assumed that the official coinages would favor the following breakdown of
forms: Agents would be evenly distributed between (i) CaCCan — e.g. ballan ‘idler’, parshan ‘commentator’; (ii) CaVCvC — e.g. sayad ‘hunter’, katav ‘reporter’ and also kacin ‘officer’, pakid ‘clerk’; and (iii) Conversion — e.g. shofet ‘judges / a judge’ judge’, me’amem ‘coaches / a coach’; contrastingly, Instruments would opt for (i) the maCCeC pattern, as in established mazleg ‘fork’, masek ‘comb’ and more recent makren ‘projector’, makher ‘battery’; (ii) some feminine maCCeCa nouns, as in recent mamtera ‘sprinkler’, mavxena ‘test-tube’; and (iii) the so-called segolate pattern, as in established degel ‘flag’, resen ‘bridle’, and newer bedem ‘brake’, bedek ‘trigger’; while in normative terms, Place nouns would require either miCCaCa as in mis’ada ‘restaurant’, mizala ‘college’, and, less commonly, masculine miCCaC nouns like misrad ‘office’, mibax ‘kitchen’, or else they would take compound forms, particularly with the superordinate head noun bet, as the bound form of ‘house = place-of’ — as in established bet-knaxet ‘synagogue’ bet-xaroaMt ‘factory’.

These predictions were not borne out at all in the open-ended production task of Part A — even although the questionnaire was administered in writing, and we had assumed that this medium would yield more selfconscious renderings than a comparable oral task had earlier shown to be the case (Clark & Berman 1984). More surprisingly, these normative options were by no means the only ones selected in the judgement task given in Part B, either. This accords well with findings for the adults who participated in our earlier, oral study. They had consistently avoided every forms for agents and ma- prefix forms for instruments in a production task, but when subsequently confronted with such innovative forms in a comprehension task, they responded by revealing their awareness of more official norms. Thus, after they had been presented with several coinages such as maxper ‘digger’ madlek ‘lighter’, masher ‘breaker’ to indicate instruments, respondents often said things like “Oh, I should have given that before, too!” or “Oh, that is the (right/correct/good) way we should talk about instruments”. Such comments, like the discrepancies we found between coinages (Part A) and selections (Part B) in the present, written tasks, indicate that what speakers do in themselves making up new words is by no means identical to the set of normatively approved or official options available to them at a more selfconscious level of performance.

### 3.3 Role of the Context

Here we refer to the lexicon of users (w Ravid 1970, Berman & Ravid 1981) and factors would occurrences in actual use reflect the normative options where this is but in relation to the types of referents, on the prominence of the lexicon tried to evaluate if it came to mind for speakers. Results for the most favored 10 classes are:

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Agents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>CaCCAN</td>
</tr>
<tr>
<td>2nd</td>
<td>Benoni Verbs</td>
</tr>
<tr>
<td>3rd</td>
<td>...an / ayy</td>
</tr>
<tr>
<td>Others</td>
<td></td>
</tr>
</tbody>
</table>

When asked to give a device or morphological comments, speakers did the same for a person with a noun like: more ‘letter’, indicating, for form dictated thei...
uted between (i) CaCCan totor'; (ii) CaCVC - e.g. kacin 'officer', pakid 'judges / a judge' judge', uglly. I n stuments as in established maseg akrem 'projector', macber mas, as in recent mamtera ab so-called segolate pat­ tbridle', and newer belem nouns like misrad d take compound forms, noun bet-, as the bound ed bet-beset 'synagogue' t all in the open-ended h the questionnaire was aimed that this medium than a comparable oral ( & Berman 1984). More : by no means the only in Part B, either. This who participated in our voiced CVCVC forms for ts in a production task, h innovative forms in a revealing their awareness d been presented with adlek 'lighter', mashbera ents often said things too !', or 'Oh, that is l about instruments'. sound between coinages sent, written tasks, in­ making up new words stively approved or of­ selfconscious level of

### 3.3 Role of the Conventional Lexicon

Here we refer to the status of well-established items in the shared lexicon of users (what Aronoff 1976 terms "old" words; see, too, Berman & Ravid 1986). We hypothesized that in this respect formal factors would carry less weight than amount and centrality of occurrences in actual usage. That is, in their own wordstock, speakers will be attentive to prototypical instances of categories - where this notion is characterizable not in structural terms, but in relation to the everyday familiarity or pragmatic salience of referents, on the one hand, and the accessibility or linguistic prominence of the lexical items which encode them, on the other. We tried to evaluate this by asking subjects to list the first words that came to mind for each of the classes in question here (Part C). Results for the most favored response-types are given in Table 4.

#### Table 4

Most favored response types in listing of real words for five classes of nouns (Part C), in percentages

<table>
<thead>
<tr>
<th>Noun class</th>
<th>Agents 350</th>
<th>Instruments 350</th>
<th>Places 350</th>
<th>Collectives 140</th>
<th>Abstracts 140</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>[37%]</td>
<td>[28.5%]</td>
<td>[41.5%]</td>
<td>[30%]</td>
<td>[32%]</td>
</tr>
<tr>
<td>2nd</td>
<td>Benoni</td>
<td>[20%]</td>
<td>[25.5%]</td>
<td>[20%]</td>
<td>[30%]</td>
</tr>
<tr>
<td>3rd</td>
<td>. . . ay</td>
<td>[16%/14%]</td>
<td>[21.5%]</td>
<td>[14%]</td>
<td>[30%]</td>
</tr>
<tr>
<td>Others</td>
<td>[13%]</td>
<td>[24.5%]</td>
<td>[22.8%]</td>
<td>[10%]</td>
<td>[21%]</td>
</tr>
</tbody>
</table>

When asked to list words known to them in the different categories, speakers did not make reference to any particular structural device or morphological pattern to start with. They initially wrote down words that seemed to them "best exemplars" of a given class - for instance, words like nagar 'carpenter, zashmelay 'electrician' for a person with a certain job. Very popular among the agents were nouns like: more 'teacher', mehandes 'engineer', masger 'metalworker', indicating, firstly, that semantics rather than morphological form dictated their choices and, secondly, that there was a high
enough level of agreement among these particular items to suggest
a clearly shared type of response-pattern for different subjects.
Interestingly enough, over one-third of the agent nouns listed
were in the CaCaC pattern, e.g. tabax 'cook', tayas 'pilot' nagar
'carpenter', in marked contrast to what we had found on the two
innovative tasks. This suggests that such nouns are noteworthy as
part of the established rather than of the potential lexicon of agent-
nouns in current Hebrew usage. Yet in this matter, too, semantics
was uppermost: If a subject gave a noun such as, say, xayat 'tailor'
chances are his or her next word on the list would be toféret 'dress-
maker', just as after giving as an instrument noun the word iparon
'pencil', very commonly indeed the subject would then list et 'pen'
and/or sargel 'ruler'. The impact of semantic prototypicality was
even clearer in the listing of instrument nouns. Here, the
two most popular items (given by more than 20 out of the 28
subjects) were the words patish 'hammer' and kaf 'spoon', followed
by some more incidental or sporadic items given by five or fewer
of the subjects — e.g. mezonit 'car', mekarer 'fridge', as well as loan
words like blender, mikser.
The specific Place nouns selected from the conventional voca-
ulary were, however, more in accord with the coinages of the
earlier sections of the test, around 40% of the words given being in
the form of m...a — e.g. mazbas 'laundry', mizbala 'garbage-dump'.
But this set also included relatively many compounds — e.g.
bet-sçer 'house-book' = 'school', ulam rikudim 'dance hall', migraš
sport 'sport field'.
In contrast to these three sets of nouns — words for agents,
instruments, and places — speakers seemed to have a hard time
accessing collective nouns in their vocabulary. This may be
because they are not even aware that words like knutsa 'group',
arena 'heap', or kovec 'set' are in fact members of this particular
semantic category. Thus, several subjects gave the word kita
'classroom') as the name of a place, but none considered that the
same word could also specify a collection (of people).
The results on Part C strongly confirm our hypothesis that the
devices which speakers favor for innovating new words are only in
part a reflection of the well-established vocabulary. Thus, new agent
nouns today rarely take the surface shape of CaCaC, although Bibli-
cal Hebrew had several such nouns — e.g. kacin 'officer' nasix
'prince' (possibly as many as its CaCaC nouns like tabax 'cook', sabal
'porter'); and be with the same sur
exclusively for a
e.g. shavir 'break
(and see further S
pattern is current:
irrespective of ho
be available in t
present-tense word
very common inde
and far less so f
yet it is seldom ac
people-agents. These
(exceptions being — yet it counts
nouns innovated
proportion of such
given over half thi
to name instrume
Berman 1984). This
current research on
'old' and 'new'
established in the
speakers, on the or
extending this rep
in Section 4 b

3.4 Favored Stru

We had hypo-
Modern Hebrew w
also conventional
which we had a pri
favored to least f
2) Root-incorporat
— as illustrate

