

# A CONTRASTIVE STUDY OF VERBAL GENDER IN MODERN HEBREW AND MODERN RUSSIAN<sup>1</sup>

WOUT VAN BEKKUM AND FIANS HAMBURGER

*Groningen University*

## *I. General introduction*

The category of verbal gender has to be considered first of all in connection with its place in the utterance. Verbal gender is part of the communicative component of the utterance and exercises its influence upon the referential component, i.e., that part of the utterance that refers to extra-lingual reality. Verbal gender represents the speaker's hierarchy in visual perspectives in relation to the referential part of the utterance. Hence it is difficult to obtain a right notion of it without taking the corresponding referential structure into account. On the other hand, the referential predicate structure can only be known from its verbal gender and it is exactly this interrelationship between referential and diathetical components that bears upon a proper insight into verbal gender.

The referential part of the utterance possesses a predicate-participant structure. The predicate contains a nucleus, one or more syntactic positions (places) and one or more roles (deep cases). The deep cases connect the nucleus with the places. The nucleus contains the lexical information by which predicates of an identical structure differ. In actional theory one usually distinguishes one-place, two-place and three-place predicates. The following deep cases are relevant to our study:

1. the agentive (A; the case of the intentional causer);
2. the objective (O; the case of the participant affected by the process);
3. the dative (D; the case of the possessor, the experiencer, or the speaker);
4. the locative (L; the case of the location where the process takes place; (directional object)).

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<sup>1</sup> We owe many thanks to Hans Hospers for his valuable comments and Arthur van Essen for correcting the English text. We are grateful to Norry Horlings-Brandse for editing the manuscript.

A participant fulfils one or more deep cases. A combination of deep cases within one place occurs in the proper reflexive predicate and in the reciprocal predicate. A division can be made into independent and dependent predicates. An independent predicate consists of a causing event and a caused event (Cholodovič 1969:5ff). A dependent predicate is part of an independent predicate and is therefore called sub-predicate. A sub-predicate may represent a causing event, a caused event or one of the phases of a caused event. Each independent predicate contains a causal component, i.e., a causal relation between the causing and the caused events. This implies that an independent predicate is a causative predicate and a dependent predicate is non-causative. Causativity implies transitivity<sup>2</sup> and refers to single-phase as well as to three-phase caused events. To illustrate this theory we can adduce the following types:

- the independent two-place predicate with a single-phase caused event is of the type 'hit';
- the independent two-place predicate with a three-phase caused event is of the type 'broke' (cf. Fillmore 1970).

Like all three-phase caused events 'broke' implies a change of situations: in the three-phase caused event a change occurs from a presupposed initial place through a transitional phase into a final phase. The initial and final phases are stative, but the transitional phase is dynamic. This idea of change with respect to the causatives was already elaborated by Jespersen (1975). It is important to note that the three-phase predicate is defined as terminative and the single-phase as aterminative. Terminativity is the first basic principle of the semantic predicate structure.

Three criteria fix the number of types of independent predicates:

1. the number of participant places;
2. the number and nature of deep cases;
3. the causative nature of the caused event (single- or three-phase).

These types can be illustrated by the following examples<sup>3</sup>:

#### I. independent predicates

##### A. one-place

- single-phase, (A + O) rubbed oneself (reflexive)
- three-phase, (A + O) killed oneself (reflexive)

##### B. two-place

- single-phase, A + O hit (non-reflexive)
- three-phase, A + O killed (non-reflexive)

<sup>2</sup> Dependent two-place predicates, such as 'saw', 'hated', etc. may be regarded as transitive, but they are not regarded as causative.

<sup>3</sup> We prefer to cite the simple past form as a clear presentation of the meaning of the predicates.

|                |                          |         |                 |
|----------------|--------------------------|---------|-----------------|
|                | (A + D) <sup>4</sup> + O | took    | (reflexive)     |
|                | (A + O) + L              | went    | (reflexive)     |
| C. three-place |                          |         |                 |
| - three-phase, | A + O + D                | gave    | (non-reflexive) |
|                | A + O + L                | brought | (non-reflexive) |

It appears that independent predicates include the agentive case.

The speaker clarifies by means of verbal gender, which participant of a predicate is the most important one in his point of view and which is less important. Lomtev called these positions *ischodnaja pozicija* (position of departure) and *posledujuščaja pozicija* (following position) respectively (cf. Lomtev 1972:117). Thus the speaker creates a diathetical hierarchy in relation to the participants involved. Danes sharply formulates the idea of deep structure diathesis (Daneš):

'Zusammenfassend möchten wir also sagen, das im Bereich der komplexen globalen 'Satzbedeutung' eine spezifische Ebene der Perspektivierung (oder Hierarchisierung) der semantischen Satzelemente zu postulieren ist. Das, was man 'genus verbi' nennt, gehört auf diese Ebene.'

Opinions differ as to the number of deep structure voices: the choice is either for two voices (active/passive or active/middle) or three (active/passive/middle). Following Benvenist (1966) we have opted for a distinction between two deep structure voices only: active and non-active. In most utterances the grammatical subject indicates which participant takes up the first position in the diathetical hierarchy. The active voice is characterised by the combination of the grammatical subject and the agentive deep case. Hence the proper reflexive and part of the reciprocal predicates are combined with this voice. The non-active voice comprises passive and middle. The combination of these two voices is established upon the observation that in both passive and middle voice the grammatical subject is linked with a participant fulfilling a non-agentive deep case. Also Lyons stresses the affinity of the passive with the middle voice (Lyons 1968:375):

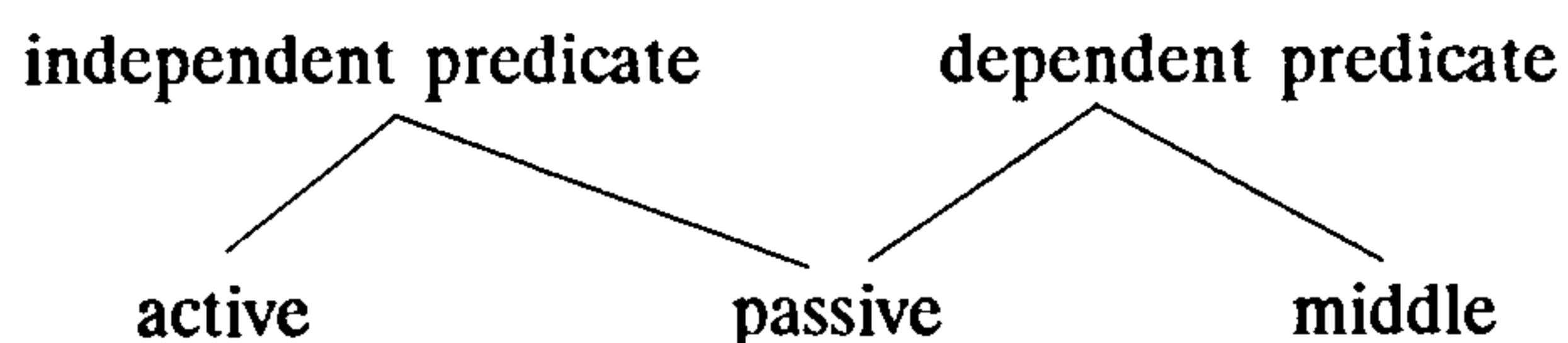
'The point being made is that the 'middle' voice can 'merge' with the passive under the 'non-agentive' interpretation of the subject.'

