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SEMANTIC STRUCTURE
AND WORD-FORMATION

VERB-PARTICLE CONSTRUCTIONS
IN CONTEMPORARY ENGLISH

WILHELM FINK VERLAG MÜNCHEN



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PREFACE

The present study was accepted as a „Habilitationsschrift“ by the „Fachbereich Neuphilologie“ of the University of Tübingen in the spring 1971. A preprint version appeared in 1971. In its original, basic form it was completed in December 1970. The final version went to print in March 1972. A number of publications which either appeared or came to my knowledge after 1970 have not influenced the study as thoroughly as earlier research, but have all been duly considered if mentioned in the bibliography. All observations and results in these publications, including material concerning verb-particle constructions, have been incorporated here insofar as they seem relevant to my discussion. The preceding remarks hold especially for Bolinger (1971a), Meyer (1970b, 1971), Spasov (1966), Sroka (1962, 1965). They are also valid for a number of theoretical articles, in particular those concerning the recent rapid development of generative semantics.

Only those books and articles which have directly influenced my study have been included in the bibliography. Examples quoted from American sources are always given in American spelling. Single quotation marks are used throughout either for technical terms or to explain the meanings of certain forms, whereas double quotation marks are used in their normally accepted form.

A number of persons have helped me in one way or another to bring this book into the form in which it is now going to press. My chief informant has been Ania Viesel. Other native speakers who have generously given of their time to check the data on verb-particle constructions are Glen Burns (American English), Michael Carr, Muriel Keutsch, Alison and Richard Meredith. I also wish to express my gratitude to Allan R.

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I am very grateful to Professor Randolph Quirk, who gave me the opportunity to use the files of the Survey of English Usage. For comments on various aspects of the study I am indebted to Professor Eugenio Coseriu and Dr. Dieter Kastovsky. I am particularly aware of the great debt I owe to Professor Hans Marchand, without whose guidance and inspiration this book would never have been written.

The „Deutsche Forschungsgemeinschaft“ especially deserves my gratitude for enabling me to pursue my research while on leave with a „Habilitationstipendium“. It has also generously subsidized the printing of this book.

Finally, I would like to thank my wife for her patience, constant encouragement, and invaluable help.

Frankfurt/Main
March 1972

CHAPTER 1: INTRODUCTION

1.1. Preliminary Remarks

1.1.1. The verb-particle construction (in the following abbreviated as VPC) is here regarded as a class of lexical items which have a common morpho-syntactic surface structure. The present study aims to develop methods for the description of the underlying semantic structures. At the same time it attempts to describe the surface structure as thoroughly as possible. The results of the empirical investigation are also intended to provide data for theoretical considerations of semantic problems. These results, to be read in conjunction with the discussion in Chapter Two, are intended to throw some light on such questions as the status of semantic features, the form of lexical entries, semantic tests, and the nature of idiomaticity and lexicalization. Certain candidates¹ for universal semantic features are set up. Other general problems such as productivity, transitivity, object deletion, and object transfer are dealt with in detail. A combination is used of various methods which supplement each other but which also yield partly overlapping results. No single method can be applied to encompass the whole range of VPCs. The constructions are not treated as isolated lexical items but are always syntagmatically described by means of their collocations with nominals. They are regarded as representing predicates in the sense of symbolic logic and are analysed into semantic components. This leads to the postulation of semantic formulas consisting of formators and designators. The semantic analysis itself is carried out: 1) with the methods of word-formation,

¹ Cf. McCawley (1968c: 268).

2) by means of the semantic formulas and semantic features, 3) with the help of archilexemes and word-fields. The VPCs are also compared to the corresponding prefixal combinations and simplex verbs.

1.1.2. For the semantic analysis a collection of material (cf. 3.5.6.1.) was set up which attempts to incorporate as many currently used collocations with *out* and *up* as possible. These two particles were chosen because they are the most productive ones and collocations with them represent by far the largest number of VPCs. The methods developed in the analysis of VPCs with *out* and *up* can easily be adapted to collocations with other particles, as well as to the VPCs found in other languages, particularly German. The lists of VPCs in Fraser (1965) served as a starting point. They contain roughly 220 verbs collocating with *out* and 900 collocating with *up*². All items mentioned were checked in a variety of dictionaries which were taken to represent contemporary British and American usage (cf. 3.1.1.). In addition, the dictionaries, except for *Webster's Third*, were examined page by page in search for new items. Cross-references within the dictionaries and items used in the definitions were used to verify and enlarge the lists. Material from the monographs on VPCs, from books on current usage and verbal idioms, and from grammars, was also included. The *Survey of English Usage* and three other types of corpus (cf. 3.5.6.) yielded further material for the semantic analysis. However, as every dictionary necessarily fails in attaining the ideal goal of completeness, this study also has to renounce such a claim, and reviewers will certainly find additional items which should have been incorporated. The collection of material and the analysis are comprehensive, but they can never be complete. Information

² The number of collocations with *out* and *up* distinguished in our study far exceeds these figures, since Fraser's lists have been supplemented and many items are homonymous or polysemous. Thus many VPCs which are counted as one item in Fraser's lists are here split up into several VPCs according to semantic features and collocation with different nominals.

as to the possible collocation of the VPCs with nominals was gathered both from tests with several native speakers and from the various dictionaries. All VPCs with *out* and *up* contained in Fraser's lists were tested with the help of one British informant. She repeatedly disagreed with collocations quoted as examples in the recent dictionaries³. In addition, all items from Fraser which could not be supplied with collocating nominals from the *Concise Oxford Dictionary*, the *Advanced Learner's Dictionary* or the *Penguin English Dictionary* were tested with two other British informants. The items which were unfamiliar to all three native speakers, and which also could not be found in *Webster's Third*, were then tested with the help of an American informant. Of these, 67 items with *up* and 6 items with *out*⁴ were given a positive familiarity rating. Despite their absence in *Webster's Third*, they will therefore have to be regarded as belonging to American usage only. 80 items with *up* and 5 items with *out*⁵ from Fraser's material were unknown to all informants. In addition to the four persons mentioned, two further British speakers acted as informants to clarify certain doubtful cases of usage. All six informants hold a university degree, and can therefore be regarded as „educated“ speakers. One result of the tests is the recognition of the fact that there is a great deal of variation among informants (cf. 3.1.3.). Collocations of VPCs with nominals which seemed perfectly familiar to one informant, or were quoted as examples in the dictionaries, were often definitely rejected as unacceptable by other native speakers. Such divided usage poses great problems for the detailed study of selection restrictions. It would imply the necessity to carry out

³ Cf. Bolinger (1971a: 17), where a number of examples given as models of British usage in Hill (1968) are rejected.

⁴ Viz. *Air out* (blankets), (mole) *burrow out* (tunnel), (criminal) *case out* (place), *dredge out* (channel), *mail out* (letters), (bottom of boat) *rot out*. For the notation used here cf. 3.1.2.

⁵ Viz. *blacken out*, *pen out*, *pencil out*, *rhyme out*, *route out*. Note that this includes *pencil out* which is mentioned in Fraser (1965: 126) as an example of a denominal derivative with *out*. Cf. 3.3.2.2. and the footnote on *chalk out* and *crayon out*.

tests on a large scale with all items and a large number of informants. For practical reasons this was impossible⁶. As it was the principal aim of the tests to find nominals collocating with the VPC, the testing procedures were very simple. The main techniques used were an evaluation test and what could be called an „elicitation test“⁷. The VPC was produced in isolation and the informant asked to give sentences or constructions in which the item collocated with nominals. Collocations from the dictionaries were then offered and the informant rated them as either acceptable or unacceptable, or gave them a query score. In many cases the informants did not know the collocations with *out* and *up* as quoted in Fraser's lists. This body of material, collected and tested in the way just described, served as the basis for the semantic analysis. Only a part of this material can be presented here. Thus, in the description of deadjectival, denominal, and deverbal derivatives in Chapter Three, unanalysable idiomatic combinations are not discussed. In Chapter Four, idioms are included, but VPCs which either do not contain one of the features set up, or do not belong to one of the word-fields, are not listed.

1.2. *Previous Work and Definition of the Subject*

1.2.1. An investigation of the semantic structure of certain linguistic elements has to begin with a definition of the field

⁶ Cf. Carvell-Svartvik (1969: 52), where the relation of verbs to prepositional phrases was tested with two informants in a corpus of 10 000 running words: „The use of many informants, however, raises other problems: there is not only the difficulty of finding enough willing and suitable „naive“ subjects with sufficient time at their disposal, but also that of test-condition control, which increases with the number of informants“. For problems of acceptability cf. Lipka (1971c).

⁷ „Compliance tests“ as described in Quirk-Svartvik (1966) were not used. Testing procedures are also described in Quirk (1966), Greenbaum (1968, 1969a, 1969b), Bunting (1969).

under study. The verb-particle construction in English (and also in German) can be regarded as a particular surface structure shared by a large number of lexical items with various word-formative and semantic structures. In our study of English VPCs we shall often refer to parallels and differences in German. However, a systematic comparison would far exceed the scope of the present monograph. For the definition of intransitive verb-particle constructions, as in *the ice broke up*, *the water leaked out* / *der Mieter zog aus*, *die Pfütze trocknete aus* and transitive ones, as in *he slipped on his coat*, *he ate up his dinner* / *er machte die Tür auf*, prosodic and syntactic (more specifically transformational) criteria are used. The main criterion, both for English and German, is a possible full stress on the particle. This distinguishes the VPC from certain prepositional phrases (as in *slip on the stairs*) as well as from prepositional verbs in English, and from prefixed verbs in German (as in *ein Land überfliegen*). Another important criterion is the possible interpolation of the pronominal object between verb and particle, which excludes other prepositional phrases in English (as in *he turned off the road*). Separability of verb and particle in finite verb forms — not only by objects, but also by a number of adverbials (as in *ich wache zu Hause jeden Morgen um sechs Uhr auf*) — is one of the most striking characteristics of the construction in German. An additional, but not a necessary, criterion is the possible applicability of the passive transformation, which distinguishes adverbial prepositional phrases (*he slipped on the stairs*, *he turned off the road* / *er setzte über den Fluß*) from constructions with prepositional or phrasal verbs and an object noun.

1.2.2. This definition includes a number of intransitive and transitive constructions in English which have to be regarded as ‚reduced prepositional phrases‘ e.g. in *he ran up (the stairs)*, *he ran out (of the house)* and *she took the book out (of the pocket)*, *she brought the dinner up (to his room)*. The definition is thus more comprehensive than the traditionally accepted definition of ‚phrasal verbs‘ and does not exclude combinations of intransitive verbs with locative or directional adverbs. This is the reason why the term ‚verb particle construction‘ (used

in a closely corresponding — though not identical — way in Fraser (1965)) was preferred to ‚phrasal verb‘. The criterion of ‚idiomaticness‘, adduced in Strang (1962, 1968)⁸, cannot be employed in a study which aims to investigate the extent of idiomaticity and lexicalization, and to explore the semantic features contained in the items under discussion.

1.2.3. Apart from the inclusion of reduced prepositional phrases, which is due to the semantic interest of this study, the VPC is equivalent to the ‚phrasal verb‘ as defined in Mitchell (1958), where ‚prepositional verbs‘, ‚phrasal verbs‘, and ‚prepositional-phrasal verbs‘ are distinguished. This threefold distinction has been taken over by Strang, Palmer, Svartvik, and Bolinger⁹. Potter (1965) also adopts ‚phrasal verb‘ after discussing other possible terms. Spasov (1966), who has compiled a dictionary of phrasal verbs, also uses the term. In Kennedy (1920), the first monograph on the subject, ‚verb-adverb combination‘ is used for much the same linguistic phenomenon, but no criteria are given for separating similar but different constructions. In an article on the development of verbal compounds in Germanic, Curme calls the VPC „genuine modern compounds“. The unit character of the combination may also be implied in the use of the term ‚two-word verb‘ adopted in Anthony (1953) and Taha (1960). Stressing another aspect of the constructions, Francis (1958) uses ‚separable verbs‘ and Live (1965) the term ‚discontinuous verb‘. Carstensen (1964) chooses the neutral ‚Wortverband‘ — a term used by Leisi (1960) in a much wider sense — to designate phrasal verbs as well as verbs with prepositions, but separates ‚Kontaktverben‘ as in *he slipped on it* from ‚Spreizverben‘ as in *he slipped it on*¹⁰. Sroka (1965) accepts the term ‚phrasal verbs‘, but, on purely distributional grounds, distinguishes three classes of particles collocating with verbs, viz. ‚adverbs‘, ‚pre-

⁸ See Bibliography for full references. Strang (1962: 157, 1968: 178).

⁹ Palmer (1965: 180-191), Svartvik (1966: 19-21), Bolinger (MS).

¹⁰ Curme (1914: 334), Anthony (1953: 1, 21, 93), Francis (1958: 265-267), Leisi (1960: 102-118).

positions', and ,adverb-preposition words'. Both Fraser (1965) and Fairclough (1965) adopt the neutral term ,particle' for the non-verbal part of the construction, because of the impossibility of drawing a neat line between adverbs and prepositions in all constructions. The status of the particle was discussed by Jespersen¹¹, who points out that there is „close connexion of a verb and a particle“ in many constructions. This aspect of the VPC, which accounts for Curme's view of the constructions as compounds, is mentioned in most of the studies on the subject. Mention is often made of the possible substitution of the VPC by a single verb, e.g. in Kennedy, but as a criterion for delimitation this is difficult to control. In separating prepositional verbs plus nominals from verbs plus prepositional phrases, Svartvik (1966: 21) states that there is „a scale of closeness and openness“ whose poles are illustrated by *she sent for the coat* (which can be passivized) and *she came with the coat* (which cannot undergo passive voice transformation). A scale with varying degrees of cohesion between verb and particle can also be postulated for the VPC as defined here, with idioms such as *peter out* and *clutter up* at one end and combinations with locative or directional adverbials such as *eat out* and *climb up* at the other.

1.2.4. The two characteristic aspects of the construction, viz. the close cohesion of verb and particle which often entails semantic unity on the one hand, and the separability of the two constituents on the other hand, are also stressed in most treatments of the German VPC. The construction differs from the English one in that the particle precedes the verb in the non-finite forms (separated by *ge* in the participle, e.g. *aufgestanden*) and in dependent clauses (*wenn er eintritt*). The separation of verb and particle in the finite forms is by no means restricted to pronominal objects or short noun phrases and to

¹¹ In MEG III: 13.9. Cf. also Sroka (1962) and (1965: esp. 181 ff.) for a discussion of modern views on the distinction ,adverb'/preposition'. In Spasov (1966: 12 ff.), the term ,adverbial postpositional element' is used. Cf. the critical discussion of Spasov's book in Hückel (1968).

transitive verbs (*er holte den Wagen am nächsten Tag in aller Frühe ab, ich wache zu Hause jeden Morgen um sechs Uhr auf*). The lesser requirements demanded by the definition of the VPC in 1.2.1. are met with, however, as the particle is always stressed and the construction is always separated by a pronominal object. The combination of verb and separable particle in German is called „unvollendete composition“ by Grimm. Paul also states that in such cases „noch keine eigentliche Komposition eingetreten ist“. Henzen (1965) uses the term ‚unfeste zusammengesetzte Verben‘, like the Duden Grammar (1966) which treats the combinations under the heading ‚unfeste Zusammensetzungen‘. In Hundsnurscher (1968), the neutral ‚Partikelverben‘ is used for combinations like *ausgehen, auszupfen, aussprechen, ausleuchten*. A decision about word class membership of the particle is not made in the Saarbrücken analysis of contemporary German either, where it is simply called ‚Verbzusatz‘¹².

1.3. Criteria Used in the Study of the VPC

1.3.1. Having surveyed the various terms used for the VPC in English and German, we shall now see what criteria are put forward to distinguish between various groups consisting of verb and particle. The discussion will mainly deal with English. For German, apart from stress and separability, hardly any criteria seem to have been developed. According to Hundsnurscher (1968: 6 f.) only Admoni (1966: 51-53) mentions several characteristic features of German VPCs: different intonation from collocations with adverb (*er versuchte mit-*

¹² Grimm (1826: 893), Paul (1909: 340), Henzen (1965: 44), Duden (1966: 369), Elektronische Syntaxanalyse (1969). A transformational approach to German VPCs is found in Lerot (1970). In Reinhardt (1969: 415) a tendency towards the loss of separability in technical language is mentioned.

zusprechen vs. *er versuchte laut zu sprechen*), additional introduction of a homonymous preposition which distinguishes the particle from a preposition (*er kommt an der Station an*), and semantic polysemy of the particle which far exceeds that of locative adverbs¹³. In English, the number of criteria used is far greater, and they are discussed in almost all modern treatments of the subject. A number of them are covert features which are revealed by possible transformations. Jespersen mentions midposition of the pronominal object with what he calls „complemental adverbs“¹⁴. He also gives stress, „meaning“, and word order as criteria¹⁵. The possible passive construction is adduced as proof of the „close connexion“ between verb and particle¹⁶, and the modern criterion of action nominalization is foreshadowed by his mention of „occurrence of the preposition *of* after *ings*“¹⁷ to prove the „cohesion of such verbal phrases“.

1.3.2. Some of the criteria for distinguishing the various combinations of verbs and particles mentioned by Jespersen were also used by Mitchell (1958) to separate prepositional verbs, phrasal verbs, and prepositional-phrasal verbs. Midposition of the object between verb and particle is possible with phrasal verbs (i.e. we have „positional variation“ as in *he turned the light off* or *he turned off the light*) and it is even obligatory in the case of a pronominal object. It is excluded for prepositional verbs¹⁸ which are characterized by „non-interpolability of nominal or pronominal forms“

¹³ The last criterion is not mentioned by Hundsnurscher who, at this point, only deals with morphological properties of the VPC.

¹⁴ MEG VII: 2.87. Cf. the much earlier discussion of possible positions in van Dongen (1919).

¹⁵ MEG III: 13.911.

¹⁶ MEG III: 13.95. Cf. Chomsky (1965: 101 f., 190).

¹⁷ MEG III: 13.97.

¹⁸ From the point of view of motivation „postpositional verb“, coined as early as 1951 by Marchand (1951: 74), seems more appropriate. The defining criteria for postpositional verbs were given as „fixed postposition and one object in the Active“ (74), and „the possibility to form a Passive of the type *he was sent for*“ (75).

(105). Phrasal verbs are further characterized by stress and intonation and by the position of adverbs, which cannot be interpolated between their components, as in **he turned suddenly off the light*. Another criterion the usefulness of which is not immediately evident — since it distinguishes ‚non-prepositional verb + nominal‘ on the one hand from either ‚prepositional verb + nominal‘ or ‚non-prepositional verb + prepositional phrase‘ on the other — is „the association or lack of association of a nominal or pronominal form with post-particle position“ (105). The prepositional-phrasal verb has two particles and is not interrupted by adverbs or objects, including pronominal objects¹⁹.

1.3.3. Live (1965), apparently unaware of Mitchell's work, uses „mid-position“ of the object (obligatory with pronouns, optional with nouns), and „stress on the particle in the passive voice“, to define a construction *M* (433) which obviously corresponds to the ‚phrasal verb‘. The pattern *P* „characterized by post-object in the active — and in the passive, major stress on verb rather than on particle —“ (434) closely corresponds to the ‚prepositional verb‘. A criterion very similar to the one quoted above from Mitchell, only restricted to the passive, „the absence of an object for the „preposition“ when the expression is in the passive“ distinguishes *he was heard of* from **it was made of* (441). It is a test of „the independence of the combination — its not requiring a (preceding) object“ (441), thus distinguishing ‚prepositional verb‘ from ‚verb + preposition‘. Like Jespersen, Live uses parallel occurrence in the passive, which is a characteristic feature of ‚discontinuous verbs‘, and which separates objects from prepositional noun phrases. „Additional formal correlations“ are „mid-object“ and „optional juncture“ after the particle (435). Besides the „aspectual character“ of the combination, its „metaphoric or

¹⁹ In a short paper by M. N. Hughes (1966) Mitchell's and Palmer's approaches are compared and the following aspects of VPCs are sketched: semantic fusion, collocability, substitution, transformations, positions of object and adverb, and nominalizations.

idiomatic sense“ (441) is regarded, as in Strang, as a defining property of the discontinuous verb. This sense is „reflected in the infeasibility of substitution of the simplex for the combination“ (441), which corresponds to the ‚unsystematic‘ relationship in Fraser (1965: 38, 42), but here serves as a criterion for including such items. Live distinguishes two main groups of discontinuous verbs according to the transitive or intransitive nature of the original simplex verb. Her material, presented in tables at the end of the article, can therefore not be compared directly with the lists in Fraser (1965), where transitive and intransitive VPCs are listed separately.

1.3.4. Carstensen (1964) gives a number of criteria for separating intransitive verb plus prepositional phrase (i.e. adverbial adjunct of place, *he slipped on the stair*) from transitive phrasal verb plus object (*he slipped on the coat*). Besides stress and intonation, various transformations are used to reveal covert features²⁰ of the constructions. Position of nominal object, pronominal object and interpolated adverb are considered. A criterion not used in the studies discussed above is „wh-Transformationen“, in particular the relative transformation which distinguishes *the road off which he turned* from **the light off which he switched*. Nominalization potential is also investigated, especially action nominalization with *of*, although the actual term is not employed. The passive transformation serves as a further criterion (*the coat was slipped on by him* vs. **the first stair was slipped on by him*); however, it cannot be used to separate phrasal verbs from prepositional verbs.

1.3.5. As mentioned previously, the voice transformation test is regarded as the chief criterion for the distinction between prepositional verbs and verbs plus preposition in Svartvik (1966: 21), although a scale of closeness and openness is also posited. The differences between prepositional and phrasal verbs are represented in a „diagnostic frame“ (21) which

²⁰ Cf. Quirk (1965: 205) where „three interlocking sets of features“ are postulated: a) manifested, b) potential, c) transformational.

contains most of the criteria used in Carstensen (1964) (viz. positions of nominal and pronominal object and of the adverb, relative transformations) with the exception of action nominalization, stress, and intonation.

1.3.6. Fraser (1965), who does not discuss Mitchell's distinction of the three types, applies most of the criteria already mentioned (viz. position of the object and adverb, action nominalization, stress). In addition, further properties of the VPC are considered: position of the particle in questions (*about what did they talk?* vs. **out what did they work?*, which is also found in Carstensen's *on what did they slip?* vs. *what did they slip on?*); the possibility of interruption by a „short parenthetical phrase“ as in *he looked up, without a reply, the information which I requested*; and the infeasibility of „conjunction“ (**he looked up the information and over the files*²¹). From all this Fraser concludes that „the combinations *look up, reel in, work out, think over* are compound verbal elements“ (20).

1.3.7. The most thorough investigation of possible criteria for a taxonomy of „the collocation of lexical items with prepositions and adverbs“ is found in Fairclough (1965). Following Mitchell, he sets up a distinction between phrasal verbs and two types of prepositional verbs (according to the number of complements) which are illustrated by *I will burn the church down* (phrasal), *he specializes in torture* (prep. type 1), and *I'll invite some of the dancers to our table* (prep. type 2) (45). This preliminary classification is later modified. Six different structures of phrasal verbs are distinguished, but the classification „is not intended to be in any way final“ (52). Later, thirteen types of phrasal verbs are set up by means of four parameters (particle 1, complement 1, complement 2,

²¹ Fraser's criteria are listed in Legum (1968: 51 f.), where it is argued that the structure underlying strings such as *he looked the number up* is derived from that underlying *he looked up the number* by a „Forward Particle Movement rule“ (56). Cf. Jacobs-Rosenbaum (1968: 104 ff.), Fodor-Garrett (1966: 150 f., 171), Katz-Postal (1964: 41 f.).

and particle 2) which may be either present, absent, or optional (70). Apart from the usual criteria like stress, position, passive and action nominalization²², Fairclough uses the criterion of possible expansion to separate ‚derived phrasal verbs‘, as in *taking his handkerchief out (of his pocket)*, *you come out (of the theatre) again*, from ‚pure phrasal verbs‘ in *he would take out a season ticket*, *the evidence has not come out in open court* (66). Expansion here is the counterpart of the phenomenon called ‚prepositional phrase reduction‘ in Fraser (1965: 98)²³. Since Fairclough’s study is based on a corpus, he is in a position to check the validity of widely accepted criteria. This enables him to point out that the criterion of adverb position does not hold in all cases, especially with intransitive phrasal verbs, where examples with interpolated *straight*, *right*, *all* occur e.g. *the adult programmes carry straight on from the children’s hour*. The corpus even contains a transitive phrasal verb with adverb in midposition: *you should feel honoured . . . they should bother to pick you distinctly out like that* (48). However, these exceptions do not seriously impair the usefulness of the criterion²⁴. This is also true for „the most reliable criterion“ (47) for distinguishing phrasal verbs and prepositional verbs, viz. the obligatory midposition of the pronominal object. Fairclough has found two counter-examples²⁵: *but before he could fix up anything the Paymaster’s investigations caught up with the sergeant* and *all we can do is rake up somebody like Piers Plowman* (61).

²² Attention is drawn to the fact that not all verbs have action nominals, Fairclough (1965: 16).

²³ Note that the term ‚derived verb-particle combinations‘ in Fraser (1965: 124 ff.) refers to derivations from the point of view of word-formation, as in *glue down*, *box in*, *board over*, *pencil out*. To avoid confusion we will therefore use ‚reduced prepositional phrase‘ for cases such as *she took her book out (of her purse)*.

²⁴ Cf. the example quoted in Meyer (1970b: 228): „*A quiet American*“, „*I summed him precisely up as I might have said*“, „*a blue lizard*“, and Bolinger (1971: 135 f.).

²⁵ We have also found one in our spoken corpus (cf. 3.5.6.2.): *you can always clear up everything*. Other counter-examples are

1.3.8. That the criterion is by no means infallible was also noticed by Bolinger, who denounces it as „the most persistently repeated misconception about phrasal verbs“²⁶. He quotes the two examples from Shakespeare and Dickens which Poutsma cites and mentions that he himself has „picked up a number over the years“ of which he gives: *they will cut up mé sometimes*. Trying to determine what are the factors which govern the position of objects of phrasal verbs in general, Bolinger points out a solution offered by Erades²⁷ which parallels one given by Maria Schubiger — the governing principle seems to be news value. Such an explanation would, according to Bolinger, account for the position of pronouns as well as for the rarity of end position of nouns such as *things, matter, idea*. Although agreeing in principle with Erades, he criticizes him for dismissing accent as a factor. „The truth of the matter“ appears to be that particle movement „is part of our means of achieving semantic focus“²⁸. In his book on the phrasal verb, Bolinger (1971a: 6-22) discusses 9 different tests for defining

mentioned in van Dongen (1919: 332 f.), MEG VII: 2.87., Sroka (1965: 113), Bolinger (1971a: 39-41), and Fischer (1971: 19 f.). It is often noted that stress plays an important role, and therefore, strictly speaking, the criterion only applies to the unstressed pronoun. As was pointed out (personal communication) by E. Coseriu and O. Grannis *anything, everything, somebody* also have to be excluded, because they are not properly pronouns like the simple ones such as *it, you, him, me*. Cf. the term ‚compound pronouns‘ for the former in MEG II: 17.2.

²⁶ Bolinger (MS: 6 f.). Cf. Chomsky (1957: 75 f.), and Jacobs-Rosenbaum (1968: 106): „whenever the object noun is a pronoun, the particle movement transformation is obligatory“.

²⁷ Erades (1961: 58): „The principle governing the place of the objects in our quotations is neither stress nor length nor rhythm, but something quite different: *the news value which the idea denoted by the object has in the sentence*. Objects denoting ideas that have news value, no matter whether they are nouns or pronouns, long or short, have endposition; those that have no such value come between verb and adverb“.

²⁸ Bolinger (MS: 10). Cf. Bolinger (1971a: 54). According to Zandvoort (1960: 241) the particle has weak stress in *we'll get up a party* because of the influence of rhythm.

his subject, which make use of most of the criteria considered in the preceding section of this study. However, in addition, he develops a refined variant of the criterion of object position which he calls „the definite-noun-phrase test“ (15 f., 61-66). It requires that „the particle can precede a simple definite noun phrase“ (15), as in *you left out the caption*. The noun phrase must consist of either a single proper noun or of *the* plus an unmodified common noun (61). For the definition of the ‚phrasal verb‘ Bolinger states: „I regard this test as the most dependable and will make the fullest use of it“ (16). Although it is very valuable, the criterion only applies to transitive combinations, and can therefore not be employed to define the VPC as is done in 1.2.1.

1.4. Aspects of the VPC which are not Discussed

1.4.1. The preceding survey of criteria used in some recent studies to distinguish the various constructions resulting from the collocation of verbs and particles shall suffice for our purposes. We do not intend here to enter into a detailed discussion of all the previous work done on phrasal verbs or verb-particle constructions, as this alone would fill a book. Our interests lie elsewhere. Moreover, a review of the research done in the field, usually beginning with Curme (1914) and Kennedy (1920), is to be found in almost every larger treatment of the subject²⁹. In our opinion the problems of possible classification of verb-particle collocations have been sufficiently treated by

²⁹ For German see Hundsnurscher (1968: 1-41). For English see especially Meyer (1970b: 4-21), Sroka (1965: 4-17, 118-242), Fairclough (1965: 1-43) and Fraser (1965: 147-168). Cf. also Kiffer (1965) for a „Survey of Grammar Books 1640-1936“ (68-96), and a „Survey of Structural Grammars 1957-1965“ (97-122). For older monographs see especially Mechner (1956: 1-32) and Anthony (1953: 1-38).

Fairclough (1965). From the syntactic point of view the VPC and other related constructions have been discussed in great detail by Fraser (1965). We shall draw heavily on both studies. Wherever it is necessary we shall of course also make reference to other previous work in dealing with particular problems.

1.4.2. The development of the VPC shall not be discussed here in detail. A few remarks, however, may not seem out of place³⁰. The reason for the development of postposition for locative particles, according to Curme (1914) is „an increase in stress and a relative decrease of the importance of the verb“ (324), and thus „the strong stress upon the adverbial prefix soon suggested its removal to a place after the verb“ (332)³¹. As is pointed out in Marchand (1969: 109) „there were certainly other reasons“, since the preservation of stressed particles as first elements in compounds remains unexplained by the theory. In an earlier article it is stated that „the rise of adverbial verbs (i.e. verbs made up of a verb followed by a stressed particle) is one of the results of the struggle for a fixed word order“³². An additional factor, in Marchand's opinion, is that „the rise of the type is tied up with the normalizing of the position of locative subjuncts in general . . . adverbs of place always follow the verb“³³. In Old English most particles formed no fixed combinations with verbs. The development of post-particle verbs was achieved by the 14th century. In the 15th century locative particles regularly followed the

³⁰ The treatment of Kiffer (1965: 40-67) is not very useful, in particular as regards the reliability of the diagram given (67). Items like e. g. *up-aras*, *down . . . felle*, *over loked* are considered as phrasal verbs and there is no material selected between 1590 and 1660. But cf. Kaznowski (To appear).

³¹ The unorthodox spelling is Curme's.

³² Marchand (1951: 73). Cf. Konishi (1958: 118), where the rise of phrasal verbs is also seen in connection with „the struggle of the two principles“ (i. e. synthetic and analytic) and the establishment of sentence word order. Müller (1957: see esp. 48, 51-56), following Bally, distinguishes an ‚anticipatory type‘ from a ‚progressive type‘ in compounds, and in agreement with Curme regards the increase of stress as the decisive factor (52).

³³ Marchand (1969a: 131).

verb, but „prepositive usage must have lingered on considerably longer as the prefixal type **outbid** is not attested before the second half of the 15th century“³⁴.

1.5. *The VPC as a Frame for Semantic Investigation*

1.5. Although further subclassification is certainly possible — as is clearly shown in Fairclough (1965) — the VPC in English (and German), as defined in 1.2.1. by a minimum set of criteria, represents a specific class of lexical items which show considerable unity from a morpho-syntactic point of view. The semantic aspect is different. A continuum of varying degrees of cohesion between verb and particle has to be recognized, ranging from a collocation of verb plus adverb in reduced prepositional phrases (*taking out his handkerchief*) to fixed idiomatic units (*cry one's heart out*). In a considerable number of items, the particle even appears to be more or less redundant. We can only study the semantic structure of the collocations if the subject is clearly delimited. The definition of the VPC affords such a well established frame for the investigation of semantic phenomena and the relationship between verb and particle.

³⁴ Marchand (1969a: 108, 131, 109). The acquisition of the VPC in the language learning process is also not treated. This topic is the subject of a recent dissertation (Fischer: 1971), which also deals with „dative constructions“.

CHAPTER 2: RECENT WORK IN SEMANTICS

2.1. *Approaches to Semantics*

2.1.1. A detailed study of the semantic structure of the VPC cannot be attempted before the theoretical foundations of such an undertaking are thoroughly discussed. Leaving aside for the moment the possibility of a structural approach, two competing models of semantic theory which are currently prominent suggest themselves: interpretative semantics and generative semantics. In recent developments of linguistic theory, semantics, which in early transformational-generative grammar had been almost completely neglected¹, received a powerful stimulus from the KF-theory², its critique in Weinreich (1966), and the reply in Katz (1967). Later, Lakoff (1968) suggested that deep structures „must be somewhat more abstract . . . than previous research in transformational grammar has indicated“ (24), and that selection restrictions are „purely a semantic phenomenon“ (26). Chafe (1968), treating idiomaticity as „an anomaly in the Chomskyan paradigm“, sets up „an alternative model . . . in which semantics is initiative; in which a semantic component generates grammatical structures“ (117) and proposes the name „generative semantic“ model (117) for it. Other proponents of ‚generative semantics‘ are Bach, Gruber, McCawley and Postal³. In a recent article

¹ Weinreich's study (1963) was not conceived within a transformational framework.

² KF = Katz-Fodor (1963). The approach in Weinreich (1966) was explicitly designed to integrate a new semantic theory with a generative conception of syntax (cf. 417). It is surprising to realize that in the subsequent discussion Weinreich's proposals seem to have had very little effect.

³ Cf. especially Lakoff (1971), Postal (1970: 96-99), Abraham-

in defence of interpretative semantics, Katz (1970) opposes it to generative semantics⁴ and seeks „to show that none of these criticisms can be sustained and that the alternative proposed is a less adequate conception of the organization of grammars“ (220). McCawley (1971) replies to Katz's criticism in an article entitled „Interpretative Semantics Meets Frankenstein“, claiming that Katz did not argue against a particular theory, but rather „against a monster that was put together out of pieces of several corpses“ (285). McCawley's argument is further strengthened by another article appearing roughly at the same time, where Katz (1971) now blandly states that generative semantics actually *is* interpretative semantics.

2.1.2. It is evident that there are still many problems which are not yet solved, neither in an interpretative nor in a generative model of semantics. However, we accept a number of the tenets of generative semantics, in particular that verbs may be viewed as predicates relating certain variables, in the sense of symbolic logic. We also believe that simple lexical items can be analysed into semantic units, which must be regarded as prelexical elements, and that there is a correspondence between the structure of lexical items and sentences. This entails that we do not accept a single specific level of deep structure of the ‚Aspects‘-type which separates syntax from semantics. We rather acknowledge various levels of analysis of different depth. When we speak of an underlying or deep structure, especially in Chapter Three, this is meant to represent a level not very remote from the surface. This remote structure is in a paraphrase relationship to the surface structure, i.e. both are transformationally related. The transformations which are set up in a simplified form in the manner of classical transformational theory are believed to be largely meaning-preserving⁵. On the whole, we shall here follow a basically inductive line of investigation, analysing a considerable number

Binnick (1969). In Chafe (1970), an independent approach is developed which cannot be labelled as belonging to generative semantics.

⁴ Cf. especially Katz (1970: 230 f.).

⁵ Cf. Hall Partee (1971: 1-21, esp. 4).

of lexical items⁶, which may yield confirmation of theoretically established semantic features, hypotheses about possible new features, and, in general, may produce empirically supported fresh insights into the functioning of semantic relations between lexical items and their components. Leech (1969: 3) recently observed that „theoretical questions still tend to be pursued in isolation from descriptive ends, and vice versa“. Our study shall attempt to investigate concrete data, without neglecting the theoretical implications which derive from observation and analysis. In our opinion Weinreich's remark⁷ is still valid that „the most urgent need in semantics is for fresh empirical evidence obtained by painstaking study of concrete lexical data“.

2.1.3. Irrespective of the question of how a particular approach to semantics is incorporated into a comprehensive theory of semantics, problems may be viewed in a predominantly paradigmatic or syntagmatic aspect, and the field of semantics may be divided accordingly⁸. Research in word-fields and structural semantics⁹ concentrates on paradigmatic semantic relationships opposing and substituting specific lexical items. On the other hand research within a generative framework, whether ‚interpretative‘ or not, naturally stresses the syntagmatic aspect¹⁰. Yet, basically, there is no hard-and-fast line dividing lexical semantics from the study of larger se-

⁶ Cf. Postal (1970), where a single surface verb with its special properties is extensively discussed, leading to a particular analysis of its underlying semantic structure.

⁷ Weinreich (1966: 473).

⁸ Cf. Brekle (1970a: 47), where ‚Satzsemantik‘ is contrasted with ‚lexikalische Semantik‘ which studies „die inhaltliche Struktur monomorphematischer Einheiten und deren paradigmatische Oppositionen“.

⁹ Cf. Öhman (1953), Schopf (1969: 147 f.), and for surveys in Russian the reviews by Kuznecova and Ufimceva quoted in Weinreich (1966: 468, Fn. 95). See also Ullmann (1962), Lyons (1963), Pottier (1964, 1965), Coseriu (1964, 1967a, 1967b, 1970a).

¹⁰ A syntagmatic point of view is, of course, not restricted to a transformational-generative approach. Cf. the ‚combinatorial semantics‘ in Weinreich (1963: 163-184).

mantic combinations¹¹, especially if both are concerned with establishing certain minimal or distinctive semantic elements. The search for such components, their formal or intuitive motivation, and the variety of terms employed will be discussed in the following. It should be noted, however, that a semantic investigation of lexical items from the point of view of word-formation, is necessarily interested in syntagmatic aspects, since word-formation is a fundamentally syntagmatic process. For practical reasons, in the following discussion, which is mainly chronologically ordered, structural semantics and research in a more or less transformational vein are treated separately.

2.2. *Semantic Features*

2.2.1. A complete survey and a detailed discussion of recent developments in semantics is impossible to achieve here¹². We shall therefore confine ourselves mainly to the problems of possible elements that can serve as minimal semantic units, the related question of the form of dictionary entries, and the relationship of lexical items to other items in the same word-field. A variety of terms have been used, often in analogy to phonology, to characterize the basic elements of semantics. In Nida (1951) the 'seme' (with a number of subclasses like the 'alloseme, 'linguiseme, 'ethnoseme, 'episeme, 'macroseme') is used and thus defined: „The simple term *seme* identifies any minimal feature of meaning and is relatable to *sememe* in the

¹¹ Cf. Weinreich (1966: 446), where it is argued that „every relation that may hold between components of a sentence also occurs among the components of a meaning of a dictionary entry. This is as much as to say that the semantic part of a dictionary entry is a sentence - more specifically, a deep-structure sentence“. See also Lipka (1971a).

¹² Cf. Lyons (1968: 400-481), Ikegami (1967), Fillmore-Langendoen (1971), and Steinberg-Jakobovits (1971) for a survey.

same general way as *phone* is to *phoneme* and *morph* is to *morpheme*" (5). Certain examples of features are mentioned: form, process, state, agent, object, instrument (10). Pottier (1964) uses a very similar terminology, defining ,sème' as a „trait pertinent sémantique" (117) or „trait distinctif sémantique" (122), and ,sémème' as an „ensemble de sèmes" (122). In addition, a number of other terms are introduced, such as the ,classème' (= „appartenance à des catégories sémantiques générales"), the ,fonctème' (= „parties du discours et leurs implications"), and the ,virtuèmes' (= „affinités combinatoires issues de l'expérience passée") (133). ,Sémème' and ,classème' are essentially paradigmatic categories, while ,fonctème' and ,virtuèmes' are syntagmatically determined. Distinctive features which are defined by opposition of lexemes are also used to analyse paradigmatic structures by Coseriu (1964: esp. 157 f.), who adopts Pottier's ,classème' (Coseriu 1966: 212) and ,sème' (Coseriu, 1970b: 167), at the same time talking of ,unterscheidende Züge' or ,Merkmale' (Coseriu, 1967a). With regard to syntagmatic structures, Coseriu (1967b: 299) postulates three types of ,lexikalische Solidaritäten' which are called ,Affinität', ,Selektion' and ,Implikation'. In Lyons (1963), distinctive features or similar minimal elements of meaning are not set up, since semantic structure is defined „in terms of certain relations that hold between the items in a particular lexical subsystem. They include such relations as sameness and difference of meaning, incompatibility, antonymy, etc." (57). Deriving from ,componential analysis', which was first successfully used in research on kinship terminology¹³ and later in a cross-linguistic study of a set of verbs¹⁴, the term

¹³ Cf. Goodenough (1956) where, however, the terms ,sememes' and ,allosemes' are employed (197), but not exactly corresponding to Nida's use of the terms, as is pointed out in a footnote.

¹⁴ Bendix (1966). But cf. Weinreich (1969: 28 Fn. 9) „it is sobering to realize that in every language many morphemes or lexemes yield no clear-cut componential analysis, and for many others such analysis is hard to conceive of altogether".

‚component‘ is also found to denote semantic features¹⁵. In Bendix (1966), e.g., ‚there is a relation between A and B‘ (62), ‚cause‘ (63), ‚chance‘ (69), and ‚change‘ or ‚not-change‘ (79) are called components. In a matrix, the „paradigm of oppositions of the verbs“ is represented with „marked shared features“ (76). The term ‚content-figurae‘ is used for semantic features in Hjelmslev (1961), where it is argued that an ‚exchange test‘ cannot only be applied to the ‚expression plane‘ of language, but also to the ‚content plane‘ (66). According to Hjelmslev, the content of an unlimited number of signs should be describable with the aid of a limited number of figurae, and „the lower we can make the number of content-figurae, the better we can satisfy the empirical principle in its requirement of the simplest possible description“ (67)¹⁶. Consequently, the criterion of the ‚exchange test‘ leads to the claim that „ram‘, ‚ewe‘, ‚man‘, ‚woman‘, ‚boy‘, ‚girl‘, ‚stallion‘, and ‚mare‘ must be eliminated from the inventory of elements if they can be explained univocally as relational units that include ‚he‘ or ‚she‘ on the one hand, and ‚sheep‘, ‚human being‘, ‚child‘, ‚horse‘ on the other“ (70)¹⁷.

2.2.2. In the theory KF (1963), in addition to the use of the term ‚syntactic markers‘, a distinction is made between ‚semantic markers‘ and ‚semantic distinguishers‘. This distinction is attacked in Bolinger (1965), and harshly criticized in Weinreich (1966: 405 f.). The dichotomy is defended in Katz (1967a), where the notion of distinguisher is said to provide „a purely denotative distinction which plays the semantic role

¹⁵ We shall here use the term ‚component‘ for larger semantic elements, while the term ‚feature‘ refers to minimal distinctive elements.

¹⁶ ‚Figurae‘ are earlier defined as „such non-signs as enter into a sign system as parts of signs“ (46). In Hjelmslev (1961), which is the ‚second revised edition‘ in English of the 1943 original, it is still maintained that „Till now, such an analysis into content-figurae has never been made or even attempted in linguistics“ (67).

¹⁷ Note that, e.g., ‚horse‘ is a component which is not likely to occur in many items apart from *stallion*, *mare*, *equestrian*. ‚He‘, ‚she‘, ‚human being‘ are quite different in that respect.

of separating lexical items that would otherwise be fully synonymous, such as, for instance, ‚red‘, ‚yellow‘, ‚blue‘, ‚green‘, etc.“ (159). The distinction has again come under attack by Bierwisch (1969: 177-181) who concludes: „I think it is time to give up the distinction between markers and distinguishers“ (180). According to Katz, semantic markers „are not features at all“ (Katz 1967a: 154)¹⁸. Weinreich (1966), on the other hand, uses ‚semantic features‘¹⁹, except when discussing KF. He considers lexical entries as triplets of ‚phonological features‘, ‚syntactic features‘ and ‚semantic features‘ (417). In Bierwisch (1965), where the existence of a hierarchy of syntactic-semantic features is studied, the term ‚Merkmale‘ is used. Later (Bierwisch 1967, 1969a), ‚semantic marker‘ and ‚semantic feature‘ are employed. An argument against distinguishing semantic from syntactic or grammatical features was recently put forward in Bolinger (1969), where it is proposed to treat such grammatical categories as word classes, together with such features as Mass/Count, Divisibility, Plurality as ‚attributes‘ of a lexical item, and consequently „to separate the word altogether as a semantic entity, leaving a set of grammatical attributes which speakers are more or less free to attach at will“ (37)²⁰. Semantic features like Human, Male are treated as elements of systems within the framework of „systemic analysis“ in Leech (1969). The contrast between Human and Non-Human is said to constitute a ‚binary taxonomic system‘, as does the opposition Male/Female²¹. Other possible systems

¹⁸ The concept of ‚semantic marker‘ in KF is severely attacked in Bar-Hillel (1969: 5) where it is argued that markers such as ‚physical object‘, ‚living‘, ‚human‘ and ‚male‘ are „conceptual elements which would be reasonable enough for a philosophy of language of antiquity or the Middle Ages“.

¹⁹ See esp. 433 ff. The advantages of a feature notation over a category symbol are pointed out in 401.

²⁰ Cf. the discussion of the implication of such a proposal in Lipka (1971b).

²¹ Cf. Bierwisch (1969a: 167), where the asymmetry between the two pairs of features is stressed: „(non-Human) obviously indicates simply the absence of a certain property, whereas neither (Male) nor

which are found in the semantic structure of language are ,multiple taxonomic systems' (as in *bedroom/hall/kitchen*), ,polar systems' (as in *rich/poor, strong/weak*), ,hierarchic systems' (as in *one/two/three, inch/foot/yard*) and ,relative systems' (as in *parent/child, above/below*) (21).

2.3. Lexical Entries

2.3.1. Before investigating possible semantic features and their status, let us consider some examples of lexical entries²² which have been offered in transformational-generative studies and related research. Chomsky (1965) considers the problem of the hierarchic nature of subcategorization of lexical items, and the item *boy* is preliminarily assigned the ,syntactic features': +Common, +Human (82). The sentence *sincerity may frighten the boy* is then treated, and a lexicon is given (85) with the lexical entries *sincerity* [+N, -Count, +Abstract], *boy* [+N, +Count, +Common, +Animate, +Human], and *may* [+M], which are later revised. *Frighten* receives the specification [+V, +—NP, +[+Abstract] Aux—Det [+Animate], +Object-deletion, . . .] (107). In the discussion of the structure of the lexicon and of redundancy, the convention that „only positively specified strict subcategorization features and only negatively specified selectional features appear explicitly in lexical entries“ (164) is adopted. The lexical entry for *frighten* is consequently simplified to [+V, +—NP, -[+N]—[-Animate], . . .] (165), while the entry for *boy* is given as [+Common,

(Female) expresses only the absence of its opposite“. Leech uses the symbols +HUM and -HUM, and -HUM is explained as ,brute' (,animal').

²² We here prefer ,lexical entry' to ,dictionary entry'. For a distinction in the terminology of Chomsky and that of Katz cf. Botha (1968: 35, Fn. 20). In Weinreich (1966) both terms are used indiscriminately.

+Human, +Count, ...] (166), since the features +N and +Animate are predictable.

2.3.2. A considerable number of semantic features are mentioned in Weinreich (1966) in treating a variety of lexical items. When dealing with the theory KF, two items are given which demonstrate reconvergence of paths. *Adolescent* is said to contain the features: (Noun or Adjective) (Human) (non-Adult) (nonChild), and thus shows a reconvergence after the split of paths for the syntactic features (or markers) Noun or Adjective (402). In *fox* there is a single path for the features (Object) and (Animate), a split into either (Human) or (Animal), and a reconvergence for the common feature (Cunning) (408). The item *eat*, which apart from other features, is characterized by (Action) and (Swallow), is regarded as having a different meaning in *eat bread* and *eat soup*. In the first case it is said to contain a feature (Chew) and a selection restriction <(Solid)>; in the second case, a feature (Spoon) and a selection restriction <(Liquid)>. From this, Weinreich concludes „that a KF-type dictionary is in danger of having to represent an unlimited differentiation of meanings“ (411). We shall return to this question later. Further examples of lexical entries are *shoot*, which contains amongst other features (+Verb, +Activity, +Voluntary, +Cause → -Rest)²³ and the ‚inflectional class marker‘ IC₁ (453); *boy* (+Noun, +Count, +Concrete, +Animate, +Human, +Male, -Adult) (456), and *car* (+Noun, +Count, +Concrete, -Animate, +Common, +Rideable-in, +Motor-driven) (456). In a footnote it is explained that an „ad-hoc global feature“ such as ‚Rideable-in‘ or ‚Motor-driven‘ is an abbreviation for a configuration of features. The idiomatic complex entry *shoot the breeze* is said to contain (+Verb, +Activity, +Communicate, +Voluntary) and the selection restriction <+Human>, while *pull _____'s leg* is characterized by (+Verb, +Activity, +Voluntary, +Irritating, Cause → +Believe Falsely ...) (453). No

²³ The arrow following Cause symbolizes a ‚configuration‘, i. e. an ordered set of features. In some entries Cause is marked + in Weinreich (1966), in others it is not.

criteria are given for the choice of a particular semantic feature.

2.3.3. In Katz (1966), where the KF theory is further developed, *chase* receives the ,reading': „Verb, Verb Transitive, . . . ; (((Activity) (Nature: (Physical)) of *X*), ((Movement) (Rate: Fast)) (Character: Following)), (Intention of *X*: (Trying to catch ((*Y*) ((Movement) (Rate: (Fast))))); <SR>“ (167), where SR stands for ,selection restrictions“²⁴. Although the ,semantic marker' (Activity) is said to distinguish *chase* from ,state verbs' and ,process verbs', and class it „together with other *activity verbs*, such as ,eat', ,speak', ,walk“ (168), the ,reading' for *eat* is later specified as „*V*, *V_{tr}*; (Process), (Physiological), . . . , (*X* takes in through mouth and swallows *Y*); <Subject/(Physical Object) and Object/(Physical Object)>, where the ,*X*' is the slot for the reading of the subject of ,eats' in a particular sentence and the ,*Y*' is the slot for the reading of its object“ (307). To reduce the number of ,semantic markers' a set of ,redundancy rules' is introduced which is based on the observation that, e. g., (Physical Object) is contained in all of the markers (Human, Animal, Artifact, Plant) (230 f.). Katz even postulates ,universal redundancy rules' which are not language specific (235). In a reply to Weinreich's critique of KF, Katz (1967) takes up the question of *eat* again, saying that „this word also has the sense of ,destruction by gradual consumption', as in (35) *The acid is eating the chain*“, concluding that „both senses of the ambiguous word ,eat' are referentially indefinite“ (175)²⁵.

2.3.4. The ,reading' for *chase* given in Katz (1966) is considerably simplified in Bierwisch (1969a), where it is pointed out that Nature, Rate, Character, Intention „are simply a redundant notation, for what could ,Fast' mean as a predication of ,Motion' if not a qualification with respect to rate, or ,Physical' as a predication of ,Activity' if not a qualification

²⁴ Cf. Bierwisch (1967: 25, Fn. 26).

²⁵ As can easily be seen, this does not fit the ,reading' quoted above. But cf. 2.4.4.2.

with respect to nature?" (156 f.). Bierwisch proposes to regard markers as predicates in the sense of modern logic, and to replace slots by variables²⁶. ‚Following‘ is seen as having a relational character and is written ‚Following (X, Y)‘ instead of ‚Following Y‘ (157). In addition, the use of the conjunction symbol \wedge yields a much less complicated description of *chase* than that of Katz, viz.

[Activity \wedge [Fast] Motion] X \wedge [Following] XY \wedge [Trying] X ([Catch] XY) \wedge [Motion Y] (160).

Bierwisch arrives at the conclusion that „a semantic metatheory in Katz’s sense should not contain any complex marker, but only basic non-complex elements, which I will call semantic features“ (182). In an earlier study, Bierwisch (1967) had developed a number of ‚markers‘ for the characterization of German adjectivals (29-34), like Space²⁷, Pol(arity), Max(imal dimension), Inherent, Vert(ical), which resulted in the description of e. g. *lang* as (+Pol) [(1 Space) [* [(+Inherent) [(+Max)]]]]. *Kurz* differed from *lang* only by (–Pol), and *hoch* was specified as (+Pol) [(1 Space) [* [(+Vert)]]] (32). The method was extended to English in Teller (1969) where it is stated that „Most of Bierwisch’s examples and analyses seem to have close counterparts in English“ (185), and where a marker (+int) is used²⁸, which refers to interior dimensions and is found e. g. in *wide* (205).

2.3.5. In Bendix (1966), a number of verbs which are

²⁶ Cf. Bierwisch (1970: esp. 30, 47), where semantic ‚features‘ are classified according to the number of arguments required and according to different types of arguments.

²⁷ ‚Space‘ — which replaces the earlier (13) ‚markers‘ (1 Dim), (2 Dim), (3 Dim) found in *lang*, *breit*, *hoch* (cf. Leech, 1969: 161 ff.) — is taken in a wider sense than usual and is graded 1 Space, 2 Space, 3 Space; „if dominated by the marker (Physical Object), then (Space) represents the physical dimensions of space; if not, as for instance in *große Angst*, *hoher Preis*, *hoher Ton*, *lange Zeit*, then it indicates a more abstract space structure“ (16). * is the symbol for a ‚place keeper‘ (27). For a revision cf. Bierwisch (1970: 43 ff.).

²⁸ Cf. our feature \pm Inside set up in 3.2.4.3.

viewed as functions or relations between variables are analysed, and from their oppositions certain 'components' are extracted (3). *A gets B* is defined as 'A changes to (A has B)' and differs from *A has B* by the component 'change of state' (67 f.). *C gives AB* is informally defined as 'C causes A to have B'; *A keeps B* is 'A has B' and 'A doesn't change to not having B'; *A loses B* is 'A has B', and 'chance causes A not to have B'; and *A finds B* is 'B is in a relation to some D' and 'chance causes B to be in some relation to A' (65 ff.).

2.3.6. The methods of symbolic logic are also fundamental in Fillmore (1968a), where verbs are seen as predicates, within the framework of case grammar²⁹. As examples where it is possible „to show one predicate as being conceptually a part of another“ are given $PERSUADE_{a, b, c}$ which is equivalent to $CAUSE_a$, ($BELIEVE_{b, c}$) and the often quoted $KILL_{a, b}$ which is said to correspond to $CAUSE_a$ (DIE_b) (377).

2.3.7. An approach similar to that of Bendix is found in T. R. Anderson (1968). The variables are „expressed by an unfilled slot“ (402) which contains category symbols. The syntactic component specifies the environment e. g. for *begin* in 'John began to run' as: $NP_1/Aux \dots S/where S \rightarrow NP_1 VP$. *Begin* is then defined by: NP_1 not-VP, $NP_x V_x NP_1$, $NP_1 VP$ (402). The middle part of the definition ($NP_x V_x NP_1$) is apparently equivalent to 'A changes' in Bendix, but an explanation is not given³⁰. With the same syntactic frame, different paraphrases obtain for *continue*, viz. $NP_1 VP$, $NP_x V_x NP_1$, $NP_1 VP$, for *stop* with a gerund following (as in *John stopped eating*) viz. $NP_1 VP$, $NP_x V_x NP_1$, NP_1 not-VP, and for *try*: NP_1 not-VP, $NP_x V_x NP_1$, $NP_1 VP$, NP_1 might fail (403). Fur-

²⁹ A different type of lexical entry is used in Fillmore (1969: 133 ff.) involving arguments, cases, prepositions, and presuppositions. The examples for the three verbs *blame*, *accuse*, and *criticize* are presented as „extremely tentative suggestions“ (123).

³⁰ The factor time which is introduced in Bendix (1966: 63 f.), and is found in 'ht = A has B after time T', or 'BR = B an-R ... before T' (76), is discussed by Anderson (1968: 403-405), but „the possibility of solving the problem with time relationships in the components“ is dismissed (405).

ther examples for a „simplification“ of vocabulary are *kill* and *learn*, which are defined by the same syntactic environment: $NP_1 \dots NP_2$, and by the paraphrases: NP_2 alive, NP_1 acts, NP_2 not-alive, for *kill*, and: NP_1 not know NP_2 , Something Changed, NP_1 know NP_2 respectively (407). *Buy* and *sell* are treated in the same way (408).

2.3.8. The verb is also assigned a central position in Baumgärtner (1967), where semantic structure is investigated „auf Grund einer gemeinsamen Menge von Grundelementen, nämlich semantischer Komponenten“ (172). *Geb(en)* contains the components (Vorgang) (Fortbewegung) (Auf dem Boden) (Aufrecht), while *flieg(en)* is characterized by (Vorgang) (Fortbewegung) (In der Luft) (178). Owing to the fact that the two sentences *der Mann geht schnell über die Straße* und *der Mann läuft über die Straße* are paraphrases, „kann nun das Adv-Lexem *schnell* von einem objektsprachlichen zu einem metasprachlichen Element umgewandelt werden, d. h. in den Rang einer semantischen Komponente ... erhoben werden“ (182). This is one of the rare remarks in the literature about how we actually discover certain components or semantic features. *Lauf(en)* is consequently specified as: „(Fortbewegung) – (Auf dem Boden) – (Aufrecht) – (Schnell) – <Sbj: Person; Dir: Ebene ∨ Raum>“ (182). Paraphrase evaluation then shows the synonymy of: *lauf* and ‚*geb*-(Schnell)‘, *trippel* and ‚*geb*-(Schnell) – (Mit kurzem Schritt)‘, *stapf* and ‚*geb*-(Schwerfällig) – (Angestrengt)‘ (184). The component structure is based on the general relation „X ist ein Y“, as in „Schlendern ist ein mäßiges, bequemes, langsames Gehen“ and „Gras ist eine stielige, schneidbare Pflanze“ (194).

