

## The Origin of Affixes.

### AGGLUTINATION.

The oldest and best-known theory of the origin of affixes is the agglutination theory. Such a genesis of affixes has also been proved in very many cases. An auxiliary word becomes unaccented in syntagme, becoming pro- or enclitic, and forming a phonetic unit with the principal word, subjected to the phenomena of sandhi and assimilation, and finally merging into one word with the principal word. The former auxiliary word usually weakens phonetically and grows shorter. In this way, e.g. some case endings originate from postpositions, such as the Estonian comitative suffix *-ga* < *kaas* < *kaasa* 'with'. In the same way some conjugation suffixes originate from auxiliary verbs, e.g. French future (*je*) *dirai* < Latin *dicere habeo*. The grammaticization of autonomous words into auxiliary words as well as the reduction of auxiliary words into affixes takes place gradually. We often find intermediate stages where it is difficult to state whether we have to do with an auxiliary word or with an affix (cf. e.g. D.L. R. Lorimer BL 53). Thus the same element in a language may be called postposition by some authors, and suffix by others. The most consistent representative of the agglutination theory in the 20th century is A. Cuny, according to whom auxiliary words form the origin not only of all suffixes, prefixes and infixes, but also of all polysyllabic stems, the latter having sprung into existence through the agglutination of the so-called »full» and »empty» words (cf. e.g. EP 239 note 2, 446—, 450—). Leaving aside the question of the origin of polysyllabic stems, it should be stressed with regard to the origin of affixes that, no matter how great a part agglutination

may have had in the origin of morphology, it is by no means the only mode of genesis of suffixes (cf. K. Brugmann K 284—, G. Royen NKS 467, 468, C. Meinhof EFS 32). The number of suffixes whose origin has been proved to be due to agglutination is, however, relatively small when compared with the total number of suffixes.<sup>1</sup> A plausible assumption is that a great number of prefixes originate in agglutination (see e.g. concerning Indo-European prefixes Brugmann K 284, as to Siamese, K. Wulff ChT 209), but as far as the languages of the Far East are concerned H. Maspero, e.g. thinks that the Mon-Khmer and Munda languages employ prefixes that have certainly never been words, and he thinks it probable that the same also applies to Tibetan-Burman prefixes (LM<sup>2</sup> 534). As to the history of the agglutination theory, see e.g. J. Schmidt Ny 3 84—. The opinion that the flexional affixes, especially Indo-European flexional suffixes, originate mainly through agglutination from former auxiliary words, is even at present rather widely spread among linguists (of the newer authors see e.g. A. Drexel UWS II 190). Of the Finno-Ugric linguists L. Kettunen is of the opinion that in principle a word of originally fixed signification ought to be assumed behind the flexional suffixes (EK 1940 251). Concerning criticism of the agglutination theory see e.g. O. Jespersen Lg 367—.

## ADAPTATION AND SECRETION.

### *History.*

The adaptation theory came into existence as a counter-balance to the one-sided agglutination theory in attempts to solve the problem of the origin of Indo-European flexion. The initiator of this theory was A. Ludwig (»Agglutination oder Adaptation«, 1873). Ludwig does not reject agglutination, but

<sup>1</sup> Examples of agglutination from various language-families will be given by the author in his so far unpublished work »The Structural Tendencies of Languages«.

his new guiding idea is that suffixes were not added to the roots and stems »in der bedeutung. in welcher wir sie fungieren sehen» (AoA 24), and that »flexion selbst einst nicht flexion war» (AoA 112). This is the first essential thesis of the adaptation theory. This thesis applies especially to flexional suffixes, i.e. flexional suffixes had not from the beginning a flexional function, but acquired it later on. This applies properly speaking to all morphemes, and in a comprehensive sense we might call every grammaticization adaptation, inasmuch as the origin of every grammatical category and morpheme means an »reinterpretation» (umdeutung) of lexical elements as grammatical (cf. W. Porzig Atti 290).