This affinity is illustrated by the fact that passive and middle forms often coincide, for instance, in French and in Russian some predicate forms may have a passive as well as a middle meaning (*se rompre, lomat'sja* - 'to break').

Independent predicates embrace both active and passive predicates. In the independent passive predicate the agentive is usually expressed in an adjunct, which takes up the 'following position' in the hierarchy. The passive predicate is dependent, when it occurs without an agentive adjunct. The relationship between independency and dependency of the predicate and the verbal gender can be depicted as follows:

<sup>4</sup> The deep cases between brackets are fulfilled by one participant.





The most direct way to realize a non-active predicate is to make it dependent by reducing it to its caused event or to one of the phases of the caused event ('laid', 'was ready', etc.). As a result of this middle voice may be expressed in general reflexive predicates such as 'died', 'received', 'grew angry', etc. These resultative non-causative correlates form pairs with the causative predicates 'killed', 'gave', 'made angry', respectively, which represent the diathetical opposition active-middle (Cholodovič 1969:10ff). From that point of view the opposition causative/non-causative may be regarded as a diathetical opposition. In Hebrew causativity is even a distinctive factor in the voice system.

Dependent predicates do not include the agentive case. Hence dependent passive predicates, such as 'was seen', 'was hated', 'was received', 'was reached', etc., are predicates with an experiencer or a possessor in the adjunct. Generally, passive forms in which such an adjunct is impossible, irrecoverable or artificial, are considered middle. Among them are the so-called stative passives as in the sentence 'the food was spoilt during transport'. Thus sub-predication is a powerful means to realize verbal gender. It is the second basic principle of the semantic predicate structure (cf. Hamburger 1986:244).

The main types of the dependent predicate can be summarized as follows:

## II. dependent predicates (caused events)

### A. one-place

|                 |   |            |
|-----------------|---|------------|
| - single-phase, | ○ | was rubbed |
|                 | ○ | was hit    |
|                 | ○ | was hated  |
|                 | ○ | was dead   |
| - three-phase,  | ○ | died       |

### B. two-place

|                 |       |              |
|-----------------|-------|--------------|
| - single-phase, | ○ + D | saw          |
|                 | ○ + D | hated, loved |
|                 | ○ + D | had          |
|                 | ○ + L | was at       |
| - three-phase,  | ○ + D | received     |
|                 | ○ + L | reached      |

In the following we shall examine whether this introductory model is an adequate basis for the description of verbal gender in Hebrew and Russian.

## II. Verbal gender in Modern Hebrew

The verbal system of Modern Hebrew is organized by the so-called *binyānīm* ('formations'), morpho-phonological patterns, which are usually divided into seven categories called Qal (Pa'al), Niph'al, Pi'el, Pu'al, Hitpa'el, Hiph'il, Huph'al (cf. Goshen-Gottstein 1965).

The seven *binyānīm* express the semantic features of voice in Modern Hebrew. The verbal system is based upon these *binyānīm* which are morphologically related to each other in a systematic way.

1. Qal is considered the basic and at the same time the active voice, both morphologically and semantically, whereas all the others are 'derived' from this morphological pattern; in this sense they could be defined as 'extensions' of Qal.
2. The original gender of Niph'al was clearly reflexive to Qal. Qal knew its own internal passive formation, only surviving in the passive participle *pa'ul* (*kātūv* - 'written', *šāmūr* - 'guarded'). Niph'al adopted the function of a passive *binyān* to Qal (*niktāv* - 'was written', *niš'al* - 'was asked'), but at the same time retained a middle voice meaning (*nistār* - 'was hidden', *nišmār* - 'was guarded'; *nāmēs* - 'melted') and even an active voice meaning with no difference from Qal (*niḥām* - 'fought', *niḥnās* - 'entered', *niggāš* - 'approached') and sometimes there is no direct relation to a Qal form at all (*nè'ènāh* - 'sighed'). Niph'al is also related to the other active *binyānīm* Pi'el and Hiph'il when it functions as a passive of Pi'el or Hiph'il, if no Qal form is extant (*niḥbād* - 'was offered'). A few Niph'al forms still betray proper reflexive use (*nāsōg* - 'withdrew') or express reciprocal action (*nifgāš* - 'met', *nidb<sup>c</sup>rū* - 'agreed with', *niḥ<sup>c</sup>mū* - 'fought each other', *no'āz* - 'consulted someone').
3. Pi'el is traditionally described as intensification, strengthening and repetition of the action (*hillēk* - 'walked' [iterative], *šibbēr* - 'smashed', 'broke' [intensive]), but we consider these and other forms of Pi'el to have primarily causative meaning (*giddēl* - 'made grow', *ziddēq* - 'caused to be a right', *qizzēz* - 'made shorter'). Many Pi'el forms are denominative.
4. Pu'al is a passive of Pi'el (*guddal* - 'was made to grow', *quzzaz* - 'was made shorter'). In Modern Hebrew it often occurs as a participle (*medubbar* - 'it is said').
5. Hitpa'el can be primarily defined as proper reflexive of Pi'el (*hitlabbēš* - 'dressed himself', *hitrahēz* - 'washed himself', *hitnaqqēm* - 'revenged himself', *hitaššer* - 'enriched himself', *hitnappēl* - 'attacked', *hitpallēl* - 'prayed'<sup>5</sup>) or gene-

<sup>5</sup> Originally hitpallēl can be considered as a reflexive form of pallēl - 'spoke' with the meaning of



ral reflexive (*hit'aṭṭēš* - 'sneezed', *hit'abbēl* - 'mourned', *hityāhēd* - 'became Jewish', *hitḥammēm* - 'became hot', *histaddēr* - 'was arranged', *hitqayyēm* - 'took place', *hištakkēah* - 'was forgotten'<sup>6</sup>). Hitpa'el can also function with reciprocal meaning (*hitrā'ū* - 'saw each other', *hityād<sup>c</sup>dū* - 'got befriended with each other').

6. Hiph'il has many characterizations: its main function is to be an active causative of intransitive (sometimes transitive) Qal (*hiršīa* - 'made guilty', *hōzī* - 'caused to get out'). Like Pi'el also Hiph'il verbs are often denominative, mostly derived from adjectives (*higbiah* - 'made long/tall', *hēfīv* - 'caused to be good', *hišmīn* - 'caused to be fat'), but also from nouns (*hifriah* - 'caused to blossom', *hiškīl* - 'made clever').