2.4. The Status of Semantic Features

2.4.1. If we adopt the method just sketched, practically any linguistic unit used as a modifier can be turned into a metalinguistic construct and assigned the status of a semantic

feature. A simple noun or verb (in infinitival form) is equated with a modified noun or verb and thus new semantic components are abstracted. The problem is, of course, tied up with the question of definitions in general, and the distinction between analytic and synthetic sentences. In Weinreich (1966: 446), the sentence *a chair is a piece of furniture for one person to sit on*, which is a definition, is contrasted with *a concert is an event for music lovers to enjoy*, which is not. He points out that banalities, paradoxes, and paraphrases can be deduced from definitions (448 f.). „Some elements of a vocabulary are arranged in taxonomic patterns“ and can be defined with a relative clause „per genus et differentiam“ (448). But definitions, although they do not normally contain definite articles and non-present tenses, „are not *uniquely* characterized by their form“ (446), and since not even the analyticity of a sentence is self-evident from its structure, „the isolation of definitional sentences cannot be reduced to a procedure, but must take place by trial and error“ (447). The definition of a definition itself, as given by Weinreich (447), „an analytic sentence containing an element x_i (the definiendum) such that the sentence would be false if x_i were replaced by any other element of the language“, seems to exhibit a certain circularity. In Pottier (1965: 33) „Quatre types de définissants: sémème, classème, archisémème, virtuème“ are used of which the ‚sémème‘ is said to correspond to the ‚différences spécifiques‘ and the ‚archisémème‘ to the ‚genre prochain‘ in definitions (33). Thus, *chaise* is defined as *siège* „à dossier et sans bras pour une personne“ (34). According to Pottier, having recourse to the ‚archilexème‘ (i.e. a concrete instance of the ‚archisémème‘, like *siège*) in definitions has the advantages of saving semantic features and also „de repousser le problème de l’expression du classème, qui n’apparaît alors qu’à la limite du général, sous les signifiants du type *tout ce qui*“ (34). The inclusion relation can consequently be used to define successively a series of lexical items with a diminishing number of features: „en allant de *banc* à *siège*, puis à *meuble*, puis à *objet*, on perd à chaque fois un certain nombre de sèmes distinctifs. A la limite, reste seul le support de ces sèmes,

c'est-à-dire le classème" (35). Like Baumgärtner, Pottier points out that ‚à dossier‘ in the definition of *chaise* as ‚siège a dossier‘ is not a word of the language but a ‚metasigne‘, while *siège* is such a word; „l’archisémème a un signifiant homogène avec le signifiant du mot défini (*chaise, siège*), tandis que les composants du sémème et du classème ont des signifiants non lexémisés . . . n’existant qu’en tant que *métasignes*“ (39). But apart from inclusion, a criterion for the distinction between signs of the metalanguage and ordinary words is not adduced, nor do we learn how correct definitions are recognized. Occurrence in a definition is certainly not a sufficient criterion, since both *siège* and *à dossier*, and *gehen* and *schnell*, respectively, are present in it. Are *siège* and *gehen* not metalinguistic elements because they are logically included in *chaise* and *laufen*? We are not told. But if we assume this, then ‚Human‘ and ‚Female‘, whose status as semantic features is widely accepted, could not be semantic features, since they are both included in *woman*. Another solution would be to regard all elements in a definition as potential features. The correctness of definitions might be tested with the help of naïve native speakers³¹. Yet, only the distinctive features (the ‚sèmes pertinents‘ in Pottier 1965: 34) which separate, e. g., *canapé, fauteuil, chaise, tabouret*, would be awarded the status of semantic components³², in order to prevent the postulation of an infinite set of features. The linguist’s task would be to single out the relevant features. But even this will lead to a proliferation of features with a fairly restricted potential, like Pottier’s ‚pour s’asseoir‘, ‚sur pieds‘, ‚pour une personne‘,

³¹ Cf. Weinreich (1966: 447): „A naïve speaker may not be able to formulate a definition quickly or elegantly, but he can with assurance reject proposed definitions as incorrect, and thus zero in on the correct definition“.

³² Cf. Bierwisch-Kiefer (1969: 70): „The *periphery* consists of those semantic specifications that contribute to the meaning of a lexical entry without distinguishing it from other dictionary entries, i. e. specifications which could be removed from the reading without changing its relation to other lexical readings within the same grammar“.

„avec dossier“, „avec bras“ (34), which conflicts with Hjelmslev's „empirical principle“, i.e., the requirements of an economic description. The undesirable alternative, however, is to be content with a very few features of great generality, like Count, Concrete, Animate, Human, and not attempt to gain deeper insight into the structure of language³³.

2.4.2. However, even features such as Animate and Human are not as simple and as unproblematic as they appear. In the KF-theory such semantic markers are called „theoretical constructs“³⁴; yet an explanation as to how they are constructed, or how they differ from ordinary lexical items is not offered. T. R. Anderson (1968) points out that „a component like Animate is meaningful only if we know what the word *animate* means, and it is reasonable to inquire how the semantic theory would define *animate*“ (409). He goes on to say that „the word *animate* . . . clearly falls within a vocabulary range which lies outside the use of basic words . . . This virtually guarantees that the word *animate* does not enter into the definition of *man*. Rather it is the perceptual fact of being alive which enters into such definitions, and the component ‚N is Animate‘ is filled perceptually rather than lexically in defining words like *man*“ (409). However, +Animate cannot be simply equated with ‚living‘ as is demonstrated in Meyer-Ingwersen³⁵. Since human beings and animals are marked +Animate in the dictionary, a sentence like *Peter ist tot* would have to be contradictory. „Wir können uns diesem Argument entziehen, indem wir sagen, daß die Angabe eines

³³ Cf. Carstensen (1969): „es ist bald deutlich, daß wir mit solchen allgemeinen Angaben nur ganz grobe Unterscheidungen treffen können“ (12), and „trotz eifrigen Bemühens hat die moderne Linguistik bisher nur einige wichtige allgemeine *semantic markers* finden können“ (15).

³⁴ Katz-Fodor (1963: 188).

³⁵ Meyer-Ingwersen (MS). The examples *Opa's Kintopp ist tot*, *Die generative Grammatik ist tot*, which are used to show that noun phrases containing +Animate are not necessarily living beings, must, however, be interpreted as metaphors, and analysed with ‚transfer features‘ similar to those used in Weinreich (1966: esp. 459).

Zustands durch das Lexikon etwas anderes ist, als die Angabe durch ein verbales Prädikat, weshalb von den Sätzen: *Peter lebt* und: *Der lebende Peter ist tot*, nur der zweite kontradiktorisch sei“ (15). Consequently it is argued that both states ‚living‘ and ‚dead‘ are contained in +Animate, and that the question whether something is actually ‚living‘ cannot be decided in the lexicon.

2.4.3. Another problem which is practically ignored in the literature is the question of word classes of ‚semantic markers‘. Again, T. R. Anderson (1968) draws attention to the fact that „a primitive like Human is not as primitive as it may seem to be. We must talk about the primitives of semantics using words, and the words we use have parts of speech attached to them . . . the nature of the construct . . . is affected by the part of speech of the word being defined. Most components of nouns are adjectives, most components of verbs are nominalized verbs or adjectives, most components of adjectives are abstract nouns. This simply means that, construct or not, the semantic component is in some sort of syntactic relationship with the word it defines“ (397). But this is precisely the reason why semantic features are not dependent on word class categories, since their syntactic marker is more or less automatically assigned to them on the level of surface structure by the items with which they occur. If we postulate a feature Repeated in constructions such as *he used to come*, in *daily*, *weekly paper*, or in German *hüsteln*, it will receive the form of an adverb in such surface structure paraphrases as ‚he came repeatedly, the paper appears repeatedly, he coughs repeatedly‘. The feature could also be labelled Repetition, if it is viewed as a property. As an element of the metalanguage, however, the choice of any label is completely arbitrary, and the frequent use of abbreviations like Vert, Prox, Dim in the literature, which are only motivated by mnemotechnic considerations, is a consequence of this. In Weinreich (1966), *during* and *when* are said to contain Simultaneity (438), Politeness is found in *please*, and \pm Certainty in *probably* and *certainly* (442). Nothing would be lost if the features were called Simultaneous, Polite, Certain, or simply Sim, Pol, Cert. The fact that

car is assigned Rideable-in and Motor-driven, which are adjectives in form, certainly derives from surface structure, where nouns are naturally modified by adjectives. T. R. Anderson (1968: 397) remarks that „a speaker of English extracts exactly the same information from ‚Human‘ that he would extract from ‚N is human‘ ... By exactly the same process, Adult and Male can be converted into ‚N is adult‘, and ‚N is male‘“. This only reflects the fact that definitions are usually copula sentences, and that a sentence of the form *An X is a Y which Z* underlies a definition such as *a car is a thing which is motor-driven*, which yields the analytical sentence *a car is motor-driven*. In this definition, *thing*, which could be further reduced to *something*, is a semantically empty³⁶ archilexeme, which corresponds to Pottier's ‚classème‘ *tout ce qui* (cf. 2.4.1.). As the predicate complement slot in English is filled by adjectivals and nominals, it is only natural that adjectives and nouns should appear in the surface structure of definitions, and, consequently, in derived semantic features. Symbols of the metalanguage, however, are not restricted to certain word classes, although adjectives in their function as modifiers are more readily applied.

2.4.4.1. This also becomes clear if we take syntagmatic considerations into account, e.g., in selection restrictions³⁷. To

³⁶ Cf. Weinreich's (1963: 180 ff.) discussion of ‚depletion‘, and the definitions of *cicatrisation* with the help of *phénomène*, *état*, *action* in Pottier (1965: 38 f.).

³⁷ Cf. Chomsky (1965: 95), where ‚selectional rules‘ are distinguished from ‚strict subcategorization rules‘; Weinreich (1966: 407), Katz (1966: 159 f; 1967a: 160, 163); McCawley (1968a: 128, 130, 134), Lakoff (1968: 26). Chomsky's concept of ‚selection restrictions‘ is disputed in McCawley (1968c: 264 ff.), whose views are in turn criticized in Kuroda (1969). The same phenomenon is also called ‚co-occurrence restrictions‘ or ‚incompatibility‘. In Halliday (1966: 156), the similarity of ‚collocation restrictions‘ is made the basis for grouping lexical items into ‚lexical sets‘. In Leisi (1967: 68 ff.), the subject is dealt with under ‚semantische Kongruenz‘. Perhaps the earliest treatment is Porzig (1934), where ‚wesenhafte Bedeutungsbeziehungen‘ is used. Coseriu (1967) distinguishes three types of ‚lexikalische Solidaritäten‘.

assume that semantic features are necessarily tied up with particular parts of speech, would of course exclude the possibility that, e.g., a noun and a verb contain the same feature³⁸. Thus, T. R. Anderson (1968: 399) concludes that „verbs are not Human; rather they require Human Actor or Human Object, etc. But, then the components Human and Human Actor are the same except for their external syntax“. The observation is quite correct, as we cannot properly speak of a *human verb*. Yet, again, this is a matter of the object language, and it is the very reason why a feature Human is a theoretical construct, since, otherwise, it could not be contained in a verb. Saying that a certain verb requires a human or non-human object or subject is only a more precise formulation of the general statement that an element \pm Human may be present in a verb. As such an element is necessary to account for selection restrictions and incompatibility, within a semantic theory, it is bound to be a theoretical construct.

2.4.4.2. As an example of selection restrictions or collocation restrictions which are due to particular semantic features, let us consider the item *eat*, and the opinions voiced about it by a number of linguists. In Lyons (1963: 20) *John eats cheese (fish, potatoes, etc.)* and *John drinks milk (beer, wine, etc.)* on the one hand, are contrasted with the unacceptable **John drinks cheese (fish, potatoes, etc.)* and **John eats milk (beer, wine, etc.)* on the other. It is observed that a linguist could account for this state of affairs „in terms of the co-occurrence of certain subclasses of nouns with certain subclasses of verbs. But he cannot hope to deal with all acceptable collocations of forms in this way“ (20). This solution would be equivalent to the use of subcategorization rules proposed in Chomsky (1965: 95). If we try to apply a feature analysis to *eat* v.s. *drink*, we may be easily misled by the examples quoted above into assuming that *eat* requires (or collocates with) Solid objects, while *drink* demands the feature Liquid,

³⁸ For dimensionality in nouns and adjectives cf. Bierwisch (1970: 44).

or Non-Solid (which is of course not the same) in its object. A glance at Weinreich's (1966: 411 f.) remarks about *eat* will quickly discard such an opinion, since *eat bread* is opposed there to *eat soup*. It is argued that *eat* in *eat bread* could be represented as involving the feature Chew and the selection restriction <Solid>, while in *eat soup* it could be marked as containing a feature Spoon and a selection restriction <Liquid>. However, this possibility is rejected since, according to Weinreich, „the activity symbolized by *eat* is also different depending on whether things are eaten with a fork or with one's hands; and even the hand-eating of apples and peanuts, or the fork-eating of peas and spaghetti, are recognizably different“ (411). The use of the word ‚activity‘ in this quotation is quite revealing. As Katz (1967a: 174) points out „Weinreich's problem about infinite polysemy is spurious . . . he fails to understand the distinction between meanings or words and the actual things, situations, events, etc. to which they can refer“. Yet, the line between factual and linguistic knowledge is not always drawn as easily as Katz suggests³⁹. In T. R. Anderson (1968: 414) it is even advocated that „the entire dichotomy between knowledge of the language and knowledge of the world must be abandoned“. The author postulates a type of extralinguistic selection restriction: „for *eat* we can visualize a component which states alternative instruments used in eating . . . The definition of *fork* would have to contain a component specifying that what the fork holds must be solid. The definition of *soup* must contain a component specifying that *soup* is liquid. Compositionally the two components are incompatible, and so ‚John ate his soup with a fork‘ is anomalous“ (414). This is certainly not a solution, especially since only the ‚activity‘ described by ‚John ate his soup with a fork‘ is anomalous, not the sentence itself. Although at times it may be much more difficult to draw the

³⁹ Cf. Coseriu 1970a. But cf. also Bierwisch-Kiefer (1969: 72): „there is no language-independent borderline between linguistic and encyclopedic knowledge in general“; Fillmore (1969: 124). We here leave aside the use of *eat* in *the acid is eating the chain*.

line between linguistic and extralinguistic knowledge, the distinction as such has to be recognized in every language. Let us look at another opinion about the meaning of *eat*, which at first sight appears to be a very simple lexical item, belonging to the central core of the vocabulary. In a review of Weinreich (1966), McCawley (1968b: 584) makes the following observation about the selection restrictions of *eat*: „I conjecture that the appropriateness of *eat* depends on whether the substance being consumed counts as ‚food‘ . . . Note that my conjecture . . . only applies to the consumption of liquids: one can perfectly well talk about eating coal or dirt or one's hat“. This condition⁴⁰ for the correct use of *eat* again points to the fact that the features Liquid and Solid play an important role, not only in distinguishing *drink* (which requires Liquid) from *eat* (which does not), but also in the selection of the correct collocations for *eat* itself⁴¹. In Seuren (1969: 195), *eat* is specified as selecting an animate subject, an optional object, and an optional prepositional object, which contains the relator *from*

⁴⁰ Cf. Leisi (1967; 16 ff.), where ‚Bedingungen‘ are postulated: „die Bedingungen, welche den Gebrauch eines Wortes erlauben, können außerhalb der Sprache liegen, sie können sich aber auch in den Sprechakten befinden, die dem Wort-Akt vorausgehen oder nachfolgen“ (17). The approach can be reconciled with a feature analysis. Leisi (20) states that *Apfel* differs from *Wind* by a ‚Merkmal‘, which is the necessary condition of movement in *Wind*. But *Luft* is like *Apfel*, in that movement is not relevant. Obviously, this is an extralinguistic component, but Leisi also recognizes syntagmatic conditions which could be viewed as features. The condition for the use of *eat* and German *essen*, according to Leisi, is „daß das Objekt etwas Eßbares (Nährendes) sei“ (68) which amounts to a certain circularity.

⁴¹ Cf. Kuroda (1969: 169). In German, the distinction apparently affects the choice of the particle in *ausessen* or *aufessen*. Thus we have *das Mus AUSessen* (Liquid), but *das Brot AUFessen* (cf. Hundsnurscher 1968: 127 f.). *Eat* requires an animate subject with no further specification, while German distinguishes between *essen* (Human Subject) and *fressen* (Non-Human Subject). When *fressen* is used with human subjects the feature –Human or +Animal may be said to be transferred to the subject; cf. Weinreich (1966: 429 ff.), and German *saufen, Maul, brüllen, trächtig*.

and is independent of the presence of the object. To account for sentences such as *he ate two plates* a subcategory of nouns with the feature ‚contentful‘ is admitted as one possible object. The question is discussed whether the object of *eat* should not also contain a feature ‚edible‘. But it is argued that such a feature „should rather figure in the semantic description of the meanings of individual nouns, and it should then be specified further: edible for humans, edible for insects, etc. Just as animate beings may be said, without deviance, to drink liquids even if these are indigestible or harmful, they can be said to eat indigestible or harmful voluminous things. But to say that a man eats beauty is certainly deviant“ (195). We have dealt at such great length with *eat* for several reasons. Firstly, it is one of the rare items whose selection restrictions have been discussed by a number of linguists, and it is also an item which enters into a VPC. Secondly, it definitely belongs to a very basic section of the lexicon, and we would hardly find a speaker of English who does not assume he knows what it means. Nevertheless, as the above quotations illustrate, there is little agreement about the features and selection restrictions involved, besides the fact that Solid and Non-Solid are relevant in its description. Finally, the discussion of *eat* provides an opportunity to show how difficult it is to draw a neat line between linguistic and extralinguistic knowledge⁴².

2.4.5. An investigation of the semantic structure of lexical items may distinguish between paradigmatic and syntagmatic structures as mentioned in 2.1.3. In Coseriu (1970b: 165 f.)⁴³, paradigmatic structures are further subdivided into primary structures (such as ‚Wortfeld‘ and ‚Wortklasse‘), and secondary structures (such as ‚Modifizierung, Entwicklung, Komposition‘).

⁴² McCawley (1968c), following Fillmore, believes that selection restrictions are „presuppositions about the intended referents“ (267).

⁴³ This is by no means the earliest quotation. Coseriu’s approach was developed in a number of previous publications. However, for reasons of convenience of quotation and ready availability, in the case of the 12 articles contained in the collection, we shall quote from Coseriu (1970b). The articles in the collection are revised.

We shall only be concerned here with primary paradigmatic structures. A word-field (,Wortfeld') is defined as „eine paradigmatische Struktur, die aus lexikalischen Einheiten besteht, die sich eine gemeinsame Bedeutungszone teilen und in unmittelbarer Opposition zueinander stehen“ (166). Thus, e.g., *rouge* is said to exclude all other elements of the same field, such as *blanc*, *vert*, *jaune* (but not *grand*, *petit*, *long*) at a certain point in a French sentence. *Rouge* forms a word-field together with the items it excludes (167). A ,lexeme'⁴⁴ whose content is identical with a whole word-field is defined as an ,archilexeme' (167). On the other hand, the lexeme is viewed as consisting of distinctive features, the ,semes'. This conception of the word-field closely resembles the approach to lexical structure developed independently by Pottier, Greimas, and partly also by Lyons. The archilexeme⁴⁵ corresponds to the ,genus' in lexicographic definitions, while the distinctive features of the lexeme are the ,differentia specifica' (164). According to Coseriu⁴⁶, archilexemes may belong to different levels, as, e.g., German *Rind* (the archilexeme for *Ochse*, *Kuh*, *Bulle*, *Stier*, *Kalb*), which in turn is included in the archilexeme *Tier*; but it is also possible that they are not expressed by a particular word (as in the case of German *jung*, *neu*, *alt*). Irrespective

⁴⁴ Coseriu defines: „eine lexikalische Inhaltseinheit, die im sprachlichen System ausgedrückt ist . . . ist ein Lexem“ (167), and „ein Lexem, dessen Inhalt mit dem eines ganzen Wortfeldes identisch ist, ist ein Archilexem“ (167). Note, that the definition of ,lexeme' does not demand that it be a „minimal semantic simplex“ as in Weinreich's (1966: 450) adoption of the term ,lexeme'. We shall follow Coseriu in the use of ,lexeme' and ,archilexeme'.

⁴⁵ ,Archilexeme' will here be preferred to Lyons' (1968: 455) ,superordinate term'. The lexemes which make up a field correspond to ,co-hyponyms'. Cf. Lyons' (1968: 454) objections against ,inclusion', on the grounds of its ambiguity, which induces him to use ,hyponymy' instead. Cf. the discussion of the word-field *Schall* in Coseriu (1967a) and of the field of *Cooking* in Lehrer (1969), where components such as \pm Lid, \pm Vigorous boil, \pm Direct heat, \pm Long time are used. For cooking terms cf. also Leisi (1967: 65, 81).

⁴⁶ Coseriu (1967b: 294 f.).

of the word-field structure of the lexicon, Coseriu⁴⁷ postulates a ‚Wortklasse‘ which is determined by a ‚Klasseme‘, such as ‚living being‘ (with the subclasses ‚human‘, ‚non-human‘ and ‚thing‘ for nouns; ‚positive‘ and ‚negative‘ for adjectives; and ‚transitive‘, ‚intransitive‘, and ‚direction‘ (e.g. ‚adlative‘ and ‚ablative‘) for verbs. The classes are said to become evident from the possible grammatical and lexical combination of lexemes, i.e. from selection restrictions. The difficulties of distinguishing ‚classesmes‘ from other semantic features can be seen in the fact that a ‚classesme‘ may coincide with an archilexeme (as, e.g., in *Tier*)⁴⁸, and that ‚classesmes‘, ‚archilexemes‘, and ‚lexemes‘ may all serve as distinctive features⁴⁹. ‚Classesmes‘ are not viewed as being restricted to specific parts of speech, as is obvious from the example of French *mourir/crever*⁵⁰, which are distinguished by the features ‚for human beings‘ and ‚for animals‘. According to Coseriu⁵¹, three types of relations between ‚word-fields‘ and ‚word-classes‘ are possible: a field in its entirety may belong to a class (as, e.g., *homme, femme, enfant, garçon, fille* to the class of human beings); a field may be divided by a classesme (such as adlative/ablative, as e.g., in *acheter* and *vendre*); and a field may be unaffected by a classesme (as, e.g., in *louer*, which may be either adlative or ablative). From the preceding discussion we may conclude that in a paradigmatic approach to the semantic structure of lexical items certain fields, which are represented by archilexemes, can be delimited and further analysed with the help

⁴⁷ Cf. Coseriu (1970b: 171 ff.): „Eine Wortklasse ist eine Klasse von Lexemen, die durch ein Klasseme determiniert werden; dieses ist ein unterscheidender Zug, der im Prinzip unabhängig von Wortfeldern in einer ganzen Kategorie von Wörtern funktioniert“ (171). Cf. also Coseriu (1967b: 294 ff.).

⁴⁸ Cf. Coseriu (1967b: 295). However, both are defined and recognized in a different way.

⁴⁹ This is the basis for distinguishing three types of ‚lexical solidarities‘ in a syntagmatic approach, viz. ‚Affinität‘, ‚Selektion‘, and ‚Implikation‘. Cf. Coseriu (1967b: 299 ff.).

⁵⁰ Coseriu (1970b: 172).

⁵¹ Coseriu (1970b: 173).

of distinctive features. Certain features may be viewed as classemes if different levels are recognized. Features which are established for certain items may not be distinctive in other items (as, e.g., in *lower*). Archilexemes appear as such on various levels.

2.4.6. Let us now consider the distinction between syntactic and semantic features and their grammatical status. In Chomsky (1965), semantic features are regarded as a „well-defined set“ which is, however, negatively characterized⁵²: „a feature belongs to this set just in case it is not referred to by any rule of the phonological or syntactic component“ (88). It is further stated (120) that in the illustrative fragment of the base component no semantic features are given, which means that Count, Abstract, Animate, and Human are syntactic features. Count is said to be a „higher-level“ feature, while Human is considered a „lower-level“ feature, which, nevertheless, plays a role „in purely syntactic rules“ (150), such as the choice of the pronoun *who*. Therefore, Human, Abstract, Animate and Count are called syntactic features (151, 153 f.). In contrast to this conception, Weinreich (1966) even calls Noun and Verb semantic features, which he intends „to be taken as semantic in the full sense of the word“ (433). Minor classes of morphemes, however, are assigned a ‚syntactic marker‘ (433), such as Preposition, Determiner, Conjunction, Number. In a revision of the categorial component, Noun and Verb are said to constitute „a complex symbol consisting of a category symbol and a semantic feature“ with identical names (433). To draw a neat line between syntax and semantics is, however, not Weinreich’s intention, in particular as he argues for an „interrelation“ and even „interpenetration“ of the two domains (468). He also stresses the fact that a decision on the semantic or syntactic nature of certain linguistic phenomena cannot be made independently of a specific grammatical model (415).

⁵² Cf. Chomsky (1965: 142): „we call a feature ‚semantic‘ if it is not mentioned in any syntactic rule, thus begging the question of whether semantics is involved in syntax“.

Bolinger (1969), also suggests not to distinguish syntactic and semantic features, but advocates rather treating categories such as parts of speech together with features such as Count, Divisibility, Plurality, as 'attributes' of lexical items. Yet it seems that the category word class is not on the same level as features such as Animate, Count or Divisibility. Only when lexical items are couched in a particular category of word class (e.g. *hand*, *father*, noun or verb, *mat* noun or adjective), can further semantic and grammatical features (like Tense, Number) then be attributed to them. The final decision about the demarcation between syntactic and semantic features will, however, always be determined by the particular grammatical model which is adopted.

2.5. *Semantic Tests*

2.5.1. As we have seen in the discussion of *eat*, selection restrictions and possible collocations may lead to conclusions about the presence of certain semantic features in lexical items. Let us consider what tests have been proposed for the semantic analysis of given linguistic elements, and the postulation of specific features. Explicit testing procedures and motivation of features are very rarely mentioned in the literature. From 2.4.1. it should become clear that opposition, substitution, and paraphrase are widespread techniques which are by no means restricted to structural semantics, and that the use of definitions is based on the fact of logical inclusion (or implication). The acceptability⁵³ or non-acceptability of utterances, which reflects grammatical or semantic deviance⁵⁴ result-

⁵³ Cf. Quirk (1966), Quirk-Svartvik (1966), Leech (1969: 12-14).

⁵⁴ Cf. Weinreich (1966: 464 f.). Weinreich argues that a distinction between grammatically and semantically deviant expressions is futile, „since the most significant class of deviations is grammatical *and* semantic at the time“ (470).

ing from the violation of certain rules, is frequently employed as a proof for semantic statements. In Postal (1970), the parallelism of various syntactic properties and restrictions of clauses with *remind* on the one hand, and clauses with *strike* and those with 'similarity predicates' (as *like*) on the other hand, is adduced as evidence for analysing the 'surface verb' *remind* as containing *strike* and a similarity predicate (as *like*, *resemble*, or *similar*).

2.5.2. In Wheatley (1970), a technique for detecting 'entailment rules' is developed. We shall label it the VW-test after the symbols used in the procedure. Wheatley⁵⁵ distinguishes the widely accepted notion of entailment from what he terms 'engagement'. While an 'open sentence' such as *X is red* is said to "entail" the statement *X is coloured*, the statement *A says I promise to X* is said to "engage" the statement *A intends to do X*. This phenomenon is often today considered as involving 'presupposition'. Wheatley argues that many semantic rules cannot be expressed in terms of entailment relations, but are expressible in terms of engagement relations. Thus:

<i>X is a rabbit</i>	ENGAGES	<i>X has long ears</i>
<i>X is a man</i>	ENGAGES	<i>X breathes</i>
<i>X is an emerald</i>	ENGAGES	<i>X is green.</i>

It seems that the distinction expressed is that between knowledge of language and knowledge of the world⁵⁶. Only entail-

⁵⁵ Wheatley (1970: 34 ff.): „entailment rules give necessary conditions for the CORRECT use of a word, where engagement rules give necessary conditions for what we might call the HAPPY use of a word“ (35). Later, the difference is defined thus: „the engagement rules give the application of a word (the element which can be taught ostensively) while entailment rules give the logic of a word“ (68). A definition of „entailment“ is given in footnote 4, page 32 (Wheatley 1970).

⁵⁶ Cf. Coseriu (1970), esp. 113 and the remarks on *liegende Stadt*. The distinction corresponds to the one set up in Bierwisch-Kiefer (1969: 68 ff.) between the 'core' and the 'periphery' of a lexical entry. Cf. esp. 72, where „linguistic and encyclopedic knowledge“ are thus distinguished.

ment relations involve semantic features and can be detected „mechanically“ with the help of the VW-test⁵⁷. At the same time the test serves to separate entailment and engagement. According to Wheatley if

X is W ENTAILS *X is V*

then it is „pointful on occasions“ to say

Every W is V

but it is „never pointful“ to say

The V W . . .

In other words, if a predicative complement is „entailed“ by a certain nominal in subject position — i.e. it is a semantic feature contained in the nominal — the complement cannot be moved into attributive position. Thus *every triangle is three cornered* is a possible, although analytic⁵⁸ sentence, but *the three cornered triangle . . .* is tautologous. But since *X is a man* does not entail but only „engages“ *X is breathing*, the utterance *the breathing man . . .* may have a „pointful use“, as opposed to *the unmarried bachelor*. We may add that *every man is breathing* is also not an analytic sentence. Wheatley admits that the VW-test „will not detect entailment rules where V, in the schematic example, is a long phrase, just because long phrases never appear in a qualifying position“ (70). It must be pointed out that there are also a number of short lexical items, traditionally labelled adjectives, which never occur in attributive position, such as *alive, asleep, afraid, content, exempt, glad*⁵⁹. The applicability of the VW-test therefore has serious limitations. It can only be used with items which can possibly occur in predicative position in copula sentences, as well as in attributive position, i.e. normally, adjectives which

⁵⁷ Cf. Wheatley (1970: 69).

⁵⁸ Cf. Weinreich (1966: 446 ff.). Wheatley does not mention the concept of „analytic sentence“ in connection with the VW-test.

⁵⁹ Other restrictions in connection with attributive and predicative position are treated in Marchand (1966b). For word class categories which are discussed at length in Wheatley (1970), cf. also Lipka (1971c), esp. 5.1.

modify nouns. Although in English⁶⁰ many adjectivized intransitive verbs also function in the two slots, the items which can be tested for semantic features are the nouns only. The verbs, like the adjectives, are diagnostic elements; only the nouns are tested. The VW-test can therefore neither be applied to VPCs, nor to verbs in general, if we wish to establish the semantic features they contain.

2.5.3. In Bierwisch (1967: 7), a technique for testing the polarity of adjectives is described, although the procedure is not explicitly claimed to be a test. The sentences

die Mauer ist zu hoch — *die Mauer ist nicht niedrig genug*
die Mauer ist nicht zu hoch — *die Mauer ist niedrig genug*

are said to be pairwise paraphrases. If *Mauer* is represented by a variable *X* and the adjectives *hoch* and *niedrig* by *A* and *B* respectively, then *A* and *B* are symbols for two sets of adjectives which differ only with regard to the semantic features (+Pol) and (−Pol)⁶¹. Thus *hoch* is analysed as containing the feature (+Pol) and a remainder of semantic components *R*₁, while *niedrig* contains (−Pol) and the same remainder *R*₁. Similarly *lang* contains (+Pol) and a remainder *R*₂, and the polar adjective *kurz* has (−Pol) and the same remainder *R*₂. The plus and minus here does not symbolize presence or absence of the feature Pol but rather the two ends of a scale represented by the remainder *R*. (+Pol)-assignment is not arbitrary, but is established by a purely linguistic test: that adjective in a pair which can be modified by measure phrases such as *doppelt so*, *halb so* is marked (+Pol), the other one (−Pol). Since we have *doppelt so hoch* (*lang*, *schnell*) but not **doppelt so niedrig* (*kurz*, *langsam*) the adjective *hoch* (*lang*, *schnell*) is marked (+Pol). The procedure involving *zu* and *nicht ... genug*, as described by Bierwisch, can thus be used to test whether two adjectives are antonymous or not. It can only be applied to adjectives and is restricted to a single

⁶⁰ In German, transitive verbs can also be adjectivized and used attributively.

⁶¹ In Bierwisch (1970: 44) ±Pol is replaced by „the relation Greater-than and its converse“.

binary feature (\pm Pol). Therefore it does not afford an instrument for testing hypothetical features in VPCs.

2.5.4. In Weinreich (1966), a motivation for individual semantic features is not given, but the conjunction *but*, which is paraphrased as ‚and ... unexpectedly‘, is claimed to be „a powerful heuristic device for testing the definitional status of sentences“ (449). The introduction of *but* is said to have a „startling effect“ in *this is a chair, but one can sit on it* (448). Weinreich refers to Bendix (1966), who had made earlier use of this test (23-31) in trying to ascertain semantic components. According to Bendix, ‚not intentionally‘ is a component of *lose* and therefore informants will regard both *he lost it, but not intentionally* and *he lost it, but intentionally* as „equally confusing“ (28). On the other hand, ‚belongs to‘ is not a component of *lose*, which appears from the fact that of the pair of sentences *he lost it, but it was his* and *he lost it, but it wasn't his* neither „ranks particularly higher than the other“ (29) and „neither sentence appears to evoke the reactions of a contradiction“ (30). It is clear that if *but* contains ‚unexpectedly‘, and ‚not intentionally‘ is contained in *lose*, then *he lost it, but not intentionally* will be tautologous, and *he lost it, but intentionally* will be contradictory⁶². Katz (1967b: 49) also points out that *but* „is governed by a semantic restriction that the conjoined expressions contrast semantically“, but fails to notice that it can be used to test semantic inclusion, if a pair of sentences (with and without negation) is considered⁶³. In Weinreich (1969), it is again stressed that

⁶² Cf. Fillmore (1969: 56): „Bendix's discussion of the ‚but-test‘ tells us a great deal about the semantics of the word *but*, but I am not convinced that the word can be put to effective use in tests for discovering other semantic facts“. *But* probably only stresses the contradiction arising from the conjunction of incompatible features and the tautology resulting from the addition of a feature that is necessarily implied. Cf. the discussion of **he walked on foot as far as Norwich* in J. Anderson (1968: 308 f.). In Greenbaum (1969b), *but* is not used for the testing of semantic features.

⁶³ Katz opposes the correct sentence *I went fishing but caught an old shoe instead* to **I went fishing but caught a fish (bass, pike,*

„*A-but-B* tests are ... enormously helpful in revealing the componential semantic structure of terms“, and that „*A-but-B* statements that are interpreted as paradoxical or tautologous reveal a good deal about entailment relations between *A* and *B*“ (52). Thus, from the „paradoxical“ sentence *she giggled but did not laugh* we can establish that giggling is a kind of laughing. The oddity of expressions with *but* may be due to the fact that the conjoined elements are either unrelated or not surprising. According to Weinreich, *and* also is „a powerful analytic device, especially in instances of polysemy“ (53). Since we can say *he ate soup and spaghetti*, he concludes that „the sense of *eat* is the same“ (53) in *eat soup* and *eat spaghetti*, but *practice* in *practice medicine* and *practice piano* is different, as *he practiced medicine and piano* can only be used as a joke. With regard to *but* it seems to be essential that we consider a pair of sentences, and that both the negated and the unnegated expressions must be deviant. We shall make use of this test in the analysis of VPCs. The *but*-test alone, however, is not sufficient to establish the exact value of a binary feature, since it does not distinguish antonymous features such as +Closed and –Closed. It has to be supplemented by the *so*-test, and thus, three sentences are required to determine a feature. Conjunction with *so* implies consequence („and ... consequently“), and therefore result, and since most VPCs denote process or action and the resulting state, the feature representing the latter can thus be found. The conjoined sentences containing *so* must be an acceptable utterance. Consider the following examples:

- /+Closed/: 1.* *She zipped up the dress, BUT it is closed.*
 2.* *She zipped up the dress, BUT it is not closed.*
 3. *She zipped up the dress, SO it is +Closed.*

etc.) *instead*, which is said to be „anomalous“, because the object in the second clause is „the same as that which the speaker was trying to catch, or a subtype of that type“ (50). However, we cannot draw the reverse conclusion that an anomalous conjoined sentence with *but* must contain a logically included element.

- /—Closed/: 1.* *She slit up the dress, BUT it is closed.*
2.* *She slit up the dress, BUT it is not closed.*
3. *She slit up the dress, SO it is —Closed*
(=not closed).

Instead of —Closed (= not closed) the feature +Open could be postulated and then +Closed would correspond to —Open. As we have seen, only the *but*-test and the *so*-test in conjunction yield the desired results. (Cf. 2.6.7.).

2.6. Predicate Logic, Verbs, and Semantic Components

2.6.1. In the literature on VPCs, the labels transitive and intransitive are used throughout to designate simplex verbs and VPCs⁶⁴. They are also used in early transformational grammar for the subcategorization of the verb. We shall not adopt this simple dichotomy here, which seems to be too crude to account for the complex relationship between verbs or verbal constructions and noun phrases. To speak of the transitive or intransitive use of a verb⁶⁵ is only a slight improvement, which takes into consideration the fact that most items can function in both syntactic roles. Following the convention which originated from the predicate calculus of symbolic logic⁶⁶, we shall

⁶⁴ Cf. 1.3.3. for the different grouping of material, with regard to this distinction, in Fraser (1965) and Live (1965).

⁶⁵ Cf. Kirchner (1959: esp. 349), and the eight classes set up in MEG III: 16.0. Cf. also Halliday (1967) where ‚intransitive, transitive, single transitive, double transitive‘ (39) are excluded from a ‚systemic‘ description, and ‚goal-transitive‘ and ‚goal-intransitive‘ (46) are introduced. ‚Transitivity‘, as used by Halliday, is „defined in terms of paradigmatic and syntagmatic relations in the clause, not by classification of verbs as ‚transitive‘ or ‚intransitive‘“ (52), therefore nouns are also classified with respect to ‚transitivity‘.

⁶⁶ Cf. Reichenbach (1947), Lyons (1968: 350), Leech (1969: 22, 66), Brekle (1970: 60 ff.).

therefore say that a certain lexical item is used as a one-place, two-place, three-place, or many-place verb, according to the number of nominals with which it combines in a sentence. Thus, e.g., *eat* may be used as a two-place verb (*he never eats caviar*), or, with object-deletion⁶⁷, as a one-place verb (*he is eating*), but the VPC *eat up* is always used as a two-place verb (*he is eating up his dinner*). The term one-place or many-place verb refers to surface structure. *Eat* is basically a two-place predicate which is also implied in the concept of object-deletion that accounts for the use of *eat* as a one-place verb on the surface structure level⁶⁸.

2.6.2. We have to make a clear distinction between one-place and many-place verbs on the one hand, which is a purely linguistic matter, and one-place and many-place predicates (or functions) on the other hand, which is a predominantly logical matter. In Bendix (1966: 7), the noun *dog* is said to represent a one-place function, which should be entered in the dictionary „in the form of a schematic sentence *A is a dog*“, while the verb *have* is regarded as a „two-place function or relation“ with the „dictionary entry“ *A has B*, and *give* „might be *A gives B to C*“. Relational nouns such as *son* are considered two-place functions. In Lyons (1968), *die* and *kill* are given as examples of a one-place and a two-place verb respectively, and *give*, *put* are called three-place verbs (350). By adding „the notion of ‚causativity‘“, two-place constructions are said to be derivable from one-place constructions, and three-place constructions from two-place constructions (368). According to Leech (1969: 66), all types of predicates are reducible to two-place predicates through rank-shift⁶⁹ and

⁶⁷ Cf. Lyons (1968: 360 f.), Fillmore (1969: 118 ff.), and Jespersen's chapter ‚Object Omitted‘, MEG III: 16.1.

⁶⁸ Cf. Fillmore (1969: 115), where „the conceptually required number of arguments“ are distinguished from „the number of arguments that must be explicitly identified in English sentences“.

⁶⁹ The term ‚rank-shift‘, which stems from systemic grammar, „applies to the circumstance of one unit containing as a constituent some other unit of higher or equal rank“ (Leech, 1969: 26).

downgrading⁷⁰ as in *I saw him cross the street, the woman whom I love*. Nevertheless, one-place predicates, and even ,zero-place predicates' (as in *it is raining*) (68) are used⁷¹.

2.6.3. In Bendix (1966: 63), a component ,Cause' is introduced „as a primitive“ in the form ,*A causes (...)*', and is considered „more strictly as a term of the metalanguage factored out in the componential analysis of the verbs“. As mentioned in 2.3.6., the component is also used in Fillmore (1968a) in analysing *persuade* and *kill*, and is regarded as a „mediatory predicate ... the two-place predicate CAUSE, a relation that holds between an object and a predication“ (377). A relative system of ,causation' is set up in Leech (1969: 207 f.), and ,weak causation' (as in *let, allow*) is distinguished from ,strong causation' (as in *make, compel*). In Lakoff (1970: 42), „a causative pro-verb“ is said to be present in sentences such as *John thickened the sauce*, while *the sauce thickened* is claimed to contain an „inchoative pro-verb“ (37). It is argued that „*the sauce* bears the same relation to *thick* in all of the sentences: 1. The sauce is thick. 2. The sauce thickened. 3. John thickened the sauce.“ (43). A causative transformation is said to operate on inchoative verbs, which in turn are the product of an inchoative rule. In Lyons (1968: 352), it is suggested that „a transitive sentence ... may be derived syntactically from an intransitive sentence ... by means of an ergative, or *causative*, transformation“, as, e. g. *John moved the stone from the stone moved*⁷². Later (383), a feature ,causative'

⁷⁰ ,Downgrading' „is the term I attach to the assignment of a component-like status to a predication“ (Leech 1969: 26). ,Predication' is defined as a cover term for assertions, questions, and commands (22).

⁷¹ Cf. Bierwisch (1970: 39): „one might hypothesize that in general only one- and two-place relations are required“.

⁷² A particular class of English verbs which allows this transformation is labelled ,ergative verbs' by Lyons (1968: 352, 359). The class corresponds to Jespersen's ,*Move and Change-Class*' (MEG III: 16.4). Cf. Fillmore (1969: 114), Hall Partee (1971: 7 f.). It is also involved in what Chomsky (1965: 189) called ,a general ,causative' transformation'. McCawley (1968: 131) states that „the

(+caus) is postulated, and, similar to Fillmore, the general principle involved is described as following: „we must embed the one-place nucleus as the predicate of the two-place nucleus“. It is, however, pointed out by Lyons that „there are many transitive verbs which do not lend themselves very happily to analysis as realizations of ‚Verb: +caus“ (384). *Eat* and *read* are given as examples of such ‚basically transitive‘ verbs. Three types of causative transformations are distinguished (383 f.): in *move* there is no morphological change when +caus is added, *soft* + caus is realized as *soften*⁷³, and *die* + caus yields *kill*. *Kill* is regarded as the „lexicalized“ two-place causative form of *die* (369, 384).

2.6.4. One may, however argue that ‚*die* + caus‘ is not equivalent to *kill*, and that *slice with a knife* is not synonymous to *use a knife to slice*, since although it denotes the same fact it differs linguistically, and that the method of paraphrasing in general only reveals extralinguistic sameness⁷⁴. However, this does not necessarily imply that in semantic analysis we only admit morphologically related items, such as *soft* – *soften*, German *tot* – *töten* to be semantically related. Coseriu’s objections against paraphrasing also do not directly concern the use of definitions, which involve elements of the metalanguage, for the analysis of simple lexical items. If we accept the equivalence of *kill* and ‚cause to die‘ – which does not mean postulating linguistic sameness⁷⁵ – *die* can be further analysed

usual causative transformation“ does not derive cases such as the verb *warm*. Cf. the use of ‚cause‘ in dictionary definitions to simplify the entries, e.g., *conk*, *dart*, *wither* in the *Advanced Learner’s Dictionary of Current English*.

⁷³ A number of deadjectival causative verbs in English, German, and French are, however, derived by means of a zero-morpheme. Cf. Marchand (1969a: 371, 1969b) and also Weinreich (1966: 425 f., 464 f.).

⁷⁴ Cf. Coseriu (1970a: 109, 117; 1970b: 216 ff.).

⁷⁵ A lexical item and its definitional equivalent cannot be used interchangeably. Cf. Fodor (1970), where reasons are given for not deriving *kill* from *cause to die* or the transitive verb *melt* from *cause to melt*. It is argued that „even where a phrase and a word

into ‚become + not + alive‘. This point of view is frequently adopted in recent research and has been advocated repeatedly by McCawley⁷⁶. By a prelexical rule which he calls ‚predicate-raising‘, X + CAUSE + BECOME + NOT + ALIVE + Y⁷⁷ is gradually converted into ‚*x kill y*‘. The rule which has „the effect of taking the main verb of a complement sentence and lifting it into the immediately higher main clause ... producing a kind of compound verb“⁷⁸ is applied repeatedly, and unites successively the predicates NOT + ALIVE, then BECOME + NOT + ALIVE, and finally CAUSE + BECOME + NOT + ALIVE, thus yielding *kill*. Postal (1970: 86) claims that a special case of ‚predicate-raising‘ is also involved in converting STRIKE + X + SIMILAR + Y + Z into the ‚surface verb‘ *remind*, as in *Y reminds me (X) of Z*⁷⁹. The notion of ‚predicate-raising‘ corresponds to the

are synonymous, the former will characteristically exhibit degrees of syntactic freedom unavailable to the latter“ (437). Note that we do not „derive“ *kill* from *cause to die*, nor do we postulate that the two have the same status as elements of the object language. The semantic components CAUSE, BECOME, NOT, ALIVE in McCawley’s analysis are also not regarded as items of the object language, but as prelexical elements. Cf. also Chomsky (1971: 188 f.).

⁷⁶ Cf. McCawley (1968d, 1970: 295), Postal (1970: 84 ff.). In Lyons (1968) the implications of treating *kill* and *die* as „alternative, syntactically-conditioned, phonological realizations of the ‚same‘ verb“ (353) are considered. In Lakoff (1970: 100), it is argued that „*kill*, *die*, and *dead* could be represented as having the same lexical reading and lexical base, but different lexical extensions“. Cf. also Binnick (1971) for support of the causative analysis.

⁷⁷ In a branching-tree representation X follows CAUSE, according to McCawley’s opinion, later adopted by Postal (1970: 86), that English has an underlying Verb-Subject-Object word order. We have simplified the formula, to maintain the parallel with *kill*.

⁷⁸ Postal (1970: 86). Such ‚compound verbs‘ could be seen to be realized in the lexemes (*be*) *dead*, *die* and *kill*. Cf. German *töten*. In generative semantics lexical items are only inserted at the highest level.

⁷⁹ Cf. the critical discussion of this proposal in Bolinger (1971b: esp. 526), where it is suggested that MAKE THINK is a better analytical counterpart than STRIKE LIKE. Cf. also Gruber (1970)

,downgrading' employed by Leech, which is merely viewed from the opposite direction as the reduction of a predicate to a component-like status⁸⁰. Fillmore's conception of CAUSE as a ,mediatory predicate' and the ,embed' used in Lyons (see 2.6.3.) refer to the same phenomenon. In construing a higher unit out of certain components, the predicates are ,raised' (a term alluding to the change of position in a branching tree diagram) – in viewing a predicate as a component of another predicate, it is ,downgraded' or ,embedded'.

2.6.5. Besides CAUSE, the component BECOME is also said to be underlying *kill*, and the further components BE and HAVE appear in the analysis of verbs carried out by Bendix⁸¹. We shall now consider the status of such features and their treatment by various researchers. The difference between BE and BECOME may be seen as involving the absence or presence of a very general feature Dynamic⁸². This feature can be factored out by opposing certain pairs of sentences as is done in Lyons (1968): „As *be* (*in San Francisco*) is to *come/go* (*to San Francisco*), so *have* (*a book*) is to *get* (*a book*), and *be* (*valuable*) to *become* (*valuable*). In each case we can say that the stative sentence (with *be* or *have*) is ,unmarked', by contrast with the dynamic, which is the ,marked' term of this particular aspectual opposition“ (397 f.). In addition to Dy-

where a prelexical formative THROUGH is said to be „incorporated“ in the lexical item *pierce* (7), and UP, DOWN in *raise*, *elevate*, *lift* and *drop*, *lower* (21).

⁸⁰ Cf. Bierwisch (1970: 38 f.).

⁸¹ Cf. Bierwisch (1970: 39 f.): „Though CAUSE and HAVE are both two-place relations, they obviously belong to different types of features“.

⁸² Lyons (1968: 397) assumes the existence of „a more general aspectual opposition which might be called *static* and *dynamic* ... as locomotion is to location, so acquisition is to possession, and ,becoming' to ,being'“. Cf. also the discussion of the differences between the two meanings of *become* in English (as in *she has become happier* and *such behaviour does not become you*) in Bald-Quirk (1970).

dynamic a feature \pm Proximate⁸³ can be found in certain verbs, and thus „in combination with the feature ‚dynamic‘, the feature ‚proximate‘ generates *come* in surface structure and the feature ‚remote‘ generates *go*“⁸⁴. In Leech (1969: 57 f.), an ‚inceptive formator system‘ is set up to explain the concept of ‚becoming‘, which is later discarded in the discussion of „static and dynamic meaning“ (198 ff.) and re-analysed as consisting of two separate systems: a ‚relative system‘ and an ‚inversion system‘ (201). Examples such as *the metal hardened*, *the liquid cooled*, *the iron liquefied* are called inchoative sentences in Lakoff (1970: 32 ff.). They are compared to the corresponding sentences with *become* (such as *the metal became hard*, etc.) which are claimed to have „very similar deep structures, perhaps even identical“ (33). The relationship between BE and HAVE is investigated in Bendix (1966), where a distinction is made between ‚the general *A has B*‘ (39 ff.) and ‚the inherent *A has B*‘ (45 ff.). The general *A has B* is said to be in a paraphrase relationship with *B is X A Y*, where „Y may be null“ and X is either *with*, or *for*, or *to* + *Verb*, or a locative preposition⁸⁵, as in *this list has the name you want* from *the name you want is on this list*. In *A has strength* v.s. *A is strong* „*have*, like *be*, seems to be little more than function as a connective between *A* and the form expressing a state describing ‚A“ (130). In comparing *have* and *be* with *get*, Bendix suggests that „*have* and *be* are two complementary ways of expressing a similar content – namely, simply that a state or

⁸³ We shall return to this feature later, but cf. the use of ‚Proximate‘ in Weinreich (1966: 455), and ‚Proximal‘ and ‚Distal‘ in Fillmore (1966: 221), where *come*, *here*, *this*, *there*, *that* are discussed. Lyons (1968: 398) also mentions *here* and *there*. The feature is also involved in Coseriu’s ‚Adlative‘ and ‚Ablative‘, cf. 2.4.5.

⁸⁴ Lyons (1968: 398).

⁸⁵ Bendix (1966: 39). Cf. the review by Leech (1968), where the counter-example *your clothes are on the floor* but **the floor has your clothes* is given. A subclass of the ‚inherent *A has B*‘, viz. the *Teil-von-Relation* is investigated in Bierwisch (1965), where it is observed that „Die Relation *A hat ein B* ist also interpretierbar als ‚*B ist ein Teil von A*“ (36).

a state relation exists“ (131)⁸⁶. In Lyons (1968), the copula *to be* is said to function as a „semantically empty dummy verb“ (322) or a „dummy carrier“ (323) in Russian, Greek and Latin, and he therefore argues in favour of „the elimination of the ‚verb *to be*‘ from the underlying constituent-structure of English“ (323). *Live* and *exist* are also considered „purely grammatical dummies“ (349). The fact that many languages have „neither a ‚verb *to be*‘ nor a ‚verb *to have*“ (388), and that *have*-sentences cannot be passivized (391), leads to the conclusion that „*have* is not a deep-structure verb, any more than *be* is“ (395). The elimination of *have* and *be* from the base component of English syntax, and their reintroduction by transformational rules is proposed in Bach (1967). Besides other arguments, mention is made of their absence in a number of languages and their semantic emptiness. *Have* and *be* are called ‚linking elements‘ whose „contribution to the meaning of the sentence is determined completely by the items that they link“ (477). The fact that a number of languages do not have *be* and *have* in their surface structure, and that English has, might, however, also be used as an argument for postulating such a verb in the deep structure of those languages. In any case, this fact or that of semantic emptiness do not seem to be sufficient reason for abandoning altogether the existence of BE and HAVE in their function as ‚connectives‘ or predicates. In Leech (1969) an ‚attributive formator system‘ is first set up „to account for the principal use of the verb *to be*“ (46), which is later eliminated (67). Although it is stated that „it is quite easy to treat a one-place or „simple“ predicate as a special kind of (two-place) predication, in which the linking or medial element is the attributive formator“ (67), the solution is discarded for three reasons. In a sentence like *I am hungry*, where *I* is symbolized by *a*, and *hungry* by *c*, and *a* and *c* are linked by the attributive formator, *c* cannot be

⁸⁶ Note that „similar“ is used, and that *have* is regarded as a ‚relation‘ (or two-place function), while *be* is not. Cf. also Benveniste (1966: 187-207): „*Etre*“ et „*avoir*“ dans leurs fonctions linguistiques, esp. 198-200.

quantified, secondly, semantic components expressed by descriptive adjectives can only occur at *c* and not at *a*, and thirdly, converse interpretations (such as **hungry is me*) are not possible (67). Leech, like Lyons, adduces the semantic emptiness of *be* and its absence in certain sentences in some languages, including Russian, to support his analysis of *be*-constructions as one-place predicates (69). He admits that the „correspondence between grammatical structure (Subject-*be*-Complement) and semantic structure (*a-r-b*)“ (68 f.) could serve to defend the use of the attributive formator system, but since he adopts the position that semantics is an autonomous level (28 ff.), BE is considered a one-place predicate. It is true that states such as, e.g., *hungry*, in *A is hungry* are not variables in the same way as *B* is a variable in *A has B*. Nevertheless, as Bendix and Bach have pointed out, BE resembles HAVE in that it is used as a ‚connective‘. In our investigation, which tries to establish a relation between semantic structures and surface structures, it seems preferable to retain the attributive formator system *be*. We shall therefore use BE, as well as BECOME (which includes the additional feature Dynamic), CAUSE, and HAVE as ‚connectives‘ or rather ‚formators‘ which relate certain variables either to a certain place, position, or state, or to other variables. The variables, as well as PLACE, POSITION, STATE are represented by ‚designators‘ which consist of semantic features. In the case of two-place verbs, which involve the feature Cause, the attributed state, position, or place is considered as an ‚embedded‘, or ‚downgraded‘ predicate.

2.6.6. As Weinreich (1963: 149), points out „virtually every semantic theory operates with a dichotomy of signs, corresponding to what we have called designators and formators“. Leech (1969) is no exception to this rule, and *all/some*, *be*, *stay/become*, *not* and *question* are treated as formators. Formators are often referred to as ‚logical signs‘, and are given by enumeration. They correspond to what Reichenbach (1947: 318 ff.) called ‚expressive‘ terms, which he distinguished from ‚denotative‘ terms. The latter are said to stand for argument variables, functional variables, or propositional

variables. According to Reichenbach, the copula is said to „portray“ — not to „denote“ — the function-argument relation, and, e.g., *is*, *has*, *and*, *or* are regarded as expressive signs (322). We shall follow Leech in his basic theoretical framework, assuming that a ‚cluster‘ (which he adopts from Weinreich) is a complex symbol containing various semantic features, which in turn is contained in a ‚predication‘ (which may be an assertion, a question, or a command). The predication consists of an initial, a medial, and a final cluster⁸⁷, as in the assertion *the woman loves the child*, of which the medial cluster (*love*) contains a ‚relative‘ feature. In our case, the features, or clusters of features, BE, BECOME, CAUSE, HAVE always occur in medial clusters. The variables, i.e. the nominals filling the places of the one-place or many-place verbs, are ‚designators‘ (consisting of features), as are the cover terms LOC⁸⁸, POSITION, STATE. This yields a number of formulas for the semantic structure of the VPC⁸⁹, which must be further specified according to the semantic features of the attribute PLACE, POSITION or STATE, viz.

$$\begin{array}{l}
 \text{BE} + \left\{ \begin{array}{l} \text{LOC} \\ \text{POSITION} \\ \text{STATE} \end{array} \right\} \\
 \\
 \text{BECOME} + \left\{ \begin{array}{l} \text{LOC} \\ \text{POSITION} \\ \text{STATE} \end{array} \right\} \\
 \\
 \text{CAUSE} + \text{BECOME} + \left\{ \begin{array}{l} \text{LOC} \\ \text{POSITION} \\ \text{STATE} \end{array} \right\}
 \end{array}$$

⁸⁷ We have here simplified the original model in Leech (24), where a predication is made up of a medial and two terminal clusters. Later (63) ‚initial‘ and ‚final‘ cluster is introduced. Note that we use ‚component‘ for both ‚clusters‘ and ‚configurations‘ of features.

⁸⁸ To avoid confusion with ‚place‘ in ‚one-place predicate‘ and

The exact specification of the cluster of features represented by the formula is determined by the features contained in the VPC and the features of the nominals functioning as variables. ‚Basically transitive verbs‘ like *eat*, *read* etc., cannot be handled by these categories since no component Cause can be factored out, and have to be treated separately. The majority of VPCs, however, can be dealt with in this way.

2.6.7. We shall here consider semantic features as theoretical constructs, whether they are found in formators or designators; constructs, which can be factored out from definitions of certain lexical items. Thus *kill* will be said to contain the features ‚Cause, Be, Dynamic, Not, Alive‘, *remind* involves ‚Strike, Be, Similar‘ (and three variables), and *chair* is considered to be made up of ‚Piece of furniture, For one person, To be sat on‘. It is the linguist’s task to determine which features are distinctive in paradigmatic oppositions within certain word-fields, and which features, in syntagmatic relationships between lexical items, influence selection restrictions. We do not attempt to analyse all VPCs entirely into semantic features, so that nothing is left over. But even an incomplete semantic description which discovers certain more or less general features, seems to be preferable to no analysis at all. The features normally appear in the form of specific lexemes⁹⁰ of English (e.g. *closed*), but have to be regarded as elements of the metalanguage. If they are contained in the paraphrased lexical item, this logical inclusion or implication will become apparent in the *but*-test. The test has to be carried out with a pair of sentences, of which one sentence is the negated form of the other. Both sentences must be judged anomalous, as one is tautologous, and the other contradictory. Thus, e.g., the VPC *fasten up* will yield *he fastened up the box, but it is closed*, which is tautologous, and

to stress the connection with locative adverbials, we shall here prefer the label LOC to PLACE.

⁸⁹ The formators HAVE and GET, i.e. (CAUSE) + HAVE + Dynamic, do not play a role here. Only in denominal derivatives (cf. 3.3.) HAVE is of a certain relevancy. But cf. 4.2.3.2.