If this thesis is accepted as correct, the question arises: what did the flexional suffixes express originally before they had acquired their flexional function? Ludwig's thesis is here: »die suffixe modificieren ursprünglich die bedeutung von wurzel oder stamm gar nicht, sie gaben beziehungen nach aussen» (AoA 27). According to Ludwig the development of grammar has followed the following scheme: 1. In the beginning there were only roots. 2. Some roots degenerated into deictic pronouns. 3. These agglutinated with the roots, and the word came into existence. 4. The deictic signification of the agglutinated elements disappeared, and they were transformed into derivational suffixes. 5. Derivational suffixes were transformed into flexional suffixes (SKAW 55 134). In this scheme of development the last stage is of the greatest importance and of the most lasting value, since the second important thesis of Ludwig's theory, which has to be recognized even at the present, is: »zwischen wortbildung und flexion besteht keine absolute ursprüngliche verschiedenheit, letztere ist nur eine weiterentwicklung der ersteren» (AoA 115).

Ludwig's theory did not, when first published, meet with any approval worth mentioning. Ludwig's contemporary, G. Curtius, expressed the opinion that Indo-European nominative and accusative endings were of pronominal origin, and that before having been transformed into flexional morphemes they had occurred in the function of derivational suffixes. The Sanscrit

genitive endings *-sja* and *-as* and the ablative *-at* have also formerly been derivational suffixes (Ch 71 --). Another of Ludwig's contemporaries, A. Bergaigne, also thought that a great part of the Indo-European flexional suffixes and coaffixes were originally derivational suffixes (MSL 2 358). R. de la Grasserie assumed, contrary to Ludwig, that the function of derivational suffixes is primary, that later on derivational suffixes were transformed into demonstrative suffixes and pronouns and, after having passed that intermediary stage, developed into flexional suffixes (C 230—.)

In 1905 H. Oertel and E. P. Morris of Yale University, published an article in defence of Ludwig's adaptation theory (HS 16), their main argument in benefit of adaptation and against the (semantic) agglutination being the difference between the regular and systematic »agglutinating» Ural-Altai languages and the »flective» Indo-European languages with their irregular and unsystematic structure, which latter trait they thought might be explained only by adaptation.

In 1910 J. Schmidt made it his task to rehabilitate Ludwig, finding that this was a debt of honour the Indo-European linguists owed him (Ny 3 81—). Schmidt quite correctly points out that a few established cases of agglutination which are known from historical time, are always used to support the agglutination theory, whereas the enormous number of indubitable instances of adaptation are scarcely ever mentioned, or only quite casually. Schmidt shows rightly that modern linguistic research, consciously or unconsciously, proceeds from the adaptation theory when interpreting the facts in the various Indo-European languages. Schmidt calls attention in the first place to the following generally recognized phenomena (Ny 4 21—): the morphologic interpretation of alternations, such as metaphony, gemination and sentence phonetic doublets (such as English *my* : *mine*), metanalytic and syntactic displacements (e.g. German *währendes krieges* > *während des krieges*), various changes of function (such as Frenc *on* < Latin *homo*). Schmidt shows further how the adaptation theory so far actually has been employed in the domain of suffixes. Here Schmidt calls attention to the following generally

known phenomena, presenting abundant instances from the Indo-European languages: secondary functions of nominal derivational suffixes (e.g. the so-called phenomena of stem irradiation), secondary functions of flexional suffixes (e.g. when a case or verb form acquires the function of another case or verb form), the transformation of final parts of stems or of derivational suffixes into flexional suffixes (the so-called phenomena of secretion), e.g. the origination of plural signs like the English *oxen*, or the nominal origin of some Indo-European personal morphemes (e.g. in the imperative).

Schmidt maintains that these facts of adaptation, which have come about in historical time, oblige us to apply the same principle to the prehistoric Indo-European Proto-language too. Furthermore Schmidt shows that these phenomena of adaptation which have come about in historical time are a continuation of tendencies that were present in prehistoric languages and in the Indo-European Proto-language. Schmidt presents numerous instances where modern linguistic research has actually applied the principle of adaptation in explaining such prehistoric linguistic facts as the origin of genders, the different functions of cases (of which Schmidt draws the conclusion that the case forms in the beginning had no signification) (Ny 4 121), cases without suffixes (nominatives, vocatives, locatives), the case functions of nondeclensional elements (e.g. the  $\bar{i}$ -element in the Italian-Celtic genitive and in the Indo-European singular feminine was originally a derivative suffix), the various functions of verb forms, the identity of nominal and verbal stems, the phenomenon that verbo-nominal suffixes were originally parts of stems that had no meaning, and that acquired their functions first through adaptation (e.g. the verbo-nominal  $\bar{a}$ -element is the final part of bisyllabic »heavy» stems). Schmidt concludes on the basis of these explanations made by Indo-European linguistic research up to now that adaptation is the typical form of the Indo-European flexional development, and that nothing else can be done but renew Ludwig's theory with the means of modern linguistic research.