7. Huph'al expresses primarily the passive of Hiph'il (*hūšraš* - 'was made to become rooted') and sometimes it is also the passive equivalent of the Qal (*naqām* - 'avenged' next to *hūqām* - 'was avenged').

Studies have shown that Israeli children learning Hebrew as their mother tongue are aware of the syntactic value of the *binyānīm* (cf. Berman 1979). The children may use one transitive form when they should use another, but they will never wrongly substitute a transitive (independent) morphological form for an intransitive (dependent) one. Thus Pi'el and Hiph'il are clearly separated from intransitive Niph'al, Pu'al, Hitpa'el and Huph'al. Berman distinguishes between 'main' and 'secondary' employment of the *binyānīm*, equating the term 'main' with 'productive', and 'secondary' with 'idiocentric'. The following examples illustrate the processes reflected in the *binyānīm* forms of verbs with a shared root (cf. Junger 1987:20):

1. Pi'el-Pu'al-Hitpa'el:

- active: *Dān 'immēn 'ēt ha- zēwēt* - 'Dan trained the team';
- passive: *Ha- zēwēt 'umman 'al y<sup>c</sup>dēy Dān* - 'The team was trained by Dan';
- proper reflexive: *Ha- zēwēt hit'ammēn* - 'The team trained'<sup>7</sup>.

2. Qal-Pi'el:

- middle: *Ha-p<sup>c</sup>rāḥīm gādū '...ginnāh* - 'The flowers grew in the garden';

'spoke to himself' like the old Russian particle *mol* - 'that is to say' contrary to *molitisja* - 'to pray'; (cf. Junger 1987:14-15).

<sup>6</sup> This function is adopted by the originally Rabbinical Hebrew stem formation Nitpa'el, e.g., *nitqabbēl* 'is received', *nitbaqqēš* - 'is requested'.

<sup>7</sup> In this example Qal-Pu'al-Hitpa'el; the simplification of the *binyānīm* patterns to transitive-intransitive clearly reflects an increasing influence of the Indo-European languages on Modern Hebrew. The question of fronting (Who trained who? Did Dan train the team or did the team train Dan?) is relevant for Modern Hebrew in the absence of case-endings, but is partly resolved in Hebrew by the particle *ēt*, denoting the definite (!) accusative.

- active: *Dān giddēl 'ēt ha-p<sup>c</sup>rāḥīm ba- ginnāh* - 'Dan grew (= raised) the flowers in the garden'

3. Qal-Hiph'il:

- middle: *Dān yāraš harbēh kēsēf mē-haz<sup>c</sup>qēnāh* - 'Dan inherited much money from the old lady';
- active: *Ha-z<sup>c</sup>qēnāh hōrīšāh harbēh kēsēf le-Dān* - 'The old lady left (= bequeathed) much money to Dan'.

4. Qal-Hitpa'el:

- active: *Dān lāvaš 'ēt ha-m<sup>c</sup>il* - 'Dan wore (= put on) the coat';
- proper reflexive: *Dān hitlabbēš* - 'Dan dressed'.

The use of Hitpa'el is completely consistent with the periphrastic use of causative Hiph'il + a reflexive pronoun ('(one)self'):

- *Dān hilbīš 'ēt 'azmō* - 'Dan made wear himself (= dressed)<sup>8</sup>.

Berman's views still reflect the traditional description of the verbal system in Hebrew, but many problems remain unsolved. If it is assumed that the opposition causative/non-causative can be regarded as part of the voice system, can the division into causative vs. non-causative now really be systematized? Is a diathetical analysis of the *binyānīm* system an absolute goal (one *binyān* - one voice) or can we only determine what has to be considered as dominant within a given *binyān*? The latter seems to be necessary, when we take the diversity of function and gender of each *binyān* into account. Causativity in Hebrew is mostly expressed by the morphological form of the verb. Periphrastic or external causatives are rare. The causer in Modern Hebrew is always in the 'nominative case', without any prefix, particle or marker. The causee, as we have seen, is preceded by the particle *ēt* or sometimes *l<sup>c</sup>*, traditionally seen as the accusative and dative markers respectively<sup>9</sup>. The problem of the difference between causative Pi'el and Hiph'il has been extensively discussed in a study on Classical Hebrew by Jenni (1968) (cf. also Van Bakkum 1983). The difficulties of classification with regard to the Pi'el and Hiph'il in Classical and Rabbinical Hebrew have their repercussions on Modern Hebrew.

Junger is convinced that the *binyānīm* can be described in terms of valency change (cf. also Abraham 1978). Derivational relations between the *binyānīm* exist; the systematism of the verb should be sought in predicate-schemes, expressing valencies of (in-)transitivization. The valency approach of the *binyānīm* stresses the idea that causativity is a diathetical marker. Junger's observations bear upon our discussion, proving that dominance plays an important role, as can be illustrated

<sup>8</sup> The reflexive as the paraphrase of a causative construction where the agents and the goal refer to the same individual. Compare to the relations between Qal and Hitpa'el in: - *Ha-bāsar qar* - 'The meat is cold, and: - *Ha-bāsar hitqārē* - 'The meat got cold', cf. J. Junger, *Predicate Formation*, p. 20.

<sup>9</sup> On the quality and distribution of these particles, cf. J. Junger 1987:77; also Keenan 1981:8



by her distinction of two groups of *binyānīm* which she defines as 'productive' and 'unproductive'. These terms can only be adduced here as an indication of the productive group consisting of morphological forms which still admit new verbs to the system. These are the Pi'el, the Hiph'il and to some extent the Hitpa'el. The Niph'al is unproductive, i.e., no new verbs enter the system in this morphological form. The formerly productive Qal is the basis of a large group of roots, but in Modern Hebrew new verbs entering the language mostly follow the Pi'el or Hiph'il pattern (often quadrilateral: *ṭilpēn* - 'phoned'; *tirpēd* - 'torpedoed'; *hišwīz* - 'sweated'). There is a group of roots that are intransitive in the Qal/Pa'el pattern and transitive in the Pi'el (*kāvēd* - 'was heavy', 'important'/*kibbēd* - 'made heavy', 'esteemed'). A small group of general reflexive verbs follows the Hitpa'el (cf. Junger 1987) (*yāvēš* - 'was dry'/*hityabbēš* - 'became dry'). Also Hiph'il is very often the causative of a root which is mostly intransitive (but sometimes transitive) in the Qal (*bāšēl* - 'ripened'/*hivšil* - 'caused to ripen'; *šākav* - 'laid'/*hiškiv* - 'caused to lie'; *ʾamad* - 'stood'/*hēʾemid* - 'put'; *tālāh* - 'hung'/*hitlāh* - 'suspended'). Thus productivity/unproductivity may reveal the pattern of dominance.