This set of hype-
rent Hebrew exter
device than in earl
"natural", agglutin
puticular items to suggest n for different subjects.
the agent nouns listed 'ook', 'pilot' 'nagar ve had found on the two nouns are noteworthy as potential lexicon of agents matter, too, semantics ich as, say, 'tailor' 'nagar would then list et 'pen' tic prototypicality was en t nouns. Here, the than 20 out of the 28 nd 'spoon', followed given by five or fewer 'fridge', as well as loan a the conventional vo- th the coinages of the e words given being in 'dance hall', 'cook' - words for agents, to have a hard time abulary. This may be like 'group', ers of this particular gave the word 'kita' considered that the sople). hypothesis that the w words are only in ary. Thus, new agent 'office' 'nasiz ed is 'cook', 'nabat 'porter'); and both Biblical and Mishnaic Hebrew had adjectives with the same surface form — a pattern which today is used almost exclusively for coinage adjectives with a passive 'able' sense — e.g. shavir 'break-able = fragile', dalay 'burn-able = flammable' (and see further Section 4 below). From our point of view, then, this pattern is currently "open" or lexically productive for this meaning, irrespective of how many such form-meaning links may happen to be available in the well-established lexicon. Relatedly, the benoni present-tense verb form — the option of conversion, that is — is very common indeed for well-established, conventional agent nouns and far less so for instrument nouns (Berman 1978, 394—405); yet it is seldom adopted as a means for "spontaneous" coinages for people-agents. The -an ending is rare for instrument nouns (exceptions being potzan '[can] opener', 'conditioner') — yet it accounted for some one-quarter of all the instrument nouns innovated in the current study, and for an even higher proportion of such nouns in our earlier, oral study — where it was given over half the time by the eleven-year olds and adults asked to name instruments used to carry out certain activities (Clark & Berman 1984). These findings clearly support the claims made by current research concerning the need to distinguish clearly between "old" and "new" words, hence between items which have become established in the conventional wordstock of a language and its speakers, on the one hand, and the currently productive devices for extending this repertoire, on the other (and see, further, the discussion in Section 4 below).

3.4 Favored Structural Devices

We had hypothesized that in a very general way speakers of Modern Hebrew would select innovative — and to a lesser extent also conventional — items in terms of certain structural preferences, which we had a priori ranked in the following order, from most highly favored to least favored devices: 1) Stem/word + external affix; 2) Root-incorporated affix, and 3) Analytic compounding and blending — as illustrated in Section 1 above.

This set of hypotheses was based on the assumption that in current Hebrew external affixes are taking over as a more productive device than in earlier times — providing the language with a more "natural", agglutinating kind of option (Dressler 1981). Here, by
"productive" we refer to the availability of new structural options which were not in general use at earlier stages of the language. These include: the widespread contemporary use of suffixal -iy to derive denominal adjectives, far beyond its more restricted range of application in Medieval Hebrew (e.g. recent memeshall-iy 'government-ai', xor-p-iy 'winter-y'); the extension of suffixal -ut to express a wide variety of abstract state nouns — as in recent me'urav-ut 'involve-ment', metuxkam-ut 'sophisticated-ness', zehhona-ut 'accountant-ey'; the addition of -an as an agent marker, not only on full nouns as in, say, miraz-an 'orientalist', tarr-'an sanitation-ist', but also with present-tense stems to yield words like juvenile mabir-an 'hit-ter', and meratat-an 'pryer', mistal-an 'starer'; the extension of the suffixes -iya and the foreign -iyda for collective and place-names — e.g. well established nagar-iya 'carpentry-shop', merkaz-iya 'central-exchange', and less conventional glada-riya 'icecream-ery', tremp-iyda 'hitchhike-station'; wide use of -on to indicate periodicals — e.g. well-established shnat-on 'annual', newer mkom-on 'local (paper)' — as well as diminutives — e.g. xadr-on 'little-room', duf-on 'teddy-bear'; and the extension of the suffix -it not only in forming diminutives like kos-it 'little-glass', map-it 'napkin = little cloth', but also for a wide range of food brandnames such as shum-it 'garlic-cheese', and larm-it 'wheat-cracker', or loan-based names for the soft-drinks trop-it, shoko-lit (Attias 1980). Alongside of all these, a further noteworthy innovation in stem-external affixation — one not addressed in our present study — is the current use of prefixes based on Graeco-Latin loan translations, such as ben-le-uni 'international' rau-goni 'varie-gated', lat-karka'i 'sub-terraneaun', lal-menadi 'three-dimensional' — a device totally foreign to earlier stages of Hebrew.

Despite the extensiveness of such devices, results of our study reveal that speakers still rely heavily on the classic Semitic device of consonantal root extraction plus affixation by means of an accepted morphological pattern of the kind traditionally termed mishkal. (Implications of this situation for the theory of Natural Morphology are discussed in Werner 1982.) This was particularly true for the three noun classes we chose to focus on — Agents, Instruments, and Places respectively. This is revealed by the responses to Part A, where subjects were asked to innovate on the basis of definitions containing verbs in the infinitive form, that is, with a prefixal l- marker, often with an additional stem-prefix as well (compare, marteva 'wetter' below, overwhelming affixation — affixal pattern around one thin which we had li

(3) Distribution

<table>
<thead>
<tr>
<th>Device</th>
<th>Root + Pattern</th>
<th>Stem + Pattern</th>
<th>Most favored suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root + Pattern</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stem + Pattern</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most favored suffix</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other devices, sible responses, (conventional le) compounds and above than on conveni...
of new structural options of the language. The use of suffixal -iy to stages of the language. It recently memshalt-iy 'go more restricted range recent xelbar-iy 'go- naion of suffixal out to nouns - as in recent 'phisticated-ness', xela- as an agent marker, not 'orient-alist', tavru'-an stems to yield words -an 'pryer', mistakl-an and the foreign -iyOda I established nagar-iya 'J and less conven. 'hitchhike-station'; - e.g. well-established 'paper' - as well as 'i-om 'teddy-bear'; and and ming diminutives like cloth', but also for a a-it 'garlic-cheese', and and for the soft-drinks like these, a further note- n — one not addressed - of prefixes based on -le'umi 'inter-national' an', tlat-memadi 'three-rlier stages of Hebrew. results of our study classic Semitic device in by means of an acc-traditionally termed the theory of Natural.This was particularly focus on — Agents, is revealed by the ed to innovate on the infinitive form, that is, itional stem-prefix as well (compare, say, le'exol ‘to-eat’/axlan ‘eater’, lehartiv ‘to-wet’/ martena ‘wetter’). Thus, responses on Part A, as summed up in (3) below, overwhelmingly (88% in all) took some form of morphological affixation — over one half in the form of root+incorporated affixal pattern — i.e. Type (2) of the three listed above — and around one-third in the form of stem/word plus external affix — which we had listed as potentially Type (1), or the most favored.

(3) Distribution of affixation devices in Part A coinages:

<table>
<thead>
<tr>
<th>Device</th>
<th>Noun Classes ( Raw Forms )</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root + Pattern</td>
<td>157 205 129 38 70</td>
<td>699 [83.5%]</td>
</tr>
<tr>
<td>Stem + Suffix</td>
<td>105 54 68 108 60</td>
<td>986 [83.5%]</td>
</tr>
<tr>
<td>[Most favored suffix]</td>
<td>.an .an .iy .iy .ut</td>
<td>994 [88.8%]</td>
</tr>
</tbody>
</table>

Other devices, accounting for only 126 out of a total 1120 possible responses, included a small number of: blanks, real words (conventional lexical items), conversion by means of benoni verbs, compounds and blends. This tendency to rely on morphology, rather than on conversion or compounding, was obviously also manifested in Part B, where some form of affixation was the only option given subjects. Yet even in this task, subjects clearly selected root + pattern affiliation far more commonly than they did stem plus external affix options for the three classes of Agent, Instrument, and Place included in this part of the test. Only with respect to Part C, the listing of familiar words, were the responses very mixed in this respect. Yet here, too, some kind of formal affixal device was the basis for many of the words subjects selected from their own vocabulary, applying to over half the Agent nouns, and around one-third of Instrument (37%) and Place (33.5%) nouns. Only the Collective and Abstract nouns tended to yield a more mixed, rather inconclusive picture, as noted in Section 3.3 above.

These findings lead us to conclude that both in the well-established or "old" wordstock, and even more so in their own innovative coinages, Hebrew speakers make very broad use of three strictly morphological, or word-internal, devices for word-formation: They
select root + internal affixes mainly in relation to familiar CaCaC
agent nouns and also for coining new CaCiC adjectives with the
sense of ‘-able’; they rely heavily on combining consonantal roots
with affixal patterns which include a suffixal and/or a prefixal
syllable; and they increasingly tend to use word or stem plus an
external suffix for coining new names for a wide variety of semantic
classes of items — as noted at the beginning of this subsection.

3.5 Avoidance of Compounding

Perhaps the most striking result was that across the test, subjects
avoided juxtaposition or compounding as a means of new-word
formation. The forms presented to subjects for selection in Part B
did not include any compounds; but in Part A only 5 out of more
than a thousand items were given in the form of a compound, while
in Part C only 4% of the familiar words listed were compounds —
mainly, as noted, for naming places, occasionally for instruments,
e.g. mxonat kvasajidwo//fira ‘machine-for washing, printing, sewing’
respectively. This accords exactly with the findings of our earlier,
oral study — where adults gave only 2.5% responses in compound
for innovative agents and instruments, even though half the input
verbs were presented to them together with a direct object (e.g.
‘a girl whose job is to pull wagons’, ‘a tool that is used to scatter

We choose to explain these findings as follows. Firstly, in strictly
structural terms, compounding in Hebrew is relatively limited, along
the following lines: It derives primarily compound nouns from
nouns; it is restricted in the range of compound adjectives it allows —
particularly in comparison with English and other Germanic lan-
guages (Meys 1975, Smith 1982); and it totally disallows compound-
verb formation, as is common in other languages (Clark & Clark
1979, Boeper & Siegel 1978, Mithun 1984 : 848) owing to the Semitic
constraint that all (although not only) verbs be constructed by
means of a fixed set of binyan conjugation patterns.