Schmidt is of the opinion that, in explaining the Indo-

European flexion, H. Hirt's particle theory (see below) must be certainly dropped as the last remnant of the theory of semantic agglutination (Ny 4 188). Schmidt's standpoint resembles that of Jespersen: Indo-European flexion has not developed from monosyllabic roots but from unanalyzable and undifferentiated primitive sound continuums of complex meaning. Derivational suffixes were the first suffixed elements that originated from this development, the meaningless endings of verbonominal bases having adapted the functions of derivational suffixes, of whose priority over flexional suffixes Schmidt is fully convinced. It was not until after the genesis of derivational suffixes that the flexional suffixes developed, the derivational suffixes or stem endings acquiring, under the influence of syntactic relations, the functions of flexion. Flexion that had arisen in this way spread by analogy and formal agglutination. The nominal and verbal flexion are identical, but the former is older, as verbal flexion together with personal endings has evolved from nominal flexion by means of adaptation.

As regards other older authors who to a greater or smaller extent have expressed standpoints based on the adaptation principle, see Schmidt Ny 4 185—.

During the present century the adaptation theory has gained more and more supporters. It has been applied most extensively by H. Hirt, who is of the opinion that adaptation has played the most important part in the genesis of Indo-European flexion. According to Hirt a great number of suffixes originate in a coalescence of words and deictic particles, which had more or less the same character as French *celui-ci*, *celui-là* (IG 3 85—, 164—, 180—). In the beginning the addition of these particles did not essentially change the meaning of the words. Later on these agglutinated particles acquired the function of derivational and flexional suffixes. According to Hirt all Indo-European cases originate from such »determinatives». Criticism of Hirt's exaggerated theory of adaptation and determinatives, see Jespersen Lg 382—, H. Koppelman ES 12—. F. Specht, too, is of the opinion that all Indo-European case suffixes originate from the stems of demonstrative pronouns that had

coalesced with nouns, though these case endings originally had nothing in common with their subsequent syntactic function (UID 353—, 391). M. Vasmer agrees in principle with Schmidt's thesis, and calls attention to Westermann's personal statement that Nubian case endings, too, are explicable by pronominal origin. According to Vasmer the question is only whether all case and derivational suffixes treated by Specht may be explained in this way (ZSPH 19 444). In the opinion of E. Locker: »Auftréfois, les génitifs, locatifs ainsi que les pluriels n'étaient pas de formes de déclinaison d'un même substantif, mais des noms d'appartenance, de lieu, de collectifs indépendants, dérivés d'un autre nom. La transformation du système vague de la formation de mots dans un système fixe de flexion est due à un développement secondaire.» In the same way the different stems of conjugation categories of the verb also had in the beginning a lexical function, and first later on were transformed into flexional categories (WBKL 9 423). The adaptation theory in the sense of Ludwig and Hirt has also been applied by S. W. F. Margadant to explain the Indo-European verb forms. According to Margadant tense suffixes had in the beginning no meaning, being only emphatic elements (Actes II 200).