⁹⁰ Cf. 2.4.5. and 2.3.8.

he fastened up the box, but it is not closed, which is contradictory. We have therefore established that *closed* is a semantic feature contained in *fasten up*. To determine the \pm value of the binary feature, the *so*-test must then be used. Since only *he fastened up the box, so it is +Closed* is acceptable, and not **he fastened up the box, so it is not closed* (= -Closed) the designative feature +Closed is contained in *fasten up*. With this method we determine +Exist for *build up* (business), but -Exist for *blow up* (bridge), *burn up* (rubbish), as the *so*-test yields the acceptable *he blew up the bridge, so it does not exist*. Similarly, we arrive at +Process for *crank up* (engine), *set up* (business), etc. — as we have . . . , *so it works (runs, turns)* — and -Process for (bullet) *pack up* (transmitter) — . . . , *so it does not work (transmit)*. Besides the designative feature +Closed, the formators Cause, Be, and Dynamic⁹¹ are also present in *fasten up*, since it is a two-place verbal construction. We shall discuss the particular features involved in VPCs as we proceed in the detailed analysis.

2.7. Semantic Analysis and Collocations

2.7.1. A semantic analysis of VPCs cannot be confined to the investigation of isolated verbal items or constructions, but must also encompass their collocations with nominals that function as variables with such predicates. This fact is repeatedly mentioned in the literature, yet its implications are rarely observed in practice⁹². If we do not take into account which variables can fill the slots of one-place or many-place verbs,

⁹¹ Which corresponds to the components ‚cause‘ and ‚change of state‘ in Bendix (1966).

⁹² Hundsnurscher (1968) is an exception, cf. esp. 42 ff. and 191 f. His study draws heavily on W. Schmidt's (1963) theory of ‚verb-meaning‘, where the influence of the subject, the object, and the adverbial complement are discussed at length (55-68).

we may theoretically be able to distinguish homonyms, but the choice between them is open and only determined by particular collocations as in *hold up* (*one's hand/the traffic/a bank*) and *carry out* (*the dishes/a plan*). To assess the meaning of idiomatic constructions and items such as *make up*, which are semantically empty in isolation, is impossible unless collocations are considered. The necessity to include collocations in analysing the semantic structure of lexical items is not restricted to verbs, where it is, however, most obvious. With regard to adjectives, for example, a distinction between 'transpositional adjectives', as in *criminal* (*court*), *heavy* (*smoker*), German *väterliches* (*Haus*) and 'semantic adjectives' as in *criminal* (*action*), *heavy* (*load*), German *väterlicher* (*Blick*), as is set up by Marchand⁹³, is difficult to draw if we look at the adjectives in isolation. It may be established in principle but the actual choice depends on context.

2.7.2. The concept of collocation is frequently used in neo-Firthian linguistics. Lyons⁹⁴ contends that the collocations of a word are not part of its meaning, while Halliday⁹⁵ proposes to use collocation restrictions for grouping certain items together, thus defining 'lexical sets'. Methods for the investigation of collocations are discussed in detail by Sinclair and Greenbaum⁹⁶. Both assume that collocations are not necessarily contiguous, as in *they collect stamps* but *they collect many things, but chiefly stamps*⁹⁷, and *it was an auspicious occasion* but *the occasion on which it was done was not an auspicious one*⁹⁸. The examples correspond to the collocations discussed in 2.7.1., viz. that of verb and object, and that

⁹³ Cf. Marchand (1966a: 138, 1966b).

⁹⁴ Lyons (1966: 295).

⁹⁵ Halliday (1966: 156). Cf. the exploratory inquiry into 'lexical clusters' in Anthony (1954).

⁹⁶ Greenbaum (1968); Sinclair (1966) distinguishes between 'casual' and 'significant' collocation (418), and, like Halliday, postulates 'lexical sets' as a result of the study of collocations. Cf. also Carstensen (1969).

⁹⁷ Greenbaum (1968: 1).

⁹⁸ Sinclair (1966: 413).

of adjectival modifier and its head. Such syntagmatic relations, which are clearly of a grammatical nature, would have to be termed ‚colligations‘, if one follows Mitchell’s distinction between ‚collocation‘ and ‚colligation‘⁹⁹. Like Sinclair and Greenbaum, we shall not adopt this usage, and prefer to call the relationship between a verb or verbal construction and its subject and objects a collocation. Like Fairclough, we shall also say that in a VPC a simplex verb collocates with a particle. Whether the collocation has to be regarded as a single lexical item or not cannot be decided in a general way, but must be determined in each individual case.

2.7.3. The term ‚collocation‘ is neutral with respect to which element is primary or dominant in the relation. This is not so if we use ‚selection‘, which implies that one element selects the other. The problem is considered by Chomsky¹⁰⁰ in his discussion of ‚selectional rules‘. It is argued that if the verb were to select the subject and object, this would lead to „a quite considerable complication of the grammar“ (115). He therefore rules out this possibility (118). If the verb is regarded as the central element of expressions as in case grammar¹⁰¹ and dependency grammar, this is obviously not an acceptable solution. Linguistic models that derive from predicate logic and consider nouns as variables of verbal predicates, will have to reject Chomsky’s proposal. The concept of collocation which does not involve a certain direction of selection, disposes of the necessity to decide on the dominance of one of its elements. Ultimately, the choice of one element as being prior to the other in a concrete act of speech involves psychological factors and considerations of topic and comment. In our study of VPCs, the verb or verbal construction is the point of

⁹⁹ Mitchell (1958: 103). *Turn off in he turned the light off* is considered a ‚colligation‘ by Mitchell (103).

¹⁰⁰ Chomsky (1965: 113-120). Cf. McCawley (1968c: 263), who suggests that there are only ‚single selectional features‘, i.e. that the verb does not select its subject and its object. Chomsky’s proposals are also rebutted in Miller (1970).

¹⁰¹ Cf. Fillmore (1968b).

departure, and we say that it collocates with certain nouns and not with others. A complete extensional description of all possible collocations is, of course, impossible to achieve¹⁰². However, we believe that even a necessarily incomplete assessment of possible collocations and collocation restrictions is useful in distinguishing homonymous items, and in revealing certain semantic features.

2.8. *Semantic Analysis and Idioms*

2.8.1. The collocations of verb and particle in turn collocate with other lexical items, as just mentioned. Some of these collocations are very familiar to the speakers of a language, and attain a high degree of cohesion, while others are quite restricted in their acceptability¹⁰³. Besides the factor of familiarity, ‚contextualization‘¹⁰⁴ also plays an important role with such restrictions. Familiar collocations, which could be called

¹⁰² Cf. Fillmore (1968a: 379) „it seems to me that no use of the extensional properties of predicates can serve us in identifying linguistically interesting properties of verbs“. Fillmore claims that a ‚collection of objects‘ for certain predications is not feasible, as it presupposes an understanding of the meaning of that predicate. However, all judgments about possible linguistic expressions presuppose an understanding of their meaning.

¹⁰³ Cf. Greenbaum (1968), Lipka (1971c).

¹⁰⁴ The term is used by Carvell-Svartvik (1969), who point out that, e.g., *the girl was turned to* and *the Prime Minister was turned to for help by people suffering from the depression in the north-eastern industrial areas* „produced immensely different responses from informants“ (18). They propose to distinguish between grammatical (systemic) and lexical (exponential) constraints (34), which is illustrated by *she smokes like a chimney*, which can under no circumstances be passivized (= a systemic constraint) on the one hand, and *they look at themselves*, which does not allow the passive compared with *they looked at the old car*, which has a passive, on the other hand (= an exponential constraint) (43).

set phrases, may be semantically self-evident, such as *bacon and eggs*, *here and there*, but they may also be highly idiomatic, such as *rub noses* or *shoot the breeze*. It is true that most syntagmatic combinations, whether they are collocations, compounds, or derivatives, become more or less affected by idiomaticity in the process of lexicalization¹⁰⁵. As is so often the case in language, we have here a phenomenon of a more-or-less kind rather than of an all-or-none kind¹⁰⁶, a continuous scale ranging from a simple conjunction of morphemes to the creation of completely new semantic units¹⁰⁷. The two poles of this scale, however, can and must be clearly distinguished. At one end, the semantic structure of the collocation is made up of its single elements. At the other end, we find semantic units which are not analysable in terms of their apparent morphological constituents.

2.8.2. Simplex lexical items obviously do not have a morphological structure which can be related to their semantic structure. If one defines an idiom as „a constituent or series of constituents for which the semantic interpretation is not a compositional function of the formatives of which it is composed“¹⁰⁸, one is forced to recognize „every word in the lexi-

¹⁰⁵ Cf. Stankiewicz (1962: 7): „idiomatization affects almost all types of derivation“. We here use ‚lexicalization‘ to designate the process in which familiar collocations arise, and distinguish it from ‚idiomaticization‘. Chafe (1968: 121) calls the process which „creates a single semantic unit out of an arrangement of units“ ‚idiomaticization‘. Cf. also Fleischer (1969: 12) who rejects ‚Lexikalisierung‘ and uses ‚De-Motivierung‘ and ‚Idiomatisierung‘. Weinreich (1969: 34) draws attention to the fact that in *bacon and eggs* the bacon has to be cooked, and the eggs are fried or scrambled. For idiomaticity in nominal compounds cf. also Botha (1968: 213-225).

¹⁰⁶ Cf. Bolinger (1961) and Halliday (1961: 247, 249) where the term ‚cline‘ is used.

¹⁰⁷ The conjunction could be viewed as ‚linking‘ in the sense of Weinreich (1966: 420 ff.). Cf. Stankiewicz (1962: 9). The creation of such units is, of course, a diachronic matter involving idiomaticization. Synchronically speaking, the scale is one of varying degrees of idiomaticity. Cf. Fraser’s ‚frozenness hierarchy‘, discussed in 2.8.3.

¹⁰⁸ Fraser (1970: 22), where a footnote refers to Hockett, who

con“ as an idiom — as in fact Fraser and Hockett do. Yet, the usefulness of such a wide concept of an idiom is questionable, as it puts monomorphemic items on the same level with partly analysable or unanalysable complex forms. We therefore believe that simplex forms should not be included within the concept of idiom. Compounds and prefixal or suffixal derivatives¹⁰⁹ naturally have a morphological structure and are affected by idiomaticity in varying degrees. As already mentioned, we can establish a continuous scale of word-formative syntagmas with respect to this phenomenon. However, it seems methodologically unwise to lump all of them together as idioms, and to disregard the difference between, e. g. adjectival compounds with *-proof* or *-free*, which can be formed almost without any restrictions, and such idiomatic formations as *cock-sure*, *head-strong*, *letter-perfect* and *point-blank*¹¹⁰. A great number of regularities would be lost, and word-formation could not be regarded as a productive process which continually creates new lexical items. In an analytic approach to word-formation, certain additional semantic features can be isolated, but in many cases, as, e.g., with nominalizations or transpositional adjectives, they are almost irrelevant. We may therefore omit them¹¹¹. The fact that certain word-formative processes are fairly restricted is not an argument for treating all such syntagmas as members of a closed class, since even the most productive grammatical processes show restrictions¹¹². We shall therefore consider compounds and derivatives as

arrives at the same conclusion from his definition of an idiom as „any grammatical form the meaning of which is not deducible from its structure“.

¹⁰⁹ We can also set up two other basic categories of word-formation, as is done in Marchand (1967), viz. ‚expansion‘, where the determinatum is a free morpheme, and ‚derivation‘, where it is not.

¹¹⁰ Cf. Lipka (1966).

¹¹¹ Cf. Lipka (1971b). It is not by chance that nominalization is the word-formative process which was first treated within a transformational framework, in Lees (1963).

¹¹² We only have to recall the irregularities in the English plural formation or the verbal paradigm. Cf. Lipka (1969).

basically non-idiomatic, omitting certain minor additional features, and only in the case of partly or completely unanalysable formations will the degree of idiomaticity be judged sufficient to treat them separately. It seems advisable to distinguish between syntagmas which are analysable and motivated, such as *steamengine*, and those which are only analysable but not, or no longer, motivated, such as *watch-maker*. Motivation may vary considerably between speakers, and is in principle a subjective phenomenon.

2.8.3. Various approaches to idiomaticity as a general phenomenon have been carried out recently¹¹³. As early as 1960 Mel'čuk proposed to distinguish 'idiomaticity' (,idiomatičnost') from 'stability of collocation' (,ustojčivost'). The latter is measured by the probability with which a given constituent predicts the appearance of the other constituents. Since idiomaticity and stability are independent, Mel'čuk (1960: 79) distinguishes four basic types of collocations: 1. stable and idiomatic, 2. stable and non-idiomatic, 3. non-stable and idiomatic, 4. non-stable and non-idiomatic. Three types of idioms are set up in Coseriu (1966: 196 ff.): 1) 'équivalents de phrases' (*la nuit tous les chats sont gris*), 2) 'équivalents de syntagmes' (*sans coup férir, avoir maille à partir*), and 3) 'équivalents de mots' (*au fur et à mesure, par cœur*). It is pointed out that while type 1) is to be regarded as a text or a fragment of a text, types 2) (which are 'syntagmes stéréotypes') and 3) (i.e. 'périphrases lexicales') could be grouped together. In Weinreich (1963: 182 f.), 'unilateral idioms', such as *charge an account* (where only *charge* could be considered idiomatic) are distinguished from 'bilateral idioms' such as *rub noses*. In contrast to Fraser and Hockett, an idiom is defined as „a grammatically complex expression“ (181). It has often been pointed out that idioms, if compared to morphologically parallel unidiomatic expressions, are characterized by various grammatical deficiencies, e.g., that the singular or

¹¹³ For a discussion of recent views on the problem cf. Lipka (To appear).

plural cannot be formed, the word order cannot be changed, modifiers cannot be inserted, and, in general, a number of transformations cannot be performed¹¹⁴. In Bugarski (1968: 252), „the idiomaticity of a sentence or a phrase“ is defined as „the feature which is inversely related to their grammatical potential“, and for the sentences under investigation a ‚gradient‘ is set up „where the grammatical potential gradually decreases as idiomaticity increases with the tightness of the structure“ (253). *Beside the point* and *beside himself* are considered „a phrasal idiom or collocation“ as compared to *beside the ash tray* (254). *Beside in his London flat is ugly beside his country-house* is termed a ‚sentence idiom‘, in which „the focus of idiomaticity . . . is identifiable at the rank of word“ (255). Here again, a simplex form is ascribed idiomaticity. We do not accept this usage, and believe that this is rather a case of polysemy than of idiomaticity. In Fraser (1970: 22) it is argued that „familiar collocations such as *bacon and eggs*, *here and there*, *an ounce of prevention is worth a pound of cure* are not to be analysed as idioms since their interpretation is held to be determined from the interpretation of the component constituents“. As pointed out in 2.8.1., familiar collocations may be idiomatic or not. Words like *sing*, *throw*, *book*, however, are regarded as „the simplest examples of idioms“ (22) by Fraser. Polymorphemic items such as *knucklehead*, *turncoat*, *overturn*, *inside of* are called ‚lexical idioms‘, and phrases such as *has the cat got your tongue?* are termed ‚phrasal idioms‘. The idiom *kick the bucket* ‚to die‘ is said to be „a very frozen case since it cannot be passivized . . . and cannot be action nominalized“ (32). A ‚frozenness hierarchy‘ of seven different levels is postulated, with ‚unre-

¹¹⁴ Cf. Fraser (1970: 23) where idioms are regarded as more or less ‚frozen‘, and Fraser-Ross (1970), where NP deletion is found to be inapplicable to idioms. Chafe (1968: 112) mentions four peculiarities of idioms: „their anomalous meaning, their transformational deficiencies, the illformedness of some of them, and the greater frequency of wellformed idioms relative to their literal counterparts“.

stricted' at one end, and ,completely frozen' at the other which contains „literally uninterpretable idioms such as *trip the light fantastic*“ (39). As can be seen from the preceding discussion, there is general agreement about the fact that idiomaticity is a matter of varying degrees. Yet, Fraser and Bugarski both differ from Weinreich in assuming that simplex lexical items can be idiomatic. As early as 1963, Weinreich stated that „it is of great methodological importance to bear in mind the complementarity of polysemy and idiomaticity“¹¹⁵. We can therefore say that Bugarski's ,sentence idiom' *beside* is a polysemous lexical item, and generally speaking, that only complex lexical items can be idiomatic, while simplex items can only be polysemous or homonymous¹¹⁶. Moreover, „the postulation of an idiom is relative to a particular dictionary, since idiomaticity and polysemy are complementary“¹¹⁷. We can only ascertain that a certain construction is different with regard to the cluster of semantic features which would normally be expected — i.e. is idiomatic — if we know which features are contained in the dictionary. Weinreich illustrates this with the help of the ,unilateral idiom' *charge an account*. If *charge* is described as containing the senses ,fill' (as in *charge batteries*,

¹¹⁵ Weinreich (1963: 182).

¹¹⁶ Cf. Lyons (1963: 18) „The difficulty of deciding whether something, synchronically speaking, is an instance of ,homonymy' or ,polysemy' is thus recognized for what it is — a pseudo-difficulty created by posing a pseudo-question“. In spite of all the difficulties, the problem cannot be dismissed so easily. According to Weinreich (1969) „the distinction between homonymy and polysemy is notoriously elusive“ (37), and „at the moment we have no criteria for distinguishing homonymy from polysemy“ (38). However, „the sub-senses of a polysemous morpheme can be compared to each other to see whether they share semantic components. If they do not, or at least if they fail to do so to any significant degree, we refer to the subsenses as homonymous“ (40). A precise distinction can only be made when it is based on a precise semantic description of individual morphemes. Before we have such a description at our disposal, all attempts at distinguishing homonymous from polysemous items will have to be tentative.

¹¹⁷ Weinreich (1966: 450).

guns) and ‚burden‘, then *charge an account* is not idiomatic. We can therefore only establish which VPCs are idiomatic when we have discovered which features are normally present in them. In Weinreich (1969: 30 f.), three types of ‚phraseological units‘ are distinguished which have in common that „in the construction A + B, the resulting sense is not the expected semantic function „f_i of the component senses a and b“ (30). In the first case, illustrated by *red hair*, one component is different, viz. *red*. In the second case, *red herring*, ‚phony issue‘, both components are different, and „unless we envisage a dictionary in which „phony“ is listed as one of the senses of *red* and „issue“ as one of the senses of *herring*, there will be a discrepancy between the ingredients and the product“ (30). Finally, the component senses may be retained, but the semantic function relating them may be different, as in *make friends with a foreigner* contrasted with *make cookies with flour*. Thus „an idiomatic sense of a complex expression may differ from its literal sense either in virtue of the semantic function . . . or of the semantic constituents“ (32). Idiomaticity is therefore not a quality of a single lexical item, but is determined by the context¹¹⁸. Weinreich’s concept of an ‚idiom‘ is quite narrow, and he defines it as a special subclass of ‚phraseological units‘¹¹⁹, which, however, are all idiomatic constructions. Expressions that are not phraseological units are termed ‚free constructions‘. In our analysis of VPCs we shall adopt Weinreich’s basic tenets with regard to idiomaticity, but we shall not follow his terminology. We shall speak of idiomatic items, attempting to specify which constituents are to be regarded as the basis for their idiomaticity. A certain degree of

¹¹⁸ Weinreich (1969: 40): „Idiomaticity turned out to be an extreme example of contextual semantic specialization“.

¹¹⁹ Weinreich (1969: 42): a ‚phraseological unit‘ is „any expression in which at least one constituent is polysemous, and in which a selection of a subsense is determined by the verbal context“. „A phraseological unit that involves at least two polysemous constituents, and in which there is a reciprocal contextual selection of subsenses, will be called an idiom“ (42).

idiomaticity will be assumed to exist in almost all syntagmas (cf. *bacon and eggs*), but will be omitted in our treatment, in order to be able to recognize certain regularities.

2.8.4. Weinreich (1969: 69) proposes that in the description of a language we have „both complex dictionary entries and an idiom list“. He explicitly deals with „verbs with particles“, and suggests that in principle „they should be generated as free constructions, and those that require idiomatic meanings will have them superimposed from the idiom list“ (69). Examples of members of the idiom list are *throw up* ‚vomit‘, *look out* ‚be careful‘, *water down* ‚dilute‘, *set off* ‚explode‘ (69). On the other hand, *stay out*, *keep in*, *look away*, *send off* „could be directly generated with their senses supplied out of the dictionary“ (70). Finally, cases like *eke out*, *cave in* could be treated by storing „*eke* and *cave in* in the dictionary without semantic features“ (70). Such elements would correspond to what Marchand (1969a: 2) called ‚blocked morphemes‘, viz. *cran-* and *Mon-* in *cranberry* and *Monday*. Weinreich does not include in his treatment cases of idiomatic expressions which arise in the process of lexicalization through ellipsis. A complement may be regularly deleted in certain VPCs, and also in simplex verbs, and will be understood by speakers, thus creating idiomaticity, as in *break up* (at school), *ring up* (on the telephone), *hang up* (the receiver), *propose* (marriage). This is not clearly distinguishable from idiomatic items which contain additional semantic features, as, e.g., *walk out* (on strike), *open up* (firing, playing). Idiomatic VPCs may be further subdivided according to whether the verb or the particle in the construction contributes to its analysability, i.e. shares semantic features with the same morpheme occurring in other collocations. These two groups would correspond to Weinreich’s ‚unilateral idioms‘ or ‚phraseological units‘. A higher degree of idiomaticity is present if neither element contributes to the analysability of the construction. This is often the case with semantically empty verbs¹²⁰ such as *do*,

¹²⁰ Cf. Weinreich (1963: 180 f.), where *take* in *take offense*, *take*

make, put, set etc. Although their occurrence is not restricted to VPCs, as is the verbal element in *eke out, clutter up, peter out*, they are similar to such blocked morphemes in that they cannot be stored in the dictionary, and cannot be provided with specific semantic features. Familiar collocations, as, e.g., *yield up the ghost* are not necessarily to be considered as idioms¹²¹. However, in most of them the degree of idiomaticity is rather high, as, e.g., in *eat one's heart out, bring up the rear*. Generally speaking, VPCs which do not fit into the frames given in 2.6.6., further specified by particular semantic features, will be regarded as idiomatic. Yet an attempt will be made to relate partially idiomatic VPCs to other items contained in the lexicon by means of particular semantic features.

medicine, take effect is considered, and ‚depletion‘ is held to be „a semiotic universal“.

¹²¹ Cf. 2.8.1. and Weinreich's remarks about *bacon and eggs*.

CHAPTER 3: THE SEMANTIC STRUCTURE OF VPCS AND WORD-FORMATION

3.1. *General Remarks*

3.1.1. If we attempt to analyse the semantic structure of VPCs, treating them as single lexical items and disregarding, for the moment, the question of whether the particle is redundant, optional or compulsory, the most natural first step will be to investigate the possible derivational relationship with other items, employing the methods of modern word-formation¹. This will allow us to establish certain patterns of overtly connected items, as, e.g., German *tot* and *töten*. The fact that the adjective and the verb share certain semantic features is obviously more readily apparent than in the case of such 'surface verbs'² as *kill* and *remind*, and adjectives such as *dead* and *similar*. Word-formation thus explains the creation of complex lexical items from simple items and may be regarded as a means by which to simplify the dictionary entries in the lexicon of a language³. However, following Weinreich

¹ The basic assumptions of our approach are outlined in Marchand (1969a: 1-59). Cf. also Brekle-Lipka (1968) for other treatments of such problems.

² Cf. the title of Postal (1970): 'On the Surface Verb *Remind*'.

³ Weinreich (1969: 72 f.) suggests that in the description of a language, besides a 'simplex dictionary' we also have a 'complex dictionary' „in which would be entered all compounds, complex words, idioms, phrases and sentences familiar to speakers of the language“ (73). He argues that „being or not being an element of an inventory“ (72) is a characteristic feature of compounds and complex words in general, and that therefore they should receive a 'familiari-

(1969), we assume the necessity of a ‚complex dictionary‘, which contains information in addition to the derivative process. To prevent duplication of the lexicon, the complex dictionary will only contain those phonological, syntactic, and semantic features in which complex items deviate from simplex ones. It will further contain familiarity ratings and the idiom-list. If complex items were treated like simplex ones, many regularities would be lost⁴. As already pointed out, the process of lexicalization adds semantic features to complex items generated out of single morphemes, but in many cases these may be omitted in order to allow the recognition of existing regularities. One of the basic tenets of word-formation is the assumption that lexical items presuppose affiliation to specific categories of word class⁵ (whether these are viewed as syntactic markers or as semantic features is immaterial for this purpose). Another one is the distinction between the two constituents of word-formative syntagmas; the ‚determinant‘, which corresponds to the modifier or satellite in syntax, and the ‚determinatum‘, which is equivalent to the head or nucleus of a construction. In compounds, both the determinant and the determinatum are free morphemes. In suffixal derivatives, the determinatum is a bound morpheme. In zero-derivatives⁶, the determinatum is not overtly expressed, but a zero-morpheme must be assumed to account for proportional oppositions such as *bake*: *bak/er* :: *cheat* verb: *cheat/∅* substantive, which can be viewed as proportional equations. Deadjectival verbs such as *legalize*, *simplify*, *black/en* as opposed to *clean/∅* are another instance of such equations. Before we

ty rating‘. A complete description of a language must incorporate both types of dictionary. The familiarity rating will have to be assigned to the level of ‚norm‘ as set up in Coseriu (1962: 11-113).

⁴ This point is also made in Botha (1968). Cf. Wheatley (1970: 21 f.), where „two vocabularies“ are assumed, one for simple lexical items and one for inflected forms.

⁵ Proposals to treat word classes as attributes of lexical items which can be attached „at will“, are discussed in Lipka (1971b).

⁶ Cf. Marchand (1969a: 359-389), Kastovsky (1968: esp. 31-53), Kastovsky (1969).

can turn to an investigation of VPCs derived from adjectives, we must first consider certain technical matters.

3.1.2. In the following discussion of VPCs from the point of view of word-formation, all items are treated in alphabetical order under the various headings. An attempt is made to incorporate as many collocations as possible with *out* and *up* found in contemporary usage, but completeness is of course impossible to achieve. The items are normally taken from one of the dictionaries⁷ used for this study, and so are the nominals that collocate with them. When such nominals which fill the places of the one-place or many-place verbs could not be obtained from dictionaries, they were supplied either from native speakers who acted as informants or from our own collection of quotations with VPCs⁸. It has been regarded as infeasible and also unnecessary to indicate the source in every single case. In most cases, one or two characteristic nominals are cited. If, however, these are considered to belong to different classes, distinguishing polysemous or homonymous senses of the VPC, then additional examples are given, separated by the symbol /. To parallel the word order in the sentence, nominals collocating with one-place VPCs are written in brackets preceding the verb, while what is traditionally referred to as the object follows it. With two-place verbs, the subject of the verbal construction is usually omitted, unless clarity demands that it be explicitly mentioned, in which case it precedes the verb. The subject is normally a human agent, and the fact that the construction is a two-place verbal implies the presence of such an agent and of the feature Cause⁹. In items where it is

⁷ *The Shorter Oxford English Dictionary, The Concise Oxford Dictionary of Current English, The Advanced Learner's Dictionary of Current English, The Penguin English Dictionary, Webster's Third International Dictionary*, Wood (1965), Heaton (1965), L. A. Hill (1968), abbreviated as SOD, COD, AL, PEN, W3, W, H, HI.

⁸ This collection is not taken from a clearly delimited basis of texts, and will therefore not be called a corpus. Material from three types of corpus is, however, also used in this study. Cf. 3.5.6.

⁹ Cf. 2.6.3. and Lyons (1968: 368), „two-place constructions can be derived from one-place constructions by means of the notion of

optional, the feature Cause will be added – after the nominals that precede the verb – in order to indicate the generality of the process, as, e.g., in (trail, path/surface + Cause) *level out*. Similarly, when the object can be optionally deleted this will be marked by a following – Deleted,_i such as *tidy up* (room – Deleted). In the case of nominals denoting human beings, it will normally be sufficient to represent them by the pro-form *somebody*, abbreviated as: ,sb^f. Occasionally it may seem sufficient to use the pro-form for inanimate nominals, viz. *something*, abbreviated as ,sth^f. Determiners, and the indication of number are omitted, unless a specification seems relevant. Nominals are not italicized. The verb is given in the infinitive, and the particle is left out when collocations with the same particle are treated together under the same heading. With deadjectival verbs, the basis of the derivation may be, generally speaking, either the positive or the comparative form of the adjective, and thus, e.g., *broaden out* is ,make or become broad or broader¹⁰. The comparative can be regarded as containing an additional feature Degree¹¹, which will be added – abbreviated as ,Deg^f – in case it is present. What is traditionally labelled figurative use, and can normally be paraphrased with the help of *as if*, will be provisionally included in the treatment of derivational relationships¹², but is not explicitly marked. The problem is tied up with the question of collocation restrictions and transfer features, and also with comparison and metaphor.

,causativity“¹⁰. With regard to causative verbs, Lyons draws attention to the general principle „that the object of a two-place nucleus corresponds to the subject of a one-place nucleus“ (383).

¹⁰ Cf. AL s.v. *broaden*; Marchand (1969b).

¹¹ This feature will be discussed in detail later. Cf. 3.7.4.4. and ,Magn, Plus^f in Apresyan-Mel'čuk-Žolkovskij (1969: 8, 13).

¹² Cf. *comb out* (snarls, head lice/subversives, staff), which is explained as ,remove or eliminate with or as if with a comb^f in W3. It could also be analysed as a deverbal zero-derivative, ,remove by or as if by combing^f. Cf. Botha's (1968: 192-213) treatment of „metaphorical compounds“, and 3.3.2.3. for derivatives involving comparison.

3.1.3. At this point in our investigation we shall not attempt to distinguish between the various stylistic or dialectal values of certain VPCs, but rather treat all items collected from our sources as belonging to the same level. It has been repeatedly pointed out¹³ that there is a great deal of variation both synchronically, with regard to style and dialect, and diachronically. This naturally includes differences between British English and American English, which we shall disregard for the moment, viewing both as a 'common language'¹⁴. Quite a number of VPCs, or certain meanings of them, are colloquial or belong to slang, but many others do not have such connotations. It is impossible to embark on a discussion of style and register, or of the term 'colloquial' in this study, or even to attempt a characterization of single items with regard to such labels. What the various dictionaries indicate differs considerably in some cases. It seems safe to assume that the VPCs represent an area of rapid change in the language.

3.2. *Deadjectival VPCs*

3.2.1. We shall now turn to the analysis of deadjectival VPCs. Semantically, they belong to the formulas BECOME

¹³ The basis of comparison is usually Kennedy (1920). Cf. Strang (1968: 179): „the author rarely tries to label forms as slang, colloquial or accepted, but the indications and omissions we do find in his work are often strange to British English speakers only forty years later“, and Live (1965: 431), where different British usage is mentioned, and it is stated that „writing in California in 1920, A.G. Kennedy lists many expressions which seem strange in the East: *chirk up*, *nerve up*, *ginger up*; and others with glosses which would surprise an Easterner“. Note that *ginger up* is quoted in AL, PEN, W3.

¹⁴ This is the title of a series of broadcast conversations on British and American English, which appeared in print as Markwardt-Quirk (1964).

with suffixes such as *-ate*, *-ify*, *-ize* — which might be expected to occur — do not seem to exist¹⁶. The result of the process or action denoted by the VPC is expressed by the adjective that serves as a basis for its derivation. This is also true for de-adjectival verbs which do not collocate with a particle. With both types there are a few static verbs which do not denote the result of a change, but rather the continuation of a state, as, e.g., *idle* 'be idle', and *brave it out* 'be, remain brave'. The semantic features of deadjectival VPCs are therefore largely determined by the adjective in question. With a number of VPCs, irrespective of their derivational status, the participle is used predominantly or exclusively as an adjective, to designate a state. Items which only occur as adjectives, e.g., *booked out*, *fed up*, or that have a special meaning in this case, are here treated separately (c. 3.5.3.3.).

3.2.2. Deadjectival VPCs with OUT

3.2.2. The following can be analysed as being derived from adjectives: *black* (lights, city/passage¹⁷), *brave* (it, storm of

¹⁶ Our material contains two apparent counter-examples. However, *separate out*, in spite of its pronunciation, is not derived by means of *-ate*, but is a zero-derivative from the adjective *separate*. Cf. the definition: 'make, become or keep separate' in AL. *Summarize up*, listed in Fraser (1965), was rejected by our informants, who suggested that either *sum up* or *summarize* should be used. The latter is not simply derived by means of *-ize* either. Cf. the definition as 'be or make a summary of' in AL.

¹⁷ W3 gives 'obliterate with or as if with black ink: BLOT: delete or suppress through censorship'. The first part of the definition can be reduced to 'make black' — whether with ink or not is linguistically irrelevant. The second part is an example of figurative use. (Sb) *black out*, as well as *black out* (radio transmitter), are idiomatic with regard to *black*, since *black* cannot be said to contain the subsenses 'unconscious', 'temporarily blind', or 'jammed'. The two VPCs, however, seem to be partly analysable with respect to *out*. In the following, it will be impossible, for obvious reasons, to discuss every VPC in the way *black out* has been discussed here.

protest), *brazen*¹⁸ (it), (face/river) *broaden* + Deg, *clean* (stable/room), *clear* (drain, cupboard), *cool* (horse¹⁹), *empty* (drawer), (ground/score) *even*, *even* (inheritance/flow of river), (girl/cow) *fatten*, (ruts/airplane/prices) *flatten*, *flatten* (piece of metal), *hollow* (river banks, coconut shell, stump/tunnel²⁰), (trail, path/surface + Cause) *level*, *level* (differences), (sb) *open*, *open* (folding map, table-cloth/land), *prim* (sb), *rough* (sth/lenses, housings/ideas/scheme²¹), (figure, face) *round*, *round* (century of independence²²), *single* (sb/incident), *smooth* (handkerchief, creases/differences), (figure/problems) *straighten*, *straighten* (sb/accounts/trouble, misunderstandings), (limestone

¹⁸ This is a static verb (such as, e.g. *brave it out*) derived from *brazen* ‚shameless‘, and is therefore a zero-derivative, not formed by means of the suffix *-en*. As a test for the question whether a certain VPC is derived from an adjective, we check whether the adjective is included in AL or not with such a meaning. Larger dictionaries are not used for this purpose, because they often list meanings or words which cannot be considered as belonging to the basic core of the language.

¹⁹ The definition in W3 ‚to cause (a horse) to move about quickly after heavy exercise until sweating has ceased and relaxation is attained‘, as in the case of *black out*, contains linguistically irrelevant information.

²⁰ Strictly speaking, *hollow out a tunnel* is not analysable as a deadjectival derivative, since *the tunnel is hollow* is hardly acceptable. This is probably a case of ‚object transfer‘ from *hollow out the mountain/with a tunnel*. Cf. Hundsnurscher’s ‚Objektvertauschung‘ (1968: 133 ff.) with examples such as *eine Rübe ausböhlen*, and English *clean out* (stable/dirt), *clear out* (drain/mud from river). In AL *hollow out* is analysed as a denominal derivative ‚make a hollow or hollows in‘. However, in most cases derivation from an adjective seems more natural. Cf. SOD ‚render hollow or concave‘.

²¹ Although this VPC can be analysed as deadjectival, as is done in AL and PEN (‚make a rough plan‘), it is more natural to assume an adverbial basis, as in SOD, COD (‚plan or sketch out roughly‘), W3 (‚shape, make, or dress ... in a rough or preliminary way‘), PEN (‚sketch roughly‘).

²² Cf. AL s.v. *round*, adj. ‚3. entire; continuous; full: a round dozen (score)‘.

layer/houses/desire) *thin*, *thin* (seedlings/ballad), (sb + Cause) *tire*²³, (street, river) *widen* + Deg.

3.2.3. Deadjectival VPCs with UP

3.2.3. The number of VPCs with *up* that can be analysed as being derived from adjectives is greater than those collocating with *out*. We find: (sb) *black*²⁴, *blacken* (oneself), (face) *brighten* + Deg²⁵, *chill* (drinks), (sb) *clean*²⁶, *clean* (desk, room/city), (weather) *clear*, *clear* (matter, mystery), *cool* (melons), (lettuce + Cause) *crisp* + Deg, *crisp* (rolls), *crispen* (bread/mathematics), *dampen* (clothes), (sky, it/furniture) *darken* + Deg, (sb + Cause) *double*, *double* (legs/carpet/bet), (stream, well + Cause/cow/imagination) *dry*, *dry* (glasses/commerce), (scores + Cause) *equal*, (persons) *even*, *even* (score/things), *fatten* (cattle), *firm* (hydroelectric power), (sb) *freshen*, *freshen* + Deg (buildings), (ground) *harden*, (gossip) *hot*, (cars, runners) *level*, *level* (road/marks), *lighten* + Deg (colours/load), (sb) *limber*, *limber* (oneself/joint), (party) *liven*²⁷, *liven* (things), (sb/athlete) *loosen*, *loosen* (economy), (air) *moisten*, *moisten* (edges), *muddy* (pond/floor), *neaten* (onself/edges), (road) *open*, *open* (wound/mine/new territory/opportunities), (sb) *perk*, (cheeks) *plump*, *plump* (pillow), *pretty* (garden/herself), *prim* (sb), (story/pace + Cause) *quicken*, *right* (fence, flag pole), (pears) *ripen*, *rough*

²³ Although, morphologically, the full adjective *tired* is not present, *tire* can perhaps be regarded as a reduced allomorph, as in *rough(ly) out*, *cheer(ful) up*, *beauti(ful) fy*.

²⁴ A one-place verb with deleted co-referential object and a deleted feature Cause, sometimes called 'intransitive for reflexive'.

²⁵ (Sb + Cause) *cheer up*, which might be analysed as 'begin to have, or cause to have *cheer* (= 'state of hope, gladness', AL)', is probably better analysed as a deadjectival derivative, where *cheer* is regarded as an allomorph of *cheerful*. Such an analysis would be supported by *rough out* (ideas), *rough up* (sb) 'treat roughly', (party) *liven up* 'become lively', (sb) *laze away* 'be lazy'. A parallel to *cheer up*, where the suffix *-ful* is also involved, is *beautify*, which is defined as 'make beautiful' in AL.

²⁶ A one-place verb, involving Cause and a deleted object.

(hair/sea/sb²⁷), *roughen* (+ Deg) (surface), *round* (prices/cattle²⁸/people), *secure* (house), (sb) *sharpen*, *sharpen* + Deg (knife), *shorten* + Deg (pants, rope), (pace, tempo/discipline) *slacken* (+ Deg), (sb) *slim* + Deg, (sb/car + Cause) *slow* + Deg, *slow* + Deg (process/reader), (sb + Cause) *smarten* (+ Deg), *smarten* + Deg (oneself/old theme), (sb + Cause) *sober*, (sb + Cause) *soften*, *soften* (enemy, adversary/town), (sb) *spruce*, *spruce* (oneself/house, garden/notions), *square* (accounts), (sb) *stiffen*, (sb) *straighten*, (sb) *supple*, *supple* (leather), (sb) *tense*, *thicken* + Deg (sauce, soup), *tidy* (room – Deleted), *tighten* (screw), *toughen* + Deg (sb), *trim* (oneself), *true* (wheel), (sb/milk/room + Cause) *warm* + Deg, *whiten* (shoes/house), *widen* + Deg (highway), (sb + Cause) *wise*.

3.2.4.1. The problems that we face in the analysis of deadjectival VPCs will become clearer if we consider some items in greater detail. As examples we shall take VPCs and zero-derivatives with *clean* and *clear*, and investigate and compare their collocations. Although most of these appear as two-place verbs, a few one-place verbs do exist, at least on the level of surface structure.

3.2.4.2. In (sb) *clean up*, as in *you should always clean up after a picnic* (AL), the thing denoted by the subject does not become clean, but causes the thing denoted by a deleted object (e.g. *place*) to become clean or tidy. In (sb) *clear out*, as in *the police are after you, you'd better clear out* (AL), there is no derivational relationship with 'become clear' but the meaning 'disappear' can be connected with two-place verbs containing the feature Cause, yielding 'Cause + disappear' = 'remove', as in *clear out (mud, rubbish, children)*, e.g., in *when are you going to clear that rubbish out of the greenhouse?*, *go and clear those children out of the cricket pavilion* (W). An explanation for the missing derivational relationship is best afforded by the phenomenon of 'Subjektvertauschung' and 'Objektvertauschung'

²⁷ Cf. footnote 25.

²⁸ This is better analysed as being derived from an adverb; cf. COD 'gather ... by riding round'. W3 'collect ... by riding around', also transferred to human beings.

that is quite frequent with German VPCs²⁹. For example, *auslaufen* can have two types of subject: either the matter which disappears from a container, e.g., *das Wasser läuft aus* (viz. *aus dem Eimer*), or the container itself, e.g., *der Eimer läuft aus*. Similarly, the corresponding two-place verb containing the feature Cause can have as object the matter which is removed, e.g., *das Wasser ausschütten*, or the container from which it is removed, e.g., *den Eimer ausschütten*. In English, *we clear the streets of snow*, and *clear a canal of* (or *from*) *obstructions* by removing the snow, or the obstruction, thus causing the street or the canal to become *clear*. An 'object transfer' occurs when we change from saying that we *clear a river* (by removing mud), to saying that we *clear out the mud* (from the river)³⁰. Obviously, *mud* cannot become *clear*, and thus the derivational relationship is obliterated, but as soon as we take into account the deleted prepositional phrase, the relationship is established. Besides in the cases of (sb) *clean up*, (sb) *clear out*, an underlying deleted object must also be assumed in (sb) *clear up*, as in *we need a few volunteers to clear up after the fête* (W). The only one-place VPC deserving this name with *clean* or *clear* is (weather, sky, it) *clear up*.

3.2.4.3. Two-place VPCs have a much wider range of collocations which partly overlap, either with or without a marked difference in meaning³¹. This is probably due to the phonological and graphic similarity of *clean* and *clear*, but also to the presence of a component Remove in most deriva-

²⁹ Cf. Hundsnurscher (1968: 124 ff.) and Fraser (1965: 130), who gives the examples *he brushed the stuff out of the room — he brushed out the room*. Object transfer also exists in pseudoprefixal combinations of the type *defrost (an icebox)* 'remove the frost from an icebox'. The type *unsaddle (a rider)* 'remove a rider from the saddle' does not have object transfer. Cf. Bolinger (1971a: 25).

³⁰ Some informants did not accept the collocations *clear out* (mud from river), and *clear* (river of mud), but agreed to the object transfer in *clear out* (rubbish from room) and *clear* (room of rubbish).

³¹ Cf. *The workmen cleaned up the mess before they left, Who's going to clear up the mess made by the cat?* (both AL s.v. *mess*),

tives of the two adjectives. We must further point out that considerable idiolectal variation seems to exist with regard to the acceptability of certain collocations, since informants objected to a number of examples from the dictionaries³². The following can perhaps be regarded as usual collocations: *clean out* (stable, room, desk, drawer, cupboard, pockets, dirt); *clean up* (room, desk, cupboard, city, mess, dirt, tidy sum); *clear out* (drain, cupboard, room, mud, rubbish, old records, children, youths); *clear up* (room, place, desk, mess, rubbish, mystery, matter, difficulty, misunderstanding). The implicit collocation with 'money' in *clean up* (a tidy sum) (H), (a small fortune) (W3), is also found in two idiomatic uses of *clean out* and *clear out* with (sb), apparently restricted to the passive, as in *I was cleaned out by those rascals* (H), *be cleaned out* (AL), *all these hospital expenses have cleared me out* (AL). If an object transfer is assumed, *clean out* (sb) and *clear out* (sb)³³ can be linked to *clean up* (money). *Clean out* and *clear out* may both be said to contain a component Remove — with reference to money —, while *clean up* may be considered to include the semantic features Cause and Have. The component Remove is present in the simple zero-derivative *clear*, e.g., in *clear the streets of snow* (one's mind of doubt, a country of bandits) (AL), where the extralinguistic object to be removed is overtly expressed, or in *clear a desk* 'by putting papers, etc. away' (AL), *clear the table* 'esp. remove dishes' (AL), where the extralinguistic object is implied or deleted. In the collocation *clear a room*, if the extralinguistic object is not mentioned explicitly, e.g., *of toys, of furniture*, the implication is normally that persons are removed. If the object is identical with the

the servant cleared up the mess you left (H), *the room has not been cleaned up after last night's party* (H), *I spent nearly an hour clearing up the room after the children's party* (W). *Clean up* and *clear up* are both defined as 'tidy up' in H.

³² E.g. *Clear up* (room) (W), (place) (H), *clear out* (old records from the cupboard) (H), *clear out* (children) (W), *hospital expenses have cleared me out* (AL). The objections were not made against the colloquial nature of expressions.

³³ 'Of money' which is deleted in the idiomatic constructions.

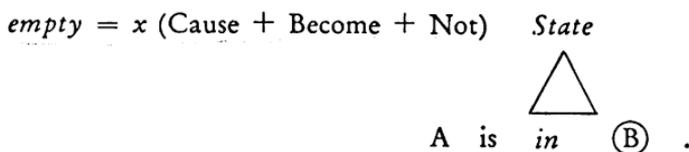
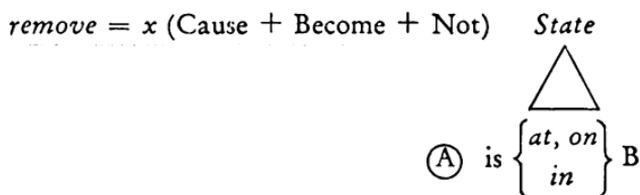
agent, the person removes himself or herself, i.e. disappears or leaves the room. In the simplex verb *clean*, a component Remove may also be assumed if one defines it as 'remove dirt', but the analysis 'make clean' will normally be preferred as in *clean a room*. However, in the collocation *clean out* (room, stable), although it will also be basically interpreted as 'make clean', the component Remove is more readily recognized³⁴, especially if a relation of object transfer is established with *clean out* (dirt). The next stage on a synchronic scale is the collocation *clean out* (desk, drawer, cupboard, pockets), where the VPC is no longer in a derivational relationship with the adjective *clean*, but is analysed as 'make empty'. The difference probably arises from the presence of a feature which may be labelled +Inside (= having an inside) in *desk, drawer, cupboard, pocket*. However, this feature is irrelevant when the collocation does not involve *out*, as in *clean up* (desk, cupboard, room³⁵) 'make clean'. Collocations of *clean up* and *drawer, pocket* seem hardly acceptable. In *clean up* (dirt, mess), Remove is probably present, while in *clean up* (city) the VPC is a derivative from *clean* in its figurative or idiomatic use as 'free from vice or corruption'. *Clear out* for some informants only collocates with *cupboard* and *rubbish*, and is thus analysed as 'make empty' and 'remove', while the other collocations quoted above (drain, mud, old records, children) are regarded as unacceptable. *Clear up* (mystery, matter) can be considered as a proper deadjectival derivative, but the same does not apply to *clear up* (difficulty, misunderstanding), where the feature Remove in connection with an abstract object seems to be present. The same feature and a concrete object must be assumed in *clear up* (rubbish). *Clear up* (desk) is not deadjectival, but is usually analysed as 'make tidy'. In a number of VPCs with *clean* and *clear* the component 'tidy' is present together with 'clean' and 'clear', and in some collocations or with some informants it is even regarded as predomi-

³⁴ Cf. the definition of *clean out* in AL, 'clean the inside of, remove dirt etc.'

³⁵ In *room*, +Inside does not seem to be present, as was already found in the collocation with *clean out*.

nant. The dictionaries vary in their definitions in this respect. The state resulting from the process or action denoted by the VPC is thus often denoted by *clean* and *clear*, but in a number of cases it is not expressed by these adjectives and involves ‘,make empty’, ‘,make tidy’, and ‘,remove’.

3.2.4.4. The relationship between *remove*, the zero-derived verb *empty*, and the notion of object transfer becomes evident if we apply a componential analysis to the two verbs, regarding them as three-place predicates with the variables (or arguments) x (= the agent), A and B . The three-place predicate may be explained as a two-place relation between x and *State* (which is, at the same time, LOC), in which another two-place relation between A and B is embedded. Both *remove* and *empty* can be said to contain the same components, with the difference that *empty* necessarily implies a feature +Inside, while *remove* does not. The two lexical items may be represented as follows:



If the feature –Inside as in *A is at (on) B* is excluded, both verbs involve the same components, and apparently have the same deep structure. If A is chosen as the object and B is deleted in the surface structure, we get x *removes A*; if B is chosen as the object, and A is deleted in the surface structure, we get x *empties B*.

3.3. Denominal VPCs

3.3.1. A number of VPCs can be analysed as being derived from nouns³⁶. Most of them are dynamic and, like the deadjectival VPCs, they must be considered zero-derivatives, since the verbal element is not overtly expressed. There are several possible relations underlying the same surface structure. Often, the noun from which the VPC is derived denotes the place, position, or state resulting from the process or action denoted by the VPC. The denominal VPCs then belong to the formulas BECOME + STATE (or POSITION, rarely LOC), such as (horses) *string out*, (soldiers) *line up*, and CAUSE + BE (or BECOME) + STATE (POSITION, LOC), such as *parcel out* (plantation), *roll up* (carpet). In a number of cases a HAVE-relation is established by the VPC, almost exclusively in collocations with *up*³⁷, as in (window) *frost up*, *grease up* (car, engine). In the majority of VPCs, however, the noun which is the basis of the derivation denotes an instrument, as in *bomb out* (sb), *wall up* (window). All word-formative processes result in a condensation of the underlying sentence. The compound or derivative is thus a new lexical unit which is more economical to use than the underlying phrase³⁸. The gain in conciseness is won at the cost of loss of explicitness and is greatest in zero-derivatives. The relation between the constituents is no longer overtly expressed.

³⁶ Cf. Anthony (1953: 84), Bolinger (1971a: 174). For denominal German VPCs cf. Reinhardt (1969: 417).

³⁷ The only denominal VPCs with *out* containing HAVE seem to be: (tree/business firm) *branch out*, *colour out* (figure in picture), (birds) *feather out*, (animal) *flesh out*. Simplex denominal derivatives may contain HAVE, such as *arm*, *butter*, *salt*, and also the component Remove (i.e. Not-HAVE), such as *bone*, *skin*, *stone*, *weed*.

³⁸ Cf. the examples in Reinhardt (1969: 417): *aus dem Rohr werden die Späne entfernt* vs. *das Rohr wird ausgespänt*. Denominal derivatives with *out* containing Remove seem to be rare in English (cf. 3.3.2.4.).

3.3.2. Denominal VPCs with OUT

3.3.2.1. In contrast to collocations with *up*, VPCs with *out* are rarely derived from nouns by means of the semantic components BECOME and CAUSE + BE (or BECOME). We find *draft* (plan, design), *lot* (land, goods), *map* (area), *parcel* (plantation), *partition* (land, property), *plot* (districts), *portion* (country), *sketch* (proposals, outline). The only one-place VPC involving BECOME is apparently (horses) *string*. An underlying prepositional phrase ,in NP' is the basis for the causative VPC *bed* (plants), which corresponds to the semantic formula CAUSE + BE + LOC, and *line* (plants, cattle) where the result of the action is a certain form³⁹. A HAVE-relation between the noun from which the VPC is derived, and the nominal with which it collocates, is found in *colour* (picture), involving Cause, and in the one-place verbs (birds) *feather*, (animal) *flesh*, where a feature +Dynamic together with HAVE yields the one-place verb *get* (in which Cause is not present).

3.3.2.2. Most denominal VPCs with *out* must be analysed as being derived from an underlying sentence in which the basis of the derivation is contained in an adverbial complement of instrument. Thus *bomb out* (sb), *boot out* (sb), *comb out* (leaves from hair), *smoke out* (snakes from hole) are derived from ,get (drive, force) out with (or as if with) *bombs, a boot, a comb, smoke*' or from ,get out by (or as if by) using *bombs, etc.*' In some VPCs a deverbal analysis may seem more natural, as in *comb out* (leaves) ,remove by combing'. However, in these cases the verb is always a denominal zero-derivative, analysable as ,use NP' as in *comb*∅ ,use a comb', *plough*∅ ,use a plough', *pump*∅ ,use a pump'. Thus ,by VPing' corresponds to ,by using NP' and, in the last resort, we always have a denominal derivative⁴⁰. In a simplified transformational

³⁹ Cf. Brekle (1970: 119, 175 ff.), where a relation ,conforming to' is postulated in *figure-skating, file-marching*.

⁴⁰ Dictionaries, therefore, vary sometimes. Cf. COD s.v. *plough* (roots, weeds) ,root out ... with plough' and W3 s.v. *plow* ,excavate

notation⁴¹ the denominal derivation of VPCs from instrumental adverbials may be represented as:

$$\textcircled{\text{T 1}} \quad \text{NP}_1 + \text{V} + \textit{out} + \text{NP}_2 + \textit{with} + \text{NP}_3 \Rightarrow \\ \text{NP}_1 + \text{NP}_3 + \textit{out} + \text{NP}_2 .$$

The symbol V may stand for various lexical items⁴². With concrete NP₂ these usually involve variants of Remove, but a number of other semantic features are also found, as in *fence* (immigrants), *ferret* (secret), *nose* (scandal), *peg* (claim). Normally, as is shown in the transformation above, the verb in the sentence underlying the denominal derivative itself collocates with *out*⁴³ and forms a VPC. In many cases we can

or hollow out by plowing'. Cf. also Lakoff (1968) and Walmsley (1971).

⁴¹ One might argue that the result of the transformation should contain V, e.g., in the form: NP₁ + (V) + *out* + NP₂. The symbol (V) would represent the zero-morpheme contained in the VPC. Thus, e.g., in *bomb/Φ/out* it would stand for *drive* in the underlying sentence 'drive out with bomb'. But as the notation is intended to represent the resulting surface structure, the zero-morpheme is not formally expressed.

⁴² Fraser (1965: 127) only mentions *cross out* in denominal derivatives from *pencil, ink, paint, chalk, crayon* which are said to go back to a sentence 'NP₁ Aux *cross out* NP₂ *with* NP₃'. In a footnote (132), it is pointed out that *cross out* is historically derived from *delete with a cross*, but is no longer motivated. Fraser gives examples of denominal VPCs with other particles where the noun also appears in an instrumental adverbial (*with* NP) in the underlying sentence. The particles *down, in, over* are said to involve the verbs *fasten (down), close (in), cover (over)*, as in *glue (nail etc.) down, box (fence etc.) in, board (wall etc.) over*.

⁴³ Such as *find* in the sentence underlying *ferret out* (secret): 'sb finds out a secret (as if) with a ferret'. In these cases the zero-morpheme (representing, e.g., *find*), together with the particle, is further determined by the basis of the derivation. The hierarchy of determination differs from that shown in the diagram in 3.2.1. It would be represented by: *ferret/ |Φ/ out*.

There is a parallel in German with certain prefixal verbs such as

assume underlying *GET OUT* as in *bail* (sb), *bomb* (sb), *boot* (sb), *brush* (dust), (workers) *clock*⁴⁴, *comb* (snarls⁴⁵, head lice, leaves), (sb, France) *contract*, (sb) *dolly*⁴⁶, *dredge* (channel⁴⁷), *filter* (sth), *fire* (badger), *force* (sb, sth), *gouge* (sth, person's eye), *hoof* (sb), *iron* (wrinkles⁴⁸/misunderstandings), *plough* (tree, roots), *pump* (water), *punch* (nail), *rake* (fire⁴⁹), *sand*⁵⁰ (stain), *scoop* (sugar), (sb) *ship*, *ship* (goods), *shoulder* (senior clerk), *smoke* (snakes⁵¹, game/sb), *spoon* (peas, porridge), *stink*⁵² (fox). If the feature Dynamic is missing, we have *KEEP OUT* which underlies the VPCs *bar* (people), *bolt* (sb), *crowd* (sb/contribution to magazine), *fence* (cattle/immigrants), *screen* (light, radiation). The dynamic VPC *FIND OUT* is contained in sentences underlying *ferret* (secret/enemies), *mouse* (delinquencies), *nose* (rat, trail/scandal/evidence), *rake* (scandal). An analysis with underlying *GIVE OUT* is possible in *hand* (samples/compliments, advice/punishment), *ladle* (soup, porridge/socialism, charm), *measure* (medicine/

ERstreiken ‚durch Streik(en)//ERreichen‘, *VERspielen* ‚durch Spiel(en)/VERTun‘, and deverbal VPCs like *AUFbinden* ‚durch Binden/AUFmachen‘. Cf. Marchand (1971b).

⁴⁴ Here, *get out* does not contain Cause and Remove. However, it may be thus analysed if a deleted reflexive object is assumed to be underlying. Cf. (sb) *contract out*, (sb) *clear out* 3.2.4.2., (sb) *clear a room* 3.2.4.3.

⁴⁵ In figurative *comb out* (government department) (AL), an object transfer has taken place.

⁴⁶ From *dolly* ‚mobile platform for camera‘. Probably analysable as ‚move out‘, perhaps with a deleted object *camera*, where *out* means ‚away from‘.

⁴⁷ With object transfer from *mud*.

⁴⁸ *Iron out* (shirt) can be explained by object transfer, and also by a modification of the simple derivative *iron* (shirt).

⁴⁹ With object transfer from *ashes* or *cinders*.

⁵⁰ Apparently clipped from *sandpaper*, cf. ‚rub or polish with sandpaper‘ W3 s.v. *sand*.

⁵¹ *Smoke out* (intentions) can either be considered as figurative use or must be treated as idiomatic.

⁵² Although the VPC is best analysed as a denominal derivative and is defined thus in COD and PEN, morphologically it is treated as deverbal, since its past is *stank out*.

rewards). Underlying *WORK OUT* can be found in *cipher* (sum, problem), *figure* (problem), *reason* (answer, plan), but they may also be derived from sentences containing *find out*. *WIPE OUT* can be said to underly *sponge* (paragraphs/memory, debts), *smudge* (sth). The VPC *CROSS OUT*, as well as the simplex verb *OBLITERATE* may be assumed to underly *ink* (picture, lines), *mark* (stain), *paint* (sth)⁵³. It seems more difficult to derive certain VPCs that obviously contain an instrumental adverbial from a sentence with a verb collocating with *out*. The underlying sentence would then contain a simplex verb, and the transformation given above does not apply. *Mark* (tennis-court), *peg* (claim), *stake* (claim) could simply be analysed as ,mark with NP', but they can also be derived from *trace out*, *mark out* or *stake out* themselves. *Space* (posts/type/payments) and *white* (printed matter) may go back to underlying *set out*, *spread out*. But *step* (distance) ,measure' and *stink* (place) ,fill' seem to be unexplained.