Secondly, in terms of actual usage, everyday spoken Hebrew, in
marked contrast to more normative formal styles of expository or
literary writing, deploys a variety of alternative structures for
expressing noun-noun relations with no overt predicate. These in-
clude the widespread use of the genitive particle shel ‘of’ to express
possession, and the tendency to substitute denominal-adjective
adjuncts for the
in such contexts.

(4) siza telefon-it
talk phone-y
knesa refuii
congress medi
avoda misrad-i
work office-y
bagdim koy-p-
clothes summe

But over and a
syntactic and sem-
tural options, we
in current Hebrew
That is, speakers
objects and entiti
community (Dow-
et findings from t
revealing almost t
for lexical innova-
temporary lexical
Hebrew speakers
iving new words in
catenating device
c)

a) In a task req
30 compound expr
one, the expression
‘like a single word
others received ar
‘vacuum-cleaner =
boker = ‘morning-x
of the 30 expres
kona-plada ‘steel ha
zwrat-bat ‘daughter
subjects to be very
speakers did not
‘wordlike’ in statu
adjuncts for the more normative, classical form of noun plus noun in such contexts as the following (and see n. 5):

(4) sixa tetfon-it vs sixat tetfon
   talk phone-y = 'phone conversation'
   konens refu'i vs kenes ref'im
   congress medical = congress doctors = 'medical meeting'
   avoda misrad-it vs avodat misrad
   work office-y = work office = 'office work'
   bgadim keyc iy-im vs bigdey kaysic
   clothes summer-y = clothes summer = 'summer clothes'

But over and above these and other formal constraints — both syntactic and semantic (Berman & Ravid 1986) — as well as structural options, we wish to suggest that compounding is not favored in current Hebrew usage as a lexical device for new-word formation. That is, speakers do not favor compounds as a means for labelling objects and entities viewed as nameworthy within their speech community (Downing 1977). As evidence, we note the very consistent findings from the present study and from our earlier, oral study, revealing almost total disregard of compounding as a possible option for lexical innovation. And several other observations from contemporary lexical usage provide further support for our claim that Hebrew speakers today prefer word-internal morphology for deriving new words in their language as opposed to the analytic, concatenating device of word-compounding.

a) In a task requiring native Hebrew-speaking subjects to rank 30 compound expression for relative degree of lexicalization, only one, the expression yom-hulMet 'birth-day', was evaluated as being "like a single word" by over 70% of the subjects, and only three others received around 50% for this evaluation — sho'ev awak
   'vacuum-cleaner = hoover', ke'ev rosh = 'head-ache', and aruzat-boker = = 'morning-meal, breakfast' (Berman & Ravid 1980). Many of the 30 expressions listed there (e.g. xalom-balashot 'nightmare', kova-plada 'steel hat = helmet', pney hayam 'sea-face = sea-level', xewral-bat 'daughter-company = subsidiary') were judged by most subjects to be very familiar, hence to some extent lexicalized. But speakers did not construe such compound expressions as fully "wordlike" in status.

relation to familiar CaCaC adjectives with the combining consonantal roots suffixal and/or a prefixal use word or stem plus an a wide variety of semantic ing of this subsection.

It across the test, subjects as a means of new-word te for selection in Part B art A only 5 out of more orm of a compound, while listed were compounds -sionally for instruments, a'asing, printing, sewing' in findings of our earlier, responses in compound en though half the input with a direct object (e.g. ol that is used to scatter

follows. Firstly, in strictly relatively limited, along compound nouns from nd adjectives it allows — nd other Germanic lan­

guages (Clark & Clark 48) owing to the Semitic erba be constructed by patterns.

day spoken Hebrew, in styles of expository or alternative structures for art predicate. These in­
ticle shel 'of' to express to denominal-adjective
Many of the lexicalized compounds which form part of the current Hebrew wordstock are the result of loan-translations taken over from languages rich in lexical compounds. These include numer
uous everyday items such as those noted in (a) above, as well as bēged-yam ‘bathing-suit’, mxonat-krīsa ‘washing-machine’, xadar-shēyna ‘sleeping-room = bedroom’. The external source of such terms indicates that they are not the result of spontaneous coinages from within the monolingual Hebrew-speaking communi
ity, made by speakers who rely on their own native repertoire of grammatical and lexical devices for new-word formation.

Alongside of such expressions as these, are many others which were introduced as compounds by Hebraists early on in the revival of the language as a spoken vernacular, but were subsequently replaced by singleword items, derived by means of affixation, as shown by comparing the earlier, compound forms in (5-i) with the monolexemic forms currently in use in (5-ii).

(5) Agent

(i) ish cava

man-army

(ii) xayal

soldier

Instrument

te’udat masa
certificate-travel

dark-on

way-Suff = passport

Place

bet sfrīm

house-books

sfr-iyā

book-Suff = library

Dozens of examples could be added to these (as is done, for example in Kutscher 1982, Sivan 1980). And there are many, many words which might in principle have been introduced as compounds, where morphological derivation was opted for — e.g. raftan ‘dairyman’ from refet ‘dairy’, mazzena ‘test-tube’ from liezon ‘to test’, makōlet ‘grocery-store’, cf. kōlet ‘contains’. Interestingly enough, such coinages rely on both types of affixation noted in Section 3.4 above: Synthetic combination of affixal patterns with a consonantal root and more analytic juxtapositioning of affixal endings to a word or stem.

d) A fourth piece of evidence showing that speakers do not favor compounding as a means for labelling objects and entities is provided by the phenomenon of clipping — e.g. the instrument nouns medīz kēlin ‘washer-of dishes = dishwasher’ and mazgan avir ‘temperer-of air = air conditioner’ are typically rendered by the initial, head noun al compounds, e.g. mxonat-krīsa ‘washing-machine’, mxonat-krīsa ‘washing-machine’,
which form part of the of loan-translations taken sounds. These include noted in (a) above, as kvisa ‘washing-machine’. The external source of he result of spontaneous Hebrew-speaking com­ eir own native repertoire t-word formation.

b) are many others which are early on in the revival but were subsequently means of affixation. As forms in (5-i) with the ii).

xayal
soldier

dark-on
way-Suff = passport

ifriya
book-Suff = library

(as is done, for example are many, many words ad as compounds, where e.g. raftan ‘dairyman’ litez ‘to test’, makolei estingly enough, such ad in Section 3.4 above: with a consonantal root endings to a word or t speakers do not favor ete and entities is pro­ the instrument nouns her’ and masgan avir cally rendered by the initial, head noun alone. Even more striking are truncations of loan compounds, e.g. super ‘supermarket’, teyp ‘tape-recorder’, translator among many others. And such clippings are also found in higher styles, including poetry (Sadan 1979).

e) Another relevant phenomenon is the widespread use of a device which both juxtaposes two words and fuses them into a single morphophonological word in the form of blends in current Hebrew, e.g. shaartaf ‘watch-young = babysitter’, zamshir ‘five-verse [fiveverse] = limerick’. This process is very common with words which have recently become entrenched in the conventional lexicon (Berman & Ravid 1986, Nir 1980). Moreover, items taking this peculiarly fused form account for some 15% of all the innovations given by over 100 subjects in a test devised specifically to investi­ gete where and how Hebrew speakers do in fact form noun com­ pounds (Berman, in press).

f) Next, we suggest that cases where compounding remains quite productive as a means of constructing new lexical items in Hebrew are largely restricted to a single type of semantic relation — where a general-purpose superordinate term functions as the head, and various hyponomous subordinates as adjuncts. True, in the conventional lexicon, Agent nouns are typically not formed by means of compounding, in contrast to the widespread use of the head-noun hdbal ‘owner-of, master-of’ for this purpose at earlier stages of the language (and compare the many such compounds in English e.g. policeman, mailman, milkman, doorman). On the other hand, Instrument and Place nouns commonly take a compound form in a quite restricted manner — with the head being a superordinate term such as mezonat- ‘machine’ (cf. mezonat-kvisa, kiva, giluaz for ‘washing-machine’, ‘typewriter’, and ‘razor’ respectively) or kley­ utensils’ for collectives (e.g. kley-mita, kley-avoda, kley-rezev for ‘bedclothes’, ‘work-utensils = tools’, and ‘vehicles’ respectively); and, similarly bet- ‘house-of’, migra­ ‘field-of’, ulam ‘hall-of’ as head nouns in the Hebrew equivalents of words meaning ‘factory’, hospital’; ‘sportsfield’, ‘tennis-court’; or ‘dance-hall’, ‘gymnasium’, respectively. These may be the most basic (or immature) kinds of compounds — as suggested by the fact that in a task eliciting in­ novative agent and instrument nouns, English-speaking three-year olds gave relatively many compound responses with general-pur­ pose, superordinate head nouns such as man, guy, woman to indicate agency (Clark & Hecht 1982). And the relatively few compounds
given on the same task by Hebrew-speaking children aged 5 to 7 (never by the three-year olds), mostly used the head noun *ma'azar* 'instrument' or *mesona* 'machine' (Clark & Berman 1984).

g) As a final source of evidence for the fact that compounding is not a common device for new-word formation in current Hebrew, we note evidence from research in progress on children's acquisition and use of such constructions (Berman forthcoming, Bilev 1985). A survey of children's usage in both interactive conversational settings and in story-telling tasks reveals that relatively very few compounds are used as part of the regular wordstock of these young speakers. And we found virtually no innovative use of such terms at all, even in naming unfamiliar objects and animals in a story picturebook, in contrast to the numerous within-word innovative coinages occurring at this age (Berman & Sagi 1981). Moreover, by age 4 or 5, Israeli children do know how to form noun compounds when required to do so in a structured elicitation task (Clark & Berman in press). This suggests that preschoolers' natural or untutored knowledge of Hebrew includes the process of compounding as part of the grammatical rules which they have internalized, but that they do not necessarily deploy it as a spontaneous means of forming new words in their use of the language.