In Finno-Ugric linguistics the importance of adaptation as a principle of the genesis of grammatical elements, especially in Hungarian, has been emphasized by the Hungarian scientist J. Melich (*A magyar tárgyas igeragozás*, Budapest 1914), Z. Gombocz (UJb 10 2) and A. Klemm (ME 155). The latter agrees with J. Schmidt's theory. Of the Finno-Ugric linguists J. Beronka contests the adaptation theory as a principle of the origin of case suffixes, being of the opinion that case suffixes are certainly former words (LK 127). Lately the adaptation theory has gained ground also among Finnish linguists. P. Ravila has come near Ludwig's theory, having adopted the same standpoint as Ludwig that 1) primary flexional suffixes have acquired their meaning through adaptation from connections in the sentence; 2) primary flexional suffixes have earlier been derivational suffixes; 3) the primary function of derivational suffixes has been to connect words;

they were a certain kind of preflexional elements of construction (cf. A. Belič's more or less similar standpoint concerning the Indo-European suffixes, *Atti* 287, cf. G. J. Ramstedt *JSF(Ou)* 55 95—); 4) derivational suffixes have formerly been pronouns (see further *Vir.* 1945 158. 314—, and here below 211). In fact, D. Bubrih and T. E. Uotila also agree with the adaptation theory, assuming that several primary case suffixes were formerly derivational suffixes (see below 200 —). The Hungarian scientist Gy. Lakó, proceeding from Ravila's hypothesis, assumes especially that the Uralic locative suffixes *\*-nə* and *\*-t* originate from the agglutination of demonstrative pronouns beginning with *n-* and *t-* with nouns (*ALH* 1 354—, *MTAK* 1 213—). J. Farkas, too, thinks that the primary *FU* case suffixes, which precede possessive suffixes, were originally derivational suffixes (*UAJb* 26 59). Regarding the Turkish language K. Grönbech is of the opinion that »die ältesten konkreten Kasus höchst wahrscheinlich von Haus aus keine Kasusformen, sondern abgeleitete nomina concreta waren, wie dies im Monglischen noch zum Teil der Fall zu sein scheint. Diese Annahme führt uns in eine Zeit zurück, wo das Prinzip der grammatischen Rektion noch nicht existierte» (*TS* 145). A. v. Gabain is of the opinion that the Turkish case endings, with the exception of accusative, are partly derived from derivational suffixes, partly from postpositions (*ATG* 151; see also especially concerning the locative *SO* 14: 5 7—; cf. also the connecting of the Yakut derivational suffix *-ti* with the locative-ablative suffix, K. Schrieffl *KSz* 13 283). According to H. Vogt the Old-Georgian genitive suffix *-is*, instrumental suffix *-it*, adverbial case suffix *-ad* and plural oblique case suffix *-et* were originally derivational suffixes (*NTS* 14 136).

With the adaptation theory is also connected the secretion theory of which Jespersen is the main representative (*Lg* 384—). By secretion Jespersen understands the phenomenon that one portion of an originally indivisible word comes to acquire a grammatical signification which it had not at first. Secretion thus is a consequence of a metanalysis. Secretion shows its full force when the part of a word thus secreted through metanalysis comes to be added to other words not originally



possessing this element. Thus in secretion adaptation or interpretation also occur. Secretion theory differs from adaptation theory only in so far that the latter assumes that the interpreted elements of words originate from agglutination, whereas the former supposes secretion or metanalysis. As instances of secretion Jespersen presents, among others, the English plural ending *-en* in *oxen* and German *-er*, which originally was part of the stem in a word such as *rind* : *rinder*, but which through secretion acquired the meaning of plural ending and spread to words where it originally did not belong, like *wörter*, *brüder*.

Jespersen notices that a trait highly characteristic of secretion is that (seen from the point of view of the speaker) the occurrence of endings originating in this way seems accidental: they occur in some words, but not in others. The endings originating in agglutination, on the contrary, occur more uniformly and are added to all words. But as a similar irregular or arbitrary distribution is met with in the case of nearly all flexional endings in the oldest stages of the Indo-European languages, Jespersen is of the opinion that this circumstance concurs with the assumption that most of the Indo-European suffixes, the origin of which we do not know, originated by secretion or similar processes, rather than by agglutination (cf. the point of view of Oertel and Morris above 173). According to Jespersen the great majority of derivational as well as of flexional suffixes can be traced back to such beginnings. The suffix separated by secretion, when added to new words, acquired a certain colouring from these words, and gradually acquired an independent signification and a special function of its own (Lg 391).