3.3.2.3. A number of VPCs with *out* are derived from nouns which are contained in an adverbial complement of manner. In principle, the transformation given for instrumental denominal VPCs also applies, with an underlying sentence containing V + *out*. In some cases, the morphological shape of the adverbial complement (*with* + NP) is the same, as in *jerk* (fish, pistol/words), *puff* (words) ,pull out, get out', (engine) *puff* ,move out', (candle/excitement) *sputter* ,go out', and *sputter* (story) ,get out'. With other VPCs an analysis with an adverbial complement *in* + NP is more natural, as in (flags) *billow* ,swell out'. *Dose* (aspirin) ,give out' can also be analysed in this way, but is defined as ,give dose(s) to' in AL, with *dose* as the object of an underlying sentence. *Fake* (hawser) ,lay out', (men) *file* ,move out', (water/people/music) *stream* ,move out', (children) *troop* ,move out' are other VPCs involving *in*. Similar is (water) *sluice*, defined as ,rush out as

⁵³ *Chalk out* and *crayon out* are both defined as ,cross out with chalk (crayon)' in Fraser (1965: 127). However, this meaning is not found in the dictionaries where both are defined as ,sketch, draw up' collocating with *plan*.

from sluice' in AL, which involves *from*, and (liquid/news) *filter* containing *through*, both with underlying ,move out'. *Lease* (house, property) can be said to go back to ,let out on lease'. The exact morphological shape of the adverbial complement cannot always be established with certainty. The one-place verb *puff out* is defined as ,open or appear in or as if in a puff' in W3, as in the example *the spin chute puffs out behind the hurtling plane*. But an analysis containing *with*, as in *puff out* (words) ,say with puffs' (AL), also seems possible. In fact, the choice between what may be called ,relators'⁵⁴ such as *with*, *in*, *from*, *through*, *on* is largely determined by the following nominal. However, the relator may have quite a specific semantic content, as in *through*, and especially when *like* is involved. A group of VPCs with *out* go back to an underlying sentence where the adverbial complement denotes comparison (*like* + NP). As the complement functions as a manner adverbial, comparison refers to the process or action denoted by the verb, which is likened to a process or action characteristically tied up with the respective nominal. The complement is thus a sentence adverbial, and therefore the VPC cannot be explained as involving BECOME and *like* + NP. Syntactically, comparison in these VPCs may be represented as an embedded sentence containing *is like* or *resemble*⁵⁵. The following can be analysed in this way: (republic) *balloon* ,spread out', (sails + Cause) *belly* ,swell out', (sb) *blossom* ,spread out', (sb) *bolt* ,move out', (sb/business firm) *branch* ,spread out', (sb) *dart* and *dart* (hand, tongue) ,move out', (troops, picnickers/glacial debris) *fan* and *fan* (cards) ,spread out', (rock formation) *feather* ,thin out', (anger) *flame* ,burst out', (people) *flock* ,move out', *fluff*⁵⁶ (pillow, feathers, hair) ,spread out', (city, business) *mush-*

⁵⁴ Cf. Lipka (1971b: 220, 223).

⁵⁵ Cf. the use of an ,embedded similarity predicate' in the analysis of *remind* as ,strike-like' in Postal (1970: 71 ff.). In many metaphorical items, whether simplex, such as *bulk*, or derived, such as *bottleneck*, the basis of comparison is shape. Cf. German *Birne*, *Hammerhai*. For other types of comparison cf. Lipka (1966: 71-96).

⁵⁶ This could also be analysed as a deadjectival derivative from *fluffy*, as is done in W3, parallel to *tire out*, *rough out*, *cheer up*, *liven up*. Cf. 3.2.2., 3.2.3.

room ,spread out', *weed* (impractical schemes/herd⁵⁷) ,take out', (blood, spring) *well* ,flow out', *winkle* (sth/machine guns) ,get, pull out', *worm*⁵⁸ (secret/sb) ,get out'.

3.3.2.4. A final group of denominal VPCs with *out* is best derived from nouns which are the objects of an underlying sentence. They were not treated in 3.3.2.1., as they do not involve BECOME or CAUSE + BE (or BECOME). *Piece* (story, theory/set of china) could be analysed as ,add a piece or pieces to' as in PEN, but is probably better interpreted as being derived from ,eke out with pieces', where *piece* is part of an instrumental adverbial. *Share out*, in the example *some small cooperative enterprises share out very well*, is defined as ,earn or produce shares' in W3. The VPC is perhaps partly explained by assuming an underlying ,give out shares'. At any rate, the formation is isolated except for *stub out*. *Share* (£ 100) is probably not analysable as a denominal derivative. *Skin* (hide) ,remove skin or outer covering' (W3) is similar to the one-place verb *share out*, but can be explained by object transfer from *skin* (moose) ,take out' and a relator *from*. It would then fit the transformation in 3.3.2.2. If *stub* (cigarette) ,put out' is regarded as denominal, it would also belong in this group. But it may be analysed as a deverbal derivative ,put out by stubbing' from *stub* as in *stub one's toe* ,strike it against sth' (AL).

3.3.3. Denominal VPCs with UP

3.3.3.1. The number of denominal derivatives collocating with *up* is considerably larger than those collocating with *out*. There is a group of VPCs, parallel to deadjectival formations, where the noun from which the constructions are derived denotes the result of the action or process denoted by the VPC. Semantically they can thus be described by the formulas

⁵⁷ With object transfer from *inferior animals*.

⁵⁸ Here, in contrast to *winkle out*, the subject is compared to a *worm*.

BECOME + STATE and CAUSE + BE (or BECOME) + STATE. If we derive the VPCs from underlying sentences by means of transformations, we would have to postulate the following simplified rules.

For one-place verbs:

$$\textcircled{T 2} \quad \text{NP}_1 + \textit{become} + \text{NP}_2 \Rightarrow \text{NP}_1 + \text{NP}_2 + \textit{up}.$$

For two-place verbs:

$$\textcircled{T 3} \quad \left\{ \begin{array}{l} \text{NP}_1 + \textit{make} + \text{NP}_2 + \textit{into} + \text{NP}_3 \\ \text{NP}_1 + \textit{make} + \text{NP}_3 + \textit{out of} + \text{NP}_2 \end{array} \right\} \Rightarrow \\ \text{NP}_1 + \text{NP}_3 + \textit{up} + \text{NP}_2 .$$

The use of such transformations seems more justified than in 3.3.2.1. where we only had very few VPCs with *out*. Nevertheless, their use is still questionable here, since the process is fairly restricted, and we can list the derivatives which are in current use in English. We find (sth + Cause) *ball*, (people) *band*, (snow) *bank*, *bank* (fire), (sb⁵⁹) *buddy*, *bunch* (haycocks), (sb + Cause) *bundle*, *bundle* (clothes/children⁶⁰), *chart* (journey), *chip* (paving stone), (sb) *chum*, *cluster* (belongings), (snake) *coil* (itself), *coil* (rope), (students) *couple*, (sb + Cause) *crock*, (sb + Cause, leaves + Cause, dog) *curl*, (people) *file*, (people) *gang*⁶¹, (children) *group*, *heap* (stones/riches), *herd* (cattle/people), *hoard* (treasure), *hump*⁶² (back), (sb) *hunch*,

⁵⁹ Apparently only AE. The subject, if plural, normally refers to two people, as also in (sb) *pal*, (sb) *team*. The three nouns are basically relational, involving two variables *x* and *y*. If *x* appears as the subject of the sentence, *y* is preceded by *with* and may be regarded as a prepositional object of *buddy up*, *pal up*, *team up*. The construction *buddy up with* etc. could also be treated as a prepositional-phrasal verb. Cf. *band up (against)*, *gang up (on, against)* and also *even up*, *square up* as mentioned in Meyer (1970b: 147).

⁶⁰ Probably better 'make like a bundle'.

⁶¹ Probably only used as a prepositional-phrasal verb with *on*, *against*.

⁶² In AL, defined as 'make hump-shaped', which would involve *like*. See below.

(soldiers + Cause) *line*, *lump* (fields), *mash* (potatoes), *mate* (pigeons, lions), (life + Cause) *mess*, *mess* (peaches/plans/communications), *mock-up*⁶³ (sth), (sb⁶⁴, shoe) *pair*, (sb) *pal*, *parcel* (papers, tea), *partition* (room), *piece* (cake), (work) *pile*, *pile* (things, sand dunes), *pool* (money), *portion* (inheritance, land), (people) *queue*, *roll* (cloth, carpet, map/oneself), (sheets) *ruck*, *slice* (bread, cheese, loaf), (dancers) *square*, *stack* (dishes, books), (sb) *team*, (sth) *total*, *wad* (shirt), *whack* (profit). Comparison is involved in a few cases and the result of the process or action is not simply expressed by the noun but likened to the thing denoted by the noun. Instead of NP we therefore have underlying ,like + NP'. (Sb, people/sources) *clam* would thus represent ,become like a clam', but it could also be analysed as ,shut up like a clam' and would then go back to an underlying manner adverbial, like the VPCs in 3.3.2.3. (Sb) *tart* could be similarly analysed, either as ,become like a tart', or as ,dress up like a tart'. The slang formation (girl) *pod* ,swell in pregnancy' (PEN) is parallel — either ,become' or ,swell up like a pod'. (Sb) *spoon* is probably ,become like a spoon' in shape. Two-place verbs could be derived from ,make into something like NP', as *bundle* (children), *dice* (vegetables, meat) ,make into cubes like dice', *hump* (back of cat). In a number of VPCs discussed above, especially when the result of the action or process is a particular shape or form⁶⁵, an underlying sentence containing a prepositional phrase ,in + NP' may be postulated as in *coil*, *curl*, *file*, *heap*, *line*, *pile*, *queue*, *roll*, *slice*, *stack*, *square*. The choice of the preposition is thus determined by the nominal. The rule regarding shape

⁶³ Defined as ,make a mock-up of' in W3. This seems to be the only VPC derived from a noun containing a particle. The idiomatic noun *mock-up* ,wooden model', if analysable, must be derived from the attributive adjective *mock* ,not real or genuine' (AL).

⁶⁴ If the subject is a personal pronoun and no prepositional phrase (*with* NP) is present, as in *they paired up at the party*, it necessarily denotes two people, due to the component Two in *pair*. What was said above in connection with *buddy up* etc. also applies here.

⁶⁵ Cf. *string out* and *line out* in 3.3.2.1.

seems to have exceptions, when *in* can also be interpreted as 'inside' as in *ball*, *parcel*. When the result is a place, and the VPCs correspond to the semantic formula CAUSE + BE + LOC, we definitely have an underlying prepositional phrase ,*in* + NP' or ,*on* + NP', as in *box* (books, handkerchiefs), *cage* (lions), *case* (vase), *coop* (chickens/sb), *deck* (logs), *dish* (dinner), *hook* (dress, coat), *list* (scores), *pen* (sb⁶⁶) *post* (announcement), *rack*⁶⁷ (pool/balls/horse), *range* (dyes), *score* (runs, points/customers/remark), *side*⁶⁸ (book), *string* (lanterns), (sb) *tee*⁶⁹, *top*⁷⁰ (whisky, drink/glass/battery). (Sb) *bed* may be interpreted as a corresponding one-place verb with a deleted reflexive object, but could also be analysed as 'make one's bed'.

3.3.3.2. The component HAVE is found in several VPCs with *up*, where CAUSE is optional. The action or process denoted by the VPC establishes a HAVE-relation between the noun from which the VPC is derived and either the object (with two-place verbs), or the subject (with one-place verbs). Such verbs are traditionally called ornative verbs. In an under-

⁶⁶ According to one informant only used in participial form as an adjective, referring to several people.

⁶⁷ SOD and COD define the one-place verb *rack up* as 'fill up stable-rack with hay or straw', which goes back to a sentence where *rack* is the object. The purpose of this action leads to the two-place VPC *rack* (horse). This surface structure can also have another underlying sentence 'fasten (horse) up to a rack' (COD) which corresponds to the prepositional phrase ,*on* + NP'.

⁶⁸ Apparently from ,*on* the sides of a book' with object transfer. Cf. 'apply covers of cloth or other material to the boards of (as a book or case), after the backbone and corners have been affixed' (W3).

⁶⁹ With a deleted underlying object *golf ball*.

⁷⁰ In *top* (glass, battery) two arguments of the original four-place predicate ,*w* put *x* on *y* of *z*' are deleted, and the two-place verb, on the surface structure level only, contains *w*, *y* and *z*, with *w* as subject and *z* as object. In the one-place verb *top up* (*with oil*), which could also be regarded as a two-place verb containing a prepositional object, *w*, *x*, and *y* appear on the surface, with *w* as subject, and *x* as prepositional object. In W *top up* is defined as 'bring the level of a liquid in a receptacle to the top or required level'.

lying sentence CAUSE + HAVE could be represented by *give to*. But since *give* requires an animate object, we here prefer *provide with* which is not restricted in this way. If CAUSE is absent but HAVE and a feature Dynamic are present, we may use *get*⁷¹. We can propose the following transformations.

For one-place verbs:

$$\textcircled{\text{T 4}} \text{ NP}_1 + \textit{get} + \text{NP}_2 \Rightarrow \text{NP}_1 + \text{NP}_2 + \textit{up}.$$

For two-place verbs:

$$\textcircled{\text{T 5}} \text{ NP}_1 + \textit{provide} + \text{NP}_2 + \textit{with} + \text{NP}_3 \Rightarrow \\ \text{NP}_1 + \text{NP}_3 + \textit{up} + \text{NP}_2.$$

A number of VPCs conform to this pattern: *bomb* (aircraft), *bug* (room), *burrow* (field, ground), (condenser) *charge*, *clue* (sb), (girl) *colour*, (trousers, clothes + Cause) *crease*, (face) *crinkle*, *crinkle* (paper), *dope* (sb), *dose* (sb), *fence* (field, plot of ground), (window, fur parka) *frost*, (plane) *fuel*, *gas* (car — Deleted), *grease* (car, engine), (vegetables) *heart*, *heat* (meat), *hem* (dress), (propeller, wings of plane, window) *ice*, *ink* (printing press), *light* (streets, sky), *liquor* (sb — Deleted), *load* (ship, vehicle — Deleted), *loop* (curtains), *lumber* (room/mind), *page* (materials), *pep* (party, demonstration), *plate* (printing press), (peas) *pod*, *rock* (flowerbed), *saddle*⁷² (horse — Deleted), *sand* (cove), (book/pupil) *shape*, *shape* (notes),

⁷¹ *Get* is of course ambiguous with regard to the presence or absence of Cause. But as we have explicitly excluded Cause, no confusion may arise. Cf. the test for the distinction of the two verbs *get* by means of the imperative in Bendix (1966: 68 f.). Derivation with underlying 'provide with' is also mentioned in Bolinger (1971a: 174).

⁷² As with certain other VPCs involving concrete objects, this could also be derived from 'put a saddle on a horse'. It would then belong to the locative VPCs, going back to a prepositional phrase, such as *box up*, *hook up*, *pen up*, etc. The transformation would correspond to T 5, only *put* would replace *provide* and *on* or *in* would replace *with*. The HAVE-relation is naturally tied up with a locative BE-relation, and is sometimes expressed by it, as in Russian *u menja (est')*. Cf. Lipka (1971b: 227).

shoe (horse), *smell* (car), *smoke* (room), *spice* + Deg (meal/things), (glasses) *steam*, *steam* (window), *stock* (shop), *tool* (factory, industries – Deleted), *wire* (house).

3.3.3.3. The largest group of all denominal VPCs with either *out* or *up* are those derived from an underlying sentence with an adverbial complement of instrument. Several subgroups must be distinguished. Some VPCs can be explained by means of a transformation which closely resembles T 1 used in 3.3.2.2. In this case the underlying sentence itself contains a VPC with *up*. With many formations, however, such an analysis would seem unnatural, and they are best derived from a sentence with a simplex verb. This method is in line with the use of the transformations T 2 – T 5. On the whole it is more appropriate for VPCs with *up* than for those with *out*. This is probably the reason why no transformation for VPCs with *up* is given under the heading ‘derived verb-particle combinations’ in Fraser (1965: 124 ff.). A number of formations can be derived by:

$$\textcircled{\text{T 6}} \quad \text{NP}_1 + \text{V} + \textit{up} + \text{NP}_2 + \textit{with} + \text{NP}_3 \Rightarrow \\ \text{NP}_1 + \text{NP}_3 + \textit{up} + \text{NP}_2 .$$

Semantically they correspond to the formula CAUSE + BE + LOC. But here, in contrast to *box up*, *dish up*, *hook up* etc., LOC is denoted by the particle and not by the noun. Locative *up* is basically deictic and the meaning ‘higher’ involves various points of reference. In *he handed up the papers to John* we have a relation between *he*, *papers* and *John* which can be seen as a three-place predicate with the three NPs as arguments. *Hand* (papers) thus corresponds to the three-place verb *give*. The sentence contains the presupposition⁷³ that *John* is ‘higher’ than the subject of the sentence

⁷³ Cf. the use of ‘presuppositions’ in generative semantics, e.g. in Lakoff (1971), Fillmore (1969: 120-123), Kuroda (1969), and the postulation of ‘supposition-rules’ in Fillmore (1966). Note that in Fillmore’s example *When did you come to the shop?*, the ‘supposition’ concerns the speaker, not the subject of the sentence. Fillmore

he. If the goal of the action, e.g. *to John*, is not overtly expressed, the underlying three-place predicate appears as a two-place verb on the surface structure level. The particle *up* then functions as a kind of pro-form for the underlying directional phrase with the meaning 'to a higher place', as in *dredge up mud (to the surface)*, *shovel up coal (on a lorry)*. In locative VPCs *up* almost always⁷⁴ contains a feature Dynamic and thus involves change of place. With regard to an agent denoted by the subject of the sentence, the direction of this change can only be either 'towards' or 'away from', which can be represented by the feature \pm Proximate⁷⁵. In a number of VPCs containing verbs of motion — but not in those derived from instrumental adverbials — the feature \pm Proximate can become predominant, and the component 'higher' is lost completely. We shall return to this question later. In *pick (sth)*, +Proximate is always present. The instrumental derivative *hand (papers)* involves —Proximate, while *spoon (soup)* contains +Proximate. In most instrumental VPCs with *up* the relative position of the speaker and of the agent is irrelevant. These VPCs are therefore unmarked as to \pm Proximate. Thus the change of place to a higher point only concerns the object in *dredge (mud)*, *jack (car)*, *shovel (coal)*. The presupposition, that in *he handed up the papers to John*, *John* must be 'higher' than *he*, is mainly based on the fact that the sentence presupposes *he held the papers in his hand*, and that therefore *he* and *papers* are on the same level. The following VPCs have the semantic structure just described, and can therefore be derived by T 6 from a sentence where V is GET or TAKE: *dredge (mud)*, *jack (car)*, *hand (papers)*, *hook (old*

(1966: 221) sets up two categories of place deixis for English: 'proximal', near the speaker, and 'distal', away from the speaker. For the use of 'presupposition' in philosophy as opposed to linguistics cf. Garner (1971).

⁷⁴ *Buoy (raft/leaf/sb)* 'keep up' is one of the rare exceptions. But the one-place and two-place verb *buoy up* can also be dynamic. Cf. SOD, COD, W3. Cf. also *bolster up*, *buttress up*, *prop up*, *shore up*.

⁷⁵ Cf. 2.4.5., 2.6.5. and Coseriu's 'adlative' and 'ablative'.

boot), *lever* (car), *lock* (ship), *pump* (water), *reel* (fish), *scoop* (earth, rice/child), *sling* (barrel), *shovel* (coal), *spear* (litter) with an additional component *like* involving comparison, *spike* (paper), *sponge* (water, mess), *spoon* (soup), *swab* (water), *vacuum* (dust), which is derived from a clipped form of *vacuum-cleaner*. Another small group can also be derived by T 6 from an underlying sentence containing a VPC, viz. *KEEP UP*, *HOLD UP*, or *PROP UP*: *bolster* (sick man/cause, theory), *buttress* (buildings/argument), *prop* (patient), *shore* (wall, hedgerows/prices). However, the underlying sentence could also be said to contain *SUPPORT* and then T 6 would not apply. Figuratively used *ginger* (trade), *touch* (team of horses/memory), *whip* (mare) could be derived from *STIR UP* but also from *ROUSE* or *STIMULATE*. All three involve Deg. Many instrumental VPCs with *up* are probably best analysed as going back to a sentence with a simplex verb. We can set up a transformation

$$\textcircled{\text{T 7}} \text{ NP}_1 + \text{V} + \text{NP}_2 + \textit{with} + \text{NP}_3 \Rightarrow \\ \text{NP}_1 + \text{NP}_3 + \textit{up} + \text{NP}_2 .$$

In the largest group of VPCs which can be thus derived, V is best specified as *CLOSE*, but might occasionally be interpreted as the VPCs *FILL UP* or *SHUT UP*. These include *bank* (hole in dam), *board* (window), *bolt* (door), *brick* (window), *button* (coat), *cement* (crack, hole), *cork* (bottle/feelings), *glue* (envelope, parcel), *gum* (envelope), *hook* (clothing), *latch* (door — Deleted), *nail* (box, window), *paper* (crack), *plaster* (crack), *seal* (letter, drawer, doorway), *solder* (hole), *stitch* (rip, hole), *wall* (window). Three VPCs are similar, viz. figuratively used *bottle* (anger, emotion), *box* (sth), *tin* (meat, food). But since the noun denotes a container, *ENCLOSE IN* must be used and they can not therefore be derived by T 7. *ENCLOSE WITH* underlies *fence* (field, plot of ground), *rail* (gap, house) which can be derived by T 7. In a group of semantically related VPCs which can be derived by T 7, the symbol V represents *BLOCK*: *bank* (river), *dam* (river/feelings, elo-

quence), *gum* (motor, works/program), *plug* (leak, sink). Another large group goes back to a sentence where V stands for *ATTACH* or *FASTEN*⁷⁶, such as *chain* (dog), *harness* (horses), (sb) *hook*⁷⁷, *hook* (heater, gas, power line), *lace* (shoes), *leash* (dog), *loop* (curtain), *paste* (bills), *peg* (clothes), *pin* (notice/seam), *rope* (curtain), *screw* (door, cupboard/handle), *strap* (suitcase). The semantic feature +Together is also contained in another group which can be derived from an underlying sentence with *LINK* or *JOIN*, such as *dot* (two cities on map), *clip* (papers), *gum* (book, envelope), *manacle* (prisoners), *rake* (hay), *rope* (mountain climbers – Deleted), *solder* (joint/union), *wire* (flowers), *yoke* (cattle). The same feature +Together is present in a group of VPCs that go back to an underlying V *COVER*: *earth* (roots), *grease* (hands), *lather* (face, sb – Deleted), *mat* (bushes), *paint* (grate, house), *rope* (sb), *sand* (road), *tape* (switch, wire/sprain cases). *Litter* (room), *muck* (floor), *track* (floor) can also be regarded as falling under this heading, but are probably better analysed as being derived from *SOIL*, *DIRTY*. The verbs *MARK* or *RECORD* underlie *chalk* (score), *mark* + Deg (stock/features es), *notch* (score/victories), while *REMOVE* underlies *brush* (dust), *mop* (mess) and *REPAIR* or *MEND* underlies *patch* (jacket), *stitch* (trousers). A number of instrumental VPCs with *up* seem to be isolated, i.e. there is only one VPC that corresponds to one underlying verb as in *bolt* (shed, bicycle) ,lock', *crank* (engine) ,start', or ,start up', *eye* (chances/sb) ,size up', *fog*⁷⁸ (road), ,obscure', *hone* (knife) ,sharpen', *pump* (tire) ,inflate', *rein* (horse) ,pull up', *saw* (branch, beam) ,cut up', *sponge* (coat, dress) ,clean', *string* (sb) ,kill, hang', *touch* (picture, last act) ,improve'.

⁷⁶ Cf. Fillmore (1969: 127): „The act of tying things can lead to fastening things, and so an extension of the verb TIE to uses proper to a verb like FASTEN or SECURE has occurred“.

⁷⁷ With a deleted object ,something' and ,horse or other source of draft to a vehicle', W3.

⁷⁸ In *smoke fogged up the road* W3, which could also be interpreted as ,cover like smoke'. Normally only the participle is used in the sense ,covered with'.

3.3.3.4. Like the collocations with *out*, denominal VPCs with *up* can also be derived from an underlying adverbial complement of manner. Practically all of them go back to a sentence containing a verb of motion. The noun from which they are derived further specifies the kind of movement, which in all cases is upward directed. The underlying sentence can therefore be said to contain ,move up'. But this *move* in the VPCs under discussion does not normally contain CAUSE and is a one-place verb. Consequently, even those VPCs which go back to an adverbial complement ,with + NP^c cannot be derived by T 6, since it only applies to two-place VPCs. We may set up a special transformation where the other relator (cf. 3.3.2. 3.3.2.3.) commonly found in adverbial complements underlying VPCs with *up*, viz. *in*, is also incorporated:

$$\textcircled{\text{T 8}} \quad \text{NP}_1 + \textit{move} + \textit{up} + \left\{ \begin{array}{l} \textit{with} \\ \textit{in} \end{array} \right\} + \text{NP}_2 \Rightarrow \\ \text{NP}_1 + \text{NP}_2 + \textit{up} .$$

As already pointed out, the choice of the relator is mainly determined by the NP, and occasionally either (*with* or *in*) may be chosen as in (smoke) *puff*. Underlying ,with + NP^c is found in: (fire) *flame*⁷⁹, (bathwater, sea) *foam*, (beer) *froth*, (sb) *perk*, (smoke) *puff*, (eyebrows) *quirk*, (lorry) *rattle*. The only two-place verb in this group is apparently *rattle*⁸⁰ (anchor). Underlying ,in + NP^c is found in: (smoke, clouds) *billow*, (water) *bubble*, (sb) *circle*, (people, procession) *file*, (smoke) *puff*, (smoke/path) *spiral*, (dust) *whirl*. The two-place verb *scale* (marks, wages/import) probably goes back to ,on + NP^c. Some of these VPCs, especially when collocating with other nominals, may also be interpreted as ,begin to have NP^c, as (fire) *flame*, (soap) *foam*, (detergents/ animal with rabies) *froth*. Comparison and, thus, an underlying adverbial complement ,like + NP^c are involved in a few formations where

⁷⁹ Perhaps better derived from ,burn with a flame' as also in (fat) *flame* (W3), or from ,the flame (of the fire) moves up'.

⁸⁰ *Rattle* (sb) ,wake up' cannot be derived by T 8.

the underlying sentence does not always contain a VPC. In this case T 8 does not apply, neither does it when ,move' is not present. We find (houses) *balloon*⁸¹ ,grow', (sb) *bolt* ,move up', (dog) *bristle*⁸², (cock) *bristle* (crest) both ,raise', *doll* (oneself – Deleted/schoolhouse) ,dress up', (sb) *fire* ,flare up', *marshal* (men/knowledge) ,summon', (stools and benches) *mushroom* ,grow, appear', *scout* (clients) ,find', (tower) *taper* ,rise', *treasure* (sth) ,store'. A more complex underlying sentence involving comparison must be assumed for (tears/pity) *well*, viz. ,rise like water in a well'.

3.3.3.5. As with some collocations with *out*, certain denominal VPCs with *up* must be derived from sentences in which the noun functions as the object. A few items appear in both types of collocation, such as *piece* and *stub*. We find (sb) *cash* ,pay', (sb) *gear* + Deg ,change', *gear* + Deg (production) ,increase', *grade* + Deg (cattle) ,improve', *hem* (dress) ,raise', *piece* (cup/story) ,join', *size* (area) ,estimate', (train/heart) *speed* + Deg, *speed* + Deg (engine/production) ,increase', (sb) *tank*⁸³ ,fill', *track* (wheel) ,measure and adjust the track of vehicle wheels' (PEN). *Limber* (gun – Deleted) ,fasten gun to limber' and *rock* (flower-bed) ,put rocks in' are further isolated cases of denominal VPCs. *Root* (weeds, tree) and *stub* (thornbushes), both ,dig or pull up with NP', are also isolated, but are not derived from underlying objects. They may be interpreted as going back to manner adverbials, but the relationship denoted by *with* between *weed*, *tree* and *root* and between *thornbush* and *stub* differs from those treated in 3.3.3.4.

⁸¹ In the example *houses in fashionable architectural styles ballooned up and expired in endless succession* from W3.

⁸² With a deleted object *hair*.

⁸³ With deleted object, but also with object connected by *on* as in figurative *tank up on beer*.

3.4. Deverbal Derivatives

3.4.1.1. In our analysis of VPCs with the methods of word-formation we have so far established that a number of collocations with *out* and *up* can be derived from adjectives and nouns. For those VPCs which cannot be regarded as deadjectival or denominal derivatives basically four remaining possibilities of interpretation exist. 1) The VPC is unanalysable, i.e. it cannot be related to other lexical items, or only partly so, and must therefore be considered an idiom. 2) The particle is redundant, i.e. the VPC and the simplex verb can be used interchangeably without a noticeable difference in meaning. In this case informants often disagree on whether the VPC is used or not, and dictionaries mention ‚often with *out*‘ and ‚often with *up*‘. American English in many cases seems to prefer the VPC where British English uses the simplex verb. 3) The particle functions as an adverb, i.e. the VPC can be substituted by the respective verb plus an adverbial complement. This applies to all VPCs originating by prepositional phrase reduction (cf. 1.3.7.), such as *she took the book out (of her purse)*, *she brought the dinner up (to his room)*, especially those which involve verbs of motion and a directional adverbial as in *the ship sailed out (of the harbour)*, *he climbed up (the mountain)*. The adverbial complement is either the prepositional phrase or an adverb such as *outside*, *upstairs*, *upwards*. If the locative adverbial does not contain the feature Dynamic it is then non-directional, as in *they dine out*, *they sleep out*. The particle functioning as an adverbial complement may also have a perfective value with the meaning ‚all off, completely, to the end‘, as in *copy out a letter*, *sit out a speech*, *eat up one's dinner*, *burn up logs*, but also other meanings such as ‚for some time‘ in *he helps out*, ‚aloud‘ in *read out a letter*, ‚not thoroughly‘ in *practise up a piece for the concert*. 4) The fourth possibility of interpretation is that the VPC is regarded as a deverbal derivative which goes back to a sentence containing an adverbial complement of manner ‚by VPing‘, as in *beat up eggs* ‚mix/by beating‘, *blow out a candle*

,extinguish/by blowing'. We have seen in the discussion of *comb out* etc. (cf. 3.3.2.2.) that VPCs with an underlying instrumental adverbial can also be regarded as deverbal derivatives. However, in the cases we shall now consider, the complement is not an adverbial of instrument, but of manner.

3.4.1.2. We have seen in 3.2. that in VPCs which can be analysed as deadjectival derivatives the adjective denotes a state which is the result of the action or process denoted by the VPC. Similarly, in certain denominal derivatives (cf. 3.3.2.1. and 3.3.3.1.) the noun denotes the result of the action or process. In denominal and deverbal derivatives with an underlying adverbial complement of instrument or manner, the basis of the derivation does not denote the resulting state, position, or place. We can argue that if the result is assumed to be overtly expressed at all, it must then be located in the particle. Purely locative VPCs with *out* and *up* which involve ,move' (and an additional feature Cause in two-place verbs) support this assumption. Derivation from an underlying sentence which already contains the particle (cf. esp. T 1) also points in this direction. The hypothesis is further strengthened by the existence of verbal constructions in English, as in *he slept himself sober, he pushed the door open, he drained the tank dry*, where the adjective denotes the result of the action denoted by the verb. Syntactically the constructions must be regarded as containing embedded copula sentences (*he is sober, the door is open, the tank is dry*) parallel to constructions with a nominal predicate complement, such as *they elected John president*. The similarities between such verb-adjective constructions and the VPCs have been repeatedly observed⁸⁴. Fraser (1965) points out that constructions such as *blow open, blow shut, let loose, make clear, strip naked, whisk open* appear in the same pattern as the VPCs. But he also mentions

⁸⁴ Cf. Anthony (1953: 86), Fraser (1965: 82 ff.), Legum (1968: 55 ff.), Bolinger (MS: 18 f.). Also in a paper by A. P. Cowie, *The status of the ,phrasal verb' as a grammatical category* read at the autumn meeting 1968 of the Linguistics Association of Great Britain at Colchester.

that their number is quite restricted⁸⁵. He treats „the *cut short* cases like the figurative verb-particle combinations“ (84). *Short* in *cut short* must be regarded as an adverb in many cases, as also in *stop short*. The same holds for *dead* in *stop dead*. However, as Legum (1968: 57) has demonstrated, in comparing *John cut short his lecture* and *John chopped up his lecture* — which syntactically behave exactly alike — it can take degree adverbs and comparatives and is therefore an adjective in this sentence. In all the verb-adjective constructions mentioned, the adjective denotes the result of the action denoted by the verb. A parallel construction is found in German with certain separable verbs which correspond to the English VPCs, such as *AUFbinden* (*schrauben*), *ZUbinden* (*schrauben*), *LOSbinden* (*schrauben*), *FESTbinden* (*schrauben*), *TOTschlagen* (*saufen*), *VOLLsaufen*. The non-verbal constituent of the construction is either a particle or an adjective, but syntactically they behave alike and they can all be analysed as ‚durch Binden (Schrauben, Schlagen, Saufen) AUF-, ZU-, LOS-, FEST-, TOT-, VOLL-(machen)‘⁸⁶. A final argument for the assumption that the particle in certain VPCs can be regarded as expressing the result may be drawn from the existence of zero-derived verbs based on precisely those particles, such as *to down, out, up*. However, all three are limited to colloquial

⁸⁵ Cf. Jespersen (MEG III: 18.1.-18.3.). Poutsma (1926) apparently does not mention the construction, but treats *cut short, halt short, stop short, stop dead* as verb-adverb constructions (642 f.). Legum (1968: 56) only gives *cut short, blast open, blow shut* and *fling open*. Bolinger (MS: 18 f.) mentions that there are a few adjectives which behave like particles, viz. *open, short, loose, and free* as in *cut (push, rake) open, cut short, pry (shake, wrestle, cast) loose, let free*. *Clear* is added in Bolinger (1971a: 37 f.) as in *blow (harrow, sift) clear*.

⁸⁶ Cf. the analysis of (*Garten*) *umzäunen*, (*Brücke*) *überdachen*, (*Berg*) *untertunneln* as derived from *Zaun um den Garten (bauen)* etc. in Lerot (1970: 27 f.) where it is stated: „das Verb der Tiefenstruktur besitzt das Merkmal [kaus] und braucht lexikalisch nicht spezifiziert zu werden“ (28). This corresponds to Lakoff's (1970: 42) „causative pro-verb“.

use⁸⁷, and while *down* and *out* are only two-place verbs containing Cause, *up* is only used as a one-place verb.

3.4.1.3. Generally speaking, we can say in accordance with the title of a paper on the ‚phrasal verb‘ by Bolinger (MS), that the VPC is „a case of divided allegiance“. He points out that „the particle belongs potentially as much with the object of the verb as with the verb proper“ (19), and that therefore we can analyse *he chopped down the tree* both ways, either as ‚he downed the tree by chopping‘ or ‚he chopped the tree until it was down‘. The first analysis yields an underlying sentence with a zero-derived verb *down*∅ and a manner adverbial containing the verbal constituent of the VPC ‚he down(∅)ed the tree/by chopping‘. In the other alternative, the particle functions as an adjective and denotes the result of the action ‚he chopped the tree/until it was down‘⁸⁸. The verb-adjective construction in *he licked the plate clean* admits of an identical analysis ‚he cleaned the plate/by licking‘ and ‚he licked the plate/until it was clean‘. From the point of view of word-formation, the determinatum in the first analysis is the zero-morpheme (*down/∅*, *clean/∅*) and the VPC is derived from the particle (or adjective) and, at the same time, from the verb which is contained in a manner adverbial in the underlying sentence. In the second case, we have no derivative at all, since the verb (*chop*, *lick*) is itself the determinatum, which is only further modified by the particle or adjective denoting the result of the action. As Bolinger (MS: 19) shows, when „empty factitives like *get* and *make*“ are used, the two functions of the particle, and also those of the adjective in verb-adjective constructions, are better distinguished and „the two affinities are kept fairly clear“. When the particle or adjective directly follows the verb, both belong together; when it is separated from the verb by a

⁸⁷ Cf. Poutsma (1926: 705).

⁸⁸ British informants reject both analyses. They would replace the zero-derivative *down*∅ by *fell* and *chopped the tree* by *chopped at the tree*. However, they agree to this type of analysis for *he licked the plate clean*. Cf. Bolinger (1971a: 70, 93-95).

noun, it denotes a „resultant condition“. Some of Bolinger's examples will demonstrate the distinction:

He's getting out a paper ‚publishing‘ v.s.

We'd better get this paper out ‚issued‘; and

They made clear their intentions ‚clarified‘ v.s.

They made their intentions clear ‚unmistakable‘.

In many cases the twofold analysis applied to *he chopped down the tree* by Bolinger is not possible. The reason for this may either be the verb or the particle. If a conclusive⁸⁹ verb denoting an action that is confined to a single moment is present in the VPC, an analysis such as ‚he chopped the tree/ until it was down‘ is excluded. Since *chop* denotes a repeated action, the collocation with *until it was down* is possible. But since *knock somebody down* usually implies ‚with one blow‘, we cannot analyse *John knocked him down* as ‚*John knocked him until he was down‘. In the similar German example *totschlagen*, the verb *schlagen* can be either conclusive or repetitive. If it is repetitive, *er schlug ihn tot* can be analysed as ‚er schlug ihn/bis er tot war‘; if it is conclusive and implies ‚einen Schlag geben‘, this analysis is excluded. The particle may be responsible when an analysis of the type ‚he downed the tree/by chopping‘ seems infeasible. This is the case with *up*, which does not allow zero-derivation of a two-place verb. However, to interpret it as a deverbal derivative from an underlying manner adverbial (*by chopping*) is still possible, if another VPC with *up* (e.g. *get up*, *wake up*) or a simplex verb (e.g. *mix* in *beat up eggs* or *extinguish* in *blow out a candle*) is taken into consideration. Thus *John knocked him up* can be analysed as ‚John woke him up/by knocking‘. The resultative interpretation ‚*John knocked him/until he was up‘ is excluded.

⁸⁹ Cf. Jespersen (1924: 273, 287 f.; MEG: 7.6.1.; 8.1.2.). There is no English equivalent to the German term ‚punktuell Verb‘. Jespersen's ‚conclusive verb‘ includes verbs denoting an action confined to a single moment as well as verbs that imply a final aim. The best rendering of ‚punktuell‘ is probably ‚momentary‘. Cf. Fillmore (1969: 112), where *sleep* is referred to as a ‚continuative‘ verb, while *wake up* is said to be ‚momentary‘. Some momentary verbs can be used iteratively.

ed for two reasons. For one thing, the verb *knock* in this case is not a two-place verb with the object *him*, but contains a deleted prepositional phrase *at the door*. The other reason, which is of greater relevancy for the analysis of VPCs, is tied up with the particle. Apart from purely locative VPCs and some other uses, the particle is not normally used as a predicative adjective to denote the state resulting from the action or process involved. Thus *John knocked him up* will have to be analysed as ‚John knocked/until he was *awake*‘. This analysis will then admit conclusions about the semantic content of the particle in a certain VPC. In many cases only an analysis of the first type (‚he downed the tree/*by chopping*‘) will seem natural, either with an underlying zero-morpheme, a VPC, or a simplex verb. Such VPCs, besides being zero-derivatives, must also be regarded as deverbal derivatives.

3.4.2. Deverbal VPCs with OUT

3.4.2.1. In a considerable number of VPCs with *out* the verbal constituent of the construction is not the determinatum, but goes back to an underlying adverbial complement of manner ‚*by Ving*‘. The main verb (V_1) of the underlying sentence is deleted in the derivation of the VPCs, which are therefore zero-derivatives, as well as being deverbal derivatives. The main verb may itself be a VPC, viz. *get out*, but in most cases it is a simplex verb. We can postulate the following simplified transformation:

$$\textcircled{T} 9 \quad NP_1 + V_1 (+ out) + NP_2 + by + V_{2ing} \Rightarrow \\ NP_1 + V_2 + out + NP_2 .$$

By far the largest group of deverbal VPCs with *out* go back to an underlying sentence which contains the empty factitive *get*, and thus the VPC *GET OUT*. With the exception of certain formations such as *buy* (sb), *catch* (batsman), *count* (boxer), etc., the particle usually has a locative meaning, and the syntactic object denotes concrete physical objects. Instead

of the VPC *get out*, the simplex verb *REMOVE* could also be used. The place from which the thing is removed (cf. 3.2.4.4.) may be overtly expressed (as in *beat the dust out of the carpet*), but it is not in those VPCs which originate by prepositional phrase reduction. In some cases like *cough* (sth), the possibility of expressing the place seems to be excluded. We find *beat* (dust), *bite* (tongue), *bowl* (batsman), *burn*⁹⁰ (sb, enemy), *buy* (sb), *catch*⁹¹ (batsman), *clip* (sth), *conjure* (rabbit), *cough* (sth), *count* (boxer/sb), *crush* (juice), *cut* (picture), *dig* (fox/sb), *edit* (clichés/film), *freeze*⁹² (sb), *grub* (plants/article), *hack* (branches, plaster), *hunt* (cat), *kick* (sb), *knock* (opponent, sb), *pinch* (side shoots), *press* (juice), *read* (sb), *ream* (defective part), *ride* (bull), *rinse* (tea-leaves), *rip* (lining), *saw* (piece from trunk), *scare* (chickens, partridge), *scrape* (ashes), *scratch* (eyes), *screen* (sb, the best educated), *soak* (dirt/poison), *spit* (pill), (machine) *spit* (hay), *suck* (poison/white of egg), *tip* (water), *tread* (juice), *vote* (sb), *wring* (water⁹³). The one-place verb (sb) *punch* ‚record the time of one’s stopping work or departure by punching a time clock‘ (W3) is isolated, and cannot be derived by T 9. The same holds for (suspended pigment) *settle* and (sb) *sell*⁹⁴. The two-place verb *starve* (garrison, sb) also involves *get out* and could therefore be derived by T 9. But it is probably better analysed with the help of a complex main verb ‚force to surrender‘. A component Remove is also present in several other VPCs. However, because of object transfer (cf. 3.2.4.) they cannot be derived from a sentence containing *remove*, but go back to an underlying-

⁹⁰ With deleted underlying object *house* or *dwelling*. If defined as ‚drive out by fire‘ (as in COD, AL, W3), the formation is not a deverbal derivative.

⁹¹ With deleted underlying object *ball*. In the following, we shall not specify every deleted object.

⁹² Cf. SOD ‚by chilling behaviour‘, AL by ‚cold behaviour‘. Although analysable, perhaps better regarded as idiomatic.

⁹³ Object transfer accounts for *wring* (clothes).

⁹⁴ Cf. Poutsma (1926: 61): „In *to sell out* (of the army) the verb to sell appears to stand for *to sell one’s commission*, *out* (of the army) denoting the result of the transaction“.

ing main verb *CLEAN* and *EMPTY*. An analysis with *CLEAN* is best applied to *rinse* (teapot/mouth), *scrape* (saucepan), *sweep* (kitchen), *wipe* (jug, bath). The main verb *EMPTY* underlies *bang* (cans), *knock* (pipe) and *tip* (pail).

3.4.2.2. None of the other deverbal VPCs with *out* go back to an underlying sentence containing *remove* or *get out* as a main verb. Apart from the non-dynamic locative VPC *lock* (sb/workmen) ‚keep out‘ and formations with an underlying main verb *utter*, they denote a change of state. As they are normally two-place verbs, they correspond to the semantic formula CAUSE + BECOME + STATE. In one of the largest groups, the state resulting from the action denoted by the VPC is one of finality, i.e. a previously existing state is brought to an end. In this semantic group the underlying sentences contain main verbs such as *EXTINGUISH*, *OBLITERATE*, *EXHAUST*, *DESTROY*. *EXTINGUISH* is found in *beat* (fire), *blow* (candle⁹⁵), *crush* (cigarette), *puff* (candle), *put*⁹⁶ (lights – Deleted), *rub* (cigarette), *shoot* (light), *snuff* (light/hopes, rebellion), *stamp* (fire/rebellion, disease), *trample* (fire), *tread* (fire). If the object is not something that is burning but something that has been written, the main verb in the underlying sentence is *OBLITERATE*, as in the VPCs *rub* (pencil marks/tracks/sb), *scrape* (word), *scratch* (name), *wipe* (name, what you have written/disgrace, insult/population). The main verb *EXHAUST* is found in *farm* (land, foothills), *mine* (source of supply, field), *row* (oneself), *wear* (shoes/patience), *write* (oneself). The verb *DESTROY* underlies *rub* (town), *shoot* (windows). A number of deverbal VPCs with *out* have the opposite meaning and go back to an underlying main verb *MAKE* or *PRODUCE*. The object is the result of the action. This can often be explained by the presence of an

⁹⁵ Also used as a one-place verb with a deleted agent, as in *the light blew out*. This is probably best explained as ‚subject transfer‘. Cf. 3.2.4.2. The same applies to *snuff out* (cf. W3 and the colloquial use as ‚die‘), *wear out*.

⁹⁶ Cf. the quotation in Poutsma (1926: 60): „I will lock up and put out“.

underlying component Remove and the process of object transfer. If we compare *cut* (picture) and *cut* (path) in *cut a picture out of a newspaper* and *cut out a path through the jungle* we see that in both cases something is removed. In the first example it is the object *picture* itself, while in the second case the object *path* is made by removing something else (e.g. branches or the like) which is not overtly expressed in the sentence. However, in some VPCs such as *grind* (tune/verses), *hatch* (plan) etc. Remove is not involved. An underlying sentence with a main verb *MAKE* or *PRODUCE* must be assumed for *blast* (ditch, new course for stream), *carve* (career), *chip* (model boat), *crank* (novel), *cut* (path/dress), *grind* (tune/verses), *hack* (path), *hammer* (scheme/tune/policy), *hatch* (plan, conspiracy), *hew* (career), *plough* (gullies), *pound* (tune/story), *scrape* (hole), *strike* (path), *study* (system), *sweat* (novel), *tap* (rhythm/telegraph message/paragraph), *think* (scheme, solution). Certain VPCs go back to an underlying main verb *FIND* such as *hunt* (old diary), *reckon* (how much we will need), *search* (friend), *smell* (secret, opposition, witch), (dog) *sniff* (survivors), *spy* (enemy positions), *thrash* (truth, solution), *wheedle* (information). A main verb *SETTLE* or *RESOLVE* must be assumed for *fight* (differences), *hammer* (differences), *iron* (misunderstandings), *shoot* (things), *talk* (problems, anxieties), *thrash* (problem, question), *worry* (answer). A number of other deverbal VPCs can also be derived, in principle, from an underlying sentence by means of T 9. However, since there are only one or two formations with each main verb the use of a transformation may be questionable. We find *beat* (gold), *hammer* (sth) both ,flatten', and the semantically similar *roll* (pastry, carpet), *shake* (sail, flag) both ,spread'. *Look* (old clothes) ,select' and similar *weigh* (butter, flour) ,separate' are also isolated, as are *feed* (animals) ,fatten', *sit* (skirt) ,stretch', *spy* (land) ,explore', *swear* (warrant) ,procure'. The following are isolated in a different way, although still recognizable as deverbal derivatives. *Drum* (sb, beggar) can be analysed as ,expel (as if) accompanied by drumming', while *ring* (Old Year) may be interpreted as ,announce or celebrate the end by ringing' or perhaps as ,accompany the end by ringing'. The

latter analysis is supported by *bow* (sb/oneself) ,bow low to sb as he leaves/bow as one goes out' (AL), which can be interpreted as ,accompany the exit by bowing'. In *sound* (sb) ,find out something by sounding somebody', the object of *find out* is different from the object of *sound out*. A final group of VPCs which all go back to an underlying sentence containing *UTTER* or *EXPRESS* cannot be derived by T 9. They are probably best explained as involving comparison. The manner in which the thing denoted by the object of the VPC is uttered or expressed, is likened to the action denoted by the verb. The formations can therefore be analysed as ,utter like Ving' or ,utter in a Ving manner'. We find *bark* (sth), *bellow* (drinking song, commands), *croak* (sth), *drone* (psalm), *fumble* (sentences), *gasp* (words), *grumble* (sth), *lisp* (sth), *roar* (order, drinking song), *scream* (curse), *snort* (reply), *spit* (curses, words), *stammer* (requests, words), *weep* (grief), *wheeze*⁹⁷ (words/tune), *whine* (requests). They also form a special group with regard to the state resulting from the action they denote. While with *beat* (fire), *blow* (candle) etc. we can say that the resulting state is ,not burning' or rather ,no longer burning', it is difficult to specify the resulting state of the *utter* group.

3.4.3. Deverbal VPCs with UP

3.4.3. The deverbal derivatives with *up* can be analysed in basically the same way as the deverbal collocations with *out*, and a transformation parallel to T 9 can be set up:

$$\textcircled{\text{T 10}} \quad \text{NP}_1 + \text{V}_1 (+ \textit{up}) + \text{NP}_2 + \textit{by} + \text{V}_2\textit{ing} \Rightarrow \\ \text{NP}_1 + \text{V}_2 + \textit{up} + \text{NP}_2 .$$

⁹⁷ Like *whine out*, this is perhaps better regarded as a denominal derivative from an adverbial complement of manner ,with + NP'. Cf. W3 ,utter with a sound of wheezing', AL ,utter with a whine'. Also *moan* (sth), *sob* (grief, excuse), *thunder* (denunciation).

However, there are some differences. The VPCs with *up* form a number of smaller groups with the same underlying main verb V_1 . A single large group, such as the VPCs with *out* originating by prepositional phrase reduction, or those with underlying *extinguish*, does not exist. Also in some cases, the underlying main verb V_1 has to be interpreted as a complex verb phrase such as *make into pieces* or *divide into pieces* as in *chop* (meat) etc.; *cause to appear* as in *conjure* (visions/spirits) etc.; *get in a favourable disposition* as in *chat* (girl, sb)⁹⁸. We also find some one-place verbs to which T10 obviously does not apply. They are derived from a sentence with an adverbial complement ,*by + Ving + NP*' in which the NP is deleted, such as (snowdrops, flowers) *pierce* ,come up', (sb, worker) *sign* ,enlist, join'. Only very few formations can be analysed as going back to an underlying VPC with *up*, such as *GET UP* as in *cough* (sth), *fish* (dead cat, ammunition), *peck* (crumbs), *puke* (dinner); *WAKE UP* as in (rooster) *crow* (barnyard), *knock* (sb), *tap* (sb); and *BREAK UP* as in *dig* (land), *plough* (ground), *scratch* (ground). Another group could perhaps also be analysed with *GET UP* or *TAKE UP*, but is probably better derived from a simplex main verb *REMOVE*, such as *dig* (tree), *dip* (water), *grub* (weeds), *hack* (paving-stone), *lick* (milk), *scratch* (bone), *suck* (moisture), *wipe* (spilt milk, mess). The result of the action is that the object is removed from a place. This could also be seen as a change of state which causes the object and the place to be separated or to be no longer together. The same semantic feature, -Together, is also found in another group of VPCs where the separation concerns a single object. The underlying main verb V_1 in this case is best interpreted as a complex verb phrase *MAKE INTO PIECES* or *DIVIDE INTO PIECES*, as in *chop* (meat), *hack* (paving-stone), *hew* (logs), *mince*

⁹⁸ Often, most semantic features of the underlying main verb, and thus of the VPC, may be already present in the simplex verb (as in *chop*). In other cases (cf. *chat*, *conjure*), the features are only contained in the entire collocation. The problem will be discussed in 4.2.4.

(meat, beef), *pound* (tablet), *saw* (beam, plank), *snip* (piece of cloth), *tear* (letter, sth). The feature -Together is also present in *prize* (lid), 'open'. Converting a thing into pieces is equivalent to destroying its structure. The shift from the preceding group of VPCs to those going back to a main verb *DESTROY* is therefore relatively small. We find *burn* (rubbish, school⁹⁹), (dog/machine) *chew* (slipper/logs), *crush* (ice, stone, paper, bone), (lorries) *knead*¹⁰⁰ (ground), *melt* (candlesticks, bells¹⁰¹), *scuff* (shoes), *tread* (earth, grass). In contrast to the groups just discussed, a semantic feature +Together must be present in a group of VPCs derived from such main verbs as *GATHER*, *MIX*, *COVER*, *CLOSE*, *ENCLOSE*, *BLOCK*, *SECURE* and the phrase *MAKE SMALLER*. In some VPCs (e.g. *scrape up*), the particle *up* can even be replaced by *together* without a change of meaning. *GATHER* is found in *bind* (hair/books), *round*¹⁰² (cattle/tourists, sb), *scrape* (money), *scratch* (few pounds), *sweep* (dust, dead leaves); *MIX* in *beat* (eggs), *blend* (paints), *shake* (medicine, mixture/bottle¹⁰³); *COVER* in *bind* (wound), *build* (area), the one-place verb (river) *freeze*, *grow* (sth), *hammer* (crack, hole); *CLOSE* in *fasten* (box), *lock* (door, house - Deleted), *tie* (parcel); *ENCLOSE* in *lock* (sb), *sew* (money, corpse); *SECURE* in *fasten* (dog), *lock* (jewellery); *BLOCK* in *build* (door, window), the one-place verb (pipes) *freeze*, *lock* (capital), *tie* (capital); and *MAKE SMALLER* in *fold* (newspaper), *twist* (paper). A complex underlying main verb *CAUSE TO APPEAR* is best assumed

⁹⁹ Also with deleted agent. Cf. Katz (1966: 160).

¹⁰⁰ Although one cannot say that the ground is destroyed, but rather the structure of its surface, the VPC probably belongs here, as it is even less acceptable to say that the ground is divided into pieces. *Tread up* is similar.

¹⁰¹ Some informants only accept *melt down* (bells), and propose the collocations *melt up* (metal, gold, silver) and the one-place verb (ice, ice-cream) *melt up*. The latter are not deverbal derivatives, as the particle functions as an adverbial with the meaning 'completely'.

¹⁰² From 'by riding round'. This is basically a deadverbial derivative. Cf. 3.2.3.

¹⁰³ With object transfer from the content to the container.

for the VPCs *conjure* (visions/spirits), *dig* (statue), *plough* (arrowhead/secrets), *rake* (old diary/accusations, past), *scare* (game). The complex verb phrase *GET IN A FAVOURABLE DISPOSITION* must be assumed to underly *chat* (girl, policeman, sb), and perhaps also *talk* (loans) as in the quotation in W3: „organizing crews to ring doorbells and talk up loans“, if an object transfer is involved. However, *talk up* may also be derived from a main verb *PRAISE* as in *cry* (sb), *talk* (a game), *write* (acting). In all of them the component Degree is present which is also found in some VPCs that go back to underlying *INCREASE* or *IMPROVE*, such as *blow* (fire), *paint* (house), *rake* (fire), *rub* (spoons, silver/one's Latin), *screw* (courage), *wind*¹⁰⁴ (watch), *write* (assets). The same feature Degree is found in other isolated VPCs which all denote an increase or improvement of some kind, such as *feed* (poor children) ‚fatten‘, *knit* (torn sleeve) ‚repair‘, *read* (subject) ‚study‘, *shake* (cushion) ‚restore to shape‘, *shake* (sb, radar crew) and *whip* (old mare/audience/emotion, interest) both ‚rouse‘ or ‚stir up‘. A small group of VPCs go back to an underlying main verb *MAKE* or *PRODUCE* such as *dream* (story, plan), *knit* (mittens), *pound* (prescription), *reckon* (bill), *think* (plan, excuse, story, caption). The main verb *SUMMON* underlies *drum* (sb/sentiment, support), *shout* (sb, clerk), *whistle* (sb/taxi). The rest of the deverbal VPCs with *up* are isolated, such as *reckon* (sb/chances) and *weigh* (consequences) both ‚judge‘, *look* (train) ‚search‘, *reckon* (cost) ‚find out‘, *shoot* (crowd/town) ‚terrorize‘.

¹⁰⁴ With object transfer from ‚increase the tightness of spring‘. Cf. PEN ‚tighten spring of (watch etc.) by winding‘ and COD ‚tighten coiling or coiled spring... *wind up strings of fiddle*‘. Similarly in *screw up*, cf. SOD s.v. *screw* v. II.2. ‚increase the tension or pitch (of a musical string) by winding up the screws or keys‘.

3.5. Problems of Productivity

3.5.1. The postulation of the transformations T 1 – T 10 in the preceding paragraphs could perhaps be interpreted as the expression of a belief in their unrestricted productivity. We do not subscribe to such a view. If various remarks about the justification of such transformational rules (cf. 3.3.3.1.) have not made this clear, the following discussion will be helpful in defining our position. We have already mentioned that in principle we accept Weinreich's notion of a 'complex dictionary' (cf. 3.1.1.), and the fact that we actually try to describe all the commonly used VPCs with *out* and *up* further proves that we believe in certain restrictions. On the other hand, that lexis as opposed to grammar is more an open set than a closed system is undeniable¹⁰⁵. Change and creativity are most obvious in this linguistic domain. The transformations T 1 – T 10 have been set up to account for this aspect of language, and are meant to predict the creation of new formations. The apparent contradiction between productivity and restrictions in natural languages may be solved with the help of the notions of competence and performance and the corresponding dichotomy of grammaticality and acceptability¹⁰⁶. One may argue, as is often done, that the acceptability or familiarity of certain complex lexical items is merely a matter of performance, that grammar or even linguistics in general is only concerned with competence, and that therefore „the unacceptability of compounds because of their unfamiliarity is no reason for not generating them“¹⁰⁷. However, the distinction between competence and performance is not at all as clear-cut as is usually

¹⁰⁵ Cf. 2.8.1.-2.8.3., Halliday (1961: 247; 1966).

¹⁰⁶ Cf. Botha (1968: 126-151), and also the principle set up in Bierwisch (1967: 8): „A sentence is the less normal the more conditions outside of it have to be met for it to be acceptable“.

¹⁰⁷ Botha (1968: 149). Weinreich's implicit assumption that the knowledge about the familiarity of complex words belongs to competence is rejected by Botha (133). Cf. also Botha's (134) quotation of Spitzer's remarks concerning the influence of sociological factors on acceptability. In Fodor-Garrett (1966: cf. 157) 'competence' is used for the 'mechanism' underlying linguistic behaviour.

assumed. In our opinion, familiarity with specific lexical items, simplex as well as complex, is part of the linguistic competence of a speaker of a language. This is obvious in the case of a native speaker who has lived abroad for a considerable time and then returns to his home country. Although his purely grammatical competence may be perfectly well preserved, his lexicon will differ considerably from that of the other members of the speech community, in particular as regards the 'complex dictionary'. Naturally, idiolectal variation always exists, especially in the domain of lexis. Yet, an ideal speaker-hearer can give familiarity ratings to complex words and make judgements on their acceptability¹⁰⁸. This fact is probably best accounted for by Coseriu's¹⁰⁹ concept of 'norm'. On the level of lexical structure the norm – i.e. the normal realization of the functional system of a particular language – according to Coseriu¹¹⁰ decides on various aspects of vocabulary: the use of new formations (like the French adjective *notionnel*), the meaning of compounds and derivatives, the frequency of items (such as German *aufmachen*, *zumachen* vs. *öffnen*, *schließen*), the form of lexical clichés (i.e. collocations like *chemin de fer* and *voie ferrée*, *gravement malade* and *grièvement blessé*, but not the other way round). With regard to productivity in word-formation, we can say that the norm of a language selects the subset of acceptable formations from the larger set of systematically possible formations and excludes others¹¹¹.