How many voices are to be distinguished in Modern Hebrew and how could they be classified? Niph'al, Pu'al and Huph'al prefer the absence of the causer or agent and are therefore no real 'passive' forms, but 'pseudo-passives', confirming more general and more 'middle voice' characteristics. In other words, they are not just equivalents of their 'active' counterparts Qal, Pi'el and Hiph'il, while they designate a wholly different state of affairs. With the pattern of dominance as our basic principle we are justified in distinguishing two voices only: active and non-active (cf. Junger 1987, Siewierska 1984:163)<sup>10</sup>. In many languages passive clauses cannot appear with an overt agent or the agent can, but need not be specified. Agentless passives are far more common than those with an agent (cf. Siewierska 1984). In Hebrew an agent-phrase is only allowed when it is required for a specific pragmatic reason, using the 'al - *yēdēy* ('by') phrase. The occurrence of 'al-*yēdēy* phrases serves as a criterion for the distinction of genuine passive and general reflexive predicates. Taking the latter observations into consideration, the *binyānīm* Niph'al, Pu'al and Huph'al can be described as predominantly non-active (middle, 'passive'), whereas Qal, Pi'el, Hiph'il and Hitpa'el in its quality of proper reflexive are predominantly active. The Hitpa'el is proper as well as general reflexive, whereas the latter occurs equally often in forms of Qal and Niph'al. Proper reflexivity is mostly morphologically expressed in Modern Hebrew, but the conjunction with a

<sup>10</sup> Siewierska 1984:163; 'The use of a reflexive morpheme in Indo-European passives is generally attributed to the original active/middle voice system in Indo-European. The active voice was used to portray the subject as simply the doer of the action, while the middle voice expressed actions or states which immediately affected the subject or its interests. In the course of time languages such as English underwent a reanalysis due to which the middle category was lost. The functions of the middle voice were subsumed by the active voice and the passive function was singled out to constitute a new separate passive voice. Russian, Greek, Hebrew and German have partially retained the Indo-European middle voice displayed by the formal similarity of reflexives and some passives while simultaneously developing a separate passive, in the case of Russian and Greek confined to the perfective. The common denominator of reflexives and passives under this interpretation is the 'affectedness' of the subject.'

reflexive pronoun is possible in the case of proper reflexive: *Yōsī hitgallēah kol yōm* - 'Yosi shaved himself every day' vs. *Hū rā'āh et 'azmō ba-rē'i* - 'He saw himself in the mirror'.

Reciprocity is expressed by the Hitpa'el morphologically (*hityādēdū* - 'got befriended with each other'), otherwise pronominally (*ahāvū zēh et zēh* - 'loved each other') or combined (*hit'ahāvū zēh ba-zēh* - 'fell in love with each other').

As for our study of the verbal gender in Modern Hebrew and Modern Russian we cannot avoid the conclusion that in the Hebrew verbal system causativity and non-causativity delimits the verbal genders to a high extent. Yet, the distribution of voice meanings over the *binyānīm* shows considerable irregularities (cf. Hamburger 1981:97-100)<sup>11</sup>:

|                   | non-causative  | causative   |
|-------------------|--|---|
| Qal <sup>12</sup> | +  | -<br>'asāf - 'gathered'<br>'azār - 'girded'<br>bāṭel - 'stopped'<br>dāḥaf - 'impelled'<br>māsar - 'handed down'<br>pāga' - 'harmed'<br>šāvar - 'broke'<br>sām - 'put down'<br>bānāh - 'built', etc. |
| Niph'al           | +  | -<br>niḵnas - 'entered'<br>niggaš - 'approached'<br>niḵna' - 'subdued'<br>nizzav - 'stood', etc.  |
| Pi'el             | -<br>qibbēl - 'received'<br>ḥippēš - 'searched'<br>biqqēr - 'visited, checked'<br>biqqēš - 'asked' | +   |

<sup>11</sup> The signs +/- are used to indicate dominance of causativity/non-causativity.

<sup>12</sup> We want to note here that proper reflexive verbs which are considered in traditional Hebrew grammar as intransitive, are regarded here as causative on the basis of their case structure, such as *verba movendi*: Qal: *hālaḳ/hillēḳn, pānah*; Pi'el: *ṭiyyēl, siyyēr, siqqēf*, etc. Therefore one should not describe them as non-causative. (cf. Junger 1987:73-75).



|                       |  |   |
|-----------------------|--|---|
| Hitpa'el              | -  | + |
|                       | hitpalləl - 'prayed'                     |   |
|                       | histakkəl - 'gazed'                      |   |
|                       | hitqayyēm - 'took place'                 |   |
|                       | hitmazẓē' - 'was familiar'               |   |
|                       | hiẓtā'er - 'regretted'                   |   |
|                       | hištannāh - 'changed'                    |   |
| Hiph'il <sup>13</sup> | -  | + |
|                       | hisriah - 'stank' (Qal: sarah - 'stank') |   |
|                       | hitḥil - 'began'                         |   |
|                       | hēnēz - 'blossomed'                      |   |
|                       | himšik - 'continued'                     |   |
|                       | hēvīn - 'understood'                     |   |

Pu'al and Huph'al follow Pi'el and Hiph'il respectively. Most exceptions result from lexicalisation, which at an earlier stage of the language may have been derived by a formation rule, but which since have acquired a meaning that is not directly produced by the root or by causation/non-causation. The derivational processes of these verbs are considered regularities and they are listed in the lexicons as idiosyncrasies (cf. Junger 1987:74-75)<sup>14</sup>.

Concluding our survey of the *binyānīm* in Modern Hebrew we can say that these seven stem formations do not allow a rigid formalisation of verbal gender. Their interrelationship is not unambiguous; their arrangement can be questioned. Still, the regularity and systematism of the *binyānīm* has been established by the adoption of a meaning in accordance with the morphological peculiarities of their form, in which the opposition causativity/non-causativity plays an important role, showing the differences between the *binyānīm* according to the principle of dominance.

### III. Verbal gender in Modern Russian

Like the other components of the utterance, verbal gender has two main strata: one stratum of meaning, and one of form, labelled as 'deep structure diathesis' and 'surface structure diathesis' respectively. In deep structure the referential and the diathetical components are separate systems, even so they are easily confused. In surface structure the situation is even more intricate, when the two interdependent components are unavoidably inseparable: a predicate form represents, among other things, both actional meaning and voice. In the study presented here we start from the separateness and at the same time from the interdependence of the

<sup>13</sup> Shaph'el comes instead of the Hiph'il as causative, when the Hiph'il of the root is already 'occupied', e.g. *hēḥzir* - 'returned, gave back' and *šitẓēr* - 'reconstructed'.

<sup>14</sup> On causativity in Hebrew cf. Bolozky and Saad 1984, Mentscher 1983.

referential and the diathetical components which are involved in predicate structure.

By deep structure diathesis we understand a hierarchy of visual perspective of the participants of a predicate and their roles. Surface structure diathesis is the system of diathetical forms and constructions by which the deep structure diathesis in a particular language is realized. Deep structure diathesis may be obfuscated by surface structure phenomena. Panzer remarks on this score (cf. Panzer 1975):

'Insgesamt ist also die Diathese als Verbalkategorie des Russischen höchst komplex und problematisch; nur von syntaktischen Konstruktionen in Verbindung mit bestimmten semantischen Invarianten ist die Unterscheidung von Aktiv und Passiv überhaupt einigermaßen sinnvoll für das Russische. Auch die Kasusyntax und -semantik spielt hier mit hinein.'