3.6 Transparency of Noun-Class Distinctions

The present study, as noted, extended an earlier investigation of Agent and Instrument nouns, to include the categories of Place, Collective, and Abstract nouns. We hypothesized that classes of nouns which are semantically related might manifest a certain formal similarity, too, whereas classes of nouns that cannot be subsumed under a single superordinate category would take maximally distinct surface forms. Thus, we expected names for Agents and Instruments — as people and objects which perform activities — to share more surface forms than, say, Agents and Places. On the other hand, we did not expect any strong pull towards total transparency, or a fully one-to-one relation between meaning and form. Such distinctiveness is often advocated by linguistic purists especially for purposes of self-conscious, official word-coinings. For instance, it has been recommended that the feminine pattern maCCeCa be used to label larger machines — e.g. *makdazTa* 'pump, oilrig' — whereas masculine maCCeC be reserved for smaller, mainly manual instruments that the pattern C2CCeC 'porter, stev' restricted to attril *shakran* 'liar' (Rabir of interpretation of that familiarity with knowledge of that conflict with meaning regularities. Specifically, we might share some fe (of Hebrew as of m *nahel* 'manager' and *sot* and *potzan* 'ct would share the mat 'sprinkler', *mashek* would be formed pre-established *ydla-uv*' rather than with tl vowel pattern with 'magic', or the aff *zidalon* 'cessation' coinages, such as *
Table 5

<table>
<thead>
<tr>
<th>Device</th>
<th>Agent</th>
<th>Instrument</th>
<th>Place</th>
<th>Collective</th>
</tr>
</thead>
<tbody>
<tr>
<td>CaCaC</td>
<td>8.5</td>
<td>66.0</td>
<td>10.0</td>
<td>12.5</td>
</tr>
<tr>
<td>[verb participle]</td>
<td>17.0</td>
<td>25.5</td>
<td>12.5</td>
<td>25.0</td>
</tr>
<tr>
<td>maccleca</td>
<td>13.5</td>
<td>33.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>maccleca/et</td>
<td></td>
<td>24.0</td>
<td>58.0</td>
<td></td>
</tr>
<tr>
<td>maccleca/et</td>
<td></td>
<td>11.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>. . . lys</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
*re'erut for conventional ra'av ‘hunger = hungriness’ (Berman & Sagi 1981).

This latter class proved problematic. Recall, firstly, that Abstract nouns were not included in the judgement task in Part B of the test; and in the production of coinages (Part A) as well as listing of familiar words in Part B, responses were often in the form of adjectives or else a mixed and varied, highly idiosyncratic set of forms. The picture which emerges for preferred forms for the remaining four categories, averaged across the three tasks of the test — new-word formation in A, judgement of innovations in B, and listing of occurrent words in C — is presented in Table 5 below. The table lists only those devices which received as high as almost 10% of the total responses — so that the totals come to less than 100%.

The figures in Table 5 reveal a continuum of form/meaning interrelations, as follows:

![Table 5](image)

At one end we find Agents, representing the most highly “individuated” class of nouns, contrasting extremely with the less specific class of Collectives at the other end. Instrument nouns are the most mixed subclass, sharing properties with both animate Agents and statically located Places. This very clear finding across the three tests, such that Instrument nouns yielded the most varied set of associated forms, accords well with findings from other studies (Clark & Berman 1984, Ravid 1978), as well as with the set of instrument nouns in the conventional lexicon. Thus, of all the classes examined here, they are the most highly restricted in meaning: A person can be a carpenter, gardener, tennis-player and dancer as well as a father, liar, braggart, or glutton at one and the same time; but a scissors is nothing but a scissors, and as such it is distinct from other objects also used for cutting, such as a knife, a saw, a pruning fork, or a lawnmower. Lower down on the continuum in (6) are Place nouns, which are semantically less restricted in application than instruments, since a school, hospital, or factory, say, can each be the location of numerous different activities, and many different acts can be performed even in such specialized places as a laundry, gymnasium, or restaurant. Besides, a place-term is potentially ambiguous as between the location of an object readin

In this final section for Modern Hebrew in general, Discussion...
hungriness' (Berman & well, firstly, that Abstract
it task in Part B of the
rt A) as well as listing of
' often in the form of
ghly idiosyncratic set of
ferred forms for the
the three tasks of the
ent of innovations in B,
sented in Table 5 below.
evived as high as almost
tals come to less than
m of form/meaning in-
ting the most highly
extremely with the less
ld. Instrument
; properties with both
. This very clear find-
dent nouns yielded the
ell with findings from
978), as well as with
onal lexicon. Thus, of
ost highly restricted
rden, tennis-player
or glutton at one and
issors, and as such
it, such as a knife,
 down on the con-
ically less restricted
ospital, or factory,	ferent activities, and
 in such speciali-
nt. Besides, a place-
cation of an activity
or an object reading. Thus a library is both a place for reading and
for books, just as a nursery is both a place for planting and for
plants. Hence at the far end of the scale, Collective nouns share
formal features with place nouns, but not with instruments or
agents.

In an earlier study, we pointed to the arbitrariness of selection
of a specific formal device even within highly restricted semantic
domains (Berman 1978: 394–401). This is clearly shown by the
conventional choice of terms in such areas as music or educational
occupations in Hebrew, thus:

<table>
<thead>
<tr>
<th>Device</th>
<th>Music</th>
<th>Schooling</th>
</tr>
</thead>
<tbody>
<tr>
<td>CaCaC</td>
<td>nagan</td>
<td>ganén-êt</td>
</tr>
<tr>
<td></td>
<td>kanar</td>
<td>nursery-teacher</td>
</tr>
<tr>
<td>Benoni</td>
<td>melave</td>
<td>more</td>
</tr>
<tr>
<td></td>
<td>acompanist</td>
<td>teacher</td>
</tr>
<tr>
<td>Verb</td>
<td>matofe</td>
<td>mefakéaz</td>
</tr>
<tr>
<td></td>
<td>drummer</td>
<td>inspector</td>
</tr>
<tr>
<td>-an</td>
<td>psañtran</td>
<td>tarpián</td>
</tr>
<tr>
<td></td>
<td>pianist</td>
<td>exersicer</td>
</tr>
<tr>
<td>Loan</td>
<td>musika'i</td>
<td>student</td>
</tr>
<tr>
<td></td>
<td>musician</td>
<td>professor</td>
</tr>
</tbody>
</table>

Such facts from the conventional lexicon combined with the
findings of our study show that the identification of form with
meaning is only partial, and that such correspondences tend to be
collapsed into more general superordinate categories, thus: -an for
Agents, both occupational and attributive, and to a lesser degree
for Instruments;* ma...a for both Instrument and Place nouns;
and -iya for both Places and Collectives. Thus, avoidance of total
transparency — in innovative usage as in the established lexicon
— applies to Modern Hebrew, even though it is a language which
in principle possesses such a rich array of formal devices for new-
word formation and one whose speakers in practice — as we have
tried to show above — still avail themselves liberally of many of
these different options.

4. DISCUSSION

In this final section, we consider the implications of our findings
for Modern Hebrew in relation to the issue of lexical productivity
in general. Discussion of the role and nature of linguistic "produc-
tivity" is thus confined here to the *lexical* level of word-formation processes as against the creative or generative properties of rules of the *grammar*. In the latter case, operations and constraints are structure-dependent, and refer to abstract structures such as N, V, or A, Preposition or Particle, Subject or Direct Object, rather than to words or classes of words. Lexical productivity, on the other hand, concerns the extent to which a given word-formation device is relied on by speakers in construing the words of their languages for purposes of interpreting both new and old words, as well as for coining innovative terms. From this point of view, a lexically productive process is one which still applies in the usage current at a given point in the development of the language. Thus, use of vowel-change to create causative verbs (as in pairs like *rise-raise, lie-lay, fall-fell*) is nonproductive in English today, by contrast with the common innovative use of a morphological device in the form of the *hif'il* verb-pattern for this same purpose in current Hebrew (Berman & Sagiv 1981, Bolozky & Saad 1983); and the Biblical pattern *CaCC* (with a historically long initial vowel) is no longer productive for the class of agent-nouns in today's Hebrew, by contrast with earlier words such as *naqid* 'governor', *qacin* 'office' (glossed as explained in n. 4).