Cf. also Fowler (1970: 26), where it is argued that „linguistic performance can best be explained as a product of a complex of competences working together, and not, as with Chomsky, by one undifferentiated and terminologically unqualified ‚competence“.

¹⁰⁸ We are fully aware of the practical difficulties of ascertaining judgements on acceptability. Cf. Quirk (1966), Quirk-Svartvik (1966). In the field of word-formation, Bunting (1969) has carried out a very interesting experiment, testing the acceptability of German derivatives in *-ung* generated by a computer.

¹⁰⁹ Cf. Coseriu (1962: 11-113).

¹¹⁰ Coseriu (1966: 175-217, esp. 206 ff.).

¹¹¹ An example of the restriction of agent-noun derivation with *-er* in German is discussed in Lipka (1971a). For restrictions with English *-er*-derivatives cf. Strang (1970).

The norm thus determines the extent of the ‚complex dictionary‘. We may therefore distinguish two levels of competence. ‚Competence₁‘ could be said to refer to the grammatical competence of a speaker, i.e. it would encompass the rule-governed activity concerning transformations and phonological realizations of linguistic structures. This level would correspond to Coseriu’s concept of ‚system‘. ‚Competence₂‘ is equivalent to that part of Coseriu’s ‚norm‘ which concerns lexical structure. It will include the idiom-list, familiarity ratings, and judgements about acceptability. That familiarity ratings are a linguistic reality is proved by poetic language and the language of advertising. Both draw heavily on unfamiliarity for achieving certain effects. Idioms obviously form a closed class within a language. On the other hand, many VPCs with *out* and *up* which are generated by T 1 – T 10 will be regarded as acceptable in a specific context if they are not affected by lexicalization, although they will receive a familiarity rating of zero. Others are unacceptable, or are restricted in their occurrence, e.g., restricted to the use as adjectives in participial form.

3.5.2. The productivity of VPCs has been judged differently by various scholars. Bolinger (MS) points out that „the phrasal verb . . . is probably the most productive source of all, not only for verbs but also for nouns“ (25), and cites the „names of new social phenomena: *sit-in*, *wade-in*, *love-in*, *lock-out*, *fallout*, *cook-out*“ (25). We shall deal with such nouns in 3.5.4.¹¹² He argues¹¹³ that „we find on the one hand an open-ended generative formula more or less like the open-ended formation of iterative verbs by adding the prefix *re-*. This is the more or less literal application of particles such as *up* and *down* which can freely attach to any verb of motion“ (26); and that at the other extreme there are phrases which „build up a partial resistance to being broken down“ (26). Also, according to Bolinger, „the use of *up* as a perfective“ is almost unrestricted. Fraser (1965: 47) quotes and discusses a

¹¹² Cf. Live (1965: 442, Fn 34): „Productivity is far higher in the nominal form than in the verb“.

¹¹³ Cf. also Bolinger (1971a: 101 f., 173-175).

statement by Whorf about the productivity of *up* meaning ‚completely, to a finish‘. Whorf claims that *up* can collocate with any initially accented verb of one or two syllables with the exception of four cryptotypes. Fraser observes that „there is a remarkably close relationship between the number of syllables of a verb, its stress, and its ability to be a part of a verb-particle construction“ (49), but gives counter-examples of verbs which do not belong to Whorf’s cryptotypes but still do not collocate with *up*, such as *worship*, *covet*, *bury*, *candy*, *can* (fruit), *chide*, *cancel* (49). We may further add *smoke* which does not admit **smoke up* (cigar, cigarette, pipe), while *drink up* and *eat up* are possible. Discussing the semantic character of verbs combining with particles, Fraser later mentions that „while we have *chase* (*hunt*, *track*, *trail*) *down*, there is no *follow down* verb-particle combination. We find *speak* (*talk*) *out* but no *utter out*“ and concludes „unfortunately there is no obvious way to determine whether or not a verb . . . will combine with a particle“ (62)¹¹⁴. Fraser’s opinion, unrevealing as it is, must needs be supported here. We can only establish certain tendencies and describe existing patterns, but the predictive power of such statements is fairly limited. Collocations with what Fraser calls ‚completive‘ *up* are subject to restrictions, as we have just seen. Bolinger’s remark about the productivity of the derivation of nouns from VPCs will be further considered in 3.5.4., but his statement about the literal use of particles and their combination with verbs of motion must be fully accepted. Prepositional phrase reduction with purely locative VPCs is certainly the most productive source for collocations with *out* and *up*, whether with one-place or two-place verbs. Apparently there are no restrictions on this process. For all other VPCs, basically two kinds of restrictions can be distinguished: morphological and semantic. With morphological restrictions, the two usually go together, i.e. an item which is mainly or exclusively used in a particular form, such as the participle *fed up* functioning as a predicative

¹¹⁴ Cf. Fraser (1966: 54).

adjective, is also semantically restricted, i.e. idiomatic. On the other hand, semantic restrictions are not necessarily tied up with morphological ones. Morphological restrictions will here be exemplified by participles functioning as adjectives, while the phenomenon of semantic restriction, or lexicalization, will be discussed in connection with nouns derived from VPCs and with collocations of particles and semantically empty ‚dummy‘ verbs, which in German have been termed ‚Funktionsverben‘. Nouns can, of course, be morphologically restricted also, when the corresponding VPC does not actually occur, as with a *dust-up*. A typical case of the combination of morphological and semantic restrictions is found in VPCs collocating exclusively with the pronoun *it*, having a specialized idiomatic meaning.

3.5.3. Participial adjectives¹¹⁵

3.5.3.1. As mentioned in 2.8.3., grammatical deficiencies are a characteristic feature of idioms. However, not all grammatically deficient items are necessarily idioms, as may be seen from the discussion of *bombed out*. According to some informants, the lexical item *bomb out* is exclusively used in participial form, either in the passive (*they were bombed out*) or as an attributive adjective (*a bombed-out school, town*). Other informants accept the VPC originating by prepositional phrase reduction from *they bomb people out (of their houses)*. If it is agreed that at least for a number of speakers the occurrence of the item is restricted to its participial form, we will have to assume that it is an idiom. This interpretation would be supported by a very explicit definition, such as ‚drive from home or building by reason of bomb damage‘ (PEN). ‚From home or building‘ and ‚by reason of bomb damage‘ are not explicitly expressed in *they were bombed out*. But if word-formation is regarded as a productive process, certain negligible semantic

¹¹⁵ Cf. Kennedy (1920: 50 f.).

features must be left out in order to recognize existing regularities¹¹⁶, and a definition like ‚drive out (of buildings, etc.) with bombs‘ (AL) is more appropriate. It is true that the place from which the object in a sentence underlying *bombed out* is removed (buildings, etc.), is no longer explicitly expressed after prepositional phrase reduction has taken place. However, the process is a regular one, and the item can be derived by T 1. Thus the item is not idiomatic in the way *pumped out* is, as in *he was completely pumped out* ‚exhausted‘. If the term idiomatic is taken in a very wide sense, then of course all passive constructions in which the agent, i.e. the subject of the corresponding active sentence, is deleted, are covered by this label. Modern English, as opposed to Old English or German, does not distinguish the ‚passive of being‘ and the ‚passive of becoming‘¹¹⁷. The collocation *bombed out* in the passive construction *they were bombed out* therefore represents both a participle and a participial adjective. Functioning as a predicative adjective, the collocation denotes a certain state. In the case discussed here the language does not have a VPC used in the active voice which denotes the action or process of which this state is the result. That passive constructions do not always have a corresponding active is also found with simplex verbs, as in *he was born in London*. According to British informants, the participle *bombed out* functioning as a predicative adjective only, collocates with nouns denoting human beings. This restriction does not hold for attributive use. We shall distinguish the two functions with the same simple technique adopted for the distinction of collocations in one-place and two-place verbs. Nominals collocating with predicatively used participles precede it, and are enclosed in brackets, such as: (people) *bombed out*. Nominals collocating with attributively used participles follow it: *bombed-out*¹¹⁸ (school,

¹¹⁶ Cf. 2.8.2., 3.1.1.

¹¹⁷ Cf. Jespersen MEG IV: 8.1.2., and the German distinction between ‚Zustandspassiv‘ and ‚Vorgangspassiv‘ (*Die Tür ist geschlossen/Die Tür wird geschlossen*).

¹¹⁸ Attributively used collocations are normally spelled with a

town). When functioning as an attributive adjective, *bombed-out* is not derivable from ‚drive out with bombs‘, involving prepositional phrase reduction, but rather from ‚destroy with bombs‘ or ‚destroy by bombing‘ (cf. 3.4.2.2.). Note that for reasons of rhythm the particle is usually not stressed in attributively used participial adjectives. In both types of derived adjectives, attributive and predicative, the fact that the denoted state is the result of a preceding action or process is characterized by the morpheme *-ed*. Tense in the underlying sentence is thus overtly expressed¹¹⁹. In the following discussion only those participial adjectives are treated for which at least one dictionary or informant suggests it is only or mainly used in this form.

3.5.3.2. Participial adjectives with OUT

3.5.3.2. Like (people) *bombed out*, the predicative adjectives (people) *burnt out*¹²⁰ and (people) *flooded out* are derivable by prepositional phrase reduction. All three are found in collocations with nominals denoting human beings (such as *we*, *they*, *family*, *people*) and have the meaning ‚be driven out of a place‘. At least in American English, the predicative *burnt out* also occurs with nominals having the semantic feature –Human¹²¹. The attributive use of *burnt-out* (vehicles), like that of

hyphen. We follow this convention throughout and thus further distinguish attributive and predicative adjectives.

¹¹⁹ Cf. Lipka (1971 b: 219 f., 223).

¹²⁰ For variation of spellings in *-ed* or *-t* with *burn* and other verbs cf. Quirk (1970), where tests are described which showed a preference for *-t* forms of participles when ‚non-durative aspect‘ was involved. These findings are confirmed by a quotation from the OBSERVER 28. 9. 69/11: „The theory that wars are caused by pent-up aggressive drives which can find no other outlet has no foundation either in history or psychology“. *Pen up* certainly is a conclusive (= non-durative) VPC. The zero-derived verb *pen* is not included in Quirk’s tests. However, another example from our material seems to contradict the theory and also the general British preference for *-t* forms: „Columns of smoke rose over the town,

bombed-out, seems to impose a collocation restriction with –Human. *Out* in this collocation apparently involves a semantic feature +Inside¹²², as is suggested by the definition of *burn out* in AL as ‚destroy (the inside of a building, ship, etc.) by fire‘. The other dictionaries do not support this assumption, with the exception of COD ‚consume contents of‘. *Out* might also be said to have an intensifying or perfective function in *burnt-out*. In the participial adjective (hotel, cinema, place) *packed out*, the particle obviously has this function. The remaining adjectives with *out* are not only morphologically isolated but are also idiomatic, and form one group with the meaning ‚exhausted‘: (sb) *drained out*, (sb) *frazzled out*, (horse/country/theory) *played out*, (sb) *pumped out*, (sb) *washed out*¹²³, (sb) *worn out*. A final item, functioning as an attributive or predicative adjective, is further isolated in that it only occurs together with an additional item *long*, as in *long drawn-out* (discussion/agony, death), (battle) *long drawn out*. The collocation thus consists of three constituents which may be separated by other elements (cf. 2.7.2.), as in:

„Mr. Peter Cartwright, a Guildford art student, said that education at Guildford was dying, a long, sordid, drawn-out death.“ (GUARDIAN 11. 4. 69/20).

The collocation is mainly used attributively and the head-noun it modifies often is a synonym of *death*, as in:

„Mr. William Hutchison [sic!] ... said yesterday that extra money ought to be provided by the Government, to put an end to this long drawn out agony.“ (OBSERVER 1. 6. 69/1).

Other participial collocations with *out* which are frequently used as adjectives are not considered here, since a corresponding VPC also exists.

where the streets are littered with burned-out vehicles“ (THE GUARDIAN 11. 4. 69/1).

¹²¹ Cf. W3 *the store was completely burnt out*.

¹²² Cf. 2.4.3. and 3.2.4.4.

¹²³ Also ‚pale and tired‘ (AL), ‚faded in color; eroded‘ (W3).

3.5.3.3. Participial adjectives with UP

3.5.3.3. The above adjectives with *out* all seem to contain an element of negative evaluation. This semantic component is more evident in the larger number of participial adjectives with *up*. We may therefore postulate a semantic feature +Negative Evaluation¹²⁴ (abbreviated as +NegEv), which is usually present in morphologically isolated participial adjectives. The only exceptions seem to be: *built-up* (area), (area) *built up*, (sb) *posted up*¹²⁵, (sb) *wrapped up in* ,absorbed by, devoted to'. Another small group with the meaning ,EXCITED, TENSE' may perhaps also be regarded as not containing negative judgement, viz. (sb) *knotted*, (sb) *pent up*, (sb, athlete) *strung up*, (sb/expectations) *wound up*, *wrought-up* (nerves/state). All the other participial adjectives with *up* which have no corresponding VPC used in the active voice, seem to contain the feature +NegEv. We can establish several groups which are largely parallel to the groups of denominal and deverbal VPCs set up in 3.3.3.2., 3.3.3.3., and 3.4.3. However, they do not normally involve the same verbs, and if they do, the items differ with regard to meaning and collocation restrictions, as in *ink up* (printing press, duplicating machine) ,provide with' and (fingers) *inked up* ,covered with, dirty'. The largest group of participial adjectives has the meaning ,BLOCKED, CLOSED', as in (drainpipe, nose, eyes) *bunged up*¹²⁶, (waterpipe/pan)

¹²⁴ We do not use -Eval(uation), because the minus would then be different in kind from the \pm used as a symbol with features. For negative evaluation in German deadjectival verbs cf. Marchand (1969b: 157-159). Cf. also the ,attitudinal plus' and ,attitudinal minus' in Bolinger (1968: 17), and Poldauf (1968). Evaluation in word-formation is discussed in Lipka (1971b: 231 f.). Cf. the neutral *riechen* vs. *stinken* and *duften* in German. In English, the verb *neglect* (as opposed to *omit*) contains +NegEv, while the adjective *negligible* does not. Cf. Fillmore (1969: 122) for *criticize*.

¹²⁵ If only predicative use and the construction *keep sb. posted up* ,informed' are accepted.

¹²⁶ As in the treatment of deadjectival, denominal, and deverbal derivatives, we will omit *up* in the following examples, since it is evident from the heading and no confusion can arise.

caked, (room) *chocked*¹²⁷, (room, chimney, drain) *choked*, (machinery/mind) *clogged*, (people, village) *flooded*, (streets/works, engine/communications channels) *jammed*, (room/mind) *lumbered*, (path, harbour, well) *sanded*, (traffic) *snarled*, (people, village) *snowed*, (nose) *stuffed*. A corresponding VPC in the active voice is not used for the extralinguistic reason that an agent cannot be named in these cases. Moreover, what leads to the state denoted by the participial adjective is not normally viewed as a single process with a specific result. Similar to the above group is (bird, dog/sb) *caged* ,ENCLOSED'. A related group of participial adjectives has the meaning ,MIXED', which, together with +NegEv, yields ,CONFUSED' or ,MUDDLED', as in (sth) *balled*, (sth) *fuddled*, (string) *knotted*, (sb) *mixed*, and ,CRUSHED' or ,JOINED' which also involves the feature +Together, such as (people) *crammed*, (people) *cramped*, (hair) *crimped*, (sb) *crumpled*, (people) *crunched*, (clothes) *mangled*, (wool, cardigan) *matted*, (people) *tied* ,married'. The feature +Together is also contained in another group of adjectives with the meaning ,COVERED' or ,FILLED' (when +Inside is present), viz. *built-up* (area), (area) *built up*, (river) *foamed*, (road, countryside) *fogged*¹²⁸, (room) *fumed*, (hands) *glued*, (hands) *greased*, (fingers) *inked*, (horse) *lathered*, (road) *rutted*, (table) *scratched*. The items are practically all denominal¹²⁹ derivatives (cf. 3.3.3.2.). The non-existence of a corresponding actively used VPC is due to the fact that the state is not viewed as caused by an agent. The group is thus parallel to the participial adjectives meaning ,blocked, closed'. In some of the adjectives (*glued*, *greased*,

¹²⁷ Apparently only a phonetic variant of *choked up*, probably from different dialects. Cf. the almost identical examples and definitions in AL. According to one informant *choke up* only occurs in participial form with nouns denoting persons. But cf. AL and W3.

¹²⁸ According to W3, active use is also possible, but the example quoted *the smoke fogged up the road ahead* involves comparison.

¹²⁹ Although *built-up* is morphologically deverbal, a *built-up area* is probably best analysed as ,an area covered with buildings'. Cf. the remarks on *cheer up*, *rough out*, *liven up*, *beautify* in 3.2.2.

inked), the feature +NegEv is represented by the additional meaning ,DIRTY' which is also found in the deverbal derivative (window) *smear'd*. In others (*rutt'd*, *scratch'd*), the undesirable feature can be said to be ,SPOILT' as also in (milk) *clott'd*. As with participial collocations with *out*, there is a small group meaning ,EXHAUSTED': (sb/horse) *don'd*, (sb/savings) *eat'n*¹³⁰, (sb) *gnaw'd*, (sb) *sew'n*. The particle has an intensifying or perfective value in (theatre/ play, concert) *book'd*, (sb) *cripp'l'd*, and the two adjectives (sb) *booz'd* and (American) (sb) *goof'd*, both meaning ,drunk'. The following participial adjectives are isolated: (sb) *caught* ,enthralled, carried away', (sb) *cut* ,upset', (sb) *fed* ,having had too much', (sb) *help'd* ,encumbered', (plan, negotiations/ship) *hung* ,delayed', (sb) *laid* ,forced to stay in bed', (sb) *puff'd* ,conceited', (sb) *wash'd* ,ruined, finished'. A final isolated adjective, which is special in that it is a denominal derivative involving comparison, is (jar of ointment) *cak'd* ,has become like a cake'. A number of participial adjectives with *up*, whether isolated or not, very frequently collocate with *all*¹³¹, thus forming a collocational pattern *all ~ed up*, such as *batter'd*, *cak'd*, *clott'd*, *cramm'd*, *cramp'd*, *creas'd*, *crinkl'd*, *cripp'l'd*, *crump'l'd*, *crunch'd*, *cut*, *dress'd*, *foam'd*, *glu'd*, *greas'd*, *ink'd*, *knott'd*, *lather'd*, *lumber'd*, *matt'd*, *scratch'd*, *wither'd*. Some of these occur almost exclusively in this collocation. Many participles also collocate frequently with *completely*.

3.5.4. Zero-derived nouns with OUT and UP¹³²

3.5.4.1. That the derivation of nouns from VPCs is an extremely productive process was pointed out by Bolinger, as already mentioned. The derived nouns are morphologically

¹³⁰ The immaterial agent can be expressed here, as in *he is eaten up with pride* (AL), *her savings were eaten up by illness* (W3), but not in an active construction. Also in *somebody is gnawed up with grief* (sorrow).

¹³¹ Cf. Kennedy (1920: 50 f.).

¹³² Cf. Kennedy (1920: 47 ff.).

distinguished from the VPCs by a different stress pattern. One might argue that they are therefore not zero-derivatives. However, although this distinction is also made in certain other disyllabic zero-derived nouns (such as *conduct*, *insult*, *misfit*, *protest*, *refill*), it is not found in many other zero-derivatives which have „homological stressing“¹³³. Marchand¹³⁴ distinguishes two types, one forming ‚exocentric agent substantives‘ (*showoff*), the other ‚impersonal deverbal substantives‘ (*blackout*). The type *showoff* is morphologically the same as the type *blackout*, but semantically follows the type *pickpocket*. They also differ in productivity: „Though considerably weaker than the very prolific impersonal type **blackout**, the type **showoff** is fairly productive“¹³⁵. According to Marchand, with the exception of *sit-in*, the recent combinations like *eat-in*, *drink-in*, *lie-in*, *love-in* „cannot be considered derivatives from phrasal verbs as corresponding verbal phrases do not exist“¹³⁶. Marchand discusses the material collected in Lindelöf (1937) and Preuss (1962a, 1962b, 1963, 1964). A comparison of the two collections clearly shows the enormous productivity of zero-derived nouns containing a particle. Lindelöf lists about 520 combinations in chronological order, of which 430 are found in the OED. Of the total number of 520 only 17 % are recorded before 1800, while more than two thirds were coined after 1850. Preuss (1962a: 1) mentions that at least 300 combinations from the last twenty years could be added. Only a year later (Preuss 1963: 1), he claims that he has collected more than 400 new formations, of which about

¹³³ Cf. Marchand (1969a: 377 ff.).

¹³⁴ Marchand (1969a: 382-386).

¹³⁵ Marchand (1969a: 383).

¹³⁶ Marchand (1969a: 385). On the other hand, not all VPCs have corresponding nouns. Anthony (1953: 105) has noted cases like *shake-up*, *write-up*, *set-up* where nominalization is restricted: *they shook up the foreign office (the cocktail)* only yields the *shake-up of the foreign office* but not **the shake-up of the cocktail*. The restriction seems to apply to the concrete meaning of the VPC, while the figurative use can be nominalized. This again shows the need to consider collocations. Cf. also Bolinger (1971a: 174 f.).

80% originated in America. Most of these are used in colloquial or technical language and in slang¹³⁷. His lists include only items apparently coined after 1940. Preuss repeatedly quotes purists' objections to the formations¹³⁸. It is characteristic that the items rarely have a single meaning, but usually three to six different meanings (cf. 3.5.4.2.). As extreme examples of such polysemy, Preuss quotes 23 meanings for *payoff*, 41 for *setup*, and 45 for *pickup*. On the other hand, there is also a considerable amount of synonymy. Preuss (1963: 2) gives the following synonyms for what is sometimes called a *pub crawl*: *blowout*, *booze-up*, *bust-up*, *cutup*, *hell-around*, *kickup*, *letoff*, *liquor-up* (*likker-up*), *swill-up*, *tank-up*.

3.5.4.2. The above remarks have shown that the degree of lexicalization in zero-derived nouns is considerable, and that many items are therefore idiomatic. Idiomaticity in such nouns seems to be much greater than in the normal VPCs, and is matched only by the degree of idiomaticity found in the VPCs containing semantically empty verbs, such as *make out*, *make up*, *set out*, *set up* etc. This does not mean, however, that the zero-derivation of nouns from VPCs does not follow certain types and patterns. Preuss (1962a: 1-2) sets up different groups of zero-derived nouns which are later (1963: 1-3, 33-35) modified and extended. The most important groups include nouns which denote: 1) the person who does what is expressed by the VPC, i.e. the agent; 2) the action itself; 3) the object of the action; 4) the result of the action; 5) the manner; 6) the place; 7) an impersonal agent; 8) a social event; 9) a span or point of time; 10) the beginning of an action; and 11) the end of an action. Preuss' group 1) is the equivalent of Marchand's type *showoff*, while group 2) comprises combinations of the type *blackout*, which, according to Marchand (1969: 384),

¹³⁷ The examples are mainly taken from recent journalism, in particular TIME, and slang dictionaries such as the *American Thesaurus of Slang* and Wentworth-Flexner's *Dictionary of American Slang* (1960). The labels 'colloquial' and 'slang' are here used in a purely informal way. Cf. 3.2.3.

¹³⁸ Such objections against the VPC itself are discussed in Kennedy (1920: 42 ff.).

„denotes an act or specific instance of what is expressed in the verbal phrase“. Preuss (1963: 1) remarks that the zero-derived nouns under discussion especially denote the action expressed by the VPC. If compounds and derivatives — including zero-derivatives — are regarded as ‚reduced‘ sentences in substantival, adjectival, or verbal forms explainable from ‚full‘ sentences, certain general ‚types of reference‘ can be set up, as is done in Marchand (1969a: 31–59). These types refer to the syntactic relations in sentences underlying syntagmas of various morphological shapes, and are named after that part of the sentence which becomes the determinatum in the compound or derivative. For example, the same underlying sentence *somebody eats apples* may yield a Subject (S) type: *apple EATER*, a Predication (P) type: *apple EATING*, or an Object (O) type: *eating APPLE*. Other sentences yield an Adverbial Complement (Ad) type, such as *swimming POOL* from *somebody swims in the pool*, where we have an adverbial complement of place. The Ad-Type may also go back to an adverbial complement of time, as in *closing TIME* from *somebody closes at that time*, or to an adverbial complement of instrument, as in *writing PEN* from *somebody writes with the pen*. Marchand also subdivides the O-type as to whether the determinatum is an affected object (as in *eating apple*) or an effected object (as in *beet sugar*, *blood stain*). These types of reference can of course also be applied to zero-derivatives. Thus *cheat*, *chimney-sweep*, is an S-type, *dance*, *sun-rise*, a P-type, *convict*, *catch* an O-type, *bus stop* an Ad-type of place, *door stop* an Ad-type of instrument, and *sun-set* an Ad-type of time. There is, however, an important difference between zero-derivatives and compounds and derivatives in which the determinatum is an overt morpheme. In the latter, the different types of reference such as *apple eater*, *apple eating*, *eating apple* are morphologically distinct. In zero-derivatives, the different types of reference which may be derived from the same underlying sentence fall together, since the determinatum is not overtly expressed. This accounts for the fact, which Preuss mentions but does not attempt to explain, that the zero-derived nouns usually have more than one meaning. They represent different types of

reference which are not morphologically distinguished. This fact also explains the enormous productivity of zero-derivation from VPCs, and is tied up with the phenomenon that the thing, action or process denoted by the noun is not overtly expressed. Thus, for example, anything that picks up or is picked up, or any action, process, place, time, or instrument that involves picking up may be denoted by the zero-derived noun *pick up*¹³⁹. Most groups set up by Preuss can be regarded as specific realizations of the general types of reference, which are applicable throughout in word-formation. They are thereby related to the syntactic structure of underlying sentences. Group 1), which denotes persons, thus comprises S-types like *passout* from ,he passes out' or rather ,he has passed out', and O-types like *wrapup*¹⁴⁰ ,somebody wraps him up'. Group 2) *tidy-up*, *back-up* from ,we tidy up' and ,we back it up' corresponds to the P-type. Group 3) contains affected O-types such as *hand-out* from ,we hand it out', and *pin-up* from ,we pin it up'¹⁴¹. Group 4) is equivalent to the effected O-type with nouns like *blowup*, *lashup*, from ,we have blown it up' and we have lashed it up'. Group 5) corresponds to the Ad-type containing an adverbial complement of manner, as in *make-up*, *shape-up* from ,we make it up in this way', ,we shape it up in this way'.

¹³⁹ Cf. the noun *take-out* ,food you can take out' (Preuss 1963: 2) derived from ,you take it out'. It is perhaps symptomatic for the productivity of the zero-derived nouns that *pickup*, *holdup*, *pinup* have been taken over in French or rather ,Franglais'. Cf. Etienne (1964: 148). *Une pinup* seems to have been replaced now by *une covergirl*.

¹⁴⁰ According to Preuss, ,an easily persuaded customer'. *The American Heritage Dictionary of the English Language* (1970) (in the following abbreviated as HER) gives the definition ,a brief summary', which is also an O-type, only with a feature —Animate, derived from the VPC *wrap up* ,summarize' (HER).

¹⁴¹ Preuss also includes *fallout* which, however, is not the „Objekt der Handlung“ but the subject in the underlying sentence ,it falls out' which contains a one-place verb. It differs from group 1) only insofar as the subject is —Animate.

Group 6) contains an Ad-type of place as in *hide-out* from ,he hides out there (at that place)‘ and *walk-up* from ,you walk up there‘. Group 7) again comprises the S-type, only with impersonal agents, i.e. those containing the feature –Animate, as in *fallout*¹⁴² from ,it falls out‘ and *pickup* from ,it picks up something‘; but also the closely related Ad-type of instrument, as in *play-back* from ,we play something back with it‘. Group 8) basically represents the P-type as in *cleanup* from ,we clean up‘. Group 9) corresponds to the Ad-type of time as in *count-down*¹⁴³ from ,we count down at that time‘. Group 10) and group 11) are again special cases or subtypes of the P-type.

3.5.4.3. Some examples may show more clearly how zero-derived nouns represent various types of reference, and also how lexicalization affects the items. *Blowout* is defined in the *American Heritage Dictionary* (HER)¹⁴⁴ as: „1.a. A sudden bursting, as of an automobile tire. b. The hole so made. c. The ruptured object. 2. A sudden escape of a confined gas. 3. The burning out of a fuse. 4. Slang. A large party or social affair“. 4. is apparently an unanalysable idiomatic item. 1.a., 2., 3. are all P-types, while 1.b. is an effected O-type, and 1.c. an affected O-type. The elements ,automobile tire, confined, gas, fuse‘ in the definitions represent semantic components of the items which have been added to mere grammatical derivation in the process of lexicalization. The zero-derived noun *blowup* denotes: „1. An explosion. 2. A violent outburst of temper. 3. A photographic enlargement.“ 1. and 2. are both P-types, but 3. is an effected O-type. In contrast to *blowup*, where the

¹⁴² Only in Preuss (1962a: 2) are *fallout* and *pickup* classed as „etwas das ...“. In Preuss (1963: 1-3), they are not included in group 7), which does not contain any nouns with *out* or *up*.

¹⁴³ In Preuss (1963: 1-3), no nouns with *out* or *up* are listed in this group. The example *sleep-up* ,time when one gets up‘ may perhaps be regarded as an Ad-type of time derived from a complex sentence ,we get up from sleep at this time‘.

¹⁴⁴ The following definitions, often in abbreviated form, are taken from HER unless another source is mentioned.

effected object which implies result is not morphologically expressed (e.g. as **blownup*), tense in the underlying sentence is marked in the surface structure of *dugout*. In the definitions: „1. A boat or canoe made by hollowing out a log. 2. A shelter dug into the ground or hillside. 3. A long sunken shelter for the players at the side of a baseball field.“, 1. represents an affected O-type, while 2. and 3. are effected O-types which are differentiated by lexicalization. An affected O-type involving the feature +Human ‚retired officer called back to service‘¹⁴⁵, seems to have developed in British English only. All items are derived from an underlying sentence which contains past tense. This is not the case with *dugout* ‚refrigerator‘¹⁴⁶, which must be derived from ‚you dig something out there‘ and is therefore an Ad-type of place. The zero-derived noun *lock-up*¹⁴⁷ may represent either an Ad-type of place when denoting a ‚place where prisoners may be kept temporarily‘ (AL), or an Ad-type of time ‚time for locking up (building etc)‘ (PEN). An S-type must be assumed in the derivation of *dropout*, *cutup* ‚mischievous person‘ (HER)¹⁴⁸, AE *higher-up* and BE *high-up* (which does not involve comparison). In *sit-up*¹⁴⁹ ‚surprise‘, synchronically derivable from ‚it makes you sit up‘, the subject is an immaterial agent.

3.5.4.4. As we have seen, the enormous productivity of

¹⁴⁵ AL. Also quoted in PEN and COD, but not in HER.

¹⁴⁶ Mentioned in Preuss (1963: 35), as used in American teenage slang.

¹⁴⁷ Perhaps only British, as it is attested in COD, AL, PEN but not in HER.

¹⁴⁸ The definition ‚expert, specialist‘ given in Lindelöf (1937: 9) represents idiomatic use.

¹⁴⁹ Quoted in Lindelöf (1937: 4). The reference there shows that the noun *sit-up* is one of the oldest formations (recorded in 1483) belonging to the 17% of formations coined before 1800, according to Lindelöf's count. Although the noun is synchronically derived from the VPC, the corresponding verb phrase is not recorded before 1889. For the problems connected with ‚backderivation‘ cf. the discussion of *peddle:peddler* in Marchand (1969a: 391-394). *Sit-up* in the quotation from 1483 as given by Lindelöf may also be interpreted as a P-type.

zero-derived nouns which go back to underlying sentences containing a VPC is accounted for by two facts: zero-derivation itself and the coincidence of various types of reference in the same derivative. Since the zero-morpheme itself has no overt form, the derivative can be used to denote all sorts of things. For example *hand-out*, which represents an O-type from ‚we hand it out‘, is defined as ‚food, clothing, or money donated to a beggar or destitute person‘ in HER, and thus denotes such disparate things as food, or clothing, or money. Their common function is evident in the definition in AL: „(a) sth. given as an alms (e.g. food or money to a beggar at the door)“. The elements of the definitions ‚to a beggar or destitute person‘ and ‚as an alms‘ are added in the process of lexicalization to the purely grammatical derivation of the O-type from an underlying sentence. However, they are not the only possible additional semantic components contained in the item *hand-out*. They may be replaced by others, as in the second definition in AL: „(b) prepared statement given (e.g. by a politician) to newspaper men“. Here, the same underlying type of reference results in a different lexical item containing the semantic component ‚to newspaper men‘ and often ‚by a politician‘. Again these additional elements are not essential and in modern use any written statement which is distributed, i.e. handed out, can qualify as a *hand-out*. The fact that *hand-out* does not overtly express the *it* contained in the underlying sentence thus accounts for its ability to denote a wide range of objects. Leaving aside the semantic components which are added by lexicalization, the process by which a noun like *hand-out* is derived from a sentence, yielding an O-type of reference, is of considerable generality. With nouns denoting the action expressed by the VPC — i.e. those representing a P-type — the generality is even greater and there are almost no restrictions (cf. 3.5.4.2.). This type of nominalization does not normally add semantic components, especially when used in anaphoric function in a larger context, taking up a preceding VPC as in the example:

„... whelping occurs just as spring thaws begin to break up the winter ice in the Gulf of St. Lawrence. Taking advantage

of the breakup, pregnant cows among the 800,000 harps make their way south". (TIME 21. 3. 69/30).

The nominalization *breakup* here functions as a pro-form¹⁵⁰, which stands for the sentence *spring thaws begin to break up the winter ice in the Gulf of St. Lawrence*, and allows it to be embedded in the following sentence. As *breakup* is not a complete nominalization of the sentence, it does not contain all of its semantic components but refers to them just as the pronoun *it* would do. Although their function is the same, the pronoun *it* presupposes an already existing noun, while the nominalization *breakup* creates one. Nominalization of VPCs in referential function is practically an unrestricted productive process, since it does not add semantic features. It is, however, only a special case of zero-derivation following certain types of reference. A different kind of productivity is mentioned in Preuss (1963: 34) in connection with *blackout*, which can be said to have the two central meanings: 1) ‚complete screening or extinguishing of lights‘ and 2) ‚temporary complete failure of memory or consciousness‘. According to Preuss, „analogy“ has created new formations in both directions. 1) is responsible for *brownout*, *dimout* ‚partial screening or extinguishing of lights‘, while 2) has led to the formation of *grayout* ‚partial failure of consciousness‘, *redout* ‚congestion of eyes with a reddish vision‘, and *white-out* ‚loss of consciousness in the (Ant) Arctic‘¹⁵¹. Similarly *camp-out* is said to have served as a model

¹⁵⁰ Cf. Vater (1968: 22), where two kinds of pro-forms are distinguished: those which presuppose ‚Vorerwähnung‘, i.e. previous mentioning (such as *he*), and those which do not (such as *somebody*). He points out that it is difficult to distinguish ‚pro-forms‘ from some nouns and adverbials „die ebenfalls „Pro“-Funktion haben können“ (23).

¹⁵¹ Contrary to the reference in Preuss (1963: 34), *white-out* is not mentioned in *The American Thesaurus of Slang* (abbreviated as ATS) 1956, or 1962. Nor is it found in the *Dictionary of American Slang* (abbreviated as DAS) 1960, or 1967. According to the definition in ATS (714), the verbs *black out*, *gray out*, *red out* are denominal zero-derivatives: „blackout, a brief period of unconsciousness during a rapid reduction in altitude; black out, to experience a „blackout“; grayout, a partial „blackout“, gray out, to partially

for *cookout* and related *poke-out* and *smoke-out*. We can regard such productivity by „analogy“ as creativity based on paradigmatic relations within a semantic field (cf. 2.4.5.). *Brownout*, *dimout*, and *blackout* 1) may be said to represent a semantic field ‚extinction of light‘; while *grayout*, *redout*, *white-out*, and *blackout* 2) share the semantic field – and the complex semantic feature – ‚failure of consciousness‘. In both fields *black-* stands for a component ‚complete‘ and the other constituents (*brown-*, *dim-*; *gray-*, *red-*, *white-*) are opposed to it. Similarly, *camp-out*, *cookout*, *poke-out*, *smoke-out* form a semantic field and share a component ‚social activity outdoors‘. The items are in a paradigmatic relationship. The second constituent of the noun is in opposition if *sit-out* is compared to *sit-in* or even derived from it, as is done by Preuss¹⁵². All the recent formations, such as *eat-in*, *drink-in*, *lie-in*, *pray-in*, *sit-in*, *teach-in*, form a semantic field with the common component ‚gathering of protest‘. According to Marchand, they are not derivatives from VPCs (cf. 3.5.4.1.). The productivity of the type is thus not based on the syntactic relations in an underlying sentence, but on parallelism in surface structure in conjunction with a common semantic component. In the case of *sit-out* parallelism seems to include antonyms¹⁵³. In all these

„black out“; redout, a congestion of the eyes with a reddish vision as a result of rapid negative acceleration; red out, to experience a „redout“. All terms are from aviation slang. For *cookout*, *poke-out*, *smoke-out*, cf. DAS.

¹⁵² Preuss (1963: 34): „Durch Veränderung des Adverbs bringt *sit-out* die Bedeutung „Protestkundgebung durch Platznehmen vor Gebäuden“ zum Ausdruck“. Marchand (1969a: 385) mentions that the VPC *sit in* (on a meeting, etc.) is unrelated in meaning to the noun *sit-in*, and therefore believes that *sit-down* is the origin of the type *sit-in*. However, *sit-in* could be derived as a P-type of reference from the reduced prepositional phrase *sit in (a building etc.)*, containing an additional semantic component ‚protest‘ involving purpose. This would explain *sit-out* from *sit out(side)* ‚not in a building‘. In all the other recent formations, *-in* is no longer motivated as a locative particle, but assumes the meaning ‚protest‘.

¹⁵³ Cf. *sick-out* (not attested in the dictionaries) in „About 20 of Hartford’s 57 black cops took part in a sick-out last year over assignment and promotion grievances“ (TIME 23.11.70/15). The

action nouns, then, *-in* and *-out* are not motivated as particles, but have become new morphemes containing potential semantic elements like +Protest and +Gathering¹⁵⁴, in *eat-in*, *drink-in* etc. and *sit-out*, *sick-out*. In the case of *camp-out*, *cookout* etc., the morpheme *-out* contains potential elements like +Gathering and +Outdoors. In *blackout*, *grayout* etc., *-out* would contain +Failure of Consciousness, while in *blackout*, *brown-out* it represents either +Failure of Electricity or +Screening of Light. The first constituent is an adjective in *blackout* etc., which functions as an adverbial of degree or manner in underlying structure, probably ,electricity fails/completely (partly etc.)', ,lights are screened/completely (partly etc.)'. In *camp-out* etc., the first constituent is a verb both on the surface structure level and in underlying structure, ,we camp (cook etc.)/outdoors'. In *sit-in*, *eat-in* etc., the first constituent is also a verb¹⁵⁵ functioning as a manner adverbial in underlying structure, ,we protest/by sitting (eating etc.)'. The same applies to the most recent formation with *in* we have found, viz. *bike-in*¹⁵⁶, although a denominal analysis is possible, as with all instrumental zero-derivatives.

3.5.4.5. To test the extent to which the productivity of zero-derived nouns with *out* and *up* actually affects generally accepted vocabulary we have checked all the items with *out* and *up* that are listed in Preuss (1962a, 1962b, 1963, 1964) with the most recent American English dictionary¹⁵⁷. In addi-

noun may be interpreted as being derived from a nonexistent verb with the underlying structure ,protest/by being sick' parallel to ,protest/by sitting (somewhere)'.

¹⁵⁴ In *sick-out*, the component is perhaps better specified as something like +Solidarity, since the noun does not denote a gathering but rather a staying away from work by a number of people.

¹⁵⁵ Also in *sit-out*, and perhaps *sick-out*, if ,be sick' is taken as a verb.

¹⁵⁶ In the OBSERVER (21. 11. 1971/3): „It was the second consecutive Saturday on an organized anti-car ,bike-in' arranged by Edinburgh Ecology Action Group...“, and „Bike-ins were planned for Liverpool and Manchester and possibly Bristol, in a move to restrain the use of the private car in city centres“.

¹⁵⁷ HER (1970). We have chosen the paperback edition, as it is not

tion, we have attempted to find all the nouns contained in HER which are derived from VPCs with the two particles. It seems that only the following zero-derived nouns with *out* are listed in HER: *bail-*, *black-*, *blow-*, *cook-*, *drop-*, *dug-*, *fall-*, *flame-*, *hand-*, *hang-*, *hide-*, *knock-*, *lay-*, *lock-*, *look-*, *sell-*, *shut-*, *strike-*, *try-*, *turn-*, *walk-*, *wash-*, *work-OUT*. The list of zero-derived nouns with *up* is a little longer, but it also contains surprisingly few items: *blow-*, *build-*, *check-*, *crack-*, *cut-*, *flare-*, *frame-*, *get-*, *hang-*, *higher-*, *hold-*, *hook-*, *let-*, *line-*, *make-*, *mix-*, *mock-*, *pick-*, *pin-*, *round-*, *shake-*, *slip-*, *sum-*, *toss-*, *tune-*, *walk-*, *wind-*, *wrap-*, *write-UP*. Some of these items are not mentioned in AL and PEN and may therefore be either quite recent or only used in American English, such as: *cookout*, *dropout*, *hangout*, *strikeout* and *cutup*, *hang-up*, *higher-up*, *tune-up*, *walkup*, *wrap-up*. PEN, which was first published in 1965, lists the following items which are not contained in AL and HER: *break-out*, *clean-out*, *break-up*, *clean-up*, *dust-up*, *punch-up*, *take-up*. In the second edition of AL, which first appeared in 1963, the following are mentioned which are not found in HER and PEN: *comb-out*, *share-out* *link-up*. It would be rash to draw conclusions from the fact that the most recent dictionary contains the largest number of items not found in the other dictionaries. Any dictionary is far from being complete. We have not systematically collected nouns with *out* and *up*, but random reading has yielded as many as the following items not recorded in AL, HER, and PEN: *check-out*, *dimout*, *foldout*, *pullout*, *shake-out*, *sick-out*, *clearing-up*, *cover-up*, *haul-up*, *send-up*, *step-up*. Some of these are certainly in current usage. But having considered various statements about the productivity of such nouns and the factors which favour it in 3.5.4.1. — 3.5.4.4., we find the small amount of lexicalized items actually recorded in the dictionaries surprising. Two explanations suggest themselves: most of the

our intention to test encyclopedic knowledge of vocabulary. We try rather to reach an approximation of commonly accepted usage. We are, however, fully aware of the drawbacks and insufficiencies of such a crude test.

new items belong to substandard, as can be seen from Preuss' collection, and the dictionaries do not list mere grammatical nominalizations which do not contain additional semantic features. The most recent formation with *out* seems to be *stop-out*, which apparently differs from *drop-out* only in an additional semantic feature +Temporarily¹⁵⁸. Lexicalization imposes restrictions on the use of certain items and their collocation potential. A number of nouns containing *out* and *up* are also morphologically restricted, i.e. their morphological structures differ somehow from the overall pattern in the zero-derivatives under discussion. Some of these contain *-ing-*, such as *clearing-up*, *summing-up*¹⁵⁹, *washing-up*, and are therefore not zero-derivatives at all. The agent nouns *diner-out*, *runner-up* are also derived by means of an overt suffix, while the *-er-* in *higher-up* denotes degree, not the agent, and the combination is therefore a zero-derivative. As already mentioned, *dug-out* is also morphologically isolated and involves past tense. The zero-derivative *pick-me-up*¹⁶⁰, 'sth. (e.g. a drink) that gives new strength and cheerfulness' (AL) belongs to the group of imperative words like *hand-me-down*, *reach-me-down*, *forget-me-not*, *kiss-me-quick*, and *speak-easy*. The original locative value of *up* in *pick-me-up* is probably replaced by a feature +Degree in synchronic analysis, as can be seen from the elements 'new strength and cheerfulness' and also from the definition 'tonic, stimulant' in PEN.

3.5.4.6. Many zero-derived nouns with *out* and *up* may be

¹⁵⁸ Cf. TIME (27.9.71/47): „In the words of the Carnegie Commission on Higher Education, they „stop out“ — that is, they drop out of the college scene temporarily to gain experience“; „For instance, Hamilton Fish III ... is now a Harvard stop-out, working on a campaign to register student voters on campus“; and „Still, many stop-outs do better academically than their less-seasoned classmates, if only because they are a year older“.

¹⁵⁹ With a plural *summings-up*.

¹⁶⁰ Apparently only British English, as it is not attested in HER. Cf. German *Kräutlein Rührmichnichtan*, *Vergißmeinnicht*. French *sainte nitouche*. For imperative words cf. Marchand (1969a: 380-384).

said to function as attributive adjectives¹⁶¹. The use of simplex and complex nouns in this function is not at all unusual in English. Mutt (1967) gives examples of complex phrases used as 'premodifiers' such as *pie-in-the-sky promise*, *get-well-soon bouquets*. Preuss (1962: 3) quotes a number of collocations „die als selbständige Neologismen zu werten sind“, such as *clean-up period*, *clean-up time*, *fall-out deposits*, *follow-up letter*, *pickup girl*, *pin-up girl*, *wash-up time*, *zip-out lining*, *zip-up boots*. In his later article (Preuss 1968: 33-35), further collocations with *out* and *up* are added: *fallout pattern*, *make-out artist*, *mock-up weapon*, *pick-up truck*, *drive-up phone*. The examples are by no means exhaustive since the pattern is very productive, especially when the noun denotes an object which admits of the action denoted by the VPC: *lock-up garage* 'one can lock up the garage', *pin-up girl*, *zip-out lining*, *zip-up boots*. The construction is the exact parallel of zero-derived nouns, and the two often exist side by side denoting the same thing, such as *a pick-up truck* and *a pick-up*, *a walk-up flat* and *a walk-up*. In such cases, the zero-derivative genetically stems from the overt construction, originating by a process of clipping¹⁶². From a purely synchronic point of view, however, the two are independent. The noun in the construction corresponds to the zero-morpheme in the derivative. In spite of the parallel to other constructions where a noun functions as an attributive adjective, collocations such as *clean-up period*, *follow-up letter*, *pick-up truck*, *pin-up girl*, *take-up spool*¹⁶³, *walk-up flat* must therefore be regarded as constructions in their own right. They do not contain a zero-derivative functioning as a preadjunct or premodifier, but go

¹⁶¹ Cf. Marchand (1969a: 386), who uses Jespersen's term 'preadjunct', and esp. Mutt (1967), who uses the term 'premodifier'. Jespersen (MEG II: 13.83.) states that „the development and free use of such substantival adjuncts forms one of the most characteristic traits of present-day English“.

¹⁶² Cf. Marchand (1969a: 441 ff.).

¹⁶³ AL 'spool on to which film, tape, etc., is wound from the spool having the film, tape, etc., that is being used'. This is an example of the use of such constructions in technical jargon.

back to sentences such as ‚we clean up during that period‘, ‚we follow it up with a letter‘, ‚we pick it up with a truck‘, ‚we pin up the girl‘, ‚the spool takes it up‘, ‚we have to walk up to the flat‘, thus representing an Ad-type of time and instrument, an O-type, an S-type, and an Ad-type of place. This solution is also much simpler than the one assuming a zero-derived premodifier.

3.5.5.1. A number of English verbs like *do*, *make*, *put*, *set* have a very wide range of applicability and are therefore semantically almost empty. Kirchner (1952), in his extensive treatment of *be*, *come*, *do*, *get*, *give*, *go*, *have*, *make*, *put*, *take*, called these verbs „die zehn Hauptverben des Englischen“. It is obvious that when such verbs collocate with particles such as *out* and *up*, they cannot contribute many semantic features to the resulting VPC. The meaning of the VPC will therefore either be largely determined by the particle, or will not be deducible from its constituents. In the latter case, the VPC is idiomatic, containing semantic features added by lexicalization. If the VPC itself collocates with an action noun, it may denote hardly more than the beginning, continuation, or end of the action. Thus in *give up* (smoking, wearing a hat) ‚stop smoking (wearing a hat)‘, the action noun normally has a feature +Habitual¹⁶⁴. In *keep up* (attack, correspondence), this feature is not present and the VPC merely means ‚continue to attack (correspond)‘. *Put up* (resistance, fight), *set up* (defence, yell), *take up* (residence) can mean ‚begin to resist (fight, defend, yell, reside)‘, or simply ‚resist, fight, defend, yell, reside‘. In these cases, the VPC corresponds to the ‚Funktionsverben‘ in German constructions such as *zur Abstimmung kommen (bringen)*, *zur Blüte kommen*, *in Blüte stehen*¹⁶⁵. It has been argued that the ‚Funktionsverb‘ is to be placed half way in a continuum stretching from the full verb on the one hand to the

¹⁶⁴ Cf. Lipka (1971b: 232).

¹⁶⁵ Cf. Heringer (1968), Klein (1968). The term ‚Funktionsverb‘ is from Polenz (1963). Klein (1968: 9), in contrast to Polenz, does not require ‚Funktionsverbgefüge‘ to contain only action nouns as nominal constituents, thus including, e.g., *ans Tageslicht bringen*.

auxiliary on the other, and that its semantic depletion is evident from contradictory collocations such as *in Gang setzen*¹⁶⁶. Semantic emptiness and lexicalization can be observed in *do out* and *do up*. *Do out* only collocates with nouns like *stable*, *room*, and then has the meaning 'to clean', which cannot be deduced from the constituents. In *do up*, the particle may be said to contribute the respective semantic features in the collocations *do up* (house, hat) 'repair, improve', (hair, face) 'make tidy' (books, dress) 'put together'. The participial adjective (horse) *done up* is idiomatic. In other VPCs and their collocations, lexicalization has added certain specific semantic components such as 'on strike' in (coal-miners) *come out*, (workers) *go out*¹⁶⁷; 'into society' in (daughter) *come out*, *bring out* (daughter); 'to public notice' in (book) *come out*, *bring out* (book). *Put out* (shoulder) 'dislocate' must be explained by prepositional phrase reduction from *out* (*of joint*). Collocations of *put out* with nominals denoting human beings can have three different meanings, viz. 'expel, remove', 'confuse, upset', and 'inconvenience'. The distinction can only be made if the larger context is taken into account. In *put out* (sb) 'expel, remove', the VPC contains a feature +Concrete and goes back to a prepositional phrase denoting a place. In the other two meanings the VPC contains -Concrete. It is not derivable by prepositional phrase reduction unless *put out* (*of composure*) is assumed for 'confuse, upset'¹⁶⁸. Lexicalization also accounts for the meaning of *take up* (artery/dropped stitch) 'catch the end of and make fast' (AL). In other VPCs, the presence of certain semantic features is only deducible from additional contextual elements. These may be complements, as in the examples from AL *the whole building went up in flames*, *the bridge went up with a roar when the mine was*

¹⁶⁶ Heringer (1968: 34, 36 f.).

¹⁶⁷ AL 'used by workers of themselves'. Both *come out* and *go out* must be explained by prepositional phrase reduction from *out* (*of the factory*). As the workers are inside, they can only *go out*, if speaking of themselves.

¹⁶⁸ Cf. German *er brachte ihn draus*, i.e. *aus der Fassung*.

exploded. Here, the meaning of *go up* 'be destroyed' is indicated by the complements *in flames, with a roar*. The specific lexical realization (i.e. the exponent) of the subject may also be responsible for the presence of certain features, as in *the doctors gave him up* as opposed to *they gave him up (for lost)*. While in *they gave him up* 'they consider him lost', the element 'lost' is not specified, the contextual element *doctor* indicates that 'lost' is realized as 'incurable'. Similarly, in *the actor made (himself) up for the part of Hamlet* and *ought she to make up at the age of twelve?* (both from AL), the contextual element *actor* and the feature +Female in *she* account for the meaning 'put cosmetics on' of *make up*. Like other VPCs, those containing empty factitives also occur in familiar collocations (cf. 2.8.1.), such as *make up one's mind, put a man's back up, make him angry, set up house, set up shop*.

3.5.5.2. A special type of such familiar collocations is found in those involving *it* where the pronoun does not have anaphoric or referential function (cf. 3.5.4.4.). They are not passivable¹⁶⁹. In these combinations *it* is not a pro-form, presupposing the existence of an earlier mentioned noun, but part of an idiomatic set phrase. Such collocations therefore combine morphological and semantic restrictions and are not derivable by means of a productive transformation. We have found the following idiomatic VPCs with *out* involving *it*: *brave it out, brazen it out, cut it out, face it out, fight it out, have it out, shoot it out, spit it out, stick it out, sweat it out*. Most of them form a semantic field represented by the archilexeme *endure* (cf. 2.4.5.). Other combinations like *fight it out, shoot it out* have the meaning 'settle by fighting (shooting)'. Collocations with *up* are less numerous and are often used in the expanded form: *hitting it up, live it up, ripping it up, rocking it up, shake it up*.

3.5.6.1. The above discussion has shown that the use of VPCs with *out* and *up* is restricted in various ways. The intuitive impression about the productivity of the VPC and the

¹⁶⁹ Cf. Live (1965: 440). Fraser (1965: 78 ff.), Meyer (1970b: 133), Bolinger (1971a: 131).

opinions voiced about it are thus more clearly determined. It seems that data from a corpus may yield evidence for even more precise statements about productivity. In transformational-generative grammar, material from a corpus is usually regarded as irrelevant for linguistic study, since it is said to represent performance only, while linguistics should be concerned with competence. Such an attitude narrows down the field of linguistic study considerably, and at the same time allows individual intuition to play a very great role. Moreover, the concept of linguistic competence is not well defined and clearly delimited (cf. 3.5.1. and Fowler 1970). Leech (1968: 91) argues that „whereas a transformationalist is extremely suspicious of the necessary validity of any evidence supplied by a corpus or native speaker informant, he is apparently satisfied that the evidence provided by his own introspections is virtually free from doubt and from the interference of non-linguistic factors“, and concludes that „the distinction between competence and performance . . . in linguistics does not pose a problem peculiar to that science: on the contrary, it is an example of the broad distinction between theoretical terms . . . and observational terms“ (94). As any corpus, however large, is by definition finite, it will never be able to capture the infinite resources of language. But it can be very useful as a means to objectify our intuitions about linguistic phenomena¹⁷⁰ (cf. 1.3.7.). It is true that the yield of a clearly delimited corpus with regard to a particular construction or other linguistic element may sometimes be relatively low. In this case it will be advisable to follow a method as that employed in Allen (1966), where the corpus consists of 4.800 ‚verb-clusters and verbid-clusters‘. The corpus is thus not defined by a certain amount of text, but by a specified number of instances of the phenomenon which is studied¹⁷¹. Besides using several types of

¹⁷⁰ Cf. Strang (1968: 199 f., 208), where it is also argued that corpus-study has limitations which must be overcome by drawing on evidence from outside the corpus.

¹⁷¹ Cf. the concept of OTU = ‚operational taxonomic unit‘, which is defined in Carvell-Svartvik (1969: 32) as „any one of the objects to be classified“.

corpus, we have basically adopted this method without, however, imposing any limitations on the amount of material thus collected.

3.5.6.2. The *Survey of English Usage*¹⁷² at London, whose files we had the chance to use for this study, affords an opportunity to check productivity with the help of a corpus. At the time when it was consulted (spring 1969), the SURVEY contained roughly 200 000 words. It yielded 97 items with *out* and 116 items with *up*, including prepositional verbs which admit prepositional phrase reduction, thus becoming VPCs. Of these, 60 verbs with *out* and 70 verbs with *up* occurred only once. If we compare the examples from the SURVEY with the material given in Fraser (1965), the corpus only contains a small part of the approximately 220 verbs with *out* and 900 verbs with *up*, viz. 44 % and 13 % respectively. The corpus could therefore not be used as a means to discover many new VPCs. However, some verbs were found which were neither mentioned in Fraser (1965) nor in SOD, COD, W3, AL, PEN¹⁷³. Those collocating with *out* are: *burgeon, cart, charter, climb, crawl, croak, drag, drift, peer, skitter, slip, stare*. Of these, more than half are verbs of motion which freely collocate with the particles (cf. 3.5.2.). The remaining VPCs can hardly be regarded as new formations which demonstrate productivity. This also holds for the three VPCs with *up*: *invite up, multiply up, quirk up*. Although the SURVEY is not confined to written English, but contains various kinds of spoken English, we have tried to check the assumption that VPCs are more frequent in spoken English by building up a special corpus. It consists of 8 BBC discussion programmes¹⁷⁴ of 50 minutes length each. If we assume that 35 minutes of conver-

¹⁷² In the following called SURVEY.

¹⁷³ Only *stare out* is found in SOD.

¹⁷⁴ It contains 6 programmes of „Any Questions“ and 2 programmes of „A Word in Edgeways“, all recorded during September, October, and November 1969. Cf. also the scanty results from the spoken corpus recorded by Anthony. 10 hours of unrehearsed radio programmes only yielded 110 VPCs with *up* (76 of group I and 34 of group II). See Anthony (1953: 111).

sation are roughly equivalent to 5.000 words of text, the total spoken corpus then consists of roughly 57.000 words. The yield of the corpus is surprisingly small. All in all, we have only found 105 instances of the use of VPCs with *out* and *up*. This includes prepositional-phrasal verbs (cf. 2.3.2.), but excludes participles and nouns. The 105 instances of VPCs are made up of 28 items collocating with *out*, of which 17 occurred only once, and 35 items with *up*, of which 22 occurred once. All VPCs are recorded in the dictionaries, so that the spoken corpus does not yield a single instance of a VPC which may possibly be regarded as a new coinage. A variety of written English was chosen as the basis for a third type of corpus, viz. certain texts on general linguistics¹⁷⁵. Approximately half of the material is made up of British English, while the other half comes from American English. In both texts the number of instances and items with *out* is higher than that with *up*. In Lyons (1968), 51 instances of collocations with *out* and *up* were found, which were made up of 15 VPCs (8 items with *out*, 7 items with *up*). In Bach-Harms (1968), the percentage is roughly twice as high, with 97 instances containing 35 different items of which 20 collocate with *out* and 15 with *up*. Of the 15 items in the British English text 7 occurred only once, while in the American English text 23 items out of 35 were found once only. Of the total of 50 items practically all¹⁷⁶ are recorded in the dictionaries. In common with the SURVEY and the material from broadcast discussion programmes, this corpus therefore does not afford a source of new coinages which demonstrate the productivity of the VPCs. We therefore conclude that a limited corpus cannot be used to test the productivity of the VPC. However, corpus study is a method which will permit statements about the frequency of occurrence of certain VPCs.