In Russian diathesis is hardly formalised. The passive is formalised unambiguously only in the passive participles, of which the perfective one may occur as a finite verb. It is also in the perfective aspect only that Russian makes a distinction between the middle and the passive voice (*vozvratilsja* vs. *vozvraščēn* - 'came back', 'has been returned'). It is true that the *sja*-form plays an important role in the system of Russian diathesis, but like the non-*sja*-form it turns out to represent either deep structure voice and it may belong to each of the three surface structure voices: active, passive, or middle (cf. Hamburger 1981:102). According to Brecht-Levin (1985) the *-sja*- suffix only occurs, when the patient in the corresponding active construction is the object in the accusative case. Moreover, the patient must be a 'strong' patient, i.e., it must be marked by the feature 'affected'. Although this theory accounts for a considerable number of cases, it does not explain why an oblique object (i.e., in another case than the accusative) can be passivized, neither why *umer* ('died'), *utonul* ('drowned'), etc. is not *umersja*, *utonulsja*, etc.

We shall describe the ways of expressing verbal gender in Russian, starting with the active voice. This voice is predominantly expressed by non-*sja*-forms (3-11). Proper reflexive and active reciprocal predicates - apart from periphrastic constructions with *sebja* and *drug druga* - are realised by *sja*-forms:

- |                         |                       |
|-------------------------|-----------------------|
| 1 <i>On mylsja</i>      | - 'he washed himself' |
| 2 <i>Oni obnimalis'</i> | - 'they embraced'     |

Some of the active predicates, however, are expressed by *-sja*-forms, e.g. *stučalsja* ('knocked'). With respect to the passive voice two factors are relevant: verbal aspect and the semantic characteristic 'animate'. Concerning aspect the passive voice in Russian is expressed according to the principle of complementary distribution: in the perfective aspect the passive predicate is realised by means of the short forms of the perfective passive participle, whereas in the imperfective aspect it is expressed by reflexive forms (*-sja*-forms). There is only one restriction: imperfective *-sja*-forms can only be applied to patients with the characteristic 'animate'. In the case of 'animate' patients one usually resorts to the imperfective

indefinite personal construction. We shall illustrate this with the following examples:

- |     |                                   |  |
|-----|-----------------------------------|--|
| 3   | <i>On podnimaet gruz</i>          | - 'he is lifting the load'   |
| 3a  | <i>Gruz im podnimaetsja</i>       | - 'the load is being lifted by him'                                |
| 4   | <i>On podnimaet ee</i>            | - 'he is lifting her'  |
| 4a  | <i>Ee podnimajut</i>              | - 'she is being lifted by him' <<br>'one is lifting her'           |
| 5   | <i>On budet podnimat' gruz</i>    | - 'he will be lifting the load'                                    |
| 5a  | <i>Gruz budet im podnimat'sja</i> | - 'the load will be being lifted by him'                           |
| 6   | <i>On budet ee podnimat'</i>      | - 'he will be lifting her'   |
| 6a  | <i>Ee budut podnimat'</i>         | - 'she will be being lifted by him' <<br>'one will be lifting her' |
| 7   | <i>On podnimal gruz</i>           | - 'he was lifting the load'  |
| 7a  | <i>Gruz im podnimalsja</i>        | - 'the load was being lifted by him'                               |
| 8   | <i>On podnimet gruz</i>           | - 'he will have lifted the load' <sup>15</sup>                     |
| 8a  | <i>Gruz budet podnjat im</i>      | - 'the load will have been lifted by him'                          |
| 9   | <i>On podnimet ee</i>             | - 'he will have lifted her'  |
| 9a  | <i>Ona budet podnjata im</i>      | - 'she will have been lifted by him'                               |
| 10  | <i>On podnjat gruz</i>            | - 'he has lifted the load'   |
| 10a | <i>Gruz (byl) podnjat im</i>      | - 'the load has (had) been lifted by him'                          |
| 11  | <i>On podnjat ee</i>              | - 'he has lifted her'  |
| 11a | <i>Ona (byla) podnjata im</i>     | - 'she has (had) been lifted by him'                               |

The confinement of the imperfective passive *-sja*-forms to inanimate patients eliminates the first and the second persons from the passive *-sja*-forms. For that reason passive imperative *-sja*-forms do not occur either. In agreement with the examples 3a-11a the usage of the passive predicate in Russian is schematised as follows:

|           |  |              |     |   |
|-----------|--|--------------|-----|---|
| inanimate |  | imperfective | ——— | <i>-sja</i> -form                         |
|           |  | perfective   | ——— | short form of perf. pass. part.           |
| animate   |  | imperfective | ——— | active (indefinite personal construction) |

This scheme is being referred to as 'the passive rule'. Thus, the occurrence of *-sja*-forms with passive meaning is rather restricted. Gerritsen even denies the existence of such predicates. She regards them as middle predicates, defining the passive in Russian within the limits of the passive participle (cf. Gerritsen 1988). In this respect the middle origin of the passive is certainly relevant.

The other part of the non-active voice is the (general-reflexive) middle voice, characterised by a non-agentive subject. This voice may also be expressed by *-sja*-forms, but then there is no limitation to one verbal aspect or to a specific semantic feature. Some examples of unequivocally middle *-sja*-predicates are present in:

- |    |                                   |  |
|----|-----------------------------------|--|
| 12 | <i>On ostupilsja</i>              | - 'he stumbled'                        |
| 13 | <i>Ne ostupis'!</i>               | - 'don't stumble!'                     |
| 14 | <i>Ty ostupiš'sja</i>             | - 'you will stumble'                   |
| 15 | <i>Ja rasserdilsja na nego</i>    | - 'I grew angry with him'              |
| 16 | <i>Serdjas' na nego...</i>        | - 'growing angry with him...'          |
| 17 | <i>Nel'zja serdit'sja na nego</i> | - 'one should not grow angry with him' |

Imperfective *-sja*-forms of the third person and with an inanimate subject are ambiguous. They may be passive or middle. They are disambiguated by the presence of an agentive adjunct:

- |     |  |   |
|-----|--|---|
| 18  | <i>Vedro napolnjalos' vodoj</i>              | - 'the bucket was being filled/filled with water' |
| 18a | <i>Vedro napolnjalos' vodoj<br/>ee otcom</i> | - '— by her father'                               |

A middle reciprocal predicate is found in:

- |    |                          |                         |
|----|--------------------------|-------------------------|
| 19 | <i>Ulicy pereseklis'</i> | - 'the streets crossed' |
|----|--------------------------|-------------------------|

Although the middle voice predicates are predominantly expressed by *-sja*-forms, some of them are realised by non-*-sja*-forms:

- |    |                           |                              |
|----|---------------------------|------------------------------|
| 20 | <i>On umer</i>            | - 'he died'                  |
| 21 | <i>On lezal na divane</i> | - 'he was lying on the sofa' |

In this connection the occurrence of both *-sja*- and non-*-sja*-forms in one and the same aspectual pair is illustrative (*lopat'sja/lopnut'* - 'to burst', *sest'/sedit'sja* - 'to sit down').