By these standards, however, this same surface pattern functions as a "productive" process in Modern Hebrew, used for passive '-able' adjectives — as was noted by Haim Blanc several decades ago. Thus, the following are among the many such terms listed in a conventional dictionary (Even-Shoshan 1979) as having been introduced in modern times, which occur in actual usage: *shavir* 'breakable = fragile', *kari* 'readable = legible', *kavis* 'washable', *shakran* 'liar', *yatir* 'solvable', *qavil* 'acceptable'. Nonetheless, this very "productive" means for attaching a given form to a given meaning is not part of the grammar of Modern Hebrew, and it remains a lexical phenomenon, much like its '-able' counterpart in current English. Firstly, there are gaps in current usage, and not all transitive verbs in fact form the basis for deriving passive adjectives by this means — e.g. there is no word for 'approachable', 'disposable', or 'sendable' even though there are verbs from which such adjectives could in principle be formed — unlike the theoretical form *yatir* 'solvable' which would be homophonous with a word with an unrelated slot that has all 'one that is sent' adjectives in this
zahir 'cautious' case — let alone words in fact have this

Other devices meeting the requirements for innovations in
Hebrew include *CaCC* for coinings in the form of the *hif'il* verb-pattern for this same purpose in current
Hebrew (Berman & Sagiv 1981, Bolozky & Saad 1983); and the Biblical pattern *CaCC* (with a historically long initial vowel) is no longer productive for the class of agent-nouns in today's Hebrew, by contrast with earlier words such as *naqid* 'governor', *qacin* 'office' (glossed as explained in n. 4).

Our findings that for innovations in
Cohen (1984) for
Moreover, such devices in Modern Hebrew, in
outset of this paper, seemly equally
and *CaCC*. The
Hebrew — e.g. *malax* 'seaman'. By
many artisans, the
such occupations — gardener', *kacz* 'gardener', *shakran* 'liar', *yatir* 'solvable'. However, some 10
in Medieval Hebrew 1
"hangman", *kacz*. And in contemporary
agent occupations, the *CaCC* listed have been introduced in names of attributes (crybaby') and of
cal level of word-formation and relative properties of rules, and constraints are of structures such as N, V, Direct Object, rather than activity, on the other hand, word-formation device is a wordstock of their lan-

and old words, as well as point of view, a lexically phrased in the usage current the language. Thus, use of (as in pairs like rise-raise, wish today, by contrast morphological device in the same purpose in current & Saad 1983); and the y long initial vowel) is no nouns in today’s Hebrew, nagid ‘government’, qacin surface pattern functions ebrew, used for passive n Blanc several decades ny such terms listed in a 79) as having been intro-
ual usage: shavir ‘break-
avis ‘wash-able’, shamish amid ‘stand-able = con-
dalit ‘burnable = flam-
’ acceptable’. Nonetheless-
ing a given form to a of Modern Hebrew, and 3 its ‘-able’ counterpart current usage, and not for deriving passive ad-
ord for ‘approachable’, 3 are verbs from which — unlike the theoreti-
cophonic with a word

with an unrelated meaning, or shaltiz ‘send-able’ which would fill a slot that has already been pre-empted by the agent noun meaning ‘one that is sent, sendee = messenger’. Secondly, not all CaliC adjectives in this pattern (such as, say, Mishnaic zuriz ‘nimble’ sahir ‘cautious’ or Modern samiz ‘vicious, thick’, sadish ‘modern’) — let alone all words with this form in the established lexicon — in fact have this meaning.

Other devices for word-formation which are characterizable as meeting the requirement of lexical productivity in contemporary Hebrew include those which our test revealed to be “preferred options” for coining new nouns in a number of different semantic classes (Section 3.1 above) and also the many stem-external affixes which we characterized as highly favored in current usage, often in distinct contrast to lexical norms at earlier stages of the language (Section 3.4 above).

Our findings thus provide clear evidence that “speakers’ choices for innovations may shift over time” — as observed by Clark & Cohen (1984) for agent suffixes in English, French, and Polish. Moreover, such changes may be particularly marked in the case of Modern Hebrew, for sociohistorical reasons of the sort noted at the outset of this paper. We can illustrate this by reference to the two seemingly equally productive agent patterns in Hebrew: CaCaC and CaCCan. The former was used for agent nouns in Biblical Hebrew — e.g. sayad ‘hunter’, dayag ‘fisherman’, tabaz ‘cook’, malaz ‘seaman’. By Mishnaic times, a period when the culture had many artisans, this had become a common device for referring to such occupations — e.g. nagar ‘carpenter’, zagag ‘glazier’ ganan ‘gardener’, kacov ‘butcher’. The CaCCan pattern, on the other hand, was reserved in Mishnaic Hebrew almost entirely for denoting attributes, mostly ones with a negative import — e.g. ballan ‘idler’, shokran ‘liar’, patpetan ‘chatterbox’ kamcan ‘miser’. Subsequently, however, some 10 of the 35 or so CaCCan nouns introduced into the Medieval Hebrew lexicon are clearly occupation terms — e.g. talyan ‘hangman’, kwarran ‘gravedigger’, zcanor ‘yardman = janitor’. And in contemporary Hebrew, CaCCan forms are used in naming agent occupations almost as often as in naming attributes. Thus of the CaCCan listed in the Even-Shoshan (1979) dictionary as having been introduced in modern times, around the same number are names of attributes (e.g. razlan ‘goesip’, basbezun ‘wastrel’, baxyan ‘crybaby’) and of occupations (e.g. raftan ‘dairyman’, rakdan
'dancer', canxan 'paratrooper') — the ratio being of about 6 to 5 respectively. Moreover, in keeping with the increased reliance on stem-external affixation noted in Section 3.4 above, Modern Hebrew has also introduced several dozen agent terms formed out of nouns plus the -an suffix — used occasionally for attributes (e.g. tokf-an 'aggressor', harpark-an 'adventurer', trust-an 'defeasist', mafean-an 'revolutionary'), but even more commonly to refer to occupations (e.g. psantr-an 'pianist', zalil-an 'flutist', yecu-an 'exporter', kaduragl-an 'football-er' and many others).

Thus, in contemporary usage, the CaCCan-pattern words and -an ending words in general have come to represent the most unmarked, least constrained means for naming agents — both occupational like English farmer, sailor and attributive like liar, idler. This specialized agentive functions of -an form words sets them apart from CaCaC words in current usage in a way that differs from earlier, more classical norms. Although the CaCaC pattern has yielded many new agent nouns — such as tayas 'pilot', pasul 'sculptor', kanar 'violinist', katav 'reporter' — these are confined to the occupation sense. And although speakers may often come up with such well-established items when asked to cite agent-nouns known to them (as was shown in the results on Part C, testing retrieval from the conventional vocabulary, Section 3.3 above), they will not themselves spontaneously coin new nouns in this form. One reason may be that this pattern violates the criterion of distinctiveness (Section 3.6 above) by crossing lexical-class boundaries, since CaCaC nouns are superficially homonymous with past-tense verbs (ganav = 'thief' and 'stole', katav = 'reporter' and 'wrote') and they include many non-agent nouns (e.g. tavas 'peacock', panas 'flashlight', pagaz 'mortar'). In much the same way, present-tense or participial benoni forms, while also widely used for naming agents in current as in classical Hebrew, are clearly not as semantically transparent or as specialized for the agentive meaning as are nouns ending in -an. Thus, just as historically the CaCiC pattern has shifted from classical agent functions to an adjectival 'able' sense, so CaCCan and other -an ending forms are used today for a wide range of agent meanings, both occupational and attributive, and they are gaining an increased role in naming instruments as well (Section 3.4 above). Hence, what constitutes a productive word-formation device in encoding form/meaning relations may differ considerably at different times in the history of a language.
ratio being of about 6 to 5
in the increased reliance on
modern zen agent terms formed out
occasionally for attributes
entirely', trust-an 'defeatist',
more commonly to refer to
xalil-an, 'flutist', yecu-an
many others).

CaCan-pattern words and
me to represent the most
r naming agents — both
- and attributive like liar,
as of -an form words sets
usage in a way that dif-
Although the CaCaC pat-
s — such as layas 'pilot',
reporter' — these are con-
ough speakers may often
when asked to cite agent-
he results on Part C, test-
, Section 3.3 above),
coin new nouns in this
违反 the criterion of
sing lexical-class bounda-
homophones with past-
katav = 'reporter' and
nouns (e.g. tavas 'peacock'
ch the same way, present-
widely used for naming
o clearly used as semanti-
agentive meaning as are
ically the CaCic pattern
to an adjectival 'able'
terms are used today for a
rational and attributive,
naming instruments as
stitutes a productive
meaning relations may
the history of a language.

And this is not necessarily directly reflected in the numerical distribu-
tion of items in the well-established, conventional lexicon of that
language at a given point in time.

Against this background, we can further refine our characteriza-
tion of lexical productivity by reference to the distinction we
introduced elsewhere (Clark & Berman 1984) between three distinct
though interrelated facets of the notion "productivity in the lexi-
con": formal or structural, normative or official, and colloquial or
spontaneous. Thus, 1) Form al productivity refers to the struc-
tural devices and structure-dependent processes available in the
grammar of a language (in this case, as word-formation options)
and the formal constraints restricting the application of these op-
tions; 2) Normative productivity describes the structural
options favored for official purposes, such as: new words approved
by the Language Academy; terms coined in specific technical do-
main; the form-meaning groupings listed in schoolgrammars, in
textbooks, and other pedagogic references; recommendations of
usage manuals; and the devices which speakers self-consciously
construe as “correct”; while 3) Colloquial productivity un-
derlies the spontaneous coinages evinced by speakers when filling
lexical gaps in the free flow of speech and the devices preferred by
nonspecialist users of the language in more structured, experimen-
tal settings, such as the kind described for Hebrew in the present
study as well as others (e.g. Bolozky 1978, Clark & Berman 1984,
Ravid 1978).