¹⁷⁵ Bach-Harms (1968), *Universals in Linguistic Theory* and Lyons (1968: 170-394), *Introduction to Theoretical Linguistics* chapters 5-8. Both texts contain about 200 pages.

¹⁷⁶ With the exception of the technical term *factor out* in Bach-Harms (1968: 172, 180).

3.5.6.3. In addition to using a limited corpus, we have therefore set up an open-ended selective corpus which only includes sentences containing VPCs with *out* or *up*. Material was collected from random reading of *TIME* and the *OBSERVER* over a period of almost two years. The following VPCs with *out* were found in the *OBSERVER* which are not mentioned in Fraser (1965) and the British dictionaries including SOD: (tape recorder) *blast* (confessions), *cantilever* (floor)¹⁷⁷, *churn* (theses and monographs, pseudo-intellectual slush), (sb) *laugh*, (hound) *needle*¹⁷⁸ (marrow), (girl) *stalk*, (MIG) *taxi*, (secrets) *trickle*, (the French) *trip*, (man) *voyage*¹⁷⁸. There are almost as many VPCs with *up*, viz. *bag* (£ 5), (aquatic life) *crawl*¹⁷⁸, (prices) *creep*, (MIG fighters) *fly*, *fudge* (the new 50 np coin), (tourists) *gawk*¹⁷⁸, *juice* (illustrations), *kit* (Aldrin), (figures) *toil*, (framework) *tower*, *trot* (workers). Of these the following are instanced in W3: *stalk out*, *trickle out* / *bag up*, *crawl up*, *fly up*, *juice up*, *kit up*, *toil up*, *tower up*¹⁷⁹. Some of these are probably taken over from American English. Others involve verbs of motion with which productivity is not restricted and the particle has adverbial function, as in: *stalk*, *taxi*, *trickle*¹⁸⁰, *trip*¹⁸⁰, *voyage* / *crawl*, *creep*¹⁸⁰, *fly*, *toil*. Some VPCs can be analysed as denominal derivatives, such as *needle out* ‚get out as if with a needle‘ (derivable by T 1), *bag up* ‚put in a bag‘, *kit up*¹⁸¹ ‚provide with a kit‘ (derivable by T 5), *tower up* ‚rise like a tower‘. In *cantilever out*, the noun is probably the instrument in the underlying sentence, such as ‚spread out, or extend, with cantilevers‘, but the VPC is not derivable by a transformation. *Churn out* ‚make, produce as if by churning‘

¹⁷⁷ Used in the passive: „These top floors are cantilevered out to allow for greater flexibility . . .“ (O. 20. 4. 69/28). In the following, the passive will not be marked if conversion into the active is possible.

¹⁷⁸ American English; in an article by Norman Mailer.

¹⁷⁹ W3 mentions the simplex *fudge* ‚devise as a substitute, contrive without basis‘, while SOD gives *fudge up* as ‚patch or fake up‘.

¹⁸⁰ Used figuratively.

¹⁸¹ Listed as ‚chiefly Brit.‘ in W3, but not recorded in the British dictionaries.

is also basically denominal (cf. 3.3.2.2.). *Juice up*, in the example „Cover illustrations were juiced up“. (0. 27.4.69/16) involves Degree and might be derived by T 5. However, it is probably better analysed as a deadjectival derivative from ‚make (more) juicy‘ (cf. 3.2.3.). It would then be another instance of a clipped VPC, like *cheer up*, *fluff out*, *laze away*, *liven up*, *rough up*, *tire out*. This pattern probably affords the best interpretation for the nonce formation found in the headline of an article on a newspaper of a Trotskyist splinter group:

„TROTTLING UP THE WORKERS“ (0. 9.11.69/44).

Besides deriving semantic elements from the phonic association with *hot up*, the combination is analysable as ‚make (more) Trotskyist‘. This is apparently the only really new formation found in the OBSERVER. Random reading of TIME yielded a greater number of VPCs not recorded in the dictionaries, i.e. in COD, AL, PEN, W3, HER, and DAS. In part they involve verbs of motion, either simplex or zero-derived (cf. 3.2.1.): *trundle out* (cake), (searchers) *spiral out*¹⁸², (hurricanes) *veer out*, (column) *clank up*¹⁸³, (vehicle) *roar up*, *scamper up*¹⁸⁴, (crews) *screech up*¹⁸⁵, (Capote) *wheel up*. Although in (guests) *stare out*, the verb is not a proper verb of motion, the particle functions as a directional adverbial. Some VPCs are denominal derivatives. In *churn out* (literature) ‚produce‘, *mail*

¹⁸² With a denominal zero-derivative *spiral/ϕ* ‚move/in a spiral‘. Cf. Brekle (1970: 119, 175 ff.); and Bolinger (MS: 26): „If a new verb were coined tomorrow, say *to helix* meaning to move so as to describe a helix, we would have *He helixed up* and *He helixed down* almost immediately“.

¹⁸³ Denominal zero-derivative from ‚move/with clanks‘. Other zero-derived verbs of motion from words denoting sounds are *roar up*, *screech up*. The VPC *wheel up* contains the zero-derived verb *wheel* ‚roll or move on or as on a wheel or wheels‘ (HER).

¹⁸⁴ From the context, the subject is deducible as *animal*, but it is deleted in the nominalization: „... these razor-sharp, miniature scythes were obviously better suited for catching and slicing up prey than for scampering up the trunks of trees.“ (T. 7.12.70/34).

¹⁸⁵ In cars.

out (cards) ,distribute', *report out*¹⁸⁶ (budget) ,reveal', the noun is best analysed as the instrument, but the combinations are not derivable by T 1. *Scent out* (mineral) ,find out' can be derived by T 1, and *slit up* (black satin sheath) ,open' is probably derivable by T 7. Other VPCs are deverbal. If subject transfer and a deleted agent¹⁸⁷ (such as *beat*) is assumed, (gases) *bake out* ,are removed' can be derived by T 9 in:

„... that would allow earthly gases left within them [instruments, LL] to bake out during the torrid two-week-long lunar day ...“ (T. 5.12.69/35).

*Damp out*¹⁸⁸ (waves of earthquake) ,annihilate' is also derivable by T 9. *Ease out* (Cardinal Pizzardo) ,remove' is probably deverbal, but may also be derived from a manner adverbial ,with ease' or ,easily'. (Accordionist) *squeeze out* (The Sidewalks of New York') ,play' and *slide up* (panel) ,open' are derivable by T 9 and T 10 respectively. *Firm up* (prices) and probably also *nance up* (film)¹⁸⁹ are deadjectival derivatives. Other unrecorded items collected from TIME are *slap up* (the mother), probably formed on *beat up*, and *match up* (sailors wishing to exchange duty stations), which involves the semantic feature +Together. Several other VPCs not found in the dictionaries are idiomatic and stem mostly from the slang of the hippie and drug world, such as *bug out*¹⁹⁰

¹⁸⁶ The definition and the quotation given in W3 would fit T 1 as it would be interpreted as ,get out, remove with a report'. It does not apply, however, to our example: „Jenkins reported out a gloomy budget for 1969-70.“ (T. 16. 5. 69/38).

¹⁸⁷ Cf. 3.4.2.2., 3.2.4.2.

¹⁸⁸ The VPC could also be said to contain perfective *out*. Cf. COD, PEN, where the simplex verb *damp*, used as a musical term, is defined as ,stop vibration of string'. In W3 a one-place VPC is instanced ,the wave damped out'.

¹⁸⁹ *Firm up* is defined in W3 as ,assure a steady flow of hydroelectric power' only. The VPC in: „The danger was that the pair would nance it up and produce a heterosexual parody of homosexual mannerisms ...“ (T. 29. 8. 69/48) is not derivable from the noun *nance* but only from the adjective *nancy*. If the interpretation ,make (more) nancy' is accepted, this is another instance of clipped VPC.

¹⁹⁰ *Bug out* is recorded in DAS in the sense of ,withdraw, retreat'.

,withdraw', *freak out*, *drop out*, *fritz out*, *stop working*, *flip out*, *trip out*, *tune out*, all denoting loss of consciousness or control. Besides being idiomatic, some formations seem to be morphologically restricted. *Spaced out*, *midied up*, and *psyched-up*¹⁹¹ apparently occur in participial use only. The latter may be analysed as ,dressed up/in a midi (psychedelic style)'. Two other quotations containing *it* probably follow the pattern ,settle, decide by -ing' (cf. 3.5.5.2.): (team) *battle it out*, (players, army) *slugging it out*.

3.5.6.4. Considering the relatively small number of unrecorded formations found by random reading of TIME and the OBSERVER, we can say that the productivity of VPCs with *out* and *up* is apparently not as great as is generally assumed. It seems to be considerably greater in American English, but the method of collection of the material does not afford conclusive evidence. If we deduct collocations with verbs of motion, the number of new items is relatively small. Besides, many of these are idiomatic or morphologically restricted. Some are obviously nonce formations such as *trot up*, *midied up*, *psyched-up*. Moreover, a considerable number of items belong to slang, or are at least colloquial or journalese. Generally speak-

„After precocious turns at turning on, dropping out, skipping out and even bugging out (into a mental asylum, for eight months), Ginsberg drifted to San Francisco's North Beach in 1953". (T. 8. 8. 69/ C7). „For many of the kids in it, pot is a part of growing up, and the great majority have no intention of freaking out for good." (T. 26. 9. 69/49). „Yet when the television camera fritzed out on the lunar surface, Astronaut Alan Bean had a moment of atavism." (T. 28. 11. 69/14). Cf. DAS *on the fritz* ,not functioning or not functioning properly'. „Acid can make you flip out." (T. 26. 9. 69/45). *Trip out* and *tune out* are probably denominal zero-derivatives. „Somebody slipped some acid into the potato and corn chips at a swinging singles party . . . and nearly 40 of the 200 guests tripped out." (T. 20. 4. 70/12). „Drink is for tuning out. Pot is for tuning in." (T. 26. 9. 69/45). Cf. the examples in Pickerell (1970).

¹⁹¹ In an article on fashionable slang: „*Spaced Out*: usually meaning high on pot, LSD or catnip." (T. 17. 8. 70/33). „. . . Princess Margaret, making her first public appearance midied up, did not fare so well . . ." (T. 26. 10. 70/68). „Robert Shaw bellows and glowers in his ornate armor like a psychedup Errol Flynn." (T. 17. 10. 69/66).

ing, word-formative productivity is much more active in slang than in standard usage, especially with regard to zero-derivation and VPCs. Two groups of participial adjectives with *out* and *up* may serve as an example for prolific types in slang which are not matched by standard usage. In the *American Thesaurus of Slang* (9f), the following items, in which the particle is sometimes facultative, are listed as synonyms of *broken*, *out of order*: *assed up*, *buggered (up)*, *bungled up*, *bust (up)*, *busted (up)*, *busticated (up)*, *conked (out)*, *fouled up*, *fucked up*, *geed (up)*, *geezed up*, *(all) gummed up*, *jacked up*, *jazzed (up)*, *jiggered (up)*, *jimmed (up)*, *jimmied (up)*, *knocked (up)*, *loused up*, *messed up*, *poohed out*, *pooped (out)*, *worn out*. The *Dictionary of American Slang* (653 f.) gives a considerable number of synonyms for *drunk*, partly collocating with *out*, such as *crumped*, *guyed*, *knocked*, *laid*, but many more collocating with *up* viz. *all geezed*, *blown*, *boozed*, *canned*, *fired*, *fried*, *geared*, *ginned*, *juiced*, *liquored*, *lit*, *lushed*, *mulled*, *polished*, *potted*, *set*, *sewed*, *stewed*, *tanked*, *teed*.

3.6. VPCs with *OUT* and *UP* and prefixal combinations

3.6. In a study of VPCs with *out* and *up*, it will not be inappropriate to compare the combinations with other collocations of the same elements. The cases where the same verbs collocate with the particles, but in reverse order, are morphologically characterized by inseparability and a different stress-pattern¹⁹². With the exception of the type *outbid*, prefixal combinations with *out-* are very restricted. According to Marchand (1969a: 96), „With a locative meaning, the particle has never had any verb-forming force. Verbs of the type

¹⁹² Cf. 1.4.2. and Marchand (1969a: 96-121). The type *outbid*, analysed as representing zero-derivatives parallel to German *vertanzen*, is regarded as a ‚pseudo-prefixation‘ in Marchand (1969a: 97).

outbreak ,break out' occur only in poetry and are equivalent to prose combinations of the phrasal type **break out**". The situation is similar with *up-*: „Probably the only vbs that have general currency are **uphold**, *upturn*, *uproot*, *upset*"¹⁹³. Comparing prefixal combinations and VPCs, Kennedy (1920: 16) argues that „in practically all of the instances where a verb-adverb combination is formed of the elements which enter into a still-existing verb-compound, the combination has the literal value and the compound the figurative. Cf. *offset* and *set off*, *outgrow* and *grow out*, *outlive* and *live out*, *uphold* and *hold up*, *upset* and *set up*". Live (1965: 442) mentions that *out-*, *over-*, *under-* are still productive, and that the prefixes are „semantically consistent and transparent in the newer compounds“, while they are „often metaphorically obscured in the older ones“. She also points out that in the process of prefixation „the merger confers transitivity on combinations of which the verb component is intransitive when uncompounded“ (442). Prefixal combinations with *out-* and *up-* are few in number and must be considered to be the remains of an older system which have been subjected to lexicalization to a large extent. The only exception is Marchand's type *outbid*. In discussing the „similarity between particles and prefixes“, Fraser (1965: 54) states that in *outburn*, *outlast*, *outwear* „*out* has the effect of doing two things. First it causes the intransitive verbs (*burn*, *last*, *wear*) to become transitive. Secondly, it associates the notion of „comparison“ to the verb“. He thus derives prefixal verbs such as *outshout*, *outshine*, *outspend* from comparative sentences containing *shout louder*, *shine brighter*, *spend more*, and sets up the transformation (3–26):

$$\begin{array}{ccccccccc}
 \text{NP} & + & \text{AUX} & - & [+V] & - & \Delta & -\text{ER} & -\text{THAN} & - & \text{NP} \\
 1 & & & - & 2 & & - & 3 & - & 4 & & - & 5 & = \\
 1 & - & \text{OUT} & + & 2 & - & \phi & - & \phi & - & 5 \\
 \text{Condition:} & & & & & & & & & & & & & \text{ADJ} > 3
 \end{array}$$

The adjective, which is the manifestation of an underlying adverb, is left unspecified by Fraser and will have to be

¹⁹³ Marchand (1969a: 121).

supplied from the context in analysing the prefixal verb. Apparently, extralinguistic knowledge or lexicalization also plays a part here, as in Fraser's example *a G.E. bulb will outburn any other type*, which is derived from an underlying *burn longer*. *Outburn* could also be analysed as derived from *burn brighter*, parallel to *outshine*. In AL, *outride* and *outrun* are defined as 'ride (run) better or faster than'. In this case both adverbs, not adjectives, may denote the same thing. However, in *outgrow* 'grow faster or taller than' (AL), there is a considerable difference between the two adverbs. Moreover, *outgrow* can also mean 'grow too large or too tall' (AL) and 'grow too quickly' (AL). Several verbs with *out-* must be analysed as denominal derivatives, such as *outpoint* 'score more points' (AL), and others which do not have a corresponding VPC, like *outnumber* 'be greater in number' (AL). Fraser is right in assuming an underlying sentence containing comparison for the productive kind of *out-*verbs which accounts for the feature Degree in the prefix. But the conditions for the transformation (3-26) are not specified well enough. In Fraser's analysis *outburn*, *outlast*, *outshout* etc. are prefixed verbs, not zero-derivatives. This is opposed to Marchand's interpretation of the type *outbid* as a zero-derivative and thus a 'pseudo-prefixation'. However, in some cases such as *outstare* 'abash by staring' (PEN), zero-derivation seems to be the only possible solution (cf. also 3.4.1.3.). There are a few prefixal verbs with *out* and *up* which might be said to be synonymous with the corresponding VPC, and are defined thus in dictionaries. However, according to AL, *outfit* and *outwear* are mainly used in participial form as adjectives, while *outspread* is only an adjective. *Uproot* is defined in AL as 'pull up with the root', exactly as *root up*. Although a tree can be *uprooted* or *rooted up*, the collocations are not identical. The verb *uproot* and the VPC *root up* show that Kennedy's statement about figurative and literal use, though often valid, is not universally acceptable. According to the quotations in AL, the prefixal verb can have both literal and figurative value: *the gale uprooted numerous trees, after he had lived in New York for 20 years his employer uprooted him and sent him to Chicago*. Moreover,

although the collocations in this case are the same, (sb) *uproot* (sb) and (sb) *root up* (sb) ‚find‘ are by no means equivalent. This meaning of *root up* is certainly not literal, as would be expected from Kennedy's rule. A comparison of VPCs with *out* and *up* and the corresponding prefixal combinations shows that while the VPCs are productive, the prefixed verbs are quite restricted. The only productive type involving *out-* as in *outbid*, *outlast* is not related to the VPC, since the prefix and the particle have no semantic features in common. *Uproot* and *root up* is apparently the only case of a close relation between prefixed verb and VPC. With other prefixes such as *over-* there seems to be a closer connection between prefix and particle. However, the prefix *over-* is really productive only with the meaning ‚too (much)‘, corresponding to the type *outbid* in this respect.

3.7. *Simplex Verbs and VPCs*

3.7.1. In 3.2. – 3.4. we have discussed those VPCs which are best analysed as deadjectival, denominal, or deverbal zero-derivatives. In some of them the particle will be regarded as redundant by a number of speakers. This is also the case with many other VPCs which are not derivatives. For all the remaining VPCs basically two possibilities exist (cf. 3.4.1.1.): either the combination is unanalysable and must then be considered as a discontinuous verb, or the particle functions as an adverb which modifies the verb. With both, verb-adverb combinations and zero-derivatives, certain effects of the process of collocation may be noticed which distinguish the simplex verb from the corresponding VPCs. In the literature, changes with regard to transitivity are noted as the most conspicuous difference. In Kennedy (1920: 26 ff), „syntactical“ and „semasiological“ effects of the combination are distinguished. Intransitive verbs are said to become transitive sometimes (e.g. *point out*, *work up*), but the reverse process is said to take

place much more often (as in *cheer up, clean up, get up*). With some intransitive VPCs a „reflexive object is understood“ (26) and they can also be used transitively. As another „syntactical“ effect, it is pointed out that often „the object of the combination is . . . of a very different character from that of the simple verb“ (26), e.g. in *buy a house/buy out a person, clean a room/clean out its contents, lock a door/lock out (or up) a person, mop a floor/mop up the water on it* etc. We have treated such cases as zero-derivatives involving object transfer. As a fourth „syntactical“ consequence of the collocation it is mentioned that many VPCs have active form but passive meaning or connotation. Although this phenomenon is found in other verbs as well, it is said to occur with special frequency in VPCs, particularly in those containing perfective *up*. The „semasiological“ effects of collocation are listed as: (1) modification as by an adverb (e.g. in *clean out*), (2) the addition of a perfective or intensive meaning, (3) an altogether different meaning of the VPC (e.g. in *dry up* ‚be silent‘, *fall out* ‚to disagree‘, *make out* ‚understand‘, ‚*put up with* ‚tolerate‘), and (4) „special meanings“, as in *call up* (by telephone), *die off/out* (applied to a collection or community), *pluck up* (courage). 3) and 4) comprise different kinds of idioms. It is pointed out that although the particle often seems to be redundant, there are actually differences in meaning. Certain verbs are said to occur never, or very rarely, without a particle, as, e.g., those in *auction off, jot down, peter out*. Live (1965: 433) mentions that „in the discontinuous verb form“ many intransitive verbs „assume transitivity“, as in *ran the intruder out, was looked up, talked up the project, shouted out curses*. „Originally-transitive verbs, of which many become intransitive in combination“ (437), e.g. *watch out, set out*, are discussed as a second category of discontinuous verbs. In this category „potentially causative verbs, which are transitive in their causative sense“ (437) are included. It is also pointed out that many verbs which „remain transitive, co-occur with a different set of objects“ (437), e.g. *carry* (package)/*carry out* (threat), *test* (candidate)/*test out* (theory), *show* (picture)/*show up* (swindler). Under the heading of „particle-aspect“ (436 f), it is stated that

up „frequently suggests intensity or totality“ and that with „adjective- and noun-derived verbs *up* is generally causative“, while *out* „contributes a connotation of thoroughness and culmination“. Fraser (1965: 38) distinguishes a „systematic“ relationship between verb and particle, i.e. when „the strict subcategorization and selectional features of the verbal element are exactly the same whether or not the particle occurs following the verb“, from all others, which are termed „unsystematic“. He concentrates on the systematic VPCs, but distinguishes several types of unsystematic relationships (43 f): 1) the addition of the particle renders a transitive verb intransitive, e.g. in *the weather cleared up, the planes stacked up over Kennedy Airport*; 2) intransitive verbs like *bawl, look, point, think* become transitive when functioning in a VPC; 3) cases which involve „a quasi-passive sense attributed to the verb-particle combination with the usual object now becoming the subject of the verb-particle combination“ (44) as in *a bill will figure up to a certain amount, a chair folds up, a clock winds up easily*. In the most recent study on VPCs with *up*, Meyer (1970b), various ways are mentioned in which the simplex verb differs from the VPC. It is claimed „daß in der Mehrzahl der Fälle die inhaltliche Funktion der Partikel von denen der anderen Kontextglieder geschieden werden kann“ (1). In locative combinations, the particle is said to denote either a relatively higher point, or a distant point on the same level, or a point exactly above a lower point in a vertical line. The particle *up* may further express „Steigerung“ (152 ff), „Vorhandensein“ (183 ff), „Nichtvorhandensein“ (296 ff), and „Kombination“ (261 ff), but also has the more specific variants denoting „Wachsein“ (121-124), „Erwachsensein“ (180-182), „Verschwinden einer Öffnung“, and „Umschließung (Verdeckung) einer Größe“ (324-341). It is repeatedly stressed (171, 289, 297, 341, 344, 362) that combination with the particle *up* involves a shift from the domination of the action to that of result, which is denoted by the particle. Meyer (1970b: 344) states: „Als typischen Effekt der nichtlokalen Partikelvarianten auf die Verben in nichtisolierten stabilen Verbindungen beobachten wir die Dominanz der grundlegenden semantischen

Komponenten, vor allem der Resultatsangabe. Dabei handelt es sich um einen Spezialfall der Formverstärkung einer Funktion“. The addition of the particle also has another important effect: a change, or more precisely an extension, of the „lexikalische Fügungsmöglichkeiten“ (172, 289, 299 f, 310). This may involve an increase in the number of nominals depending on the VPC (170, 173).

3.7.2.1. Changes in transitivity, or rather in the use of lexical items as one-place or many-place verbs (cf. 2.6.1.), are by no means restricted to VPCs. Poutsma (1926: 45-90) stresses the „floating nature of transitiveness“ and discusses various processes by which transitives are turned into intransitives and vice versa, quoting also examples containing VPCs with *out* and *up*. One-place verbs may be derived from two-place verbs: 1) „through absorption of an object“, e.g. *lock up* (doors), *put out* (lights), *sell out* (of the army) (one's commission); 2) „through being used passively without a change of voice“, often owing to „a dropping or absorption of the reflexive or reciprocal pronoun“ (27), e.g. *cancel out*; and 3) „through no evident process“. On the other hand two-place verbs may be derived from one-place verbs: 1) „through being used in a causative meaning“, e.g. *follow up*, *trot out*; 2) „through being furnished with a Cognate Object“, e.g. *live out* (life); 3) „through denoting a kind of uttering“; 4) „Through taking an Effective Object; and 5) „through Absorption of a Preposition“. With 3), 4), and 5), no VPCs with *out* and *up* are mentioned. Prefixation is also given as a possible source for derived two-place verbs¹⁹⁴. It is pointed out repeatedly¹⁹⁵ that the addition of an adverb or adverbial may change a one-place verb into a

¹⁹⁴ Cf. Polenz (1968: 8), where this function is attributed to German *be-*, *er-*, as in *begießen*, *besteigen*, *ersteigen*. By prefixation *A gießt den B auf C* is changed to *A begießt den B (mit C)*. This is an instance of ‚objectivized locative phrases‘ (cf. 3.7.2.4.) involving object transfer and facultative object deletion. Cf. 4.2.1.3. As Polenz points out, the prefix in *ersteigen* also adds a semantic element of difficulty, since collocation with *Berg* is possible, but collocations with *Stuhl*, *Pferd* are excluded.

¹⁹⁵ Poutsma (1926: 55, 86).

two-place verb. The particle in this case „denotes a locality or state into which the person or thing indicated by the object is brought through the action denoted by the verb“ (86) (cf. 3.4.), as in *bow out* (sb), *cry out* (eyes), *last out* (others), *live out* (night), *sit out* (other guests), *talk out* (sth), *walk out* (sb). A sentence containing several instances of such VPCs is quoted from Thackeray (87): *I would rather wait him out, and starve him out, than fight him out.* This is a fine example of deverbal zero-derivatives which are accounted for by T 9. Jespersen¹⁹⁶, in dealing with „the double use of a great many verbs“ as transitives and intransitives, distinguishes the following classes of verbs which, however, are said to show „a good deal of overlapping“: 1) an ordinary object omitted; 2) a reflexive pronoun omitted; 3) a reciprocal pronoun omitted; 4) verbs of movement and change; 5) verbs derived from adjectives, etc.; 6) verbs derived from substantives; 7) causatives and inchoatives; 8) activo-passive use of the verb 1)-3) involve reduction of a two-place verb to a one-place verb by means of object deletion (cf. 2.6.1.), while 4)-7) involve an additional feature Cause (cf. 2.6.2., 2.6.3.). In 8) (*the book sells well*), the underlying subject denoting the agent is deleted, and thus a two-place verb is reduced to a one-place verb¹⁹⁷.

3.7.2.2. According to Lyons (1968: 367), „All pseudo-intransitive sentences . . . are to be transformationally derived from transitives. On the other hand . . . true intransitives . . . may be taken as the ‚source‘ for the generation of transitive sentences. The order of derivation is therefore intransitive — transitive — pseudo-intransitive“. We have already seen, especially in the discussion of deadjectival and denominal verbs, that in many cases the addition of a semantic feature Cause converts one-place verbs into two-place verbs in a regular manner¹⁹⁸. This phenomenon corresponds to Poutsma's

¹⁹⁶ Jespersen MEG III: 16.0. and 16.1.-16.8.

¹⁹⁷ Cf. Halliday (1967: 47), where a „process-oriented“ type of sentence (*this material washes*) is distinguished from an „agent oriented“ type (*the clothes were washed*). In both cases, the underlying subject is deleted on the level of surface structure.

¹⁹⁸ Cf. 2.6.1.—2.6.4.

„being used in a causative meaning“ and, using Halliday's terms, it must be regarded as a change from a process-oriented type to an agent-oriented type of sentence. In most two-place verbs which are not derivable from other lexical items, however, the feature Cause must be assumed to be already present without any change taking place. It seems clear that Cause necessarily implies the presence of an agent who causes something, and of an object which is either affected or effected. This two-place relation is established when Cause is added to a one-place verb. In such cases, where the presence of the feature Cause is optional, what is denoted by the sentence may be presented in either a process-oriented or an agent-oriented way.

3.7.2.3. Basically the same fact holds for verbs or VPCs which admit of object deletion¹⁹⁹, although the terms process-oriented and object-oriented would seem more appropriate here. The process-oriented sentence containing a one-place verb, e.g. (sb) *tidy up*, (sb) *clear up*, (sb) *gas up*, (sb) *liquor up*, (sb) *load up*, (sb) *saddle up* / (sb) *rinse out*, (sb) *speak out* actually names the agent in this case, but its relation to the object is not expressed. This corresponds to Poutsma's „absorption of an object“, as in *lock up* (doors), *put out* (lights), and Jespersen's „object omitted“. For this reduction of a two-place verb to a one-place verb, it is irrelevant whether the exponent of the object in the underlying sentence is a full noun, a reflexive pronoun, or a reciprocal pronoun. The other possibility of deriving a one-place verb from an originally two-place verb may be called „subject deletion“. This corresponds to Poutsma's „being used passively without a change of voice“, Jespersen's „activo-passive use“, and Fraser's „quasi-passive sense“, as in (chair) *fold up*, (clock) *wind up*. It is the type originally called „process-oriented“ by Halliday.

3.7.2.4. It was remarked above (2.6.2.) that three-place verbs can be derived from two-place verbs by adding the feature Cause. On the other hand, it should also be possible to

¹⁹⁹ Cf. Lakoff (1970: 47) and also Mittwoch (1971) for „unspecified NP deletion“ with VPCs.

reduce three-place verbs to two-place verbs by deleting one of the objects in the underlying sentence. If a sentence containing a three-place verb is regarded as a three-place predicate, then all three arguments have equal status, although their order is, of course, not irrelevant. Theoretically, each of the arguments would then have the same chance of being deleted. As we have seen with two-place verbs, either of the two arguments in the underlying two-place predicate may, in fact, be deleted. However, subject deletion is much less frequent than object deletion. If a sentence such as *they cleared out the mud from the river* is regarded as representing a three-place predicate containing the arguments *they*, *mud*, and *river*, then the notion of object transfer will support the assumption that the three arguments, or at least the two „objects“, have basically the same status²⁰⁰. This analysis presupposes that a distinction between adverbial adjunct and prepositional object is not made in this case²⁰¹. In *they cleared out the mud*, one object will be said to be deleted, while in *they cleared out the river*, it is the other object that is deleted. The relation between the two sentences is then explained by object transfer²⁰². However, *they cleared out the mud* could also be interpreted as being derived by prepositional phrase reduction, and then the arguments in the underlying predicate would not be given equal status. Only, in this case, *they cleared out the river* will remain unexplained. If a sentence such as *she took the book out of her purse* is analysed as representing a three-place predicate with

²⁰⁰ This is the position of case grammar as first defined in Fillmore (1968b).

²⁰¹ Poutsma (1926: 31 ff.) gives three criteria for recognizing the prepositional object: 1) the prepositional phrase should be „a necessary complement of the verb“ (31), 2) the preposition in them is „distinctly vague in meaning“ (32), and 3) the preposition is „intimately connected with the governing verb“, so that both form „a kind of unit“ (33). He admits that „some prepositional word-groups, as in *He leaped over the fence*, *He has slept in this bed* occupy an intermediate position“ (35) between prepositional object and adverbial adjunct.

²⁰² Cf. 3.2.4.2. and 3.2.4.4., Fillmore (1969: 127 f.).

the arguments *she*, *book*, and *purse*, then the possibility of prepositional phrase reduction, and the impossibility of object deletion would indicate the unequal status of the arguments. But even if an unequal status of the arguments is assumed, this does not preclude the analysis of both *they cleared out the mud from the river* and *she took the book out of her purse* as three-place predicates. Sentences containing two-place verbs can be derived from both, either by prepositional phrase reduction or by object transfer. But only object transfer could explain the relationship between *they cleared out the mud* and *they cleared out the river* (and *clear the river*, but **clear mud*), and between *remove* and *empty* (cf. 3.2.4.4.). Object transfer is a consequence of the possibility of shifting semantic focus, i.e. it is based on the distinction between topic and comment and the process of topicalization²⁰³. The notion of object transfer will also be supported by the phenomenon of what is called „objectivized locative phrases“ in Hall (1965: 85 ff). It is observed there that sentence pairs such as *John smeared paint on the wall/John smeared the wall with paint*, *John planted peas and corn in his garden/John planted his garden with peas and corn* are clearly related to each other²⁰⁴, and that the second sentence in each pair is best derived from the first one. Other sentences, like *he provided the children with shelter*, are also said to contain „derived objects“ (87 f) which stem from ,to NP‘, ,for NP‘ and ,of NP‘ phrases (*he provided shelter for the children*). In comparing object transfer and prepositional phrase reduction let us consider some further sentence pairs. Hundsnurscher (1968: 124) gives as German examples of „Subjektvertauschung“ and „Objektvertauschung“:

- (1) *das Wasser läuft aus* (dem Eimer)
- (2) *der Eimer läuft aus*

which can be regarded as subject transfer, and

²⁰³ Cf. Brekle (1970: 77 f.).

²⁰⁴ Cf. Fillmore (1968b: 48) and also *defrost the icebox* from *remove the frost from the icebox*, and *unsaddle the rider* from *remove the rider from the saddle*.

(3) *das Wasser ausschütten* (aus dem Eimer)

(4) *den Eimer ausschütten*

which are cases of object transfer²⁰⁵. In (2) and (4), a locative (or rather directional) prepositional phrase becomes the subject and the object of a sentence. The two-place VPCs in (3) and (4) can be derived from the one-place VPCs in (1) and (2) by adding the feature Cause. The sentences

(5) *they cleared out the mud* (from the river)

(6) *they cleared out the river*

are parallel to (3) and (4) in that they involve object transfer, but they differ in the presence of two particles (*out, from*) as opposed to one particle (*aus*) in the German verb phrase *das Wasser aus* (dem Eimer) *schütten*. Two particles in the directional prepositional phrase are also involved in

(7) *she took the book out* (of her purse)

(8) *she brought the dinner up* (to his room)

which are best explained by prepositional phrase reduction. Object transfer is not possible in this case. The corresponding sentences involving one-place verbs are

(9) *the ship sailed out* (of the harbour)

(10) *he climbed up* (the mountain).

Directionality in (10), as opposed to (8), is expressed by a single particle, as in German. The parallel with *out* exists in American English, where prepositional phrase reduction also involves a single particle, as in *he jumped out* (the window).

Sentences like

(11) *the chair folds up*

(12) *the clock winds up easily*

might perhaps be said to involve subject transfer, parallel to (2). However, there are two important differences: (11) and (12) as opposed to (2) do not involve a directional prepositional phrase, and (2) cannot be transformed into the passive by

²⁰⁵ For French cf. Pottier (1962: 198-200), and the examples quoted there: *dératiser le pot* and *dépoter les rats*, both from *ôter les rats du pot (de fleurs)*.

inserting an auxiliary, while (11) and (12) can (*the chair is folded up, the clock is wound up easily*)²⁰⁶.

3.7.2.5. As we have seen in 3.7.2.1., changes in transitivity are by no means confined to the addition of a particle to a simplex verb, nor are they a necessary consequence of such a process of collocation. Moreover, the direction of change is not fixed, since one-place verbs may become two-place verbs and vice versa in the process of collocation with a particle. Changes effected by adding the feature Cause or by object deletion are far more important in this respect, and are also of a much more general nature. In many cases, VPCs can have an optional feature Cause or – Deleted and can thus be used both as one-place or two-place verbs. It is true that prepositional phrase reduction plays a very important role in the formation of VPCs (cf. T 1, T 6, T 8, T 9). Whether this must be regarded as a change in transitivity depends on the value one ascribes to the prepositional phrase involved. If it is regarded as a prepositional object, then prepositional phrase reduction must be viewed as a kind of object deletion which reduces three-place verbs to two-place verbs, and two-place verbs to one-place verbs. Poutsma pointed out that in sentences like *he leaped over the fence* – which allows prepositional phrase reduction – the prepositional phrase is somewhere in between the adverbial adjunct and the prepositional object. Some of the criteria for the latter given by Poutsma apply (at least sometimes), others do not. In many cases, the prepositional phrase is „a necessary complement“, at least from the point of view of information (cf. *she took the book, she took the book out, she took the book out of her purse*). However, the preposition is usually not „vague in meaning“. On the other hand, the preposition is „intimately connected with the governing verb“, as it is not dropped in prepositional phrase reduction. Generally speaking, „a scale of closeness and openness“ (cf. 1.2.3.) must be recognized to exist, which ranges from collocations of

²⁰⁶ *The chair is folded up* and (11) are, of course, not synonymous since (11) involves a modal component ‚can be‘ which may perhaps be represented by a feature +Possibility.

prepositional verbs plus nominals to verbs plus prepositional phrases. The particle in VPCs originating by prepositional phrase reduction must be considered a kind of pro-form which stands for the whole prepositional phrase²⁰⁷. It clearly functions as an adverb, and the VPC is thus distinct from the simplex verb (*she took the book/she took the book out*).

3.7.2.6. Object transfer²⁰⁸ is also not restricted to collocations of verb and particle, although it seems to occur more frequently with VPCs, in particular with the synonyms of *remove*. Hundsnurscher gives the German examples *das Gras mähen/eine Wiese mähen* which are paralleled by English *mow the grass/mow the lawn*. With nouns denoting containers, determiners play a role, as in *drink milk/drink one glass* (but usually not **drink a glass*)/*drink a glass of milk*. Object transfer is not identical with what Live called co-occurrence with „a different set of objects“ (cf. 3.7.1.). Object transfer presupposes that a relationship exists between the objects which are transferred. In Live's examples this is not the case. Besides, there is a considerable difference between the VPC and the simplex verb: *carry out* (theory) is a discontinuous idiomatic VPC while *test out* (theory) ‚verify/by testing‘ and *show up* (swindler) ‚reveal/by showing something‘ are deverbal zero-derivatives. In Kennedy's examples (cf. 3.7.1.), where the object of the VPC has „a very different character“, a relationship between the objects exists in the sentence underlying the VPC. With the exception of *clean out* — where *clean out* (room) is also possible (cf. 3.2.4.2.) — they are all deverbal zero-derivatives, and the object of the VPC is replaced for the object of the verb in the underlying sentence. Only in *mop up the water on the floor* is an „objectivized locative phrase“ (cf. 3.7.2.4.) involved, and the direction of the object transfer

²⁰⁷ Cf. Sapir-Swadesh (1932: 13, 64-70), where „elliptic locative pronouns“ and „space-locative pronouns“ are discussed. *Below* in *he went below* is said to mean „to AN IMPLIED POINT below THE IMPLIED POINT OF REFERENCE (the point where he was standing)“ (13).

²⁰⁸ And also ‚subject-transfer‘, if Jespersen's „activo-passive use“ is regarded as such (cf. *the chair folds up/the book sells well*).

is probably the reverse of that in the other examples. As should be clear from the preceding discussion, object transfer and object deletion are two very different matters. Object deletion – whether the object is a noun, as in *gas up* (car), *light up* (pipe, cigarette), *lock up* (doors), *saddle up* (horse), or a pronoun, as in *liquor up* (oneself) – may be a source of idiomatity, especially when the deleted object is not easily reconstructed. Poutsma (1926: 59) describes this aspect of object deletion with the metaphorical wording that „the verb may then be said to be used in a *pregnant* meaning, more being meant than is actually expressed“. In other cases, as in *eat* (sth), the object may be irrelevant, and is therefore deleted, but this does not necessarily result in idiomatity. Parallel to object deletion, idiomatity may also arise by the deletion of an adverbial adjunct, as in Kennedy’s example of „special meanings“ (cf. 3.7.1.) – *call up* (by telephone), *ring up*.

3.7.2.7. From the preceding discussion we have seen that the collocation of verb and particle, as compared to the simplex verb, may induce certain changes with regard to transitivity and the nature of the objects. The changes do not all go in the same direction, and the same changes may also be produced by processes other than that of collocation with a particle. The differences can therefore not be generalized. When the selection restrictions and the meaning of the VPCs differ considerably from the simplex verb, as in *carry out* (threat) vs. *carry* (package), the two are unrelated and the VPC must be regarded as an idiomatic discontinuous verb. The same holds for VPCs such as *peter out*, where the verbal constituent does not occur independently. Apart from the differences between VPCs and simplex verbs discussed in the literature, one might assume that the two also differ with regard to figurative usage. There is, however, little evidence for such a hypothesis. We have found only the following VPCs whose use seems to be confined to a figurative one, while the corresponding simplex verb occurs only in literal use: (sb) *blossom out*, (sb/business firm) *branch out*, *freeze out* (sb), *grind out* (tune/verses), *map out* (one’s time), *root out* (crime/radicals/sb/old letter), *smell out* (secret, plot), *thrash out*

(problem, truth, solution), *weed out* (herd/the bad/impractical schemes), *winkle out* (secrets, story, news) / *bottle up* (emotion, anger), *cork up* (feelings, emotion), *soften up* (sb). Many other items are mainly used figuratively, but in such cases either the simplex verb is also used figuratively or the VPC has also literal uses.

3.7.3.1. We shall now consider those VPCs in which the particle functions as a locative adverb or a locative pronoun. When prepositional phrase reduction is responsible for the formation of the VPC, a certain movement is expressed by the VPC which then contains a feature +Dynamic. The particle in these cases denotes direction, and not place or position. This applies to the vast majority of VPCs. In certain VPCs – apparently only collocations with *out* – the particle, however, obviously contains a feature –Dynamic, thus denoting place. It will be clear that such collocations cannot include verbs of motion. We have found the following VPCs: (sb) *board out*, (sb) *dine out*, (sb) *eat out*, (servant) *live out*, (sb) *sit out*, (sb) *sleep out*, (children) *stay out*. In all of them, the particle *out* must be negatively characterized as ‘not in (a place)’. The place may be any house, and then *out* is synonymous to *outdoors*, as in *sit out*, *sleep out*, *stay out*. It may also be the home, as in *board out*, *dine out*, *eat out*, *sleep out*, *stay out*, or the place of employment, as in *live out*, *sleep out*. Basically, all three possibilities may occur, as in (sb) *sleep out*, ‘not in a house’, ‘not at home’, ‘not at place of employment’. In a few other VPCs the particle has a feature +Dynamic, thus denoting direction, but the verb in the collocation does not express physical movement. Such VPCs denote visual activity, which may be interpreted as a kind of abstract movement proceeding from the observer, as in (sb/hotel room) *look out*, (sb) *peek out*, (sb) *peer out*, (sb) *stare out* / (sb) *look up*.

3.7.3.2. In collocations with verbs of motion, the VPC contains the feature +Dynamic. The particle thus denotes direction instead of place. The feature can be said to be transferred²⁰⁹ from the verb to the particle in the process of collo-

²⁰⁹ Cf. the postulation of ‘transfer features’ instead of ‘selection

cation. Other features will be assumed to be present in the particle, such as an optional feature Vertical (\pm Vert)²¹⁰ in *up*. If *up* is $-$ Vert and collocates with verbs of motion, it contains a feature Proximate (\pm Prox)²¹¹. The direction of the movement is relative to a certain point of reference²¹². Since the explicit designation of this point of reference is deleted in prepositional phrase reduction, the particle functioning as a locative pro-form in the VPC is ambiguous. In collocations with *out*, the particle stands for ‚out of some place‘, which may be symbolized by $-$ Prox. The unreduced prepositional phrase specifies the necessary point of reference, and the noun in it can be said to denote the ‚starting-point‘²¹³ of the movement denoted by the VPC. In the collocations with *up*, the noun in the unreduced prepositional phrase represents the ‚ending-point‘ of the movement, which is the necessary point of reference. *Up* is thus a locative pro-form which stands for ‚up to some place‘. If the ending-point is higher than the starting-point, *up* involves $+$ Vert; if it is not, then $+$ Prox is present. This shows that there are actually two points of reference for all verbs denoting movement (including the VPCs

restrictions‘ in Weinreich (1966: 429 ff., 459). Selection restrictions would not work here, since the particle can be basically \pm Dynamic.

²¹⁰ Cf. Bierwisch (1967: 13), where a universal semantic marker ($+$ Vert) is postulated for the vertical dimension, as opposed to ($-$ Vert) for the other dimensions. The feature is motivated on the grounds of „a deep-seated difference between the vertical dimension and the horizontal ones“, as a consequence of the „human perceptual apparatus“. Cf. also 4.2.3.1.

²¹¹ Cf. 2.6.5., 3.3.3.3. and, especially, Meyer (1970b: 71 f.; 1971).

²¹² Cf. Sapir-Swadesh (1932: 13, 16), where it is pointed out that „locative pronouns“ (like *in*, *below*) have an implied point of reference, while other locative expressions (like *at*, *beside*, *east of*, *west of*, *upon*, (*a*)*round*, *against*, *with*) require an explicit point of reference. Cf. also 3.3.3.3.

²¹³ The „ending-point“ is defined in Sapir-Swadesh (1932: 11) as „the relation that exists between a movement and the point at which it ends“. Later (64), a corresponding „starting-point“ is introduced without definition. We use both terms in the sense of Sapir-Swadesh. Cf. also: „The principal device for expressing the ending-point-relation in English is the relator *to*“ (14).

with *out* and *up*): the starting-point and the ending-point. Both points of reference are independent of the speaker of the utterance, although they may coincide (cf. *he came up to me*). This fact distinguishes deixis in VPCs with *out* and *up* from the deictic categories involved in *here, this/there, that, come/go* (cf. 2.6.5.). According to Sapir-Swadesh (1932: 78), *out of* „is generally a starting-point expression“, while the *up* in sentences such as *pull up your chairs, he walked up to the parson* „has the function of adding to the basic e-p [ending-point, LL] notion that of increasing nearness, e.g., ‚He walked progressively nearer to the parson“. In their study (20 f), a number of simplex lexical items are analysed by assigning them an ending-point. Thus, *enter* is said to denote a movement whose ending-point is ‚a point in‘, and *admit* is then analysed as ‚cause or permit to enter‘. *Approach* and *to near* are said to involve ‚a point near something‘ or ‚points successively nearer something‘, which amounts to assigning them a component ‚move‘ and the feature +Prox. *Converge* „corresponding with the restrictive locative *together*, expresses MOVEMENTS *having as ending-point A POINT OCCUPIED BY ALL*“ (20 f). This corresponds to our use of +Together. As the starting-point in prepositional phrases with *out* and the ending-point in phrases with *up* is deleted in prepositional phrase reduction, the resulting VPCs with *out* only contain the components ‚move, -Prox‘, and the VPCs with *up* either ‚move, +Vert‘, or ‚move, +Prox‘.

3.7.3.3. If the result of a movement is not merely a change of place but at the same time a change of state, the VPC can be said to denote position. In discussing *sit up and pay attention*, Sapir-Swadesh (1932: 81) argue: „When the location (ending-point) is thought of as united with the particular ‚stasis‘ which results from a characteristic *movement* into a characteristic locatively determined *being*, we have ‚position‘. Position is not a type of location but is a more complex type of entity, involving or implying location, frequently ending-point of preceding movement. In actual usage position and ending-point get blended“. It seems that we have to distinguish two homonymous VPCs, one containing +Dynamic (*sit up*₁),

which denotes a movement resulting in a position, and another item (*sit up*₂) containing –Dynamic, which denotes the position itself. The same holds for *stand up*²¹⁴. With other VPCs, dynamic and non-dynamic items involving position are separated. Thus –Dynamic is present in: (tongue) *hang out*, (gun, balcony) *jut out*, (cape) *push out into sea*, (stomach) *stick out* / (outline of ship) *loom up*, (branch) *stick up*; +Dynamic in: (eyes) *pop out*, (tongue + Cause) *shoot out* / (sb) *buoy up*, (sb) *jump up*, (sb) *leap up*, (soldiers + Cause) *line up*, *prick up* (ears), (horse) *rear up*, (shirt) *ride up*, (sb) *spring up*, (sb) *start up*, *step up* (mast), (sb) *straighten up*, *tilt up* (barrel), *tip up* (barrel).

3.7.4.1. In VPCs which do not denote a movement of some kind, the modifying function of the particle is not always easily identified. The adverb is sometimes said to contribute to the expression of aspect. Thus, in Poutsma (1926), verbs are said to be „assisted in expressing an ingressive (or momentaneous) aspect by adverbs“ (296), such as *away*, *back*, *down*, *off*, *up*, while in other cases „the notion of terminativeness is brought out with the assistance of adverbs, chiefly *out*, *through* and *up*“ (300). In Live (1965: 436), the „particle-aspect“ of „thoroughness and culmination“ is attributed to *out*, and that of „intensity or totality“ to *up*. In Kennedy (1920: 25), *up* is said to have a „perfective value“ and „can be used in the perfective sense with almost any descriptive verb“. Fraser (1965: 37; 1966: 51 f) distinguishes three groups of VPCs, of which the second is labelled „completive“ VPCs. In this group, which includes collocations with *out* and *up*, the particle is not regarded as an adverb, but is said to cause the meaning of the verb „to take on a completive sense“ (53). Aspect is a term which many linguists restrict to Slavonic languages. Often, particularly in German linguistic literature, ‚aspect‘ is carefully distinguished from the ‚mode of action‘ (‚Aktionsart‘)²¹⁵,

²¹⁴ Cf. Poutsma (1926: 296) and the example quoted there: „Miss Slater had commanded Eva to stand up for the remainder of the lesson“.

²¹⁵ Cf. Zandvoort (1962), Knobloch (1965: 172-176), Nickel

although it is generally agreed that the two are not always clearly separable. If such a distinction is made and the term aspect is used for English, then it is usually applied to the opposition of simple form and expanded form²¹⁶. The labels perfective and imperfective (also durative, continuous, progressive) are normally used to distinguish the two categories of aspect. For the modes of action, a variety of terms are employed (which sometimes overlap) in most cases for the distinction of several phases of the action or process, such as inchoative, ingressive, continuative, progressive, egressive, conclusive, resultative, terminative. Other oppositions concerning the modes of action are punctual or momentaneous vs. linear, iterative or frequentative vs. durative, and also intensive or intensifying. In view of such a variety (and often confusion) of terms, it seems advisable not to create new ones or to give new definitions to old labels. As a cover term for the intensifying of perfective function of the particle in VPCs, we will, however, adopt Fraser's neutral term 'completive' in the following. We shall also try to determine more precisely, with the help of paraphrases, the functions of the particle, which are usually denoted by rather vague labels²¹⁷. This seems all the more appropriate, since the modes of action are normally believed to involve semantic differences, as opposed to the grammatical distinction of aspect.

3.7.4.2. The 'ingressive' mode of action as noted by

(1966: 213-233), Hansen (1967: 15-20, 42-56), Schopf (1969: 120-122). For the history of the term 'Aktionsart' cf. Klein (1968: 10-18). For the distinction cf. Knobloch (1965: 177): „Die Scheidung zwischen Aspekten und Aktionsarten . . . ist zwar für die grammatische Theorie notwendig, sie ist jedoch in keiner Sprache am sprachlichen Material selbst rein durchzuführen“.

²¹⁶ Cf. Schopf (1969: 151 ff.), Hansen (1967): „Die meisten Grammatiker stimmen heute darin überein, daß die englische Aspektkategorie durch die Glieder EF und SF repräsentiert wird“ (20); „In den modernen germanischen Sprachen kann wohl nur hinsichtlich des Englischen vom Vorhandensein eines kategorialen Aspekts gesprochen werden“ (17).

²¹⁷ Cf. Polenz (1968: 9, 138), where the same method is proposed instead of using „Schlagwörter“.

Poutsma for *sit down*, *sit up*, *stand up* does not seem to play a great role in VPCs with *out* and *up*, in contrast to collocations with *away*, *back*, *down*, *off*. Although *sit up* and *stand up* can be paraphrased as ‚begin to sit‘, ‚begin to stand‘ (which in word-formational terms would then be zero-derivatives), both can also be ‚duratives‘, as Poutsma (1926: 296) himself mentions. In collocation with action nouns, certain semantically empty VPCs such as *put up* (fight), *set out* (walking, on a journey), *take up* (residence) can be analysed as denoting the beginning of an action (cf. 3.5.5.1.). In this case, in contrast to *sit up*, *stand up*, it is not the particle alone which expresses the beginning, but the whole VPC. Therefore the mode of action is not expressed by the collocation with the particle, as opposed to the simplex verb. If the term ‚ingressive‘ is used in a wide sense, then the majority of VPCs with *out* and *up* will be covered by it, since they contain +Dynamic and denote a change of place or state. In traditional terminology, they are therefore sometimes called ‚mutative verbs‘²¹⁸.

3.7.4.3. Let us now consider the ‚completive‘ function of the particle. In the literature on VPCs²¹⁹, the following items are said to receive a completive sense; through collocation with *OUT*: *broaden*, *burn*, *buy*, *carry*, *deepen*, *die*, *even*, *fade*, *fight*, *freeze*, *give*, *lengthen*, *puzzle*, *seek*, *sell*, *stretch*, *sweat*, *think*, *tire*, *turn*, *wear*, *widen*, *work*; through collocation with *UP*: *beat*, *block*, *break*, *brush*, *burn*, *buy*, *churn*, *clean*, *clog*, *cut*, *dry*, *eat*, *fix*, *grind*, *heal*, *jam*, *jiggle*, *mix*, *plug*, *roil*, *seal*, *shake*, *stir*, *stop*, *swell*, *tear*, *use*, *wash*. As can be seen from the groups set up in Fraser (1966: 52), more than just a completive nuance of the verb is often involved:

- (1) *The man mixed (beat, churn, jiggle, roil, shake, stir) up the paint*

²¹⁸ Cf. Poutsma (1926: 23), and Fillmore’s (1969: 112) ‚change-of-state verbs‘.

²¹⁹ For references cf. 3.7.4.1. In Mittwoch (1971) a syntactic feature [completive], attached to the VP node, is distinguished from a semantic feature [completive], contained in the particles *up* and *down*, in *drink up*, *drink down*, *eat up*.

(2) *She coiled (curl, fold, roll, wind) up the rope*

(3) *The woodsman broadened (deepen, lengthen, widen) out his step*

(4) *The garbage clogged (block, jam, plug, stop) up the drain.*

In (1), the VPC cannot be paraphrased simply as 'mix (beat, etc./completely' or 'mix/all of'. This is only possible with *mix up* itself. All the other VPCs must be analysed as 'mix (=CAUSE + BE + +Together)/by beating, etc.', and are thus deverbal zero-derivatives involving +Together. The morphological structure of *beat up* (paint) could be represented by: *beat// Φ /up*. If *up* is assigned completive force only, it then functions as the determinant of the zero-morpheme on the next level of analysis, and +Together is exclusively contained in the zero-morpheme. If this analysis is not accepted, the zero-morpheme, in conjunction with the particle, must be regarded as the determinatum. In (2), the VPCs may be paraphrased as 'coil, (curl, etc.)/completely', but can also be analysed as denominal or deverbal zero-derivatives involving +Together. The VPCs in (3) are obviously deadjectival derivatives involving Degree, which can neither be paraphrased as 'broaden/completely', nor as 'broaden/all of the step', nor as 'broaden/to the end, until it is finished'. Only in (4) can the VPCs be paraphrased either as 'clog (block, etc.)/completely', or 'clog (block, etc.)/all of the drain'. If, however, other collocations are used than the ones given by Fraser, then some items are completive and allow paraphrases with either 'completely' or 'all of', such as: (face) *broaden out*, *beat up* (sb), which is perhaps better rendered as 'beat severely'. Some other items quoted in the literature also require comment. *Buy out* (sb) is only a zero-derivative, as mentioned in the dictionaries. *Carry out* (plans, threat, orders, movements) is a discontinuous verb. (Family, the dinosaur/customs) *die out* involves a different set of subjects as opposed to the simplex verb, since only a collectivity can 'die/completely', and an individual's dying is not gradable. *Fade out* (picture, conversation) is 'cause to fade/gradually', not 'completely'. *Freeze out* (sb) is not

,freeze/completely', but a zero-derivative. Although *give out* 'be exhausted' involves ,completely', it is a discontinuous verb, not *give* modified by *out* ,completely'. *Puzzle out* (sth) 'solve, find out' is not completive in our sense, although it involves finality. The same holds for *seek out* (place, book, person), *sweat out* (cold), *think out* (scheme, solution), *turn out* (lights, gas-fire/goods/scholars), *work out* (problem, message, share, method/silver-mine). *Brush up* (dust/French) involves +Together and Degree but not ,completely'. *Fix up* (quarrel) may perhaps be analysed with ,completely'. *Seal up* (letter, window, drawer) is a denominal zero-derivative which might be analysed as ,close/completely'. (Ankle, wrist) *swell up* is not completive but involves Degree. *Wash up* (dishes, dinner things) 'wash all of' is parallel to *die out* in that it cannot be used with nouns denoting a single element. In addition to the items quoted in the literature, the following VPCs involve a completive particle, since they can be paraphrased with either ,completely' or ,all of'. Collocations with *OUT*: *copy* (article, letter), *write out* (copy). The collocations with *UP* are more numerous: (play, theatre, concert) *booked* (only used in the participle), (business) *close*, *drain* (glass), *drink* (the water), *fill* (tank, street), *finish* (everything, drink, dinner) (perhaps to be analysed as ,drink, eat/all of'), (girl) *flush*, *gobble* (supper), *kill* (weaklings), *munch* (bread, biscuits), (sb) *pay*, (sb) *rest*, (pears) *ripen*, (car, screw) *rust*, *shred* (paper, cabbage), *sell* (sb's goods), *slice* (loaf of bread), *snip* (piece of cloth), *type* (report), *write* (diary, notes, affair) (which involves object transfer). Another aspect of a completive meaning of the VPC is what Poutsma called „terminativeness“. In these cases, the particle may be paraphrased sometimes by ,all of', but usually by ,to the end' or ,until finished'. Apparently, such VPCs are restricted to collocations with *out*, such as: (sb/fire) *burn* (oneself/itself), *face* (matter), *fight* (storm/issue, war), *follow* (enterprise), *hatch* (eggs), *hear* (sb), *last* (apprenticeship), *live* (fate), *play* (role), *ride* (storm/gale/current adjustment), *serve* (apprenticeship), *sit* (play, dance, speech), *stick* (first term), *wait* (storm).

3.7.4.4. In the analysis of deadjectival VPCs, we have

postulated a semantic feature Degree (Deg) which was based on the comparative in the gradation of adjectives (cf. 3.1.2.). It is thus ultimately connected with the very general process of quantification and has to be regarded as a formator. If the feature is defined in a wide sense, it will include the superlative in the gradation of adjectives as well as degree adverbials and various devices for intensifying linguistic units, as are found in a great number of languages. We shall here restrict the use of the feature to those cases where the morphemes *-er* (as affixed to adjectives) or *more* are found in the paraphrases underlying certain surface structures. Thus Deg will be said to be contained in prefixal verbs of the type *outbid*, *outshine* ,bid more than', ,shine brighter than' (cf. 3.6.)²²⁰. Deg is also present in simplex lexical items such as *increase* ,cause to be *more*' and *improve* ,cause to be *better*'. In the productive prefixal types *overanxious* ,too anxious', *overcaution* ,too much caution', *overburden* ,burden too much', it is also present, only on a deeper level. *Too* must be analysed as ,exceeding a certain norm'. As we have already seen, Deg is found in some VPCs with *out*, and in a great number of collocations with *up*.²²¹ In many VPCs with *up*, the feature Deg together with +Dynamic is the only difference between the simplex verb and the VPC, and the two components must therefore be regarded as the meaning of *up*. Thus, while the zero-derived verb (car) *speed* is ,have speed', the VPC (car) *speed up* is ,get more speed' or ,increase speed'. The presence of Deg in the particle alone is probably partly explainable from the surface structure parallel with deadjectival VPCs where Deg is an optional feature of the underlying adjective. A second more important source of the productivity of VPCs with *up* contain-

²²⁰ Note that we do not follow Marchand's analysis of the type *outbid* as representing zero-derivatives. However, denominal combinations such as *outnumber*, *outpoint* (cf. 3.6.) are here regarded as zero-derivatives, as are the German formations of the type *ertanzen*, *verspielen*, *aufschrauben*, and deverbal English VPCs such as *blow out* (candle), *crow up* (barnyard).