Considering the data and arguments given above, we have come to the conclusion that the voices in Russian are organised according to the principle of dominance (cf. Hamburger 1986:147). Non-*-sja*-forms predominantly realise active predicates, whereas *-sja*-forms predominantly realise non-active predicates (the middle voice, and the passive voice according to the 'passive rule').

<sup>15</sup> Instead of this perfect meaning 8-11 may also have an aorist meaning: 'he will lift the load', etc.



## IV. The Hebrew system set against the model

Setting the Hebrew voice system against the model as developed in section I we arrive at the following presentation<sup>16</sup>:

| I. Independent predicates |   |      |       |      |       |                             |
|---------------------------|---|------|-------|------|-------|-----------------------------|
| places                    | 1   | 2    |       | 3    |       |                             |
| phases                    | 1   | 3    | 1     | 3    | 3     |                             |
| voices                    | act   | act  | act   | act  | act   |                             |
| morph.                    | Hitp  | Hitp | QPH   | Hitp | QPH   | Hitp(N) <sup>17</sup> Q P H |
|                           | 1   | 2    | 3 4 5 | 6    | 7 8 9 | 10 11 12 13                 |
| 1. <i>hištafšēf</i>       | - 'rubbed oneself' (pr)   |      |       |      |       |                             |
| 2. <i>hit'abbēd</i>       | - 'killed oneself' (pr); <i>hitraḥēz</i> - 'washed oneself' (pr)      |      |       |      |       |                             |
| 3. <i>pāga'</i>           | - 'hit'   |      |       |      |       |                             |
| 4. <i>šifšēf</i>          | - 'rubbed'  |      |       |      |       |                             |
| 5. <i>hikkāh</i>          | - 'hit'   |      |       |      |       |                             |
| 6. <i>hitgārāh</i>        | - 'taunted'   |      |       |      |       |                             |
| 7. <i>rahaḥ</i>           | - 'washed'; <i>hālak</i> - 'went' (pr); <i>lāqaḥ</i> - 'took' (pr)    |      |       |      |       |                             |
| 8. <i>giddēl</i>          | - 'made great'  |      |       |      |       |                             |
| 9. <i>hišmīd</i>          | - 'exterminated'  |      |       |      |       |                             |
| 10. <i>hitgannēv</i>      | - 'left stealthily' (pr) ( <i>nitpal</i> - 'attached oneself to'(pr)) |      |       |      |       |                             |
| 11. <i>nātan</i>          | - 'gave'  |      |       |      |       |                             |
| 12. <i>sippēq</i>         | - 'supplied'  |      |       |      |       |                             |
| 13. <i>hè'evīr</i>        | - 'transported'   |      |       |      |       |                             |

Generally speaking, in Modern Hebrew independent predicates are combined with the active voice, including proper reflexives in Qal and Hitpa'el.

It turns out that the distinction one-phase/three-phase is irrelevant to the Hebrew voice system. Thus our model is reduced as follows:

<sup>16</sup> Q = Qal; N = Niph'al; P = Pi'el; H = Hiph'il; Hitp = Hitpa'el; pr = proper reflexive.

<sup>17</sup> for proper reflexive use of Niph'al, cf. section II.

| independent predicates |       |             |       |
|------------------------|-------|-------------|-------|
| places                 | 1     | 2           | 3     |
| voices                 | act   | act         | act   |
| morph.                 | Hitp. | Q P H Hitp. | Q P H |

As for the number of places we establish that one-place independent predicates are realised by the *binyān* Hitpa'el exclusively. Two-place and three-place independent predicates are realised by Hitpa'el and those *binyānīm* which represent the active voice in Hebrew.

| II. dependent predicates <sup>18</sup> |  |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
|--|--|---|---|--------|---|------|----|------|---|-----|----|----|----|----|------|--------|------|----|------|----|----|----|
| places                                 | 1  |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| phases                                 | 1  |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      | 3  |    |    |
| voices                                 | mid  |   |   | 'pass' |   |      |    |      |   | mid |    |    |    |    |      | 'pass' |      |    |      |    |    |    |
| morph.                                 | Q  | P | H | Hitp   | N | (Pu) | Hu | Hitp | N | Pu  | Hu | Q  | P  | H  | Hitp | N      | (Pu) | Hu | Hitp | N  | Pu | Hu |
|  | 1  | 2 | 3 | 4      | 5 | 6    | 7  | 8    | 9 | 10  | 11 | 12 | 13 | 14 | 15   | 16     | 17   | 18 | 19   | 20 | 21 | 22 |
| 1. <i>kā'av</i>                        | - 'ached'; <i>mēt</i> - 'was dead'                                 |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 2. <i>pihēq</i>                        | - 'yawned'   |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 3. <i>hir'īd</i>                       | - 'trembled'; <i>hir'īt</i> - 'quivered'; <i>hisrīaḥ</i> - 'stank' |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 4. <i>hitqayyēm</i>                    | - 'took place'; <i>hit'aṭṭēš</i> - 'sneezed'                       |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 5. <i>niḳ'av</i>                       | - 'ached, suffered'; <i>nimšak</i> - 'lasted'                      |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 6.                                     |  |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 7. <i>hūhlaq</i>                       | - 'slipped'  |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 8. <i>hitpallēš</i>                    | - 'rolled about'   |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 9. <i>nidqar</i>                       | - 'was stabbed'  |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 10. <i>'uqqal</i>                      | - 'was twisted'; <i>puttal</i> - 'was curved'                      |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 11. <i>hūtqaf</i>                      | - 'was attacked'; <i>hūkkāh</i> - 'was struck';                    |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 12. <i>mēt</i>                         | - 'died'   |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 13.                                    |  |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 14.                                    |  |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 15. <i>hitḥammēm</i>                   | - 'became hot'; <i>hištappēr</i> - 'improved' (gr)                 |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 16. <i>niftar</i>                      | - 'died'; <i>nišbar</i> - 'broke'                                  |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |
| 17.                                    |  |   |   |        |   |      |    |      |   |     |    |    |    |    |      |        |      |    |      |    |    |    |

<sup>18</sup> Pu = Pu'al; Hu = Huph'al; gr = general reflexive.