With regard to structural productivity, we noted the fol-
lowing. Firstly, it is here that the grammar and the lexicon interact
most critically in any language. Thus, for instance, noun compounding
in Hebrew is formally restricted along the lines suggested in
3.5 above; the maCCeC pattern for instrument nouns is not freely
extendable to quadrilateral roots — e.g. the verb zashav 'think'
underlies the noun mazshev 'computer', but the related verb
xashben 'calculate' (rendered quadrilateral by addition of the suf-
fixal -n as a root consonant) is not the basis for an instrument noun
like *mazsheven to mean 'calculator', just as the derived root t-r-g-l
as in targel 'to-exercise' does not yield *matregel or the like to mean
'practicer, exercise-device'; CaCaC agent nouns are more constrained
than the CaCCan pattern, since they are avoided with root-final
alef or ayin low consonants — so that q-r-t 'read' yields karyan
'announcer', but not *kara (a fact that is shown by the current gen-
eral reliance on the "incorrect" form *cabay in place of normative *caba from the root c-b- for *[house]painter*; while stem plus -an forms are less restricted than the root-incorporated pattern CaCCan for denominal agent formation in the case of nouns with a more complex structure than CVCVC — thus *zaaer* 'yard' yields *zaaran* 'janitor', *réfet* 'dairy' yields *raftan* 'dairyman', but the full noun stem is needed to derive nouns like *mirzax-an* 'orientalist', *tavru'a-n* 'sanitation-ist'; and in structural terms of formal constraints, the CaCiC '-able' pattern is not readily available for roots ending in a glide — e.g. *azit* 'eat-able = edible' from the root ?-k-l 'eat', but not *shatiy* 'drink-able' from the root sh-t-y.

Surprisingly enough, considering the rich tradition of morphological research in Hebrew as in other Semitic languages, such issues still await detailed investigation for Modern Hebrew, of a kind well beyond the scope of the present study. One possible reason is that concern with new-word formation in the language to date has focused mainly on what we have termed "normative" productivity. Yet to the best of our knowledge, little information is available on the extent to which official recommendations for new-words have filtered down into general use, to become part of the general wordstock of Hebrew speakers. Exceptions are the studies of Al-loui-Feinberg (1974) and Nir (1982) — both of which indicate that in fact only part of the vocabulary that is officially instituted by such a body as the Hebrew Language Academy is absorbed into general everyday usage.

In the present context we will note three phenomena in the lexicon of colloquial Hebrew which run counter to what is sanctioned by arbiters of "good" usage. Firstly, as observed in Section 3.5 above, speakers often prefer Noun plus Denominal Adjective combinations to the more classical construct-state forms of Head Noun plus Noun Adjunct. This is true not only in a wide variety of syntactically derived Noun-Adjective combinations, such as *memshala yier'el-it* 'Israeli government' vs. the noun-noun counterpart *memshelat yier'el* (see Attias 1981, Levi 1976), it is also manifested in the recent tendency to create fully lexicalized compounds from such strings — e.g. *geva'arana* 'white cheese', *tavatiya aviri* 'aeronautical industries', *rakvet taxit* 'nether train = subway'.

A second departure from normative dictates, as noted in Section 3.2 above, is the consistent preference of speakers for the maCCeCa pattern for Place nouns, across a wide range of different words: *shoShan's* (1979) typically renders usage: *mirpa'a* 'c d-r-k 'tread'; *miShoP* from *shoP* 'shop' from *s-p-r k-b-s 'laundry'; *mitpara* 'sewing-r e-p-n 'seaman'; *mitshof* 'sewn' from *shof* 'sews'; *mitshof* 'sewn' from *shof* 'sews'; and many others.

The question of whether not immediately be fully "transparent" to the class of place instruments, say *mamora* 'pruning-for mamka 'sprinkles', *mamzona* 'test-tube', and many others. My analysis of the above, argue above, speaks meaning relations below, Hebrew nouns, so can both even though the b. The second point simply may not know overgeneralize to all. Thus, alongside of treated as maCCeCa in there are several word form, which speak 'restaurant' and pe minhara 'tunnel', a and there are other madgara 'hatchery', 'stairway'. Besides the collectives mish occur alongside of
abay in place of normative *eter*); while stem plus -an incorporated pattern CaCCan ease of nouns with a more xacer 'yard' yields xacran yman', but the full noun- an 'orientalist', taora'-an of formal constraints, the lable for roots ending in a n the root t-k-l 'eat', but t-y.

ch tradition of morpholog­

itic languages, such issues on Hebrew, of a kind well
the possible reason is that
language to date has fo-
normative" productivity.
formation is available on
actions for new-words have
some part of the general
as are the studies of Al-
floor of which indicate that
is officially instituted by
phenomena in the lexicon
what is sanctioned by
ved in Section 3.5 above,
1 Adjective combinations
of Head Noun plus Noun
variety of syntactically
h as memshala yora'el-it
counterpart memelahet
also manifested in the
1 compounds from such
atiya avirit 'aeronautical
way'.
ates, as noted in Section
s for the maCCeCa
ms, across a wide range
of different words. Thus, the following are all listed in Even-
Shoshan's (1979) dictionary in the miCCaCa pattern, yet they are
typically rendered as maCCeCa words in unselfconscous, everyday
usage: mirpa'a 'clinic' from r-p-1 'treat', midraxa 'sidewalk' from
d-r-k 'tread', mishkala 'nursery' from sh-k-l 'plant', mispara 'barber-
shop' from s-p-r 'cut (hair)', misbasa 'laundry, washroom' from
k-b-s 'launder', mishzata 'slaughterhouse' from sh-h-t 'slaughter',
mispara 'sewing-room' from t-p-r 'sew', mispana 'shipyard' from
s-p-n 'seaman', misra'aka 'fountain' from z-r-q 'throw', midsha'a
'lawns' from dèsha 'grass' (and these represent only the commonest
of some three-dozen such neologisms listed in this dictionary !).
The question of why the normative form is resisted in such cases is
not immediately obvious, particularly as this pattern would then
be fully "transparent", as follows: It would be uniquely allocated
to the class of place-nouns, and maCCeCa would serve primarily for
instruments, say — as in older, Biblical mazresha 'plough', ma-
mera 'pruning-fork', Medieval magreja 'rake', and also recent
mašmīra 'sprinkler' as well as (non-agricultural) implements like
mašzerna 'test-tube', maškema 'camera', mašrega 'knitting-needle',
and many others.

My analysis of the situation is as follows: Firstly, as we have
argued above, speakers are quite tolerant of non- uniqueneBB in form-
meaning relations of this type. Just as English -er (and, as we shall
note below, Hebrew meCaCeC) serve for both agent and instrument
nouns, so can both miCCaCa and maCCeCa serve for place nouns,
even though the latter is also commonly used for instruments.
The second point relates to a further kind of opacity. Speakers
simply may not know when to use which form, and hence they
overgeneralize to the less specialized, less restrictive maCCeCa.
Thus, alongside of the words listed as miCCaCa but generally rend-
ered as maCCeCa in ordinary speech — such as those noted above —
tere are several words which have become fossilized in the miCCaCa
form, which speakers never change to maCCeCa (e.g. mis'uda
'restaurant' and perhaps by direct analogy mislāla 'gutter-ery',
mishkara 'tunnel', and also mizkāla 'college', midrasha 'seminar');
and there are others which are rendered only by maCCeCa — e.g.
mašgēra 'hatchery', mazleva (normative maslava) 'dairy', mašrega
'stairway'. Besides there are nonplace nouns in both forms — e.g.
the collectives mishkara 'police', makhēla 'choir'. And older words
occurs alongside of more recent coinages in all subgroups! This
suggests that there is no motivated, morpho-phonological or semantic basis for speakers to make a decision as to which form is "right" in the sense of best suited to their own norms of usage. Some words have become lexicalized one way, others another, on the basis of common usage rather than of normative dictates or structural constraints. Where no such fossilization has occurred, speakers will either opt for normative miCCeCa or they will extend the less specialized maCCeCa to place-names in accordance with their individual lexicon, as a function of their personal linguistic history and experience. Thus, it is precisely in such instances, where "colloquial" and "normative" productivity tend to conflict, that lexical divergence and variation can be expected. The last set of instances we note here is of the masculine-noun pattern maCCeC. Since Mishnaic time, this has come to be more specialized for the instrument sense — as in masrek ‘comb’, mashpex ‘funnel’ — compared with Biblical words like masger ‘metalworker’, mamzer ‘bastard’, maalben ‘rectangle’ (Gluska 1981). And today this pattern is typically specified as the form par excellence for naming instruments in Hebrew. Yet our studies indicate some resistance to this normative recommendation. Thus, this pattern was rarely used in subjects’ production of innovative instrument nouns in the oral test (Clark & Berman 1984); it constituted only 21% of the answers in the comparable written test (Part A of the present study); and less than a third (32%) of the forms chosen as suited to instrument nouns (Part B) were in the maCCeC form. We suggest that the official requirement is successful in the case of words that can be defined as rote-learned or as unanalyzed at two extremes of the Hebrew wordstock: Ones which are common, everyday terms that form part of the basic vocabulary of young Hebrew learners, and so have become fossilized in this set form (as illustrated in (8-i) below) and those which are part of the highly specialized, self-consciously innovated technical terminology of the language (as in 8-iii). Elsewhere, as in the examples in the middle column (8-ii) below, speakers quite typically use a present-tense בָּא verb-form — most particularly where the base-verb is in the P3 פָּד’l pattern, rather than in one of the two other transitive patterns P1 פָּד’l and P5 הָיָ’. 