²²¹ Cf. Meyer (1970b: 125-180).

ing Deg is the locative meaning involving +Vert. The ending-point of such a movement is ‚higher than‘, which also contains Deg. In a more abstract meaning, the originally locative value ‚higher than‘ is converted into ‚more than‘. This interpretation is equivalent to the procedure employed in Bierwisch (1967: 16, 32 f), where „a very abstract feature“ (Space) is set up to account for the meaning of certain adjectives used as modifiers of abstract nouns, as in *lange Zeit*, *kurzer Tag*, *große Angst*, *hoher Preis*, *hoher Ton*. It is a well known fact that in many languages lexical items which denote locative relations are also used to denote temporal and other more abstract relations. But the locative meaning of *up* is not the only source for Deg. That deadjectival verbs also play a role with regard to Deg, is proved by the fact that certain VPCs with *out* contain the feature, such as (face/„textile“) *broaden out*, (fall) *lengthen out*, *lengthen out* (wine) ‚make last longer‘, (limestone layer/houses) *thin out*, (street, river) *widen out*. There are even other VPCs with *out* which apparently contain the feature, such as *let out* (trousers) ‚make longer‘, *sit out* (rival) ‚sit longer‘, and *spin out* (time, money, glass of port) ‚make last longer‘. The overwhelming majority of VPCs containing Deg, however, consists of collocations with *up*. We here disregard all the other semantic features in the VPC and attempt to give an exhaustive list of VPCs with UP which involve Deg: *beef* (army, office), *bid* (goods), *blow* (fire/photograph/tire), *brace* (yards), (face) *brighten*, *brighten* (classroom), *brush* (French), *buck* (sb), (pressure) *build*, *build* (health, military forces), *bump* (prices, costs), *buoy* (sb), (sb) *change*, *charge* (sb), *chat* (sb), (dealer) *crack* (car), *crisp* (rolls, lettuce), *cry* (sth/sb), *dilute* (coffee, wine)²²², *do* (house, hat), (sb) *ease*²²², *feed* (children), *freshen*

²²² In some cases Deg denotes an increase towards the negative pole of a certain scale. Cf. ‚Minus‘ in Apresyan-Mel’čuk-Žolkovskij (1969: 13). Thus *dilute up* denotes an increase in *dilution*, but a decrease in the *strength* of the coffee, or wine. In the nominal form, a certain scale encompassed by two antonymous adjectives (such as *long* and *short*) is usually represented by the positive pole (*length*). The polarity is also neutralized when a certain dimension is measured

(herbage/buildings), *furish* (harness), (sb) *gear*, *gear* (production), (wind, sea) *get*, *get* (health), *ginger* (trade, flow of revenue), *grade* (herd of cattle/standard), *hasten* (process), *hem*²²² (dress), *hop* (engine), (gossip/air raids) *hot*, *hot* (things, Shakespearean productions), (sb + Cause) *hurry*, *jack* (prices/discipline), *jazz* (party, things/sb), (barometer, prices) *jump*, *key* (sb, crowd), *knit* (torn, sleeve), (rain, wind) *let*²²², *lighten* (load), *lighten* (colours), (things, party + Cause) *liven*, (business, shares) *look*, *mark* (umbrellas), (expenses, bills) *mount*, *paint* (house, town), *pep* (sb/party, demonstration), (sb) *perk*, *perk* (oneself/denims/sales), (weather, trade/sb) *pick*, (wind) *pipe*, (store) *play* (other makes, items), *point* (narrative), *polish* (brasswork/style), *pull* (your grammar), (story, pace + Cause) *quicken*, *rake* (fire), *read* (subject), (bomber) *rev*, *rev* (motor-bike/engine/pace), *roughen* (surface), *rub* (spoon/Latin/memory), *rush* (work), *salt* (vegetables), *scale* (wages, marks, imports), *screw* (courage, exhilaration/oneself/rent), *send* (prices, temperature), (sb) *sharpen*, *sharpen* (knife), (rents, prices/sb) *shoot*, *shorten* (pants, rope), *shout*²²³, *sing*²²³, (sb) *slack*, (sb/pace, tempo, discipline) *slacken*²²², *slacken* (effort), *slick* (story/café), (sb) *slim*, (sb, car + Cause) *slow*²²², *slow* (reader/process), *soup* (engine, car/textbook economics, title), (sb) *speak*, (car, train/heart) *speed*, *speed* (engine/service/production process), *spice* (dish, meal/things), *steam* (economy), (trade) *step*, *step* (production), *sweeten* (stock), *switch* (radio, volume), (weather) *take*, (sb) *talk*, *talk* (game), *thicken* (sauce, soup), *tighten* (screw), *tone* (muscles, system), *touch* (picture, last act/horses/memory), *toughen* (sb), (sb + Cause) *trade*, *whack* (sth), *whip* (mare), *widen* (highway), *wind* (watch), *write* (the acting/asset). Basically, Deg can refer to an increase towards

(3 miles long but not *3 miles short). When somebody *eases up*, the consequence is a decrease of tension. The clearest manifestation of this phenomenon is the synonymy of *slow up* and *slow down*. When a car slows down, its speed decreases, therefore *down*. When it slows up, the process is the same, only this time it is viewed as an increase of slowness, therefore *up*.

²²³ Only used in the imperative.

either pole of a certain scale, as is evident in *dilute up*, *ease up*, *slow up* etc.

3.7.4.5. In a number of other VPCs, the particle functions as an adverb, but there are very few collocations in which it has the same meaning. In some cases, the function of the adverb is isolated. In a small group of VPCs with *out*, the particle has the meaning 'into society', or 'into public knowledge': *ask out*²²⁴ (sb), *bring out* (young lady), (daughter/book) *come out*, *have out* (sb), *invite out* (sb), (sb) *step*. In another group, *out* has the meaning 'aloud', as in (sb) *cry out*, *read out* (letter), (shot, bells) *ring out*, *roar out* (order, drinking song), *sing out* (order), (sb) *speak out*, *spell out* (words). In other functions, the particle is apparently isolated, as in *help out* (sb) 'temporarily', *ride out* (racehorse) 'to the limit', (sb) *strike out* 'vigorously'. In *type out* (essay, thesis), the particle is completive if the analysis 'type the final copy' is accepted. *Write out* (cheque) is a familiar collocation which is perhaps analysable as 'make out/by writing'. Writing is also involved in *fill out* (form²²⁵, check), which can be analysed as 'make complete', but not in *fill out* (story). As opposed to the completive function of the particle described in 3.7.4.3., *up* has the meaning 'not thoroughly' in a few VPCs, such as *practise up* (piece for concert), *press up* (suit), *scrub up* (children), *sponge up* (coat, dress). This group is related to certain VPCs where *up* has the meaning 'again, a second time', as in *fry up* (potatoes, yesterday's dinner), *heat up* (cold meat), *iron up* (dress), *warm up* (milk). The meaning 'awake' is found in a number of VPCs with *up*, but there are only a few in which it

²²⁴ Cf. Sapir-Swadesh (1932: 72): „The expression 'to ask out' is in a class with 'to invite out to', 'to take out to', 'to have out to' and others, as applied to social functions and activities, e.g. a dance, a bridge-party, supper, the opera, etc.". *Ask out* and *invite out* involve Cause, and must be analysed either as deverbal zero-derivatives, or as containing an embedded sentence with *come out*.

²²⁵ This collocation belongs to American usage; in British English a VPC with a different particle is used, viz. *fill in* (form). Cf. Palmer (1965: 187). The difference shows the idiomatic character of the discontinuous verb.

can be attributed to a modifying particle alone, such as *keep up* (sb), (sb) *stay up*, (sb) *wait up*. In (sb + Cause) *rouse up* and (sb + Cause) *wake up*, ‚awake‘ is already present in the simplex verb, while *rout up* (sb) involves ‚out of bed‘ rather than ‚awake‘. *Knock up* (sb) is a deverbal zero-derivative.

CHAPTER 4: SEMANTIC FEATURES

AND WORD-FIELDS

4.1. *General Remarks*

4.1.1. A powerful method in the study of the semantic structure of lexical items is that of word-formation, in that it describes how complex items can be derived from simplex ones in a regular way. Looking at the process from the other direction, we can greatly reduce the number of items which have to be assigned a complete semantic specification, if complex items can be derived from simplex ones. This amounts to a considerable simplification of the lexicon. However, there are certain limitations to the method, which are mainly due to the effect of lexicalization. Varying degrees of idiomaticity tend to obscure the originally clear relationship between the constituents of a complex form, which thus becomes unanalysable. With regard to VPCs, this means that many items which are not readily recognizable as deadjectival, denominal, or deverbal derivatives would remain unexplained. There are two possible ways to overcome this limitation, if the VPCs are regarded as units for the time being¹. Certain semantic components and features may be found to be present in the entire VPC, and the items are grouped together accordingly. In a second step it will then be possible to check whether or not the

¹ Cf. Pierce (1970: 101), where it is argued that „*burn up*, *cut up*, etc., must be treated as single lexical items, not as *burn* plus *up* and *cut* plus *up*“. Although we find many discontinuous verbs, one certainly cannot claim for all VPCs, as is done by Pierce, that „*up* is a complex verb former, *i.e.*, a derivative morpheme, and its meaning is VERB FORMATIVE“ (101). Cf. 3.2.1.

established features are contained in the simplex verb. The other possibility for a semantic investigation is to set up word-fields which are represented by certain archilexemes².

4.1.2. It is obvious that the two procedures yield partly overlapping results, as in the case of an archilexeme *gather*. Since an archilexeme is considered as covering the content of a word-field, the members of which are directly opposed to each other in a specific syntactic slot³, it can be discovered by a commutation test. It is the smallest common denominator of a number of lexical items, i.e. it is that item which semantically includes all the others. It can therefore replace these other items with only a loss, not a change of information. The items in the word-field represented by *gather* form a subset of the items covered by the semantic formulas (CAUSE +) BECOME + STATE, where STATE is realized as +Together⁴. On the other hand, certain groups of VPCs can only be grasped with the help of an archilexeme, as in the case of *utter* and collocations with *out*. To postulate a feature +Uttered for the STATE resulting from the action denoted by the VPC seems quite unnatural and counterintuitive. In the following analysis of VPCs by means of semantic features we shall disregard all items which involve place, i.e. those covered by the semantic formulas BE + LOC, BECOME + LOC, and CAUSE + BECOME + LOC. Therefore VPCs which contain a feature +Motion, either contributed by the simplex verb or present only in the collocation, are not included here. Two-place verbs involving POSITION will be treated⁵ as an inter-

² Cf. 2.4.5. and Geckeler (1971: 177-204).

³ Cf. Geckeler (1971: 192 f.).

⁴ At first sight the two sets seem to be identical, as would also appear from the definition of *gather* as 'get, come, or bring together' in AL. However, in a number of cases the VPC could not be replaced by *gather*, either because of selection restrictions or because of a different meaning. Cf. *clip up* (papers), *hook up* (gas, heater/power lines). Cf. also *gather one's papers and books together* in AL s.v. *gather*.

⁵ Cf. also 3.7.3.3. Thus one-place verbs such as (gun, balcony) *jut OUT/(sb)start UP*, (ship) *loom UP* are not included in the follow-

mediate category between LOC and STATE. We shall concentrate, however, on features connected with STATE.

4.2. *Semantic Features*

4.2.1.1. As discussed in 2.6., we regard all sentences, i.e. the expressions of predications, as consisting of an initial, a medial, and a final cluster of semantic features. With one-place verbs the VPC comprises the medial and the final cluster. With two-place verbs the VPC mainly represents the medial cluster, while the final cluster is filled by the object of the sentence. It will be immediately clear that this analysis encounters certain difficulties. With two-place verbs STATE, which is the result of the action denoted by the VPC, is exclusively the state of the object. The relationship between the VPC and the object is thus much closer and different in kind, as opposed to that between the subject and the VPC. This is what Weinreich⁶ tried to capture with the concepts of ‚nesting‘ and ‚configuration‘. The relation is equally close between the STATE involved in one-place VPCs and the subject of the sentence, as is obvious from the possibility of deriving a two-place verb by adding CAUSE. The problem is solved by setting up a distinction between ‚connectives‘ or ‚formators‘ and ‚designators‘, as was done in 2.6.5. and 2.6.6. Both are semantic features, or semantic components, i.e. groups of features. But only the formators, viz. BE, BECOME, HAVE, GET, CAUSE occur as

ing. Cf. Meyer (1970b: 104-112) for *bang, bolt, loom, pop, rear, rise, sit, stand, start, sticke, straighten UP*.

⁶ Cf. Weinreich (1966: 425), where the possibility of treating *the lady sings arias* as a two-place predicate with *lady* and *aria* as arguments is discussed, and it is pointed out that „the metarelation of one of the arguments to the relation is different from that of the other“. It is argued that „The nesting construction is clearly intended to provide a formal representation of the intuitive feeling of *transitivity*“ (424).

medial clusters and function as connectives. Besides the formators, verbs — and of course VPCs — also contain descriptive semantic features: the designators. Consequently, one-place and two-place VPCs will be analysed as containing formators and designators. The latter are represented in the semantic formulas by the cover symbols LOC, POSITION, and STATE.

4.2.1.2. In 2.5. we discussed the possibility of semantic tests and concluded that the *but*-test, as used in a pair of sentences of which one is negated, is the most powerful device for motivating specific semantic features if used in conjunction with the *so*-test. The procedure can thus be employed to justify the postulation of certain designators like +Together. As we have seen in 2.4.1., basically all linguistic units which function as modifiers in definitions can be turned into meta-linguistic elements and thus serve as theoretical constructs to denote semantic features. The formators are equivalent to the „genus“ in semantic formulas such as BE + STATE, BECOME + STATE, CAUSE + BECOME + STATE which can be considered as definitions. The designators, which specify the cover symbol STATE, function as the „differentia specifica“. Hjelmslev's „empirical principle“ (cf. 2.2.1.) requires that the number of such designators be kept as low as possible to permit an economical description of language. On the other hand, collocation restrictions of the nominals involved will sometimes demand quite specific designators in certain definitions. The conflict between the requirements of the generality of features, and of the naturalness of definitions (cf. 2.4.1.) can only be solved by a compromise of the two principles. Although our choice of semantic features is motivated by the results of the *but*-test, some definitions will need a slight alteration of the exponent of the feature to sound perfectly natural. This deviation will be further enhanced by another consequence of the principle of economy: the use of binary features, symbolized by \pm . Although in the object language STATE requires a modifier in adjectival form, designators, as theoretical constructs, will also be used in the shape of other word classes (\pm Exist, \pm Protrude), in abbreviated form (\pm Vert), and in a form derived from neo-Latin coinings (\pm Prox) (cf. 2.4.3.). The

following semantic features are used as designators for STATE: +Adult, ±Apparent, +Awake, ±Blocked, ±Closed, +Confused, ±Covered, +Empty, ±Exist, +Fastened, +Inflated, ±Inside, ±Process, ±Prox, ±Together, ±Vert.

4.2.1.3. Before entering the description of the VPCs, we shall first discuss two binary features in greater detail: ±Exist, and ±Together. Both occur in collocations with *out* and *up* and are of greater general relevancy than the other features. The feature +Exist is tied up with what is traditionally called the effected or effective object. In these cases the thing denoted by the object is the result of the action denoted by the verb — therefore the term object of result is also used — which is represented by the formula CAUSE + BECOME + /+Exist/⁷. The effected object is created by the action, while the affected object already exists before the action takes place. The difference is treated as a „covert“ grammatical distinction in Fillmore (1968b: 4). However, it is said to have „syntactic relevance“, as the effected object does not permit interrogation of the verb with *do to* (*What did John do to the table?*) while the affected object does. The sentences *John built the table* and *John ruined the table* are said to differ in this respect. In a review of Fillmore's article, Brekle (1970b) proposes a further criterion for this distinction, which is considered as part of the selection restrictions of a verb. According to Brekle, a noun functioning as an effected object necessarily contains as the dominating semantic feature the ‚nomen patiens‘ of the respective verb. Thus, in the examples *ich drucke ein Buch*, *ich schreibe ein Pamphlet*, *ich zeichne ein Dreieck*, the nouns *Buch*, *Pamphlet*, *Dreieck* contain the respective features „Gedrucktes“, „Geschriebenes“, „Gezeichnetes“. On the other hand, the affected object *Pferd* in *der Mann schlägt das Pferd* does not contain the feature „Geschlagenes“. This criterion is of course

⁷ In the following, designators will be marked by / /, when occurring in semantic formulas. Besides indicating the distinction between formators and designators, the notation avoids a confusion of the + belonging to the formula and the + or — which are symbols of binary features.

not only applicable to German⁸. Another surface structure manifestation of the „covert“ distinction can be found with verbs in German and English. It seems that in some cases the verb governing an affected object must collocate with a prefix or a preposition, while the effected object is governed by the simplex verb. The phenomenon is linked with the question of object transfer and objectivized locative phrases (cf. 3.7.2.4.). Consider the following examples:

- (1) (i) *etwas auf ein Blatt schreiben*
- (ii) *ein Blatt beschreiben*
- (iii) *einen Brief schreiben*
- (2) (i) *etwas an (auf) die Wand malen*
- (ii) *die Wand an(be)malen*
- (iii) *ein Bild malen*
- (3) (i) *write something on the blackboard*
- (ii) *write on the blackboard*
- (iii) *write a book*
- (4) (i) *smear one's hands with grease*
- (ii) *smear grease on one's hands*
- (iii) *smear a word.*

In (1 iii), (2 iii), and (3 iii), the effected object collocates with the simplex verb, while the affected object in the other examples requires a prefix or a preposition in German and a preposition in English. When object deletion takes place, as in (1 ii), (2 ii), and (3 ii), object transfer occurs. In (3 ii), the new object is a prepositional object. In (4 ii), no object deletion is possible when object transfer takes place, but the new object is not a prepositional object. The parallelism between (3 iii) which contains +Exist and (4 iii) which contains –Exist suggests that the effected object may perhaps be paralleled by an „anihilated⁹ object“. While the effected object is created by

⁸ As pointed out by Coseriu (personal communication), this criterion does not hold for *zeichnen* which can mean either ‚draw‘ or ‚represent, picture by drawing‘. The latter meaning accounts for *ich zeichne ein Haus (Schiff, Baum, etc.)*, where the lexical items *Haus, Schiff, Baum, etc.* do not contain the feature „Gezeichnetes“.

⁹ Cf. Lipka (1971b: 226).

the action, the annihilated object is destroyed by the action denoted by the verb. The binary nature of the feature \pm Exist will support such a hypothesis. One might suggest that the correct notation for two-place verbs containing this feature is simply CAUSE + BE and CAUSE + NOT + BE. But there are strong arguments against such a notation. The symbol \pm Exist is derived from the *but*-test for the presence of features. It is also supported by the distinction between the main verb *be* and the copula *be*, and the parallel to the notation of other features. The binary feature \pm Together has already been widely used in this study, which may testify to its importance. It can refer either to at least two different physical objects, or to at least two parts of the same object. A single physical object which cannot be viewed as consisting of separate parts cannot involve this feature, i.e. it cannot be the subject of a one-place verb or the object of a two-place verb containing \pm Together. The feature partly corresponds to [\pm joint] as set up in McCawley (1968a: 152), which is, however, only used for the subcategorization of noun phrases: „Joint noun phrases allow adjuncts such as *together*; nonjoint noun phrases allow adjuncts such as *each*“. According to Dougherty (1970: 535), McCawley's [+joint] applies to phrasal conjunction, while [-joint] corresponds to sentence conjunction. In Meyer (1970a: 8), the symbol [+Combined] is used for „bewegliche Konkreta“ which reach „einen gemeinsamen Zielpunkt“. This is exactly equivalent to our notation +Together, and to Sapir-Swadesh's „a point occupied by all“ (cf. 3.7.3.2.), only that we do not confine the feature to movements of concrete physical objects¹⁰. The features posited in Meyer's dissertation

¹⁰ Although Meyer, in his dissertation (1970b), does not restrict the feature to concrete objects — as is shown by the examples: *draw up* (results), *roll up* (words), (bills) *mount up*, *stack up* (knowledge) — he mainly deals with those. Cf. especially (1970b: 264). He prefers to speak of „Einzelgrößen“ which are combined into a „Gesamtgröße“. According to Meyer (1970b: 355) neither [+Combined], nor [\pm Present] are directly related to the directional meaning of the particle, which is considered as the main variant.

(1970b: 342) for nonlocative and non-directional variants of *up* largely correspond to those set up here. Thus, [+Awake], [+Combined], [+Increased] are equivalent to our +Awake, +Together, +Deg. Meyer's general features [+Present] and [-Present] are here specified more precisely as ±Apparent and ±Exist. Although it only appears in a few VPCs we have taken over Meyer's feature [+Adult]. What is labelled informally as „Verschwinden einer Öffnung“ (324) and „Bedeckung einer Größe“ (329) is here captured and differentiated with the help of the features +Blocked, +Closed, +Covered. „Lokale Fixierung des Objekts“ (83) corresponds to +Fastened.

4.2.2. VPCs with OUT

4.2.2.1. Before discussing other semantic features, we shall first consider VPCs with an intermediate category between LOC and STATE, viz. collocations involving

CAUSE + BE + POSITION:

They all denote movements of concrete objects. The result of the movement is a position which is characterized by the features +Protrude and -Vert. We have found: *boom* (sail), *dart* (hand, tongue) (also without CAUSE), *hold* (arms, hand/baby), *push* (roots), *reach* (hand - Deleted), *shoot* (tongue, hand/buds) (also without CAUSE), *stick* (head, tongue), *stretch* (arm).

4.2.2.2. In the following, semantic features in one-place VPCs and two-place VPCs will be treated in alphabetical order.

BECOME + /+Apparent/:

This feature is related to +Exist but the two are distinguished here, as we believe that there is an important difference between effected and affected objects and also between the respective subjects. In Meyer (1970a: 6 f), +Apparent and +Exist are combined under the same label (+Present), and are said to be distinguished by the context. We have found:

(strata) *chop*, (sun/news, truth/daughter/sb in photograph) *come*, (rock, minerals) *crop*, (news) *filter*, (anger) *flame*, (news) *leak*, (moon/ancient belief) *peep*.

BECOME + /+Exist/:

When the subject comes into existence only through the process denoted by the VPC, the latter contains the feature +Exist, as in: (disease, war, inflation, fire, quarrel, riots, disturbances, plague) *break*, (war, disease) *burst*, (flowers, sum, equation, book) *come*. The majority of VPCs with +Exist are two-place verbs containing CAUSE.

BECOME + /-Exist/:

There are many more collocations with *out* containing -Exist than +Exist. The feature partly overlaps with -Process in those cases where the subject is an action noun or a ,process noun', as, e.g., in (fire) *burn*, or denotes a living being, as in (sb) *pass*. The items containing -Process thus form a subset of the items containing -Exist. We list here only those VPCs which do not involve -Process: (pressure groups) *cancel*, (family/the dinosaur/old customs, specialization) *die*, (supplies) *give*, (stream/copper deposits/supplies/families) *pete*, (sandstone) *pinch*, (patience) *wear*.

BECOME + /+Inflated/:

Although there is a connection with +Protrude, the following VPCs are better characterized by +Inflated: (sails) *belly*, (muscles) *bunch*, (cheeks) *fill*, (sails) *swell*. (Calves) *bulge* is non-dynamic.

BECOME + /-Inside/:

The two examples, (sb) *check*, (sb, workers) *clock*, do not simply involve LOC, but denote a certain STATE resulting from the movement: ,be no longer registered' and ,work no longer'. (Sb) *drop*, (sb) *pass* may refer to school and society.

BECOME + /-Process/:

Like the preceding feature, -Process involves „terminativeness“

(cf. 3.7.4.3.). Both could be subsumed under a common feature labelled /No longer/, with –Inside involving STATE in addition to LOC, and –Process involving STATE in addition to Process. In the semantic test a complex expression like ,no longer function in a certain way‘ will seem most appropriate. The symbol –Process is intended to cover and abbreviate this expression. The process itself may be either denoted by the verbal constituent of the VPC, as in (fire, candle/bulb, grate/sb) *burn*, or is implied as a normal function of the subject, as in (engine/sb) *conk* ,work/be conscious, live‘, (engine) *cut* ,work‘, (engine) *give* ,work‘, (fire, light) *go* ,burn‘, (sb) *pass* ,be conscious, live‘, (sb) *peg* ,live‘, (wick/sb) *suff* ,burn/live‘, (candle) *sputter* ,burn‘. In other collocations the process is referred to by an overt agent noun or a process noun functioning as subject, as in (runner) *drop*, (baseball player) *fly*, (exitement) *sputter*. Another item is: (fireworks/attempts, enthusiasm) *fizzle*.

BECOME + /–Prox/:

The only one-place VPC with *out* is apparently (sb) *hire*. The VPC goes back to an underlying sentence containing a deleted reflexive pronoun as object. The subject is thus ,away from‘ itself (cf. 3.3.3.3.). The items with –Prox do not simply represent a subset of the items containing –Together. The feature –Prox necessarily contains –Together, but in a specific way, viz. referring to the subject of the sentence only. It can be paraphrased by ,no longer together with subject‘ or ,away from subject‘. Thus, e.g., both features, –Prox and –Together, are simultaneously present in the word-field represented by the archilexeme *distribute*. This fact leads to the distinction between the two features.

BECOME + /–Together/:

In one-place VPCs derived by prepositional phrase reduction, the element with which the subject is no longer together is not overtly expressed. When the subject is a collectivity, its members are no longer together as a result of the process denoted by the VPC. We find: (business firm) *branch*, (sb, France) *contract*,

(sb) *drop*, (troops, picnickers/glacial debris) *fan*, (mist, pelicans, lines/civilization) *fray*, (city, company, business) *mushroom*, (sb) *opt*, (suspended pigment) *settle*, (legs/end) *splay*, (payments) *spread*, (houses) *thin*.

CAUSE + BE + /+Apparent/:

Blurt (secret), *bring* (meaning of a passage/young lady, book), *dig* (book), *dope* (specifications), *drag* (reason), *draw* (scarf), *ferret* (secret), *figure* (problem), *find* (sb/sth — Deleted), *fish* (coin), *flush* (dollars/tax evaders), *hunt* (old diary, hat), *haul* (old essay), *perk* (fish, pistol), *lay* (cold meal, evening clothes), *nose* (rat, trail/scandal, evidence), *point* (pictures, the man/mistake/that¹¹ . . .), *puzzle* (sth), *rake* (scandal), *reckon* (how much we will need¹¹), *root* (truffles/possessions), *rout* (bottle), *scare* (partridge), *search* (friend/insincerity), *seek* (sb, place, book, keymen, enemy bombers), *smell* (sb, witch/secret, opposition), *smoke* (intentions), *sound* (sb¹²), *spell* (views), *spy* (secrets/land¹²), *track* (development), *trot* (horse/knowledge, excuse), *whip* (knife, wallet), *worm* (secret).

CAUSE + BE + /-Apparent/:

There are apparently only three collocations with *out*, where, in contrast to the majority of VPCs, the negative value of the binary feature \pm Apparent is present: *black* (windows, lights), *block* (view), *shut* (bay, view, sunlight).

CAUSE + BE + /-Blocked/:

Apparently there is only *thaw* (pipes, radiator/hands/sb).

CAUSE + BE + /+Empty/:

The feature does not only denote a state of concrete objects, i.e.

¹¹ Cf. the use of a sentential complement *that*∩*S'* in the sub-classification of verbs in Chomsky (1965: 94). It is perhaps worth mentioning that of the 50 instances of *point out* found in our corpus of linguistic texts (cf. 3.5.6.2.), 36 have sentential complements with *that*.

¹² With object transfer. In *sound somebody out about a question*, the question becomes +Apparent, not the person.

containers — a state resulting from removing something — but also more abstract states. In the semantic tests these are best denoted by ‚exhausted‘. We find: *farm* (land), *knock* (pipe), *mine* (field), *muck* (stable), *rake* (fire), *write* (oneself).

CAUSE + BE + /+Exist/:

Bang (sth written), *bat* (a draft), *beat* (path), *blast* (ditch, new course for stream), *block* (plan, scheme), *chalk* (plan), *cipher* (sum), *comb* (hairstyle), *crank* (novel), *crayon* (plan), *cut* (path/dress), *dig* (spring), *draft* (plan), *draw* (scheme), (streams) *etch* (valleys), *grind* (tune/novel), *hack* (path), *hammer* (scheme, policy, empire), *hatch* (plan, conspiracy), *hew* (career), *hollow* (place in the cliffside, rain barrel, tunnel), *knock* (novelettes), *plow* (gullies), *pound* (tune/story), *print* (list), *reason* (answer, plan), *rough* (lenses, disks), *scoop* (hole, channel), *score* (channel), *scrape* (hole), *strike* (method), *study* (system), *sweat* (novel), *tap* (telegraph message, paragraph), *think* (scheme, what . . ., solution), *thrash* (solution), *work* (method/salvation).

CAUSE + BE + /-Exist/:

As with one-place VPCs, there is a certain overlap with —Process when the object is an action noun or process noun, as in *beat* (fire), *blow* (fire, light), *fade* (conversation), *stamp* (fire, disease, rebellion), *trample* (fire), *tread* (fire). Other items are: *blot* (view/enemies), *cancel* (kindness), *hammer* (differences), *ink* (picture, lines), *iron* (wrinkles/misunderstandings), *kill* (weaklings), *knock* (bridge, aircraft), *mark* (stain), *phase* (campaign), *root* (mistakes, crime/radicals), *rub* (pencil marks, tracks/town/sb), *sand* (stain), *snuff* (hopes/jobs), *sponge* (memory, debt), *talk* (problems), *wipe* (what you have written/population, defending force/disgrace, insult).

CAUSE + BE + /+Inflated/:

Some one-place VPCs containing this feature also occur as two-place VPCs with an additional feature CAUSE, such as: (wind) *belly* (sails), *fill* (sails). Others are: *blow* (cheeks, paper bag), *bunch* (chair with cushions), *puff* (chest).

CAUSE + BE + /-Process/:

Beat (fire), *black* (radio transmitter), *blow* (fire, light, candle), *burn* (oneself), *count* (boxer), *crush* (cigarette), *fade* (picture/conversation), *jam* (cigarette), *knock* (sb/opponent), *lay* (player), *muster* (soldier), *puff* (candle), *put* (fire, light), *rub* (cigarette), *shoot* (light), *snuff* (light, rebellion), *stamp* (fire/disease/rebellion), *stub* (cigarette), *trample* (fire), *tread* (fire). As can also be seen in one-place VPCs involving -Process, the majority of items refer to the end of a process which is either the burning of a concrete object, or the emission of light¹³. In a number of items, especially in slang, this is likened to the state of being alive or conscious in a figurative way. As the examples show, the VPCs, however, also denote the end of other processes such as the transmission of radio waves, boxing, the running of a film, conversation, fighting, playing, serving as a soldier, illness, and rebellion.

CAUSE + BE + /-Prox/:

Besides purely locative VPCs, there are certain collocations which involve more than a movement of concrete objects away from the subject of the sentence. The result is not a position but a STATE. In some VPCs an additional feature -Together is present. We find: *charter* (ships), *farm* (operations/baby), (press) *feed* (papers), *give* (leaflets), *hand* (samples, passes/compliments, advice, punishment), *hire* (boats/slaves), *ladle* (soup, porridge/socialism, charm), *lease* (house, property), *lend* (book), *measure* (medicine/rewards), *rent* (cottage/house), *send* (light and heat, perfumes, bleating/glacier tongues/new leaves/invitations), (cities) *thrust* (suburbs).

CAUSE + BE + /-Together/:

We here include only those items which are not purely locative. The others will be treated under the archilexeme *remove* in

¹³ With regard to the sentence *the electric light went out*, where „the possible exponents of subject are limited to a few which belong to the sets of *light* and *fire*“, this is also pointed out in Fairclough (1965: 77).

4.3.2. The following VPCs involve —Together¹⁴: *beat* (gold), *deal* (sandwiches, food, supplies/complements), *dole* (food, money), *dose* (aspirin), *draw* (metal/subject), *fan* (cards), *knead* (dough), *ladle* (soup, porridge), *leave* (sb/letter, possibility, point), *measure* (medicine), *miss* (sb/words, verse/sweet course), *open* (folding map), *parcel* (plantation), *partition* (land, property), *play* (length of line), *portion* (sth), *ravel* (rope's end), *roll* (pastry, carpet), *scrub* (acetone), *separate* (organisms, crystals/the good ones/episodes), *serve* (rations), *shake* (sail, whip), *share* (£ 100, estate), *shred* (project), *sift* (ashes, wheat/students/fact), *single* (sb/incident), *smooth* (handkerchief), *sort* (apples, defective tool/riddles), *space* (posts, farms/space/payments), *splay* (toes), *spread* (rug, map, arms), *stretch* (oneself), *thin* (seedlings), *trail* (business), *weed* (herd), *weigh* (butter, flour, portions), *white* (matter). In certain collocations with nouns the STATE resulting from the action denoted by the VPC will be more naturally referred to as ‚flat‘ or ‚spread out‘, but this is only a contextual variant of the more general feature —Together.

4.2.3. VPCs with UP

4.2.3.1. As with collocations with *out*, we shall first discuss

CAUSE + BE + POSITION:

Most of the VPCs under this heading denote a position which involves vertical extension (+Vert) of concrete objects. Meyer (1970a: 4) uses (+Vertical) to refer to only that position which implies simultaneous presence of an object at a lower and a higher point. Collocations with *up* which denote movement from a starting-point to an ending-point, and a resulting difference in height, are said to contain a different feature called

¹⁴ There is one collocation with *out* which might be said to involve +Together, viz. *piece* (set of china/story, theory). But this is better analysed as containing a feature +Complete. It is not identical with completive *out* (cf. 3.7.4.3.).

(Height)¹⁵. However, the two features do not differ with regard to \pm Dynamic, but stand in an irreversible relation of implication, since (+Vertical) necessarily implies (+Height) but not vice versa. Thus, *stand up* can have a dynamic as well as a static variant both of which contain the feature (+Vertical). We do not follow Meyer here, as we are mainly interested in POSITION and STATE — not in movement. The distinction may be based on features of the verb, but also on the nature of the concrete objects which may have a dominating dimension¹⁶ (as in *set up a safe*). Parallel to the VPCs with *out* we here include items where POSITION is the result of a preceding movement. In some cases this is in connection with +Together, as in *bind* (hair), *line* (troops), *tuck* (shirt-sleeves, skirt, legs). We find: *bend* (wire, piece of metal, edge of a book), *cock* (ears), *draw* (oneself), *fling* (arms), *get* (sb), *hang* (coat), *hold* (head, umbrella/house/toppling regime), *knock* (arms), *lash* (curtain), *peg* (clothes), *prick* (ears), *prop* (patient), *raise* (oneself), *rein* (horse), *rig* (microphone), *right* (old fence/mast, flagpole), *rout* (sb), *shore* (hedgerows), *stand* (pole), *step* (mast), *thrust* (hand), *trice* (sail, boom, window shade), *turn* (collar).

4.2.3.2. The following involve BE and BECOME.

BECOME + /+Adult/:

There seems to be only a single¹⁷ one-place VPC containing this feature, viz. (sb) *grow*, and the number of two-place VPCs is also quite restricted. However, as is well known, the feature is contained in other lexical items, such as *bachelor* and *woman*.

¹⁵ Cf. Meyer (1970b: 41 ff., 102 ff., 342; 1971: 390).

¹⁶ For this problem cf. Bierwisch (1967: esp. 14, 22). Meyer (1970a: 4) points out that (+Vertical) is in logical conjunction with a feature (+Awake), since the state of being awake excludes a lying position. There is, of course, only a normal, not a necessary connection between the two states. However, this would suffice to explain the relationship between the two features.

¹⁷ Cf. Meyer (1970b: 180-182).

BECOME + /+Apparent/:

(Questions) *bubble*, (seeds/question, case) *come*, (rock, mineral/subject, difficulties) *crop*, (sb/subject, question) *pop*, (wrinkles/her age) *show*, (weeds, wheat/horror) *spring*, (sb, teachers) *step*.

BECOME + /+Awake/:

Most VPCs with this feature are either non-dynamic (*keep*, *sit*, *stay*, *wait*) or involve CAUSE. Apparently, the only one-place verb is (sb) *wake*.

BECOME + /+Blocked/:

(Machinery) *clog*¹⁸, (channel) *fill*, (engine, motor) *pack*, (drain) *plug*, (well) *sand*, (machinery, engine/verse, compositions) *seize*, (sink) *stop*.

BECOME + /+Closed/:

Apparently there is only one one-place VPC with this feature, viz. (wound) *heal*.

BECOME + /+Covered/:

There seem to be only (car, screws) *rust*, (glasses) *steam*.

BECOME + /+Exist/:

As already mentioned, there is some overlap with +Apparent. We find: (gale/trouble) *blow*, (difficulties) *crop*, (custom, practice, troublesome situation) *grow*, (stools and benches) *mushroom*, (breeze/suspicion, doubt) *spring*, (plants/houses, shopping centers) *sprout*, (difficulties) *start*, (tears) *well*.

BECOME + /-Exist/:

(Barrel) *blow*, (sth) *burst*, (sth/business) *bust*, (business) *close*, (stream/imagination/enterprise/individual men) *dry*.

¹⁸ Most of these are used predominantly or exclusively in participial form, such as (drainpipe, nose, eyes) *bunged up*, etc.; cf. 3.5.3.3.

BECOME + /+Inflated/:

(Balloon) *fill*, (ankle) *puff*, (ankle) *swell*.

BECOME + /+Together/:

(Figures) *add*, (stuff) *ball*, (people) *band*, (people) *buddy*¹⁹, (soldiers) *close*, (sb/wings of aircraft) *crumple*, (children, sb) *cuddle*, (sb) *double*, (people) *gang*¹⁹, (sb) *huddle*, (sb) *join*, (sb, families) *link*¹⁹, (lions) *mate*, (broken leg) *mend*, (ice) *pack*, (people/shoe) *pair*, (sb) *pal*¹⁹, (cars/work) *pile*, (coat) *pucker*, (debts) *roll*, (mountain climbers) *rope*, (people) *round*, (people) *shift*²⁰, (leaf) *shrivel*, (sb) *sign*¹⁹, (people) *squash*, (people) *squeeze*, (cars, planes) *stack*, (hours, expenses) *tot*, (sth) *total*²¹.

BECOME + /-Together/:

The negative value of the binary feature \pm Together is present in a number of other VPCs, as in: (motor car) *buckle*, (people) *bust*, (ship/meeting/people/sb) *break*, (aircraft/sb) *crack*, (sth) *divvy*, (plank) *splinter*, (party, group/language/couple) *split*.

CAUSE + BE + /+Adult/:

The objects of the VPCs in this group necessarily all contain -Adult, and seem to be restricted to +Human. They can therefore be represented by the archilexeme *child*. We find: *bring* (child), *cosset* (child), *drag* (child), *fetch* (child).

CAUSE + BE + /+Apparent/:

Call (scenes from childhood), *conjure* (spirits, visions of the past), *cough* (sth), *dig* (statue), *fetch* (anecdotes), *hunt* (old

¹⁹ The second element is often connected by *with*, and we then have a prepositional-phrasal verb, as in (schools) *link up with* (industry), (they) *linked up with* (waitresses). In other VPCs it is implicitly present through lexicalization, as in (sb) *join up*, i.e. *join the army*.

²⁰ Usually in the imperative only.

²¹ A prepositional-phrasal verb, with the result connected by *to*; as in *it totals up to £ 16* (AL).

records, references, quotations), *look* (fast train), *plow* (arrow-heads/secrets), *raise* (prophet), *rake* (diary/scandal, old quarrels, past), *reckon* (bill), *root* (sb), *scare* (game), *scout* (clients), (dog) *scratch* (bone), *show* (fraud, ignorance/rogue, impostor), *turn* (facts in an encyclopedia).

CAUSE + BE + /-Apparent/:

Cover (sb/tracks/scandal), *doctor* (plans), (smoke) *fog* (road), *hush* (fact, affair), *smother* (scandal), (earth/clouds) *swallow* (sb/aircraft), *wrap* (meaning).

CAUSE + BE + /+Awake/:

Call (sb), (roosters) *crow* (sleeping barnyard), *get* (sb), *knock* (sb), *rouse* (sb, brothers), *wake*²² (sb, wife).

CAUSE + BE + /+Blocked/:

Bank (hole in dam, river), *block* (entrance), *clog* (pipes/machinery), *dam* (river, valley/eloquence), *foul* (traffic, works, drain), *freeze* (pipes), *gum* (works/program), *lock* (capital), *plug* (sink), *screw* (door), *shut* (army), *stop* (mouse-hole, entrance, nose), *stuff* (ears, hole), *tie* (property, capital), *wall* (window/crevice).

CAUSE + BE + /+Closed/:

Bind (wound), *board* (window), *bolt* (door), *brick* (window), *build* (door, window), *button* (coat), *cement* (crack, hole), *chink* (sth), *do* (dress), *fasten* (box), *glue* (envelope, parcel), *hammer* (crack, hole), *latch* (door), *lock* (doors, window, house), *mend* (hole, crack), *nail* (box, window), *paper* (crack), *paste* (sth), *plaster* (crack), *seal* (drawer, window), *shut* (house, window, shop), *solder* (hole), *stitch* (rip, hole, trousers/patients), *zip* (dress, jacket).

²² Cf. Strang (1968: 149) „In a recent survey, R. Kingdon ... gives the dominant British usage as *wake*, *woke*, *woken* usually compounded with *up*“.

CAUSE + BE + /-Closed/:

Break (ground), *churn* (road), *hack* (pavement), *prize* (lid), *rip* (belly, earth, waistcoat), *roll* (flank of enemy), *slit* (seam, dress) *tear* (street).

CAUSE + BE + /+Confused/:

The feature denotes a special aspect of +Together, usually involving +NegEv (cf. 3.5.3.3.), where mixing results in a state of confusion, as in *jumble* (toys, books/stories/members of chorus), *mix* (sth), *muddle* (things). Some VPCs containing the feature are only used as participial adjectives.

CAUSE + BE + /+Covered/:

Build (area), *earth* (roots), *fog* (road), *freeze* (river), *grease* (hands), (plants) *grow* (sth), *lather* (face/sb), *mat* (bushes), *mould* (plants), *muffle* (oneself), *sand* (road), *sew* (corpse), *steam* (window), *tape* (sprain cases, switch, wire), *tuck* (child in bed), *wrap* (sth/oneself).

CAUSE + BE + /+Exist/:

Build (business), *cobble* (sth), *cook* (story), *dash* (dress), *draft* (plan), *draw* (document, contract), *dream* (rumours, plan, story), *drum* (sentiment, support/some way of making liquor), *fake* (story), *hang* (record), *hatch* (all this, conspiracy, plan), *huddle* (treaty), *kick* (row, fuss), *knit* (mittens), *knock* (meal, shelter), *make* (story), *open* (opportunities), *pound* (prescription), *raise* (deliverer), *reckon* (bill), *rig* (shelter, scaffolding), *rustle* (food, meal/article), *scare* (meal), *slap* (meal), *stitch* (dress), *think* (caption, plan, excuse), *throw* (temporary huts), *trump* (tasks, charges), *vamp* (lectures, excuse), *whack* (meeting place/signatures), *whip* (sketch). Some VPCs contain an additional component ‘Hurriedly, Hastily, Not Thoroughly’.

CAUSE + BE + /-Exist/:

Blow (bridge), *burn* (rubbish, school), *chew* (slipper, logs), *cut* (sth/enemy’s forces), *dry* (dew, wells/words, commerce), *pack* (assignment), *smash* (furniture/organization), *swallow* (earnings, theory), *tear* (letter/agreement).

CAUSE + BE + /+Fastened/:

The feature denotes an aspect of +Together, where a movable concrete object is attached to another normally fixed concrete object: *chain* (dog), *fasten* (box/dog), *harness* (horses), *leash* (dog), *loop* (curtain), *paste* (bills), *pin* (notice), *rope* (curtain), *screw* (handle), *strap* (suitcase).

CAUSE + BE + /+Inflated/:

Bloat (sb), *blow* (tyre), *pump* (tyre/poem/smile).

CAUSE + BE + /+Inside/:

Bottle (resentment, anger), *box* (sth), *clap* (smugglers), *cloister* (sb), *coop* (sb), *cork* (feelings), *dam* (feelings), *lock* (jewellery/sb), *shut* (jewels/sb), *treasure* (bits of local speech), *wall* (monster).

CAUSE + BE + /+Process/:

Crank (engine), *set* (business, shop), *start* (car).

CAUSE + BE + /-Process/:

(Machine-gun bullets) *pack* (transmitter).

CAUSE + BE + /-Prox/:

Deliver (stolen goods/fortress), *render* (fort).

CAUSE + BE + /+Together/:

Add (figures), *bank* (money), *beat* (eggs), *beat* (men), *bind* (a book, books), *blend* (paints), *bundle* (everything), *call* (forces), *cast* (figures), *clip* (papers), *close* (type matter), *connect* (a wire, wires/electric appliance, water supply), *count* (figures), *couple* (train, engine), *crimp* (paper, material), *do* (hair, books), *dot* (two cities on a map), *double* (carpet/legs/sb), *enter* (sales), *figure* (account), *fold* (newspaper), *furl* (flag), *gather* (tools), *gum* (book, envelope), *heap* (stones/riches), *hoard* (gold, treasure), *hook* (heater, gas/power lines), *huddle* (goods), *knit* (torn sleeve) *lace*²³ (shoe, corset, tarpaulin), *loop*

²³ Apparently mainly used in process-oriented sentences (cf.

(curtains), *mark* (item²⁴), *marshal* (men, troops/knowledge), *match* (colours), *mate* (pigeons), *multiply* (illegitimate children), *pack* (things/family), *pair* (sth), *parcel* (papers, tea), *piece* (cup/story), *pile* (sand dunes, logs), *pucker* (brows, lips), *rake* (hay), *ravel* (ball of wool), *roll* (cloth, carpet, map/sb), *rope* (sb/mountain climbers), *round* (cattle/tourists/news), *save* (money), *scoop* (cakes of soap), *scrape* (money), *scratch* (few pounds), *screw* (face, eye/sheet, piece of paper), *shake* (medicine), (heat) *shrivel* (leaves, leather), *solder* (joint/union), *squash* (people), *stack* (dishes, things), *stock* (things²⁵), *store* (food, water), *stow* (provisions), *sum* (evidence²⁵/situation/sb), *summon* (energy, arguments), *sweep* (dust, leaves), *take* (artery/dropped stitch), *tally* (the for and against/reports), *tie* (parcel), *tot* (figures, bill, how far...), *trice* (prisoners), *truss*²⁶ (chicken, criminal), *twist* (paper), *weigh* (consequences, arguments), *wind* (wool), *wire* (flowers), *yoke* (cattle).

CAUSE + BE + /-Together/:

Break (box, old ship, word/meeting), *carve* (joint), *chip* (paving-stone), *chop* (meat), *churn* (waves), *crack* (aircraft, car²⁵), *crash* (car, plane), *crush* (ice, stone), *cut* (meat), *dig* (land), *divide* (work/food), *divvy* (loot), *hack* (paving-stone), *hew* (logs), (lorries) *knead* (ground), *melt* (bells), *mince* (meat, beef/play), *partition* (room), *plough* (ground, field), *portion* (inheritance/land), *pound* (tablet), *saw* (beam, plank), *shake* (cushion), *shred* (paper, cabbage), *slice* (loaf of bread), *snip* (piece of cloth), *split* (compound/colours/money, costs, job), *stir* (mud), *tear* (letter/agreement), *whack* (profit).

4.2.3.3. Compared to BE, BECOME, and CAUSE, the formator HAVE is of little importance in VPCs with *out* and

3.7.2.3.), as in *a corset that laces up ai the side* (AL), *covered with a tarpaulin that laced up the middle* (W3).

²⁴ To a store or tavern account; cf. W3.

²⁵ Used normally as a one-place verb with deleted object.

²⁶ Although the object is a singular, there are different objects which are brought together, viz. the wings and the arms respectively to the body.

up. It is practically nonexistent in collocations with *out*. Only in *deck out* (sb, sth, airplane), *fit out* (sb, sth, party, ship), and *rig out* (sb, sth, book) is it present in the underlying semantic structure²⁷. Often only the object that is provided with something else, i.e. the receiver, is explicitly mentioned, and the thing which is added, i.e. the direct object in the sentence is deleted. If it is overtly expressed, it is connected with the indirect object, i.e., the receiver, by *with*. The situation is different in collocations with *up*. As we have seen in 3.3.3.2., there are a number of denominal VPCs which contain HAVE. In all of them the noun from which they are derived is the direct object in the underlying sentence, and the noun with which the VPC collocates is the indirect object, i.e. the receiver. The underlying sentence is therefore a three-place predicate in which the subject, i.e. the agent, CAUSES one object, i.e. the receiver, to HAVE another object. Such sentences can be paraphrased by *provide with*. When CAUSE is not present, the phenomenon is viewed as process-oriented, and the underlying sentence is a two-place predicate. It can be paraphrased by *get*. There are some VPCs with *up* which also admit of paraphrase by *get* and also denote the establishment of a HAVE-relation between the subject and the object. However, they differ from the one-place VPCs treated in 3.3.3.2. in two respects: 1) they are not denominal derivatives, 2) they contain CAUSE and are thus two-place VPCs. The underlying sentence involves a three-place predicate, but as agent and receiver fall together, the reflexive pronoun which represents the third argument is deleted. We thus get a two-place VPC in which subject and object are related by the formators

CAUSE + HAVE:

Chalk (points, victories, score/profits), *knock* (runs), *muster* (courage), *notch* (score, victories), *rack* (points, victories), *scoop* (cakes of soap/child), *soak* (ink, rain/sound/neutrons/sun-

²⁷ For denominal VPCs with *out* involving HAVE cf. 3.3.1.

shine/labor), (state loan) *sponge* (savings). In contrast to the VPCs involving BE + BECOME, no additional semantic features such as \pm Apparent, +Blocked, \pm Closed etc. are involved. The VPCs merely function as a copula which establishes a HAVE-relation.

4.2.4.1. The results of the preceding feature analysis of collocations with *out* and *up* allow us to check whether the feature we have found in the VPC is already present in the simplex verb or not. The features we have set up, such as \pm Apparent, \pm Blocked, etc. are of course not the only features contained in the lexical items, but from our point of view they are the most characteristic ones. Moreover, in a study based on such a vast amount of material, the attempt to give complete semantic descriptions of all lexical entries and then to compare them would be infeasible. Certain important features have to be singled out first, before we can proceed to a more detailed analysis. The preceding description is not only incomplete with regard to semantic features, but also with regard to the totality of collocations with *out* and *up* which are in current usage. Although our analysis is based on the collection of material which attempts to include possibly all current VPCs with *out* and *up*, only that part of the material is actually presented which readily allows the application of the method developed here. Thus, those VPCs, in which STATE does not contain any of the features used here are not included. Idioms are also not described. If we check which features are present in the simplex verb, a significant relationship between the simplex and the VPC is only found in the case of three features: +Blocked, +Confused, and \pm Together. Since +Blocked and +Confused are different aspects of +Together, depending on the collocation with certain nominals, only the feature \pm Together can be said to be present in a significant number of simplex verbs. VPCs with *out* and VPCs with *up* are quite distinct in this respect. In VPCs with *out* only -Together is found, while VPCs with *up* may contain either +Together or -Together, although +Together occurs much more frequently. The following verbs that are constituents of one-place VPCs with *out* can be said to contain -Together:

fray, splay, spread, and the zero-derivatives *branch, fan, thin*. There are many more two-place VPCs with *out*, either simplex or zero-derived, which contain –Together: *deal, dole, fan, leave, miss, open, parcel, partition, portion, separate, share, shred, single, sort, splay, spread, stretch, thin, weed*. In collocations with *up*, +Together is contained in a far greater number of VPCs than –Together. In many one-place VPCs, the verbal constituent alone, either as a simple verb or a zero-derivative, contains +Together: *add, band, close, cuddle, double, gang, huddle, join, link, mate, pair, pile, shrivel, squeeze, stack, tot, total*. +Together is also found in the following constituents of two-place VPCs: *add, bind, blend, bundle, close, connect, couple, double, fold, furl, gather, heap, hoard, huddle, match, mate, multiply, pair, pile, shrivel, squash, stack, store, sum, summon, tie, tot, trice, truss, yoke*. The feature +Blocked is contained in *clog, plug, stop* which collocate with *up* to form one-place VPCs, and in *block, clog, gum, lock, plug, shut, stop, stuff, tie* which form two-place VPCs. +Confused is found in *jumble, mix, muddle* which form two-place VPCs with *up*. –Together is also contained in many collocations with *up*, and in the verbal constituents which form one-place VPCs, such as *bust, break, crack, divvy, splinter, split*, or two-place VPCs, such as *break, chop, churn, crack, crash, crush, cut, dig, divide, divvy, mince, partition, portion, shred, slice, snip, split, stir, tear*. The fact that both values of a binary feature, such as +Together and –Together, can occur in numerous collocations with the same particle, such as *up*, points to the conclusion that the particle does not contain this feature. In this case, the verb is responsible for ±Together. On the other hand, there are also cases where the same verbal constituent, such as *ravel, roll, shake, weigh*, collocates with both particles. The VPC then contains –Together when collocating with *out*, and +Together when collocating with *up*. This fact points to the conclusion that *out* is connected with –Together and *up* with +Together, a conclusion strengthened by the fact that +Together does not occur in collocations with *out*, and occurs much more often in collocations with *up* than –Together.

4.2.4.2. A connection between one particle and certain features can also be established in those cases where there is no significant relationship between simplex and VPC with regard to features. Thus, +Empty, -Inside, -Process and -Prox occur almost exclusively in collocations with *out*, while +Awake, +Closed, +Confused, +Covered, +Fastened, +Inside are practically restricted to collocations with *up*. Here the features can be said to be contained in the particle. It should be clear from our discussion of denominal and deverbal zero-derivatives, that the nominal or verbal basis of the derivation is, in principle, unrelated to the features contained in the particle or the VPC. Thus, for example, +Empty is not contained in the lexical items which denote the process by which something is emptied, viz. by *farming, knocking, mining, raking, writing*, or the object which is removed, such as *muck*. With regard to surface structure, the features denoting STATE may be contained basically either in the zero-morpheme alone (when the particle is completive) or in the zero-morpheme in conjunction with the particle. In the latter case, the zero-morpheme will have the formators, such as CAUSE and BECOME, assigned to it, while the particle contains the designators, such as +Empty. Thus, *mine// ϕ //out* is analysable as ,CAUSE + BECOME (= ϕ)/ +Empty (= *out*)/ /by *mining*'. This analysis is most obvious when the particle alone can function as an adjective denoting STATE (cf. 3.4.1.3.), as in *blow out* (candle) ,CAUSE + BECOME (= ϕ)/ -Process (= *out*)/ /by *blowing*'. When the nominal is the instrument in the underlying sentence, as in *earth, fog, grease, lather, mat, mould, sand, steam, tape*, it is also clearly unrelated to the specific semantic feature in the VPC, such as +Covered. Basically all kinds of actions having a certain STATE as the result can be performed with the help of instruments. Only deadjectival zero-derivatives are different, since the basis of the derivation, i.e. the adjective itself, denotes the STATE resulting from the action of process denoted by the zero-derivative. This provides the explanation for the surprising facts that the same features occur in collocations with different particles, and that opposing features such as +Exist and -Exist can occur in collocations with the same

particle. The form of the description of VPCs used in 4.2.2. and 4.2.3. permits an easy comparison of how simplex verbs and the corresponding VPCs differ with regard to their collocations with nominals. Since the particle is omitted for reasons of brevity, it is readily apparent that many collocations which are possible with the VPC are excluded for the simplex verb.

4.2.5. The status of the semantic features we have used depends on the point of view which is adopted. Generally speaking, all semantic features, whether formators such as BE, BECOME, HAVE, CAUSE or designators, such as \pm Apparent, $+$ Blocked, etc. can be said to contribute elements of information. Thus, the more semantic features are present in a lexical item, the more information it contains. *Chair*, which can be defined as 'piece of furniture with a back for one person to sit on' (cf. 2.4.), contains more features and more information than *thing*. Features are therefore used to distinguish lexical items, such as *gehen*, *fliegen*, *laufen*, *trippeln*, *stapfen* (cf. 2.3.8.). At the same time, semantic features are theoretical constructs within the frame of a certain grammatical theory²⁸. From a third point of view, at least some semantic features must be regarded as linguistic universals, such as the formators and various designators, like $+$ Adult, \pm Awake, $+$ Deg, \pm Dynamic, \pm Exist, \pm Inside, \pm Movement, \pm Prox, \pm Together, \pm Vert. Their universality is to be explained by certain universal facts of human experience and the human perceptual apparatus²⁹. The difference in particular languages must be considered as arising through different combinations of universal features. Not all features used here are indivisible universal elements of meaning. As mentioned before, \pm Blocked, \pm Closed, \pm Confused, \pm Fastened all involve various aspects of the universal feature \pm Together, and depend on the specific exponents of the nominals which collocate with the VPC. \pm Apparent must probably be analysed into something like 'can be seen' or ' $+$ Possibility and $+$ See'; $+$ Covered into

²⁸ Cf. 2.4.3.-2.4.5.

²⁹ Cf. Bierwisch (1967: 3 f., 13, 24 f.).

,HAVE, Surface, and Completely'; and +Empty into ,—Exist and +Inside'.