18. *hūra'* - 'worsened'; *hūkhāh* - 'became dim'
19. *hištahēq* - 'erased'
20. *nižžat* - 'was set on fire'
21. *puttar* - 'was dismissed'; *hunnaq* - 'was strangled'
22. *hūšmad* - 'was exterminated'

|        |     |        |   |      |     |        |    |    |      |    |
|--------|-----|--------|---|------|-----|--------|----|----|------|----|
| places |     |        | 2 |      |     |        |    |    |      |    |
| phases | 1   |        |   |      | 3   |        |    |    |      |    |
| voices | mid | 'pass' |   |      | mid | 'pass' |    |    |      |    |
| morph. | Q   | P      | H | Hitp | N   | Hitp   | N  | Pu | Hu   |    |
|        | 1   | 2      | 3 | 4    | 5   | 6      | 7  | 8  | 9    |    |
|        |     |        |   |      |     | Q      | P  | H  | Hitp | N  |
|        |     |        |   |      |     | 10     | 11 | 12 | 13   | 14 |
|        |     |        |   |      |     | Hitp   | N  | Pu | Hu   |    |
|        |     |        |   |      |     | 15     | 16 | 17 | 18   |    |

1. *rā'āh* - 'saw'; *hāyāh + b<sup>e</sup>* - 'was at'; *hāyāh + l<sup>e</sup>* - 'had'<sup>19</sup>; *šānē* - 'hated'; *'āhav* - 'loved'
- 2.
3. *hirgīš* - 'sensed, felt'
4. *hitrāgēš* - 'was excited at'; *hitga'ga'* - 'yearned for'
5. *nimzā'* - 'was at'; *nir'āh* - 'seemed to'
6. *hitqaššēr* - 'was connected with'
7. *nigrar* - 'was dragged to'; *nidḥaf* - 'was pushed to'
8. *quššar* - 'was tied with'
9. *hūšar* - 'was sung'
10. *nāfal* - 'fell to'
11. *qibbēl* - 'received'
- 12.
13. *hitqārēv* - 'approached'; *hitrāḥēq* - 'moved away'
14. *niggaš* - 'approached' (gr)
15. *hitqabbēl* - 'was received'
16. *niqrav* - 'was sacrificed to'
17. *qubbal* - 'was received'
18. *hūfraš* - 'was set aside'

Dependent predicates in Modern Hebrew are combined with non-active voice (middle, 'passive'), showing a wide variety in the application of *binyānīm*. The occurrence of Qal, Pi'el and Hiph'il proves the inconsistency and diffusion in the realisation of voice with dependent predicates.

<sup>19</sup> The verb 'to have' in Hebrew is always expressed by the verb 'to be(long)' + 'to'. The present tense of this verb does not exist; Modern Hebrew adopted the construction from Classical Hebrew: *yēsh + l<sup>e</sup>* (compare Russian *jest'*) as in: *yēsh li bayit* - 'I have a house'.

Just as with the independent predicate also with the dependent predicates the difference in phases is irrelevant to the voice system of Hebrew. Consequently the model is reduced as follows:

|            |                      |          |                 |          |
|------------|----------------------|----------|-----------------|----------|
|            | dependent predicates |          |                 |          |
| places     | 1                    |          | 2               |          |
| voices     | mid                  | 'pass'   | mid             | 'pass'   |
| morphology | QPHHit<br>NPuHu      | HitNPuHu | QPHHit<br>NPuHu | HitNPuHu |

As for the number of places we observe that all *binyānīm* are involved in expressing middle voice, whereas those *binyānīm* which represent non-active voice as well as Hitpa'el cover 'passive' use.

#### V. The Russian system set against the model

In Russian independent one-place predicates (proper reflexives) are expressed by *-sja*-forms. They are considered active by us. Two-place independent predicates are either proper reflexives (active *-sja*-forms or non-*-sja*-forms), active non-reflexives or passives (*-sja*-forms according to the passive rule).

Two-place proper reflexive predicates are either expressed by *-sja*-forms or by non-*-sja*-forms. The non-reflexive active predicates are almost exclusively expressed by non-*-sja*-forms. Two-place independent predicates can be passivized by *-sja*-forms according to the passive rule. Two-place proper reflexive predicates can be passivized, when the objective role is not combined with the subject like in *vzjal* - 'took'. *Šel* - 'went', however, cannot be passivized, because the objective is combined with the subject.

Three-place predicates are expressed by non-*-sja*-forms. They can be passivized by *-sja*-forms according to the passive rule.

These observations can be shown in the following survey:

I. independent predicates<sup>20</sup>

|        |     |     |          |          |          |
|--------|-----|-----|----------|----------|----------|
| places | 1   |     | 2        |          | 3        |
| phases | 1   | 3   | 1        | 3        | 3        |
| voices | act | act | act pass | act pass | act pass |
| morph. | s   | s   | n(s) s   | n(s) s   | n s      |
|        | 1   | 2   | 3 4 5    | 6 7 8    | 9 10     |

1. *tersja* - 'rubbed oneself' (pr)
2. *mylsja* - 'washed oneself' (pr)
3. *ter* - 'rubbed'
4. *stučalsja* - 'knocked on'
5. *tersja* - 'was rubbed'
6. *myl* - 'washed'; *bral* - 'took'; *šel* - 'went' (pr)
7. *otpravilsja* - 'went'; *chvatalsja* - 'seized' (pr)
8. *mylsja* - 'was washed'; *bralsja* - 'was taken'
9. *daval* - 'gave'; *prinosil* - 'brought'
10. *davalsja* - 'was given'; *prinosilsja* - 'was brought'

The verbal forms cited above show that the independent predicate is realised in Russian in a fairly regular manner: non-*sja*-forms with active predicates, *sja*-forms with passive and predominantly with proper reflexive predicates.

It appears that difference in phases, i.e., the difference between predicates of the type 'hit' and 'broke' does not affect verbal gender with the independent predicate. The number of places is only relevant in that two-place proper reflexives are less often realised by *sja*-forms than one-place proper reflexives. Thus the model is reduced to:

## independent predicates

|            |     |      |      |     |      |
|------------|-----|------|------|-----|------|
| places     | 1   |      | 2    |     | 3    |
| voices     | act | act  | pass | act | pass |
| morphology | s   | n(s) | s    | n   | s    |

Dependent predicates are combined with the middle or, to a lesser extent, with the passive voice. Both one-place and two-place dependent predicates are expressed by *sja*-forms and non-*sja*-forms. Some of the two-place dependent predicates can be passivized, though rarely in *sja*-forms:

## II. dependent predicates

|        |     |     |          |          |
|--------|-----|-----|----------|----------|
| places | 1   |     | 2        |          |
| phases | 1   | 3   | 1        | 3        |
| voices | mid | mid | mid pass | mid pass |
| morph  | s n | s n | s n s    | s n s    |
|        | 1 2 | 3 4 | 5 6 7    | 8 9 10   |

1. *česalsja* - 'itched'
2. *bolel* - 'ached'
3. *provalilsja* - 'collapsed'
4. *umer* - 'died'
5. *rasporjadilsja* - 'had'; *nachodilsja* - 'was at'; *radovalsja* - 'rejoiced'
6. *imel* - 'had'; *stojal* - 'stood at'; *videl* - 'saw'
7. *oščuščalsja* - 'was felt'
8. *dostalos* - 'fell to'; *dobratsja* - 'reached'; *razdrazilsja* - 'got irritated'
9. *polučil* - 'received'
10. *polučalsja* - 'was received'; *dostigalsja* - 'was reached'

Our observation is that with the dependent middle predicates dominance of the *sja*-forms as against the non-*sja*-forms is hard to establish. This can be illustrated by synonyms with or without the *sja*-suffix like *varilsja/kipel* - 'boiled'; *umer/skončalsja* - 'died'; *provalilsja/ruchnul* - 'collapsed'; *imel/rasporjadilsja* - 'had'; *vidnelsja/byl viden* - 'was visible, was seen'; *belel/belelsja* - 'got white', even within one and the same aspectual pair: *stanovilsja/stal* - 'became'. The realisation of voice with the dependent predicate is far less regular than with the independent predicate.