How was secretion possible at a language stage when there as yet were no grammatical categories and morphemes at all, which might have served as analogy? Jespersen maintains that man is a classifying animal and that the whole process of language is nothing but distributing phenomena into different classes on the strength of similarities. Jespersen presents an instance related by Professor Hempl whose daughter, when having received a black kitten called *Nig*, immediately called a gray kitten *Grig* and a brown one *Brownig*. Here we see

the genesis of a suffix, says Jespersen. The classifying instinct often manifests itself in bringing words together in forms which have something in common as regards meaning. In this way there are smaller classes and larger classes, of which it is sometimes impossible to say in what way their similarity in form has come about. E.g. in Old English some names of animals have the ending *-gga*, such as *frogga*, *stagga*, *doega*, *wicga*, now *frog*, *stag*, *dog*, *wig*. Jespersen gives other similar instances. (Lg 388—).

W. Wundt has also expressed a similar view regarding the genesis of nominal derivational suffixes in Part II of »Die Sprache«. Wundt says: »Wie die Komparationsformen ursprünglich aller Wahrscheinlichkeit nach nicht Grad-, sondern Artunterschiede sind, so erscheint die Sprache überhaupt ursprünglich erfüllt von Unterscheidungen der Gegenstände und Eigenschaften, bei denen das Verwandte oder ähnlich Erscheinende durch lautliche Angleichung verknüpft wird. Dabei geschieht diese Angleichung regelmässig so, dass die Grundelemente des Wortes zunächst den individuellen Begriffsinhalt ausdrücken, während Beziehungselemente, die als Suffixe oder Präfixe zu ihnen hinzutreten, und die für eine bestimmte Begriffsklasse übereinstimmend sind, die Art oder Gattung bezeichnen, welcher der Begriff angehört. So weichen die uralten indogermanischen Verwandtschaftsnamen *Vater*, *Mutter*, *Bruder*, *Schwester*, *Tochter*, *Schwager* in ihren die spezielle Bedeutung tragenden Lautbestandteilen sämtlich voneinander ab; aber durch die übereinstimmende Endung sind sie zu einer Gruppe verbunden. Mit dieser Endung muss sich daher in einer frühen Zeit die Vorstellung der Verwandtschaft verknüpft haben. Sicherlich ist das nach allem, was wir über die Vorgänge der Begriffsbildung wissen, nicht so geschehen, dass sofort für eine solche Gruppe von Wörtern ein derartiges, die Begriffsklasse verzeichnendes Suffix auf einmal entstand. Die psychologisch einzig mögliche Weise, sich den Vorgang zu denken, besteht viel mehr darin, dass von der Bildung eines Verwandtschaftsnamens zu der eines anderen eine Assoziation der beiden Vorstellungen und der sie begleitenden Gefühle herüberreichte, welche eine Angleichung derjenigen Lautele-

mente des Wortes bewirkte, die nicht dem Ausdruck des besonderen Inhalts der Vorstellung dienen» (15—; cf. also H. Oertel LSL 60—, Brugmann K 313). The difference between Jespersen and Wundt consists in Wundt's apparently being of the opinion that derivational suffixes originate by agglutination, and not by secretion (cf. e.g. op.cit. 18).

The opinion that the Indo-European suffixes have not originated by agglutination has grown more and more general during the present century (cf. e.g. J. Kuryłowicz EI 131). In connection with this the secretion theory has come into more extensive use, especially in explaining the genesis of Indo-European flexion (see e.g. Royen NKS 502, Meinhof EFS 32, W. Porzig Atti 290, Kuryłowicz EI 131). Already Brugmann admitted the possibility of secretion (K 313). (For instances of secretion in Indo-European and other languages, see Royen 498—506).<sup>1</sup>

#### *Relationship of Case Suffixes and Derivational Suffixes.*

Ludwig's thesis that the flexional suffixes originally had some function of a different kind, is supported by numerous historical facts from various languages. It is a generally known phenomenon that the meaning of affixes changes in the same way as the meaning of words. Change of meaning can be observed in derivational as well as flexional suffixes. As regards flexional suffixes it is e.g. known that cases change their meaning. Beronka says: »Die Entwicklung der lappischen Kasus zeigt, dass mehrere ihrer Suffixe sich mit grosser Leichtigkeit