4.3. Word-Fields

4.3.1. As pointed out in 4.1.2., setting up word-fields by means of archilexemes is intended to be a procedure which supplements the other methods of semantic analysis employed in this study. A number of word-fields are therefore not described here, as they are included in certain semantic classes covered by the formulas in 4.2., such as those represented by the archilexemes *appear, close, cover, destroy, emit, gather, produce, provide, separate*. Other semantic groups only partly overlap with the feature analysis, such as *obliterate*, which is not equivalent to CAUSE + BE + /—Exist/, or *distribute*, which contains a combination of —Prox and —Together. A feature analysis is not readily applicable to certain classes of VPCs, and they will therefore be treated here. They are represented by the archilexemes *begin/finish, clean, confine, consume, discover, fill, obliterate, pay, repair, solve, stop, utter, vomit, write*. The locative VPCs with *out* which constitute the word-field represented by *remove* and the archilexemes *improve, increase* will also be included. Verbs of motion collocating with *up* are not treated here. For reasons of comparison and easy access the archilexemes will be listed in alphabetical order. As will be seen from the discussion in 2.4.5. the VPCs contained in one word-field share certain elements of meaning, i.e. semantic features, but are at the same time in opposition to each other, i.e. separated by distinctive features. Both become evident in definitions (cf. 2.4.1.). The archilexeme corresponds to the „genus proximum“, and the distinctive features to the „differentia specifica“³⁰.

³⁰ Cf. Geckeler (1971: 245 f.).

4.3.2. VPCs with OUT

Begin:

(Disease, fire, quarrel) *break*, (war, disease) *burst*³¹, (flames/sb) *flare*, burn/be angry^c, (sb) *flash*, speak^c, (sun) *shine*, (sb) *start*, (sb) *stride*, (sb) *strike*, strike, hit/walk^c.

Clean:

Clean (room, stable), *do* (stables, room), *flush* (gully trap), *muck* (stables), *rake* (fire), *rinse* (teapot, mouth), *scrape* (saucepan), *scrub* (pan), *sponge* (wound), *sweep* (kitchen), *wipe* (jug, bath).

Discover:

Dig (book), *dope* (sb/specifications/how...), *drag* (reason), *ferret* (secret), *find* (sb/sth), *flush* (dollars, tax evaders), *hunt* (diary, hat), *nose* (rat, trail/scandal, evidence), *puzzle* (sth), *reason* (plan/answer), *reckon* (how much...), *root* (truffles, possessions), *root* (sb/newspaper), *search* (friend/insincerity).

Distribute:

Deal (sandwiches, food supplies/compliments), *dish* (food), *dole* (food, money), *dose* (aspirin), *hand* (samples, passes/compliments, advice, punishment), *ladle* (soup, porridge/honours, socialism, charm), *measure* (medicine/rewards), *mete* (rewards, punishment, justice, portion), *parcel* (plantation), *portion* (sth), *serve* (rations), *share* (estate).

Finish:

(Fireworks/attempts, enthusiasm) *fizzle*, *follow* (enterprise), *last* (apprenticeship), (stream, copper deposits) *peter*, (company) *phase*, *phase* (campaign), (sand-stone) *pinch*, *play* (role), *see* (education), *serve* (apprenticeship), (excitement) *sputter*, *stick* (first term), (patience) *wear*.

Obliterate:

Black (passage), *blot* (words), *blur* (all), *cross* (words, text), *ink* (lines), *mark* (stain), *paint* (sth), *rub* (pencil marks), *score* (words), *scrape* (word), *scratch* (name), *scrub* (order), *smudge*

³¹ Also *burst out into tears* (threats/laughing, crying), begin to weep (threaten, laugh, cry)^c.

(his first strokes), *sponge* (paragraphs), *wipe* (what you have written).

Pay:

(Sb) *fork* (money — Deleted), (sb) *shell* (money — Deleted).

Remove:

Beat (dust), *bite* (tongue), *blast* (obstruction), *bleach* (stain), *bomb* (sb), *burn* (enemy), *buy* (sb), *cart* (sb), *cast* (devil), *catch* (batsman), *chuck* (sb/bill, motion), *chip* (sth), *clean* (dirt), *clear* (mud, rubbish, children), *comb* (snarls, head lice/subversives), *cook* (water), *count* (sb), *crowd* (contribution/tradition), *crush* (juice), *cut* (picture/rivals/details), *drag* (box/prisoner), *drain* (water), *drown* (sb/animal), *drum* (sb, beggar/idea), *filter* (sth), *fire* (badger), *flood* (people), *flush* (dirt/mains), *force* (sb/sth), *freeze* (sb), *gouge* (eye), *grub* (plants), *hack* (plaster, branches), *hammer* (childishness), *hoof* (sb), *hunt* (cat), *kick* (sb), *look* (old clothes), *muck* (rock), *nose* (competitor), *peck* (sth), *pince* (side shoots), *pitch* (sb), *plough* (tree, roots), *pluck* (sth), *press* (juice), *pull* (tooth), *pump* (water), *read* (sb), *ream* (defective part), *ride* (bull), *rinse* (tea-leaves), *rip* (lining), *rope* (mustang), *rule* (sb/possibility), *saw* (piece from trunk), *scrape* (ashes), *scratch* (eyes), *screen* (sb), *scrub* (acetone), *shoulder* (senior clerk), *sift* (ashes, wheat/fact, students), *skin* (moose/hide), *smoke* (snakes, game/sb), *soak* (dirt, poison), *squeeze* (juice, water/money), *stink* (fox), *talk* (bill/anxieties), *tread* (juice), *weed* (sb/the bad ones/schemes), *wrench* (post, tooth), *wring* (humidity), *yank* (stuff).

Solve:

Cipher (problem), *figure* (problem), *fight* (differences), *iron* (misunderstandings), *shoot* (things), *talk* (problems), *thrash* (problem, question), *work* (problem, coded messages).

Utter³²:

Bark (sth), *bawl* (curse, orders), *bellow* (commands), *blare*

³² Cf. Fraser (1965: 62) „We find *speak* (*talk*) *out* but no *utter out*“. The field *utter* may be said to contain the feature —Inside applied in a figurative meaning. The words or sounds are then viewed as changing from a STATE +Inside to a STATE —Inside. Cf. Latin *ex/press* and German *äußern*, *aus/drücken* and the whole

(warning), (sb) *blaze*, *blurt* (secret), *boom* (verses), (sb) *break*³³, (sb) *burst*, (sb) *call*, *chime*³⁴ (tune), *cough* (sth), (sb) *croak*, (cock) *crow*, (sb) *cry*, *drone* (psalm), *fumble* (sentences), *gasp* (words), *grind*³⁴ (tune), *grumble* (sth), *jerk* (words), (sb) *lash*, (sb) *launch*, *let* (yell, curse), *lisp* (sth), *moan* (sth), *pound* (tune), *pour* (tales), *puff* (words), *rap* (oath, message, commands), *rasp* (orders, denial), (bells/shot) *ring*³⁴, (sb) *rip* (vituperation, cursing — Deleted), *roar* (order, drinking song), *roll* (words, song), *rumble* (comments, remarks), *scream* (curse), *send* (bleating), *shout* (orders, names), *shriek* (warning), *sob* (grief, excuse), (sb) *sing* (order — Deleted), *snarl* (answer), *snap* (orders), *snort* (reply), (sb) *speak* (one's mind — Deleted), *splutter* (words, threat), *sputter* (story), *squeak* (words), *stammer* (request, words), *talk* (anxieties), *thunder* (denunciation), *weep* (grief, sorrow), *wheeze* (words/tune), *whine* (requests), *whip* (sth), *yell* (order).

Write:

Bang (article, speech, copy), *bat* (draft), *chalk* (score), *fill* (form, check), *pound* (story), *type* (essay), *write* (cheque, copy).

4.3.3. VPCs with UP :

Begin:

(Fire/conflict) *blaze*, (sb) *open* ,shoot/play^c, (sb) *pipe* ,play/sing/speak^c, (sb) *sit*, (sb) *speak*, (breeze/suspicion) *spring*, (sb) *stand*, (band) *strike* (tune — Deleted) ,play^c, *strike* (acquaintance, friendship, conversation), (orchestra/child) *tune* ,play/cry^c.

group of „expressive Verben“ described in Hundsnurscher (1968: 103-107). Many VPCs such as *croak out*, *cry out*, etc. are often used with direct speech as an object.

³³ Normally used as a prepositional-phrasal verb: *break out into curses*.

³⁴ Also with an inanimate subject: (bells) *chime out* (tune — Deleted); (barrel-organ) *grind out* (tune), etc.

Clean:

Mop (territory), *rinse* (dishes), *scrub* (children), *sponge* (coat, dress).

Confine:

Coop (sb), *cork* (feelings), *dam* (feelings, eloquence), *lock* (sb/jewellery/capital), *shut* (sb/jewels/perfume, whisky/army), *tie* (property), *wall* (monster).

Consume:

Drain (glass), *drink* (water), *eat* (dinner), (locust/illness) *eat* (crop/savings), *finish* (everything, drink, dinner), *gobble* (supper), *mop* (dinner/beer), *munch* (bread, biscuits), (bills) *swallow* (earnings).

Discover:

Dig (statue), *hunt* (old records, references, quotations), *root* (sb), *scout* (clients).

Fill:

Fuel (plane), *fume* (room), (sb) *gas* (car – Deleted), *ink* (printing press), *light* (streets), *lumber* (room/mind), *smell* (car), *smoke* (room), *stink* (place), (sb) *tank*, *top* (radiator, car battery – Deleted, glass).

Finish:

(Sb) *end*, *knit* (argument, remarks), *pack* (assignment), *point* (brickwork), (sb) *wind*, *wind* (speech, evening/business, company).

Improve³⁵:

Beef (army), *brush* (French), *build* (health), *do* (house, hat), *freshen* (buildings), *ginger* (trade), *grade* (herd of cattle/standard), *jack* (discipline), *jazz* (party, things), *knit* (torn sleeve), (things, party + Cause) *liven*, (business, shares) *look*, *paint* (house, town), *rake* (fire), *rub* (Latin/memory), *screw* (courage), *slick* (story/café), *soup* (engine, car/textbook economics, title), *spice* (things), *steam* (economy), (trade) *step*, *touch* (picture, last act/memory).

Increase:

Blow (fire/photograph/tire), (pressure) *build*, *build* (military

³⁵ Items in this field contain the feature +Positive Evaluation (+PosEv). Cf. 3.5.3.3.

forces), *bump* (prices, costs), *gear* (production), *ginger* (trade, flow of revenue), (gossip/air raids) *hot*, *jack* (prices), (expenses, bills) *mount*, *perk* (sales), (wind) *pipe*, (pace + Cause) *quicken*, *rev* (pace), *scale* (wages, marks/imports), *screw* (exhilaration/rent), *send* (prices, temperature), (rents, prices) *shoot*, *speed* (process), *step* (production), *switch* (volume).

Pay:

(Sb) *ante* (money — Deleted), (sb) *cash*, (sb) *chip* (money — Deleted), (sb) *cough* (money — Deleted), (sb) *dub*, (sb) *fork* (money — Deleted), (sb) *stump* (half a quid — Deleted), (sb) *tip*.

Remove:

Blot (gravy, ink, liquid), *brush* (dust), *dab* (liquid), *dig* (tree), *dip* (water), *grub* (weeds), *hack* (paving-stone), *lick* (milk), *mop* (mess), *plough* (beets), *pluck* (weeds), *pry* (floor-board), *root* (dandelions, trees), *sop* (water, gravy), *sponge* (mess, ink), *stub* (thornbushes), *suck* (moisture), *swab* (water), *vacuum* (dust), *wipe* (spilt milk, mess).

Repair:

Fix (quarrel), *knit* (torn sleeve/friendship), *mend* (hole, crack), *patch* (motorcycle/quarrel), *touch* (door, scratches).

Spoil:

(Sth) *ball*, *blotch* (everything), *clog* (machinery), *clutter* (desk, room), *flub* (situation), *frig* (situation), *garble* (message, situation), *litter* (desk, room), *lumber* (room/mind), *muck* (floor/experiment/childhood), *muff* (play, situation), *scratch* (table), *scuff* (shoes), *smudge* (writing, stamp), *splotch* (work), *track* (floor).

Stop:

(Ship) *bring*, *bring* (ship, car), *haul* (child), *hold* (horse, traffic/husband in career), (engine) *pack*, (driver/car) *pull*, (machinery) *seize*.

Vomit:

Bring (meal, poison), *fetch* (everything), *throw* (meal — Deleted).

CHAPTER 5: SUMMARY AND CONCLUSIONS

5.1. Summary

5.1.1. In Chapter One the VPC is defined and distinguished from similar constructions with the help of prosodic and syntactic criteria. The main criterion is the possible full stress on the particle. In two-place VPCs, mid-position of the pronominal object is the prerequisite for inclusion. An additional criterion is the possibility of passive transformation. The definition of the VPC is thus more comprehensive than the traditional definition of the phrasal verb, as it also includes reduced prepositional phrases. A survey of previous work on various verb-particle constructions is then given, discussing the terminology and criteria employed in such studies. The rise and development of the VPC is excluded from the scope of the present monograph. The VPC is considered as providing a frame for the investigation of the semantic structure of a specific class of lexical items.

5.1.2. In Chapter Two general problems of semantic theory are discussed in detail in the light of recent research. In particular, the form of lexical entries, the status of semantic features, selection restrictions, word-fields and archilexemes, semantic tests, collocations, and problems of idiomaticity are treated. For the testing of potential features contained in the VPCs a modified type of the *but*-test used by Bendix and Weinreich is found to be most suitable. Such features are considered as ‚designators‘, which are distinguished from other semantic features or components – the ‚formators‘ – that function as connectives, such as BE, BECOME, HAVE, CAUSE. Intransitive and transitive verbs are regarded as representing one-place or many-place predicates in the sense of symbolic logic. They

are analysed into semantic components. The addition of Cause increases the number of arguments required in the surface structure, while object deletion reduces it. This model of the semantic structure of VPCs leads to the postulation of semantic formulas consisting of formators and designators. The formulas provide a method for the analysis of most VPCs. The analysis must take into account the possible collocations of the VPCs with nominals which function as arguments in the underlying predicate.

5.1.3. In Chapter Three the methods of word-formation are employed to establish a derivational relationship between VPCs and other lexical items. A considerable number of VPCs can be analysed as being deadjectival, denominal, and deverbal derivatives. All denominal and deverbal VPCs are zero-derivatives. Only in deadjectival derivatives is an overt derivational morpheme (-*en*) also found — but the majority also contain a zero-morpheme. In deadjectival VPCs the underlying adjective denotes the state resulting from the action or process denoted by the VPC. The noun serving as the basis for denominal VPCs also often denotes result. Much more frequently, however, the noun is contained in an adverbial complement of instrument or manner in the underlying sentence. In a number of denominal VPCs comparison is involved, while in others the noun is the object in the underlying sentence. A HAVE-relation between the noun which is the basis of the derivation and the subject or the object of the sentence containing the VPC is established in certain collocations with *up*. Other VPCs in which the particle is not simply completive or functions as an adverbial must be considered as deverbal zero-derivatives. The transformations T 1 — T 10 were set up to account for the derivation of deadjectival, denominal, or deverbal VPCs from underlying sentences. The productivity of the process is not unrestricted. In many cases collocations of verbs and particles are only, or predominantly found in the form of participial adjectives or nouns. The formation of zero-derived nouns containing a particle is a very productive process. This fact is explained by zero-derivation itself, and also by the coincidence of various types of reference in the same derivative. However,

generally accepted vocabulary is much less affected by the productivity of such nouns than is normally believed. The degree of lexicalization of the derivatives and consequently their idiomaticity is considerable. The same holds for collocations of particles with verbs like *do*, *make*, *put*, *set*, etc. which are almost empty semantically. There are also a number of idiomatic collocations with *out* and *up* involving *it*, where *it* does not have anaphoric or referential function. In addition to restrictions imposed by idiomaticity and the use of collocations with particles in certain word classes only, productivity of the VPC is then treated and tested with the help of three types of corpus. Collocations with *out* and *up* are compared with corresponding prefixal combinations. This is followed by a discussion of the differences between VPCs and the respective simplex verbs. Transitivity is thoroughly examined from this point of view, and the usefulness of the notions of object deletion, object transfer, and prepositional phrase reduction is demonstrated. In a number of VPCs the particle clearly functions as a locative adverb or a locative pro-form. Other functions of the particle are then treated and an exhaustive list of the VPCs involving the feature Degree is given.

5.1.4. In Chapter Four the analysis of the semantic structure of VPCs by the methods of word-formation is complemented by the use of two further techniques: the semantic formulas set up in 2.6.6. containing semantic features confirmed by the *but*-test — and archilexemes representing certain word-fields. Having established which specific features besides the ‚formators‘ are present in the entire VPC, it was then possible to check whether these ‚designators‘ are already found in the simplex verb or not. The status of semantic features is then considered. The investigation of word-fields within the morpho-syntactic frame of the VPC allows us to recognize certain paradigmatic structures. Many items which elude the grasp of the word-formational analysis and the feature analysis can be treated by this method.

5.2. Conclusions

5.2.1. Certain general conclusions can be drawn from our study. The VPCs with *out* and *up* can be characterized as dynamic lexical items. Only a few exceptions are static. They usually denote an action or a process which results in a change from one place, position, or state to another place, position, or state. Collocations of verbs with other particles are much less numerous and less frequent. The VPC must be regarded as a class of lexical items with a common morpho-syntactic surface structure, but with a variety of underlying structures. With regard to the relationship between the verb and the particle, basically four types can be distinguished: 1) the VPC is unanalysable, i.e. it cannot be related to other lexical items, or only partly so, and must therefore be considered as an idiomatic discontinuous verb; 2) the VPC is a zero-derivative (in a few cases a suffixal derivative) — either deadjectival, denominal, or deverbal — i.e. the verbal constituent of the collocation cannot be interpreted as the determinatum of the syntagma, which is further determined by the particle; 3) the particle functions as an adverb, i.e., the VPC can be substituted by the respective verb plus an adverbial complement; and 4) the particle is redundant, i.e. the simplex verb and the VPC are largely interchangeable.

5.2.2. In the dictionary component of a grammar, a simplex dictionary and a complex dictionary have to be distinguished. The latter contains the idiom-list, familiarity ratings, and, in general, only that information on complex items which is not deducible from word-formative processes alone, i.e. which is required by the effects of lexicalization. Idiomatic discontinuous verbs are included in the idiom-list, while VPCs where the particle functions as an adverb or is redundant, belong to the simplex dictionary. The remaining VPCs, i.e. the derivatives, form part of the complex dictionary, where additional semantic features and familiarity ratings are assigned to them. They belong to the ‚norm‘ of a particular language, which is part of the linguistic competence of a speaker. Leaving aside phonological and phonetic competence,

at least two other levels of competence must be distinguished, which could roughly be called grammatical and lexical competence. For the study of lexical competence and the 'norm' of a language it is not sufficient to rely on one's own idiolect and intuition. More objective evidence is necessary. Corpus study can partly overcome the limitations of a single speaker's knowledge. However, as any corpus is by definition limited, it has to be supplemented with additional observational data which can help to confirm or disprove certain introspective hypotheses.

5.2.3. Transitivity in the VPCs is not regarded as a binary taxonomic feature, but as a complex phenomenon which is best explained by assuming that the lexical items have underlying one-place or many-place predicates. This assumption, together with the feature Cause, the notions of object deletion and of object transfer, and the process of prepositional phrase reduction, provides the most adequate explanation for many characteristic properties of the VPCs. Both the addition of Cause, which increases the number of nominals functioning as arguments, and object deletion, which reduces it, are very general and regular processes. So is prepositional phrase reduction, by which the particle in the collocation is turned into a locative pro-form.

5.2.4.1. The discussion of general semantic problems also yields a number of results. With regard to the semantic structure of lexical items, interpretative and generative semantics differ much less than in other issues, although in the latter, the structure of lexical entries is usually represented by trees. The search for features, i.e. minimal semantic elements, in such syntagmatic approaches, is common to interpretative semantics, generative semantics, and the predominantly paradigmatic structural semantics. Although structural semantics attempts to discover word-fields, it also searches for distinctive features, which separate the items included in a particular word-field. The word-field itself is represented by an archilexeme in which the opposition of distinctive features is neutralized. Many different terms have been employed in the literature to denote semantic features.

5.2.4.2. A review of lexical entries, as given in recent research, shows a variety of specific semantic features the use of which is normally only intuitively motivated. Paraphrase evaluation of definitions, however, leads to the postulation of semantic features, whereby modifiers used in the object language are turned into metalinguistic constructs. But only distinctive features are awarded this status. The correctness of definitions can be tested with the help of native speakers. Even very general features, such as +Animate, are not as unproblematic as is normally assumed, since the feature cannot simply be equated with ‚living‘. As elements of the metalanguage, semantic features are not dependent on word class categories. The discussion of the selection restrictions or collocation restrictions of *eat* shows that there is little agreement as to how best to describe such a basic lexical item. It also demonstrates how difficult it is to draw a neat line between linguistic and extralinguistic knowledge. The decision about the demarcation between syntactic and semantic features is determined by the particular grammatical model one adopts.

5.2.4.3. The feature Cause must be considered as having exceedingly great generality. Its addition turns one-place verbs into two-place verbs, thus constructing a higher and more complex unit. The original one-place predicate underlying the one-place verb, however, is thereby reduced to a component-like status. This may be viewed as ‚downgrading‘ or ‚embedding‘, and CAUSE can be regarded as a ‚mediatory predicate‘. Although BE and HAVE are semantically empty, and are not overtly expressed in some constructions in certain languages, there are arguments against eliminating these „dummy verbs“ from the underlying semantic structure of English and other languages. Both function as ‚connectives‘ between variables. If one tries to establish a correspondence between overt syntactic structure and underlying semantic structure, they have to be retained in a language such as English or German. In paraphrases of lexical items which yield metalinguistic constructs, such as *kill* ‚CAUSE + BE + NOT + ALIVE‘, or *give* ‚CAUSE + HAVE‘, they are also indispensable. BE and HAVE can be regarded as unmarked forms. If the very general feature

+Dynamic is added, we get BECOME and GET. The features Cause and +Dynamic, together with the 'connectives' are considered as 'formators' which are distinguished from the less general semantic features called 'designators'. The latter are denotative (like *alive* in the paraphrase of *kill*), and can be established for the VPCs with the help of the *but*-test. When they are represented by the labels LOC, POSITION, STATE, semantic formulas result, which can be applied to the semantic analysis of the VPCs of which they are paraphrases.

5.2.4.4. A semantic analysis of VPCs must encompass their collocations with nominals. It seems natural that a verb or verb phrase cannot be treated in isolation, and that the subject and object also have to be considered. But an analysis of adjectives, in particular the distinction between transpositional and semantic adjectives, also depends on a consideration of collocations, as does the distinction of homonyms. The VPCs are said to have collocation restrictions concerning certain nominals. This term is preferable to the term selection restrictions, as it is neutral with regard to whether the verb or the nominal is primary or dominant in the relation. Many VPCs are idiomatic. Idiomaticity is not a quality which can be assigned to simplex lexical items. It depends on the particular dictionary. Idiomaticity and polysemy are complementary. A certain amount of idiomaticity is assumed to be present in almost all syntagmas.

5.3. *Specific Results*

A number of specific results derive from our investigation. In the course of the study it was found useful to employ certain very general semantic features and components which are probably universal. Apart from the formators CAUSE, BE, and HAVE these are: +Deg, ±Dynamic, ±Inside, +NegEv, ±Prox, ±Vert, and Remove. The feature analysis of the VPCs has yielded the designators for STATE: +Adult, ±Ap-

parent, +Awake, ±Blocked, ±Closed, +Confused, ±Covered, +Empty, ±Exist, +Fastened, +Inflated, ±Process, ±Together. With regard to which features are already found in the simplex verb, it turns out that there is a significant relationship between the simplex and the VPC in the case of only three features: +Blocked, +Confused, and ±Together. Since +Blocked and +Confused are different aspects of ±Together, only this feature can be said to be present in a significant number of simplex verbs. Although -Together also occurs in many collocations with *up*, there is a clear connection between the VPCs with *out* and +Empty, -Inside, -Process, -Prox, and -Together on the one hand, and the VPCs with *up* and +Adult, +Awake, +Closed, +Confused, +Covered, +Fastened, +Inside, and +Together on the other hand. Within the set of VPCs with *out*, the following word-fields represented by archilexemes have to be recognized: *begin, clean, discover, distribute, finish, obliterate, pay, remove, solve, utter, write*. As regards the collocations with *up*, there are no word-fields as characteristic as are those above for VPCs with *out*, but we find: *begin, clean, consume, discover, fill, finish, gather, pay, remove, repair, spoil, stop, vomit*. However, with such VPCs the feature Degree is of great importance, as in items contained in the word-fields *improve* and *increase*.

5.4. General Observations

Collocations with the particle *up* represent by far the largest number of VPCs in English. The VPCs must be regarded as a part of the lexicon which shows rapid shift and considerable stylistic and dialectal variation. From a number of observations it becomes clear that VPCs are especially frequent in American English and in slang. This is also valid for participial adjectives and zero-derived nouns involving collocations of verbs and particles. Productivity is restricted in various ways. Only the formation of VPCs denoting movement is practically unrestricted.

BIBLIOGRAPHY

- Abraham, W. & Binnick, R. J. (1969), 'Syntax oder Semantik als erzeugende Komponente eines Grammatikmodells?', *LB* 4, 1-28.
- Admoni, V. G. (1966), *Stroj sovremennogo nemeckogo jazyka/Der deutsche Sprachbau*. 2nd edition. Moskva-Leningrad.
- Allen, R. L. (1966), *The Verb System of Present-Day American English*. The Hague-Paris.
- Anderson, J. (1968), 'On the Status of "Lexical Formatives"', *FL* 4, 308-317.
- (1969), 'Adjectives, Datives and Ergativisation', *FL* 5, 301-323.
- Anderson, T. R. (1968), 'On the Transparency of *Begin*: Some Uses of Semantic Theory', *FL* 4, 394-421.
- Anthony, E. M. Jr. (1954), 'An Exploratory Inquiry into Lexical Clusters', *American Speech* 29, 175-180.
- Apresyan, Yu., Mel'čuk, I. A., & Žolkovskij, A. K., (1969), 'Semantics and Lexicography: Towards a New Type of Unilingual Dictionary', in Kiefer (1969), 1-33.
- Bach, E. (1967), 'Have and Be in English Syntax', *Lg.* 43, 462-485.
- (1968), 'Nouns and Noun Phrases', in Bach-Harms (1968), 90-122.
- Bach E. & Harms, R. T. (eds.) (1968), *Universals in Linguistic Theory*. New York.
- Bald, W.-D. & Quirk, R. (1970), 'A Case Study of Multiple Meaning', *Essays and Studies 1970*, 101-119.
- Bar-Hillel, Y. (1969), 'Universal Semantics and Philosophy of Language: Quandaries and Prospects', in Puhvel (1969), 1-21.
- Baumgärtner, K. (1967), 'Die Struktur des Bedeutungsfeldes', in Moser (1967), 165-197.
- Bazell, C. E., Catford, J. C., Halliday, M.A.K., Robins, R. H. (eds.) (1966), *In Memory of J. R. Firth*. London.
- Bendix, E. H. (1966), *Componential Analysis of General Vocabulary: The Semantic Structure of a Set of Verbs in English, Hindi, and Japanese*. The Hague.
- Benveniste, E. (1966), *Problèmes de linguistique générale*. Gallimard.
- Bierwisch, M. (1965), 'Eine Hierarchie syntaktisch-semantischer Merkmale', in *Studia Grammatica* 5. 3rd edition (1970), 29-86.
- (1967), 'Some Semantic Universals of German Adjectivals', *FL* 3, 1-36.
- (1969a), 'On Certain Problems of Semantic Representations', *FL* 5, 153-184.
- (1969b), 'Strukturelle Semantik', *Deutsch als Fremdsprache* 6, 66-74.

- (1970), 'On Classifying Semantic Features', in Bierwisch-Heidolph (1970), 27-50.
- Bierwisch, M. & Heidolph, K. E. (eds.) (1970), *Progress in Linguistics*. The Hague-Paris.
- Bierwisch, M. & Kiefer, F. (1969), 'Remarks on Definitions in Natural Language', in Kiefer (1969), 55-79.
- Bolinger, D. (1961), *Generality, Gradience, and the All-or-None*. 's-Gravenhage.
- (1965), 'The Atomization of Meaning', *Lg.* 41, 555-573.
- (1968), 'Postposed Main Phrases: an English Rule for the Romance Subjunctive', *CJL/RCL* 14, 3-30.
- (1969), 'Categories, Features, Attributes', *Brno Studies in English* 8, 37-41.
- (1971b), 'Semantic Overloading: A Restudy of the Verb REMIND', *Lg.* 47, 522-547.
- Botha, R. P. (1968), *The Function of the Lexicon in Transformational Generative Grammar*. The Hague-Paris.
- Brekke, H. E. (1969), 'Generative Semantics vs. Deep Syntax', in Kiefer (1969), 80-90.
- (1970a), *Generative Satzsemantik und transformationelle Syntax im System der englischen Nominalkomposition*. München.
- (1970b), Review of Bach-Harms (1968), *IF* 75, 230-242.
- Brekke, H. E. & Lipka, L. (eds.) (1968), *Wortbildung, Syntax und Morphologie. Festschrift für Hans Marchand*. The Hague-Paris.
- Bünting, K.-D., (1969), 'Sprachgefühl und Computer. Bewertung von „erdateten“ Wörtern in einer Informantenbefragung', *Muttersprache* 79, 284-300.
- Bugarski, R. (1968), 'On the Interrelatedness of Grammar and Lexis in the Structure of English', *Lingua* 19, 233-263.
- Carstensen, B. (1969), 'Grammatik und Wörterbuch: Kriterien zur Abgrenzung syntaktischer und semantischer Informationen', *Neusprachliche Mitteilungen* 1, 8-17.
- Carvell, H. T. & Svartvik, J. (1969), *Computational Experiments in Grammatical Classification*. The Hague-Paris.
- Chafe, W. L. (1968), 'Idiomaticity as an Anomaly in the Chomskyan Paradigm', *FL* 4, 109-127.
- (1970), *Meaning and the Structure of Language*. Chicago-London.
- Chomsky, N. (1957), *Syntactic Structures*. The Hague.
- (1965), *Aspects of the Theory of Syntax*. Cambridge, Mass.
- (1971), 'Deep Structure, Surface Structure, and Semantic Interpretation', in Steinberg-Jakobovits (1971), 183-216.
- Coseriu, E. (1962), *Teoría del lenguaje y lingüística general*. 2nd edition (1967) Madrid.
- (1964), 'Pour une sémantique diachronique structurale', *TLL* II, 1, 139-186.
- (1966), 'Structure lexicale et enseignement du vocabulaire', *Actes*

- du premier colloque international de linguistique appliqué*, Nancy 1966, 175-217.
- (1967a), ‚Zur Vorgeschichte der strukturellen Semantik: Heyses Analyse des Wortfeldes ‚Schall‘, in *To Honor Roman Jakobson, Essays on the Occasion of his Seventieth Birthday*. The Hague-Paris, 489-498.
- (1967b), ‚Lexikalische Solidaritäten‘, *Poetica* 1, 293-303.
- (1970a), ‚Bedeutung und Bezeichnung im Lichte der strukturellen Semantik‘, in *Commentationes Societatis Linguisticae Europaeae* III, 104-121.
- (1970b), *Sprache, Strukturen und Funktionen. XII Aufsätze zur Allgemeinen und Romanischen Sprachwissenschaft* (ed. U. Petersen). (= Tübinger Beiträge zur Linguistik 2). Tübingen.
- Darden, B. J., Bailey, Ch.-J. N., & Davison, A. (eds.), (1968), *Papers from the Fourth Regional Meeting of the Chicago Linguistic Society*. Chicago.
- Dougherty, R. C. (1970), ‚Review Article: Recent Studies on Language Universals‘, *FL* 6, 505-561.
- Duden (1966) = Grebe, P. et al., *Grammatik der deutschen Gegenwartssprache*. 2nd edition. Mannheim.
- Elektronische Syntaxanalyse (1969) = Eggers, H. et al., *Elektronische Syntaxanalyse der deutschen Gegenwartssprache*. Tübingen.
- Erades, P. A. (1960), ‚Points of Modern English Syntax‘, *ES* 41, 347;
(1961), *ES* 42, 56-60.
- Étiemble, (1964), *Parlez-vous français?* Paris.
- Fillmore, Ch. J. (1966), ‚Deictic Categories in the Semantics of ‚Come‘‘, *FL* 2, 219-227.
(1968a), ‚Lexical Entries for Verbs‘, *FL* 4, 373-393.
(1968b), ‚The Case for Case‘, in Bach-Harms (1968), 1-88.
(1969), ‚Types of Lexical Information‘, in Kiefer (1969), 109-137.
(1969Rev.), Review of Bendix (1966), *General Linguistics* 9, 41-65.
- Fillmore, Ch. J. & Langendoen, D. T. (eds.), (1971), *Studies in Linguistic Semantics*. New York, etc.
- Fleischer, W. (1969), *Wortbildung der deutschen Gegenwartssprache*. Leipzig.
- Fodor, J. A. (1970), ‚Three Reasons for Not Deriving ‚Kill‘ from ‚Cause to Die‘‘, *LI* 1, 429-438.
- Fodor, J. & Garrett, M. (1966), ‚Some Reflections on Competence and Performance‘, in Lyons-Wales (1966), 135-179.
- Fowler, R. (1970), ‚Against Idealization: Some Speculations on the Theory of Linguistic Performance‘, *Linguistics* 63, 19-50.
- Francis, W. N. (1958), *The Structure of American English*. New York.

- Fraser, B. (1970), 'Idioms within a Transformational Grammar', *FL* 6, 22-42.
- Fraser, B. & Ross, J. R. (1970), 'Idioms and Unspecified NP Deletion', *LI* 1, 264-265.
- Garner, R. (1971), '„Presupposition“ in Philosophy and Linguistics', in Fillmore-Langendoen (1971), 23-42.
- Gauger, H. M. & Bausch, K.-R. (eds.), (1971), *Interlinguistica. Sprachvergleich und Übersetzung. Festschrift zum 60. Geburtstag von Mario Wandruszka*. Tübingen.
- Geckeler, H. (1971), *Strukturelle Semantik und Wortfeldtheorie*. München.
- Goodenough, W. H. (1956), 'Componential Analysis and the Study of Meaning', *Lg.* 32, 195-216.
- Greenbaum, S. (1968), *Investigating Collocations: An Experimental Approach*. Working Paper. Survey of English Usage.
- (1969a), *Studies in English Adverbial Usage*. London.
- (1969b), 'The Question of *But*', *Folia Linguistica* 3, 245-253.
- Greenberg, J. H. (ed.) (1968), *Universals of Language*. 2nd paperback edition. Cambridge, Mass.
- Grimm, J. (1826), *Deutsche Grammatik*. Vol. 2. Göttingen.
- Gruber, J. S. (1967), 'Look and See', *Lg.* 43, 937-947.
- (1970), *Studies in Lexical Relations*. Diss. M.I.T. Mimeograph. Reproduced by the Indiana University Linguistics Circle.
- Hall, B. C., (1965), *Subject and Object in Modern English*. Diss. M.I.T. Cambridge, Mass. Microfilm.
- Hall Partee, B. (1971), 'On the Requirement that Transformations Preserve Meaning', in Fillmore-Langendoen (1971), 1-21.
- Halliday, M. A. K. (1961), 'Categories of the Theory of Grammar', *Word* 17, 241-292.
- (1966), 'Lexis as a Linguistic Level', in Bazell et al. (1966), 148-162.
- (1967), 'Notes on Transitivity and Theme in English', *JL* 3, 37-81, 199-244.
- Hansen, B. (1967), *Form und Funktion der Kategorien des Tempus, der Korrelation und des Aspekts im modernen Englisch*. Diss. Berlin. Humboldt-Universität. Typescript.
- Henzen, W. (1965), *Deutsche Wortbildung*. 3rd edition. Tübingen.
- Heringer, H. J. (1968), *Die Opposition von 'kommen' und 'bringen' als Funktionsverben*. (= Sprache der Gegenwart 3). Düsseldorf.
- Hjelmslev, L. (1961), *Prolegomena to a Theory of Language*. (Translated by Whitfield, F. J.). Madison.
- Ikegami, Y. (1967), 'Structural Semantics: A Survey and Problems', *Linguistics* 33, 49-67.
- Jacobs, R. A. & Rosenbaum, P. S. (1968), *English Transformational Grammar*. Toronto-London.
- Jespersen, O. (1924), *The Philosophy of Grammar*. Reprinted (1968). London.

- (MEG), *A Modern English Grammar on Historical Principles*. Part III (1927). Part VII (1949). Reprinted (1965). London.
- Kastovsky, D. (1968), *Old English Deverbal Substantives Derived By Means of a Zero Morpheme*. Diss. Tübingen.
- (1969), 'Wortbildung und Nullmorphem', *LB* 2, 1-13.
- Katz, J. J. (1966), *The Philosophy of Language*. New York-London.
- (1967a), 'Recent Issues in Semantic Theory', *FL* 3, 124-194.
- (1967b), 'Some Remarks on Quine on Analyticity', *Journal of Philosophy* 64, 36-52.
- (1970), 'Interpretative Semantics vs. Generative Semantics', *FL* 6, 220-259.
- (1971), 'Generative Semantics is Interpretative Semantics', *LI* 2, 313-331.
- Katz, J. J. & Fodor, J. A. (1963), 'The Structure of a Semantic Theory', *Lg* 39, 170-210.
- Katz, J. J. & Postal, P. M. (1964), *An Integrated Theory of Linguistic Descriptions*. Cambridge, Mass.
- Kiefer, F. (ed.) (1969), *Studies in Syntax and Semantics*. (= FL Supplementary Series, Vol. 10). Dordrecht.
- Kirchner, G. (1952), *Die zehn Hauptverben des Englischen im Britischen und Amerikanischen. Eine semasiologisch-syntaktische Darstellung ihrer gegenwärtigen Funktionen mit sprachgeschichtlichen Rückblicken*. Halle.
- (1959), 'Zur transitiven und intransitiven Verwendung des englischen Verbums', *ZAA* 7, 342-399.
- Klein, W. (1968), 'Zur Kategorisierung der Funktionsverben', *BzLul* 13, 7-37.
- Knobloch, J. (ed.) (1961 ff.), *Sprachwissenschaftliches Wörterbuch*. Heidelberg.
- Krenn, H. & Müllner, K. (1970), 'Generative Semantik', *LB* 5, 85-106.
- Kuroda, S.-Y. (1969), 'Remarks on Selectional Restrictions and Presuppositions', in Kiefer (1969), 138-167.
- Lakoff, G. (1968), 'Instrumental Adverbs and the Concept of Deep Structure', *FL* 4, 4-29.
- (1970), *Irregularity in Syntax*. New York, etc.
- (1971), 'On Generative Semantics', in Steinberg-Jakobovits (1971), 232-296.
- Leech, G. (1968), 'Some Assumptions in the Metatheory of Linguistics', *Linguistics* 39, 87-102.
- (1968Rev.), Review of Bendix (1966), *JL* 4, 298-299.
- (1969), *Towards a Semantic Description of English*. London-Harlow.
- Lees, R. B. (1963), *The Grammar of English Nominalizations*. 2nd printing. The Hague.
- Lehrer, A. (1969), 'Semantic Cuisine', *JL* 5, 39-55.

- Leisi, E. (1960), *Das heutige Englisch. Wesenszüge und Probleme*. 2nd edition. Heidelberg.
- (1967), *Der Wortinhalt. Seine Struktur im Deutschen und Englischen*. 3rd edition. Heidelberg.
- Lerot, J. (1967), *Zur formalen Bedeutungslehre*. Diss. Löwen.
- (1970), 'Zur Integration der Semantik in die Transformationsgrammatik', *BzLwI* 18, 7-21.
- Lipka, L. (1966), *Die Wortbildungstypen WATERPROOF und GRASS-GREEN und ihre Entsprechungen im Deutschen*. Diss. Tübingen.
- (1969), 'Assimilation and Dissimilation as Regulating Factors in English Morphology', *ZAA* 17, 159-173.
- (1971b), 'Grammatical Categories, Lexical Items, and Word-Formation', *FL* 7, 211-238.
- (1971c), 'Grammatikalität, Akzeptabilität und Produktivität in der Sprache', in v. Stechow, A. (ed.), (1971), *Beiträge zur generativen Grammatik. Referate des 5. Linguistischen Kolloquiums Regensburg, 1970*. Braunschweig, 142-151.
- 'Probleme der Analyse englischer Idioms aus struktureller und generativer Sicht' (To appear) (in *Generative Transformationsgrammatik 1967-1972. Gastvorträge des Frankfurter Kreises Junger Linguisten*. Frankfurt).
- Lyons, J. (1963), *Structural Semantics. An Analysis of Part of the Vocabulary of Plato*. Oxford.
- (1966), 'Firth's Theory of 'Meaning'', in Bazell et al. (1966), 288-308.
- (1968), *Introduction to Theoretical Linguistics*. Cambridge.
- Lyons, J., & Wales, R. J. (eds.), (1966), *Psycholinguistic Papers*. Edinburgh.
- Marchand, H. (1951), 'The Syntactical Change from Inflectional to Word Order System and Some Effects of this Change on the Relation 'Verb/Object' in English. A Diachronic-Synchronic Interpretation', *Anglia* 70, 70-89.
- (1966a), Review of Zimmer, K. E., (1964), *Lg*, 42, 134-142.
- (1966b), 'On Attributive and Predicative Derived Adjectives and Some Problems Related to the Distinction', *Anglia* 84, 131-149.
- (1967), 'Expansion, Transposition, and Derivation', *La Linguistique* 1, 13-26.
- (1969a), *The Categories and Types of Present-Day English Word-Formation*. 2nd edition. München.
- (1969b), 'Die Ableitung deadjektivischer Verben im Deutschen, Englischen und Französischen', *IF* 74, 155-173.
- (1971a), 'Die deadjektivischen reversativen Verben im Deutschen, Englischen und Französischen: *entmilitarisieren, demilitarize, démilitariser*', in Gauger-Bausch (1971), 208-214.
- (1971b), 'Die Präpartikelverben im Deutschen: Echte Präfixbildung-

- gen, synthetische Präfixbildungen, pseudo-präfixale Bildungen', in *Sprache und Geschichte, Festschrift für Harri Meier*. München 1971, 313-326.
- Marckwardt, A. H., & Quirk, R. (1964), *A Common Language. British and American English*. London.
- McCawley, J. D. (1968a), 'The Role of Semantics in a Grammar', in Bach-Harms (1968), 124-169.
- (1968b), Review of Sebeok (1966), *Lg.* 44, 556-593.
- (1968c), 'Concerning the Base Component of a Transformational Grammar', *FL* 4, 243-269.
- (1968d), 'Lexical Insertion in a Transformational Grammar without Deep Structure', in Darden-Bailey-Davison (1968), 71-80.
- (1970), 'English as a VSO Language', *Lg.* 46, 286-299.
- (1971), 'Interpretative Semantics Meets Frankenstein', *FL* 7, 285-296.
- Mel'čuk, I. A. (1960), 'O terminach „ustojčivost“ i „idiomatičnost“, *Voprosy Jazykoznanija* 4, 73-80.
- Meyer-Ingwersen, J. (MS), /—*Animate*, +*Human*/. Manuscript.
- Miller, J. E. (1970), 'Stative Verbs in Russian', *FL* 6, 488-504.
- Mitchell, T. F. (1958), 'Syntagmatic Relations in Linguistic Analysis', *TPhS*, 101-118.
- Mittwoch, A. (1971), 'Idioms and Unspecified NP Deletion', *LI* 2, 255-259.
- Moser, H. (ed.) (1967), *Satz und Wort im heutigen Deutsch*. Düsseldorf.
- Müller, D. (1957), *Studies in Modern English Syntax — Two Aspects of Synthesis*. Winterthur.
- Mutt, O. (1967), 'Some Recent Developments in the Use of Nouns as Premodifiers in English', *ZAA* 15, 401-408.
- Nickel, G. (1966), *Die Expanded Form im Altenglischen*. Neumünster.
- Nida, E. A. (1951), 'A System for the Description of Semantic Units', *Word* 7, 1-14.
- Ohmann, S. (1953), 'Theories of the 'Linguistic Field'', *Word* 9, 123-134.
- Palmer, F. R. (1965), *A Linguistic Study of the English Verb*. London.
- Paul, H. (1909), *Prinzipien der Sprachgeschichte*. 8th edition (= Konzepte der Sprach- und Literaturwissenschaft 6). Tübingen.
- Pickerell, S. M. (1970), 'Zum Wortschatz der Rauschgiftsüchtigen', *LS* 15, 103-105.
- Pierce, J. E. (1970), Review of Pei, M. (1967) *The Story of the English Language*, *Linguistics* 64, 99-103.
- Poldauf, I. (1968), 'Evaluative Predication', *PhPr* 11, 1-12.
- Polenz, P. v. (1963), *Funktionsverben im heutigen Deutsch. Sprache in der rationalisierten Welt*. Düsseldorf.

- (1968), 'Ableitungsstrukturen deutscher Verben', *Zeitschrift für deutsche Sprache* 24, 1-15, 129-160.
- Porzig, W. (1934), 'Wesenhafte Bedeutungsbeziehungen', *PBB* 58, 70-97.
- Postal, P. M. (1970), 'On the Surface Verb "Remind"', *LI* 1, 37-120.
- Pottier, B. (1962), *Systématique des éléments de relation*. Paris.
- (1965), 'La définition sémantique dans les dictionnaires', *TLL* III, 1, 33-39.
- Poutsma, H. (1926), *A Grammar of Late Modern English. Part II, The Parts of Speech. Section II, The Verb and the Particles*. Groningen.
- Preuss, F. (1962b), (1963), (1964), 'Konversion oder Zero-Derivation', *LS* 7, 97-105; *LS* 8, 1-3, 33-35, 109-112, 164-166; *LS* 9, 69-70.
- Puhvel, J. (ed.) (1969), *Substance and Structure of Language*. Berkeley-Los Angeles.
- Quirk, R. (1965), 'Descriptive Statement and Serial Relationship', *Lg.* 41, 205-217.
- (1966), 'Acceptability in Language', *Proceedings of the University of Newcastle upon Tyne Philosophical Society* I, 7, 79-92.
- (1970), 'Aspect and Variant Inflection in English Verbs', *Lg.* 46, 300-311.
- Quirk, R. & Svartvik J. (1966), *Investigating Linguistic Acceptability*. The Hague.
- Reichenbach, H. (1947), *Elements of Symbolic Logic*. Paperback edition (1966). New York-London.
- Sapir, E. & Swadesh, M. (1932), *The Expression of the Ending-Point Relation in English, French and German*. (= Language Monographs, Suppl. to Language, No. 10). Reprinted (1966). New York.
- Schmidt, W. (1963), *Lexikalische und aktuelle Bedeutung. Ein Beitrag zur Theorie der Wortbedeutung*. Berlin.
- Schopf, A. (1969), *Untersuchungen zur Wechselbeziehung zwischen Grammatik und Lexik im Englischen*. Berlin.
- Sebeok, T. A. (ed.) (1966), *Current Trends in Linguistics* 3. The Hague.
- Seuren, P. A. M. (1969), *Operators and Nucleus. A Contribution to the Theory of Grammar*. Cambridge.
- Sinclair, J. McH. (1966), 'Beginning the Study of Lexis', in Bazell et al. (1966), 410-430.
- Stankiewicz, E. (1962), 'The Interdependence of Paradigmatic and Derivational Patterns', *Word* 18, 1-22.
- Steinberg, D. D. & Jakobovits, L. A. (eds.), (1971), *Semantics. An Interdisciplinary Reader in Philosophy, Linguistics and Psychology*. Cambridge.
- Strang, B. M. H. (1968), *Modern English Structure*. 2nd edition. London.

- (1970), 'Aspects of the History of the -ER Formative in English', *TPbS*, 1-30.
- Svartvik, J. (1966), *On Voice in the English Verb*. The Hague-Paris.
- Teller, P. (1969), 'Some Discussion and Extension of Manfred Bierwisch's Work on German Adjectives', *FL* 5, 185-217.
- Ullmann, S. (1962), *Semantics. An Introduction to the Science of Meaning*. Oxford.
- Vater, H. (1968), 'Zu den Pro-Formen im Deutschen', *Sprachwissenschaftliche Mitteilungen* I, 1, 21-29.
- Walmsley, J. B. (1971), 'The English Comitative Case and the Concept of Deep Structure', *FL* 7, 493-507.
- Wandruszka, M. (1967), 'Implication et explication', *Revue de Linguistique Romane* 31, 316-330.
- (1969), *Sprachen. Vergleichbar und unvergleichlich*. München.
- Weinreich, U. (1963), 'On the Semantic Structure of Language', in Greenberg (1968), 142-216.
- (1966), 'Explorations in Semantic Theory', in Sebeok (1966), 395-477.
- (1969), 'Problems in the Analysis of Idioms', in Puhvel (1969), 23-81.
- Wheatley, J. (1970), *Language and Rules*. The Hague-Paris.
- Zandvoort, R. W. (1960), *A Handbook of English Grammar*. London.
- (1962), 'Is 'Aspect' an English Verbal Category?', *Gothenburg Studies in English* 14, 1-20.
- Zimmer, K. E. (1964), *Affixal Negation in English and Other Languages. An Investigation of Restricted Productivity*. (= Suppl. to *Word*, Monograph 5). New York.

Studies of Verb-Particle Constructions

- Anastasijević, K. (1954), *Adverbial Modifiers UP, DOWN, IN, OUT, ON, OFF in Contemporary English*. M. A. thesis, University College London.
- Anthony, E. M. Jr. (1953), *Test Frames for Structures with UP in Modern American English*. Diss. Univ. of Michigan. Microfilm facsimile. Ann Arbor 1969.
- Binnick, R. J. (1971), 'Bring and Come', *LI* 2, 260-265.
- Bolinger, D. (MS), *A Case of Divided Allegiance: The Phrasal Verb*. Manuscript.
- (1971a), *The Phrasal Verb in English*. Cambridge, Mass.
- Carstensen, B. (1964), 'Zur Struktur des englischen Wortverbandes', *Die Neueren Sprachen* 1964, 305-328.

- Cruz, J. M. de la, 'Notes on the Transformational Analysis of Phrasal Verb Structures in Contemporary English', (To appear) (in *Studia Anglia Posnaniensia* 4).
- Curme, G. O. (1914), 'The Development of Verbal Compounds in Germanic', *PBB* 39, 320-361.
- Dongen, W. A. van (1919), 'HE PUTS ON HIS HAT and HE PUTS HIS HAT ON', *Neophilologus* 4, 322-353.
- Fairclough, N. L. (1965), *Studies in the Collocation of Lexical Items with Prepositions and Adverbs in a Corpus of Spoken and Written Present-Day English*. M. A. Thesis, University College London.
- Fischer, S. D. (1971), *The Acquisition of Verb-Particle and Dative Constructions*. Diss. MIT. Microfilm.
- Fraser, J. B. (1965), *An Examination of the Verb-Particle Construction in English*. Diss. M.I.T. Microfilm.
- (1966), 'Some Remarks on the Verb-Particle Construction in English', *Monograph Series on Languages and Linguistics* 17 (Georgetown University), 45-61.
- Henzen, W. (1969), *Die Bezeichnung von Richtung und Gegenrichtung im Deutschen. Studien zu Umfang und Ausnützung der mit Adverbien der Richtung zusammengesetzten Wortbildungsgruppen*. Tübingen.
- Hill, L. A. (1968), *Prepositions and Adverbial Particles. An Interim Classification, Semantic, Structural, and Graded*. London.
- Hükel, W. (1968), 'Einige Fragen des Wortverbandes im Englischen', *Fremdsprachen* 4, 252-260.
- Hughes, M. N. (1966), *Phrasal & Prepositional Verbs*. English Language Teaching Institute, London. Typescript.
- Hundsnerscher, F. (1968), *Das System der Partikelverben mit 'AUS' in der Gegenwartssprache*. Diss. Tübingen.
- Kaznowski, A., *The Development of Verb-Particle Constructions in English*. Diss. Warsaw. (To appear)
- Kennedy, A. G. (1920), *The Modern English Verb-Adverb Combination*. (= Stanford University Publications, Language and Literature, Vol. I, No. 1). Stanford.
- Kiffer, Th. (1965), *A Diachronic and Synchronic Analysis and Description of English Phrasal Verbs*. Diss. Pennsylvania State Univ. Microfilm facsimile, Ann Arbor 1969.
- Konishi, T. (1958), 'The Growth of the Verb-Adverb Combination in English — A Brief Sketch', in *Miscellany in Honour of T. Otsuka* (Tokyo, 1958), 117-128.
- Legum, St. E. (1968), 'The Verb-Particle Constructions in English Basic or Derived?', in Darden-Bailey-Davison (1968), 50-62.
- Lerot, J. (1970), *Generative Behandlung der Verbzusammensetzungen im Deutschen*. Mimeograph.
- Lindelöf, U. (1937), *English Verb-Adverb Groups Converted into*

- Nouns.* (= Societatis Scientiarum Fennica Commentationes Humanarum Litterarum IX, 5). Helsingfors-Leipzig.
- Lipka, L. (1971a), 'Ein Grenzgebiet zwischen Wortbildung und Wortsemantik: die Partikelverben im Englischen und Deutschen', in Gauger-Bausch (1971), 180-189.
- Live, A. H. (1965), 'The Discontinuous Verb in English', *Word* 21, 428-451.
- Mechner, M. (1956), *Some Problems of Collocations of Verb and Particle in the Teaching of English as a Foreign Language*. M. A. thesis, Univ. of London.
- Meyer, H.-J. (1970a), *THESEN zur DISSERTATION Semantische Analyse der modernenglischen Verbalpartikel UP im Vergleich zu verwandten englischen und deutschen Verbalpartikeln*. Mimeo-graph.
- (1970b), *Semantische Analyse der modernenglischen Verbalpartikel UP im Vergleich zu verwandten englischen und deutschen Verbalpartikeln*. Diss. Berlin.
- (1971), 'Die Richtungsvarianten von *up* im Kontext mit Verben', *ZAA* 19, 387-408.
- Potter, S. (1965), 'English Phrasal Verbs', *Philologica Pragensia* 8, 285-289.
- Preuss, F. (1962a), 'Substantivische Neologismen aus Verb und Adverb', *LS* 7, 1-3.
- Reinhardt, W. (1969), 'Probleme der Wortbildung in der deutschen Fachsprache der Technik, dargestellt am Beispiel der sog. verbalen Partikelkompositionen', *Deutsch als Fremdsprache* 6, 415-419.
- Renský, M. (1964), 'English Verbo-Nominal Phrases', *Travaux Linguistiques de Prague* 1, 289-299.
- Shluktenko, J. A. (1955), 'Über die sogenannten „zusammengesetzten Verben“ vom Typ *stand up* in der englischen Sprache der Gegenwart' *Sowjetwissenschaft* 8, 223-235. Translated from the original in *Voprosy Jazykoznanija* 3 (1954), 105-113.
- Spasov, D. (1966), *English Phrasal Verbs*. Sofia.
- Sroka, K. (1962), 'Critique of the Traditional Syntactic Approach to Adverb/Preposition Words in Modern English', *Biuletyn Polskiego Towarzystwa Językoznawczego/Bulletin de la Société Polonaise de Linguistique* 21, 127-140.
- (1965), *English Phrasal Verbs*. Diss. Wrocław.
- Taha, A. K. (1964), 'The Structure of Two-Word Verbs in English', in Allen, H. B. (ed.) (1964), *Readings in Applied English Linguistics*, 130-136.
- Wood, F. T. (1955), 'Verb-Adverb Combinations', *English Language Teaching* 10, 18-27.

Dictionaries

- Berrey, L. V. & van den Bark, M. (1956), *The American Thesaurus of Slang*. (= ATS). 2nd edition (1962). New York.
- The Concise Oxford Dictionary of Current English* (1964). (= COD). 5th edition. Oxford.
- Davies, P. (1970). *The American Heritage Dictionary of the English Language*. (= HER). Paperback edition. New York.
- Garmonsway, G. N. & Simpson, J. (1965), *The Penguin English Dictionary* (= PEN). Harmondsworth.
- Heaton, J. B. (1965), *Prepositions and Adverbial Particles*. (= H). London-Harlow.
- Henderson, B. L. K. (1962), *A Dictionary of English Idioms, Part 1. Verbal Idioms*. London.
- Hornby, A. S., Gatenby, E. V., Wakefield, H. (1963), *The Advanced Learner's Dictionary of Current English*. (= AL). 2nd edition. London.
- The Shorter Oxford English Dictionary* (1962). (= SOD). Reprinted with corrections. Oxford.
- Webster's Third New International Dictionary of the English Language* (1964). (= W3). Springfield, Mass.
- Wentworth, H. & Flexner, S. B. (1960), *Dictionary of American Slang*. (= DAS). 2nd edition (1967) with supplement. New York-Berlin.
- Wood, F. T. (1965), *English Verbal Idioms*. (= W). London-New-York.

LIST OF ABBREVIATIONS

The following abbreviations are used for the more commonly cited periodicals:

<i>BzLwI</i>	Beiträge zur Linguistik und Informationsverarbeitung
<i>CJL/RCL</i>	Canadian Journal of Linguistics/Revue Canadienne de Linguistique
<i>ES</i>	English Studies
<i>FL</i>	Foundations of Language
<i>IF</i>	Indogermanische Forschungen
<i>JL</i>	Journal of Linguistics
<i>Lg.</i>	Language
<i>LB</i>	Linguistische Berichte
<i>LI</i>	Linguistic Inquiry
<i>LS</i>	Lebende Sprachen
<i>PbPr</i>	Philologica Pragensia
<i>PBB</i>	Paul and Braunes Beiträge zur Geschichte der deutschen Sprache und Literatur
<i>TLL</i>	Travaux de linguistique et de littérature
<i>TPbS</i>	Transactions of the Philological Society
<i>ZAA</i>	Zeitschrift für Anglistik und Amerikanistik

Other abbreviations:

AE	American English
AL	The Advanced Learner's Dictionary of Current English
ATS	The American Thesaurus of Slang
COD	The Concise Oxford Dictionary of Current English
DAS	Dictionary of American Slang
Deg	Degree
Deleted	Object can be optionally deleted
Dm.	Determinatum
Dt.	Determinant
H	Heaton, Prepositions and Adverbial Particles
HER	The American Heritage Dictionary of the English Language
HI	Hill, Prepositions and Adverbial Particles

KF	Katz-Fodor, The Structure of a Semantic Theory
MEG	Jespersen, A Modern English Grammar on Historical Principles
NegEv	Negative Evaluation
O.	THE OBSERVER
PEN	The Penguin English Dictionary
Prox	Proximate
sb	Somebody
SOD	The Shorter Oxford English Dictionary
sth	Something
SURVEY	Survey of English Usage
T.	TIME, The Weekly Newsmagazine
Vert	Vertical
VPC	Verb-Particle Construction
W3	Webster's Third New International Dictionary of the English Language
W	Wood, English Verbal Idioms.

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