<table>
<thead>
<tr>
<th>(8) Instrument Noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rote-Learned, Fossil</td>
</tr>
<tr>
<td>Rote-Learned, Fossil</td>
</tr>
<tr>
<td>maqal &lt; P1 x fork</td>
</tr>
<tr>
<td>mashpex &lt; P1 s funnel</td>
</tr>
<tr>
<td>maftéax &lt; P1 p key</td>
</tr>
<tr>
<td>masrek &lt; P3 m comb</td>
</tr>
<tr>
<td>maqreg &lt; P5 m screwdriver</td>
</tr>
</tbody>
</table>

The first set of well-known Hebrew as in other languages, as isolated items, word by word. The last column
(8) Instrument Nouns in the maCCeC Pattern:

<table>
<thead>
<tr>
<th>Rote-Learned, Fossilized</th>
<th>Innovative, Resisted</th>
</tr>
</thead>
<tbody>
<tr>
<td>mazleg &lt; P1 zoleg</td>
<td>makrer ~ P3 mekarer</td>
</tr>
<tr>
<td>fork</td>
<td>fridge</td>
</tr>
<tr>
<td>mashpex &lt; P1 shofex</td>
<td>maghec ~ P3 megahec</td>
</tr>
<tr>
<td>funnel</td>
<td>iron</td>
</tr>
<tr>
<td>mafteax &lt; P1 potex</td>
<td>mafelax ~ P3 mefelax</td>
</tr>
<tr>
<td>key</td>
<td>nutcracker crack-</td>
</tr>
<tr>
<td>masrek &lt; P3 mesarek</td>
<td>mazhev ~ P3 mezhev</td>
</tr>
<tr>
<td>comb</td>
<td>computer calculate</td>
</tr>
<tr>
<td>mavreg &lt; P5 mavrég</td>
<td>mazeded ~ P3 mezeded</td>
</tr>
<tr>
<td>screwdriver</td>
<td>sharpener sharpens</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The first set of words are among the high-frequency, well-established items known to be resistant to change or regularization in Hebrew as in other languages (Schwarzwald 1982); they are learnt as isolated items, without any analysis relating them to the base-verb. The last column consists of technical terms, typically used by people particularly familiar with the referents in question — and
they indeed represent the result of selfconsciously, official, policy-making of the kind we have described as "normative productivity".

The middle set is perhaps the most interesting — since the forms to the left are those officially recommended, either originally or to this day (the words for 'refrigerator' and '(pencil-)sharpener' have been standardized in the "deviant" form) and there are others which could be added to this list, e.g. mexash ‘filter’, commonly rendered as mexen ‘(kitchen) sieve’. These words are instances where speakers have opted for the less transparent, non-unique device of conversion — retaining the present-tense participial verb-form which is very close in pronunciation to the meCCeC form, so that the same surface form is used both as a present-tense verb and as an instrument noun, as shown in (8-ii) above.

Thus, although the ma- prefix nouns are “taught” in school-grammars as the class of words for naming instruments, although a standard dictionary lists well over 100 such nouns as having entered the language recently, and although — as noted in Section 3.2 — speakers are selfconsciously aware that this is the “good” or “correct” way to derive instrument nouns, actual usage may run counter to these dictates. Even people who work with computers often name them by the present-tense plural form mexash-im and not by “required” maxshev-im, just as people who work with cars are likely to call the radiator either by the loan-form radiyator or by the present-tense form mexen ‘chills/chiller’ in preference to normative macnen (and see, further, Alloni-Feinberg [1974] for a sociolinguistic study of the gap between official nomenclature for car-parts and actual usage in different sectors of the population). In fact, if someone talks about makrer when referring to a refrigerator, say, in preference to colloquial present-tense mekarer, he or she is likely to be identified as a schoolteacher, a grammarian, or a foreigner. There is thus ample evidence that speakers are resisting the maCCeC form as "bookish", except in the more selfconsciously monitored contexts of technical expertise.

Where colloquial usage conflicts with normative dictates — as in use of maCCeCa for miCCaCa place-terms, and in use of meCaCeC for maCCeC instruments — two related trends emerge. There is a pattern of considerable variability across speakers and even within a single individual depending on the context of usage, whether formal, hence more selfconsciously, or casual and hence less monitored. And language change can be predicted, as a given, non-normative set of forms become a new "standard".

The question then is: why do these devices come to concern us here. structural devices arise — which is how we find expression in Hebrew. A further reason that speakers will recognize in their language as well as in the language of the other classes of Agent. In fact, we have shown this to be the case. One form is very common in their own language, and the others themselves. This form many speakers at a particular time in Hebrew. In that case, the decision to use a particular form as a basis for productivity is made here.

We conclude that language change cannot be predicted without relevant devices favoring another structural option. These will depend on the following factors:

(i) Underlying structure available to speakers

(ii) Pattern incorporation

(iii) Distribution of patterns in the lexicon, with their everyday discourse frequencies established.
conscious, official, policy-
normative productivity”. Con-
ting - since the forms to
d, either originally or to
'(pencil-)sharpener’ have
m) and there are others
various ‘filter’, commonly
These words are instances
transparent, non-unique
ant-tense participial verbs-
the macacec form, so
a present-tense verb and
above.
are “taught” in school-
ing instruments, although
such nouns as having en-
h - as noted in Section
that this is the “good” or
us, actual usage may run
who work with computers
atural form mezashe-im and
people who work with cars
be loan-form radiyalar or
‘chiller’ in preference to
mi-Feinberg [1974] for a
official nomenclature for
actors of the population).
then referring to a refrig-
ent-tense mekarer, he or
her, a grammarian, or a
hat speakers are resisting
the more selfconsciously
normative dictates - as
as, and in use of meCaCeC
trends emerge. There is a
speakers and even within
ext of usage, whether for-
and hence less monitored.
as a given, non-normative
set of forms becomes established in general usage, hence reflecting
a new “standard” (Donag-Kinrot 1978).
The question remains as to why or how a given device or set of
devices comes to be productive in the “colloquial” sense which
concerns us here. One factor may be general favoring of certain
structural options at a given phase in the development of a language
- which is how we explained, for instance, the avoidance of com-
pounding and the wide use of stem-external affixes noted earlier.
Another structural factor may be the pull to distinctiveness - which
we took to explain the current preference for -an ending words to
name agent nouns. However, as we have pointed out, this will never
find expression in anything like a total form-meaning correspond-
ence, even in a language which affords the varied options available
in Hebrew. A further factor is that of frequency, since it is reasonable
that speakers will make broadest use of those forms which are most
common in their language. However, the notion of “frequency”
itself requires clarification. If it refers to the established wordstock
listed in a conventional dictionary, and covering all periods of the
language as well as all levels of usage, then our findings for the
classes of Agent, Instrument, Place, Collective, and Abstract nouns
have shown this to be incompatible with the choices made by speak-
ers themselves. There may be dozens or hundreds of words in a
certain form many of which are not known, or not used at all, by
speakers at a particular point in the development of the language.
In that case, the devices which they embody cannot be considered
as a basis for productivity in new-word formation of the kind at
issue here.

We conclude that in characterizing the relative productivity of
word-formation devices, account needs to be taken of the currently
relevant devices favored by members of a given speech community.
These will depend on a complex interaction of factors, including:
(i) Underlying structural wellformedness and the formal options
available to speakers - e.g. vowel alternation and root plus affixal
pattern incorporation in Hebrew; conversion and prefixing as well
as suffixing in English; (ii) typological predispositions - e.g. for
affixation in Semitic languages, for compounding in Germanic;
(iii) distribution of these devices in the conventional, well-estab-
lished lexicon, with the vocabulary items employed by speakers in
their everyday discourse often differing quite considerably from
frequencies established for written texts; (iv) psycholinguistic fac-

tors favoring distinctiveness and semantic as well as morphological transparency; (v) speaker expectations deriving from the individual's experience, level of literacy, background in formal language study, and personal norms of usage; and (vi) patterns of change, of regularization, and extension of various devices at a given point in the historical development of a language. From these several points of view, Modern Hebrew seems to afford a particularly interesting case for investigation. It offers a rich array of affixal word-formation devices ranging from the highly synthetic to agglutinating type; owing to its having been so recently, and quite uniquely, revived as a spoken vernacular and the official language of a particular geo-political entity, words are constantly being innovated to name entities unfamiliar from prior stages of the language; and there is a peculiar tension in the society between the structurally motivated pull to regularization of form/meaning correspondences and the conservative reliance on earlier, written sources on the part of official innovators and normative grammarians, on the one hand, and the rather different motivations and sources of hypothesis construction relied upon by speakers both when acquiring and when using the language as an everyday means of expression.

Address of the author: Ruth A. Berman
Department of Linguistics
Tel Aviv University
Ramat Aviv
Israel 69978

NOTES

1 The study reported on here forms part of a broader project in the general domain of word-formation, including croslinguistic research into children's development of word-formation devices. I am indebted to Professor Eve V. Clark of Stanford University and to Dorit Ravid of Tel-Aviv University for their assistance, and for providing invaluable insights on all phases of this work.