As with the independent predicate so with the dependent predicate the difference in phases does not play a role. As for the number of places the one-place predicate can only be middle, whereas the two-place predicate is either middle or passive. Consequently the model is reduced as follows:

## dependent predicates

|            |     |     |      |
|------------|-----|-----|------|
| places     | 1   |     | 2    |
| voices     | mid | mid | pass |
| morphology | s n | s n | s    |

<sup>20</sup> s = *sja*-form; n = non-*sja*-form; ( ) = peripheral.



## VI. Conclusion

A contrastive analysis of verbal gender in Modern Russian and Modern Hebrew may show the similarities and differences between the two languages at a particular level, demonstrated in the context of a chosen theoretical framework. In the introductory part of this study (section I) the starting-point is therefore that one and the same meaning can be realised in different languages. On this basis it may be assumed that these realisations have this meaning in common. In comparing linguistics signs a common semantic model is necessary in any case in order to make manifest zero realisations. A model of the common meaning of the predicate and also of verbal gender has served as a basis for comparing verbal gender in modern Hebrew and Russian. Our model comes down to the following:

we assume that, just like the proposition as a whole, the deep structure predicate has a referential component and a speaker-linked component. The referential component is a structure with participants and deep cases. The speaker-linked component comprises categories such as tense, mood and verbal gender. In the present study we deal with the latter category. In order to analyse verbal gender in modern Hebrew and Russian we have set their surface structure phenomena against the common model of referential predicate structure and verbal gender.

On the basis of the number of participant places one-, two- and three-place predicates are distinguished. Dependent on the fact that in the predicate there is a terminative boundary or not, we distinguish single phase (= aterminative) and three-phase (= terminative) predicates. Moreover, the predicates are differentiated on the basis of differences of their deep cases.

Both Russian and Hebrew offer the opportunity to describe the relationship between the predicate models of verbal gender and the employment of voice system. Verbal gender operates on the referential predicate structure and is connected with it in a specific way. The speaker establishes the hierarchy of the participants by means of verbal gender. He has at his disposal two deep structure voices for that purpose: active and non-active. The latter voice usually occurs as middle and/or passive. As for the functioning of verbal gender a dichotomy in the predicates is of great importance: a division into independent and dependent predicates. This division is based upon the distinction in the predicate of a causing event and a caused event, i.e., that part of the process which is connected with the intentional causer (agent), and the other part which is connected with the affected (patient), respectively.

In the independent predicate there is a causing event as well as a caused event, whereas in the dependent predicate it concerns only a caused event. The independent predicate is combined with the active voice (when the grammatical subject is agent) or, in Russian, with the passive voice (the grammatical subject is a non-agent and the agent is expressed in an adjunct). The active voice appears only with the independent predicate. Proper reflexive predicates also belong to the independent active predicates.

The dependent predicate is combined with the non-active voice (the grammatical subject is a non-agent): the middle voice with one-place predicates, the middle

or passive voice with two-place predicates. Thus the passive voice may be combined with the independent as well as with the dependent predicate. However, the adjunct with the two- place dependent passive predicate does not contain an agent, but an experiencer or a possessor. The possibility to add an agentive adjunct distinguishes the passive voice from the middle voice.

As for verbal gender Hebrew and Russian show a major difference with regard to the passive voice: in Hebrew the passive voice is less developed than in Russian. Whereas in Russian a true passive voice exists, the passive predicate in Hebrew may just as well be regarded as middle voice, because the addition of an agentive adjunct is still considered as rather artificial.

Concerning the realisation of verbal gender one can easily state that at first sight both languages seem to be completely different.

Hebrew has a system of seven fully fledged paradigms, the *binyānīm*, to be regarded as diathetical categories. Verbal gender in Russian, however, is morphologically hardly developed. Still, the verbal systems in these two languages show more similarities than one would ever expect. In both Hebrew and Russian the distinction one-phase/three-phase predicate appears to be irrelevant. Therefore the models as presented in sections IV and V could be reduced considerably. On the other hand the distinction independent (causative)/dependent (non-causative) predicate turns out to be of great importance. In Hebrew this can be explained from the fact that the independent predicate is almost exclusively realised by the so-called active voice forms such as Qal, Pi'el, Hiph'il (and also Hitpa'el) of which the latter two are even defined as causative *binyānīm*. The realisation of the dependent predicates, however, is reserved for Niph'al, Pu'al and Huph'al (as well as Hitpa'el!). This division of the *binyānīm* almost boils down to complementary distribution. In Russian too the independent predicate exhibits a fairly regular voice pattern: the active predicate is almost exclusively realised by non-*sja*-forms; the passive independent predicate is formed according to the passive rule, although the paradigm of the imperfective *-sja*-forms is strongly defective. The dependent predicate, however, shows a wide variety of diathetical forms in both systems.

Generally speaking, in both Hebrew and Russian the voices are realised according to the principle of dominance (cf. Ariel 1988)<sup>21</sup>. Pi'el and Hiph'il forms in Hebrew predominantly represent active independent predicates, but they may also represent middle dependent predicates. In particular such 'counter-examples' have caused confusion in Hebrew grammar. The non-*sja*-form in Russian predominantly expresses the active voice, but it may also represent a middle dependent predicate. The *sja*-forms are mostly destined for denoting passive and middle predicates. A special function of the *sja*-form is its use for proper reflexive and reciprocal predicates which can be equated with the function of the Hitpa'el in Hebrew.

Our goal was to show the possibilities and difficulties of the classification of processes (actionality) with regard to the analysis of verbal gender in Hebrew and

<sup>21</sup> Ariel, as many others, considers the conjugations to be a coherent, neatly organised system from the angle of their syntactic and semantic functions, but he too is aware of the deviations and exceptions which trouble every consistent description of the *binyanim*.

Russian. Although these two languages display substantially different surface behaviour (sections II and III), they are nevertheless quite similar at a more abstract level. We mainly used the model to make the diathetical phenomena of the two languages under discussion comparable. Cross-linguistic or contrastive analysis is not only important for the theory of universal categories, but it is also relevant to the description of individual languages (cf. Fisiak 1983).

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