---

<sup>1</sup> In Finno-Ugric linguistics the secretion theory has been applied to explain the origin of derivational suffixes by A. Rytönen in his work »Eräiden itämerensuomen *tm*-sanojen historiaa» (1940). Rytönen is of the opinion that e.g. suffixes *-ma*, *-ja*, *-ka*, *-la*, *-pa*, *-ta* (~ *-mä*, *-jä*, *-kä*, *-lä*, *-pä*, *-tä*) may have originated by secretion from words of onomatopoeic type *pim* : *pima*, *hui* : *huja*, *ökä*, *helä*(*htää*), *kop* : *kopa*(*htaa*), *kü* : *kita*(*jaa*) (29—; for criticism of the investigation, see A. Penttilä Vir. 1940 246—, esp. 253).

neuen Bedeutungen angepasst haben, dieser Adaption scheint die Grundbedeutung kein wesentliches Hindernis gewesen zu sein» (LK 129).

Changes of meaning, however, do not occur only within the limits of one and the same grammatical category, as history of language presents abundant instances where, e.g. derivational suffixes have been changed into flexional suffixes. Even the transformation of originally autonomous words into auxiliary words (morphemes) proves that the bounds between lexical and flexional elements are not insurmountable. The same is proved by the circumstance that often it is impossible with some language elements to say whether we are concerned with a lexeme (semanteme) or a morpheme, a stem or an affix (Boas HALL I 34—; B. Malinovski MoM 302: cf. W. D. Whitney LGL 222, Sapir L 109—).

Several authors have stressed the fact that there is no essential difference between nominal derivational suffixes and case suffixes, but that they are intimately connected. K. B. Wiklund, e.g. says: »Zwischen Derivationsendungen und Kasusendungen besteht aber kein principieller Unterschied» (Fest. Qvigstad 335). See also e.g. K. Schriebl KSz 13 281, G. Mészöly NyK 40 327.

A. Sauvageot says about the case suffixes in Uralic and Altaic languages: »Elles n'assument, à l'origine aucune fonction syntaxique. Elles modifient seulement le sens des mots du point de vue sémantique . . . Les formes casuelles de l'ouralo-altaïque sont purement qualitatives et doivent être assimilées aux autres suffixations dérivatives qui forment des mots comparables à nos adjectifs dérivés» (EFr I 36: 5). But there seems to exist no principal difference between case suffixes in Uralic languages and, e.g. Indo-European case suffixes. Ludwig states about the Finno-Ugric case suffixes that here in many cases is »eine abschliessung gegen die nominalbildung unmöglich» (-nen 2). In Ludwig's opinion of this point there is »der tief reichende unterschied zwischen Indogermanischer und Ugrischer flexion», but that it is »nur ein ser starker unterschied des grades . . . und was allerdings wichtiger ein grundunterschied», and »im laufe der sprachentwicklung auf Indo-

germanischem sprachboden ganz ähnliches zum durchbruche gekommen ist» (ib).

The relationship of the function of case suffixes and of derivational suffixes in the Finno-Ugric languages manifests itself especially in the phenomenon that in some of these languages case suffixes also occur as derivational suffixes. This phenomenon has been noticed especially in the Mordvin and the Permic languages. According to M. E. Evsev'ev in Erza-Mordvin the inessive and translative case suffixes of the indefinite declension also occur in the function of substantive derivational suffixes, as all definite declension case endings in the singular and plural can be added to them, e.g. of the indefinite inessive form *pakśaso* 'on the field' it is possible to form definite nominative *pakśasoś* 'that which is on the field', plural *pakśasotne* 'those that are on the field', inessive *pakśasošt* 'in that which is on the field', elative *pakśasodošt* 'of that which is on the field', etc., all cases of the singular and plural; likewise of indefinitive translative *kudoks* 'for the house' — definitive nominative *kudoksos* 'that which is for the building of the house', plural *kudoksnę*, allative *kudoksonteń* (-*šteń*) (OMG 106—; see also F. J. Wiedemann MGr § 25, J. Budenz NyK 19 74, 128; J. Steuer NyK 22 453, 456, D. R. Fuchs KSz 13 95; Ö. Beke KSz 15 62 note, A. A. Šahmatov MÉS 782).