2 In representing Hebrew forms, both current and classical, a broad phonetic transcription is adopted, as a rough rendering of how such items are pronounced in what Blau (1944) termed "General Israeli Hebrew". Thus, we do not replicate the historical (or orthographic) consonantal root elements, unless these are relevant to a particular line of argument. Words have final stress, unless marked by an accent aigu as having penultimate word-stress. In representing the morphological affixation patterns termed nestkal 'weight' for nouns and adjectives, binyan 'construction, conjugation' for verbs, we adopt the consonant, other ele

3 The study was carried out at Tel-Aviv University and owes much to Miriam Mendelewitch and Sc

4 Words are glossed, even though the study was carried out at Tel-Aviv University and owes much to Miriam Mendelewitch and Sc

5 Hebrew is a particularly interesting case for investigation. It offers a rich array of affixal word-formation devices ranging from the highly synthetic to agglutinating type; owing to its having been so recently, and quite uniquely, revived as a spoken vernacular and the official language of a particular geo-political entity, words are constantly being innovated to name entities unfamiliar from prior stages of the language; and there is a peculiar tension in the society between the structurally motivated pull to regularization of form/meaning correspondences and the conservative reliance on earlier, written sources on the part of official innovators and normative grammarians, on the one hand, and the rather different motivations and sources of hypothesis construction relied upon by speakers both when acquiring and when using the language as an everyday means of expression.

Address of the author: Ruth A. Berman
Department of Linguistics
Tel Aviv University
Ramat Aviv
Israel 69978

NOTES

1 The study reported on here forms part of a broader project in the general domain of word-formation, including croslinguistic research into children's development of word-formation devices. I am indebted to Professor Eve V. Clark of Stanford University and to Dorit Ravid of Tel-Aviv University for their assistance, and for providing invaluable insights on all phases of this work.

2 In representing Hebrew forms, both current and classical, a broad phonetic transcription is adopted, as a rough rendering of how such items are pronounced in what Blau (1944) termed "General Israeli Hebrew". Thus, we do not replicate the historical (or orthographic) consonantal root elements, unless these are relevant to a particular line of argument. Words have final stress, unless marked by an accent aigu as having penultimate word-stress. In representing the morphological affixation patterns termed nestkal 'weight' for nouns and adjectives, binyan 'construction, conjugation' for verbs, we adopt the consonant, other ele

3 The study was carried out at Tel-Aviv University and owes much to Miriam Mendelewitch and Sc

4 Words are glossed, even though the study was carried out at Tel-Aviv University and owes much to Miriam Mendelewitch and Sc

5 Hebrew is a particularly interesting case for investigation. It offers a rich array of affixal word-formation devices ranging from the highly synthetic to agglutinating type; owing to its having been so recently, and quite uniquely, revived as a spoken vernacular and the official language of a particular geo-political entity, words are constantly being innovated to name entities unfamiliar from prior stages of the language; and there is a peculiar tension in the society between the structurally motivated pull to regularization of form/meaning correspondences and the conservative reliance on earlier, written sources on the part of official innovators and normative grammarians, on the one hand, and the rather different motivations and sources of hypothesis construction relied upon by speakers both when acquiring and when using the language as an everyday means of expression.

Address of the author: Ruth A. Berman
Department of Linguistics
Tel Aviv University
Ramat Aviv
Israel 69978

NOTES

1 The study reported on here forms part of a broader project in the general domain of word-formation, including croslinguistic research into children's development of word-formation devices. I am indebted to Professor Eve V. Clark of Stanford University and to Dorit Ravid of Tel-Aviv University for their assistance, and for providing invaluable insights on all phases of this work.

2 In representing Hebrew forms, both current and classical, a broad phonetic transcription is adopted, as a rough rendering of how such items are pronounced in what Blau (1944) termed "General Israeli Hebrew". Thus, we do not replicate the historical (or orthographic) consonantal root elements, unless these are relevant to a particular line of argument. Words have final stress, unless marked by an accent aigu as having penultimate word-stress. In representing the morphological affixation patterns termed nestkal 'weight' for nouns and adjectives, binyan 'construction, conjugation' for verbs, we adopt the consonant, other ele

3 The study was carried out at Tel-Aviv University and owes much to Miriam Mendelewitch and Sc

4 Words are glossed, even though the study was carried out at Tel-Aviv University and owes much to Miriam Mendelewitch and Sc

5 Hebrew is a particularly interesting case for investigation. It offers a rich array of affixal word-formation devices ranging from the highly synthetic to agglutinating type; owing to its having been so recently, and quite uniquely, revived as a spoken vernacular and the official language of a particular geo-political entity, words are constantly being innovated to name entities unfamiliar from prior stages of the language; and there is a peculiar tension in the society between the structurally motivated pull to regularization of form/meaning correspondences and the conservative reliance on earlier, written sources on the part of official innovators and normative grammarians, on the one hand, and the rather different motivations and sources of hypothesis construction relied upon by speakers both when acquiring and when using the language as an everyday means of expression.

Address of the author: Ruth A. Berman
Department of Linguistics
Tel Aviv University
Ramat Aviv
Israel 69978

NOTES

1 The study reported on here forms part of a broader project in the general domain of word-formation, including croslinguistic research into children's development of word-formation devices. I am indebted to Professor Eve V. Clark of Stanford University and to Dorit Ravid of Tel-Aviv University for their assistance, and for providing invaluable insights on all phases of this work.

2 In representing Hebrew forms, both current and classical, a broad phonetic transcription is adopted, as a rough rendering of how such items are pronounced in what Blau (1944) termed "General Israeli Hebrew". Thus, we do not replicate the historical (or orthographic) consonantal root elements, unless these are relevant to a particular line of argument. Words have final stress, unless marked by an accent aigu as having penultimate word-stress. In representing the morphological affixation patterns termed nestkal 'weight' for nouns and adjectives, binyan 'construction, conjugation' for verbs, we adopt the consonant, other ele

3 The study was carried out at Tel-Aviv University and owes much to Miriam Mendelewitch and Sc

4 Words are glossed, even though the study was carried out at Tel-Aviv University and owes much to Miriam Mendelewitch and Sc

5 Hebrew is a particularly interesting case for investigation. It offers a rich array of affixal word-formation devices ranging from the highly synthetic to agglutinating type; owing to its having been so recently, and quite uniquely, revived as a spoken vernacular and the official language of a particular geo-political entity, words are constantly being innovated to name entities unfamiliar from prior stages of the language; and there is a peculiar tension in the society between the structurally motivated pull to regularization of form/meaning correspondences and the conservative reliance on earlier, written sources on the part of official innovators and normative grammarians, on the one hand, and the rather different motivations and sources of hypothesis construction relied upon by speakers both when acquiring and when using the language as an everyday means of expression.

Address of the author: Ruth A. Berman
Department of Linguistics
Tel Aviv University
Ramat Aviv
Israel 69978

NOTES

1 The study reported on here forms part of a broader project in the general domain of word-formation, including croslinguistic research into children's development of word-formation devices. I am indebted to Professor Eve V. Clark of Stanford University and to Dorit Ravid of Tel-Aviv University for their assistance, and for providing invaluable insights on all phases of this work.

2 In representing Hebrew forms, both current and classical, a broad phonetic transcription is adopted, as a rough rendering of how such items are pronounced in what Blau (1944) termed "General Israeli Hebrew". Thus, we do not replicate the historical (or orthographic) consonantal root elements, unless these are relevant to a particular line of argument. Words have final stress, unless marked by an accent aigu as having penultimate word-stress. In representing the morphological affixation patterns termed nestkal 'weight' for nouns and adjectives, binyan 'construction, conjugation' for verbs, we adopt the consonant, other ele
c as well as morphological

deriving from the individual
round in formal language
1 (vi) patterns of change,
s devices at a given point
age. From those several
afford a particularly in-
rich array of affixal word-
ly synthetic to aggluti-
ately, and quite uniquely,
icial language of a partic-
antly being innovated to
ese of the language; and
between the structurally
orm/meaning correspon-
rmative grammarians, on
motivations and sources
by speakers both when
as an everyday means

REFERENCES

Alloni-Feinberg, Yafa. 1974. "Official Hebrew terms for parts of the car:
A study of knowledge, usage, and attitudes." In: Joshua A. Fishman, ed.
Aronoff, Mark. 1976. Word Formation in Generative Grammar. Cambridge:
M. I. T. Press.
Tel-Aviv University ms.
Attias, Talia. 1981. Ordering of Adjectives in Modern Hebrew. Tel-Aviv
University master’s thesis.
Avinery, Yitschak. 1976. A Theaurus of the Hebrew Radical Nouns. Tel-Aviv:
Izra’il Publishing.
Tel-Aviv: Sifriyat Maariv. [Hebrew].
Berman, Ruth. 1979. Modern Hebrew Structure. Tel-Aviv: University
Publishing Projects.
Berman, Ruth. 1982. New-word formation in English and Hebrew: The issue
of productivity. Paper presented at Conference of University Teachers of
English, Bar-Ilan University, Ramat-Gan, June 1982.


Smith, Karl. 1982. The use of compound adjectives in Hebrew, English, and Norwegian. Tel-Aviv University ma.