In Estonian, too, the inessive suffix *-s* actually occurs as a derivational suffix, except for the difference that the word that is in the inessive case is not congruent with the principal word, in constructions like *silmad on aukus* 'eyes are in hollow (hollow-eyed)', *kottis püksid* 'trousers in bag (baggy)', *mures näoga* 'with face in worry (worried)', *pilves ilm* 'weather in cloud (cloudy)', *näljas inimene* 'man in hunger (hungry)' etc. Cf. also Livonian *suolms* 'in knot (knotted)' (LGr 23), Finnish *poika on nälissänsä ja janoissansa* 'the boy is in his hungers and thirsts (hungry and thirsty)', *mies on taudissa* 'the man is in illness (ill)', *kivi on lujassa* 'the stone is fast' (E. N. Setälä SKL 53), and Hungarian adjectives, like *éhen* 'hungry' (locative of *éh* 'hunger').

On Mordvin prolative Steuer gives the following example:

*pilmanžavat panarınza, kener-pakarğat ožanza, sur-preavat surıl-danza* 'his shirts (reaching) to the knee, his sleeves (reaching) to the elbow, his fringes (reaching) to fingertips' (NyK 22 456; cf. Budenz UA 301). Cf. also Estonian *põlvini kuub* 'a knee-long coat', *maani sark* 'a shirt reaching down to the ground' (*põlvini, maani* are terminatives) etc. Cf. also Mongolian *amidu* 'living, alive' (locative from *ami* 'life') (N. Poppe Language 30 575).

The elative suffix *-s* of the Permic languages occurs as a real derivational suffix. That the Permic possessive derivational suffix *-s* was formerly an elative suffix with which it is at present phonetically exactly identical, has been proved by Fuchs KSz 13 85— (in detail JSFOu 30: 14 2—), where numerous instances are given. E.g. Votyak *šürisjos ažä ortžože, ažišjos šürä kiložē* 'the last will be first and the first last' (88), Zyrian *vištav asrat gortišjesve* 'tell to your domestics' (90). Fuchs explains the transformation of the elative case suffix into a derivational suffix by the fact that their meaning is so closely related, which he demonstrates by means of instances where it is difficult to determine whether we have to do with an elative adverb or with the derivational suffix on *-is* and attribute, like *so göršokis makežosiz nuk uue, gurtliš kiđoke og šu tšażem, kuštini kuue* 'die Sachen müssen aus dem Topfe in einen Abgrund ungefähr hundert Klafter vom Dorfe entfernt geworfen werden' (92) — whether 'the things in the pot must be thrown' or 'the things must be thrown from the pot'? In Estonian too the elative suffix *-st* actually occurs as an adjective derivational suffix, with the only difference that the elative word is not congruent with the principal word in constructions like *maja on kivist* 'the house is of stone', *traadist aed* 'fence of wiregrating', etc. Cf. also Livonian *lūst* 'knöchern' (Sjögren LGr 23), Finnish *sormus on kullasta* 'the ring is of gold', Vepsian *hētseq tohespäi* 'it is of bark', *olgespäi kanaine* 'a hen of straw', etc. (Kettunen VLT 81—, 190). Cf. also the occurrence of the ablative case as attribute in Ostyak and Vogul in constructions like Ostyak *jiba süxta kāt pōseñen* 'zwei handschuhe aus uhuhaut', *noχ-sōxtâ* 'aus elentierhaut', cf. Estonian *põdranahast kindad* 'gloves of elk-

skin'; Vogul *kwotl āyi* 'mittleres mädchen', *sāsēl lap* 'decke aus birkenrinde' (S. Patkanow — R. Fuchs LFSO 98).

In Votyak the egressive suffix *-sän* (*-šen*) occurs in some instances as a nomen possessi suffix, e.g. *korkaśānlān*, *gurež-ulśśānlān nīmzi odig lo* 'those coming from the chamber and those coming from the mountain foot have one name', *ludyśenlen inmyśenlen nimyz odyg* 'eines auf dem Felde und eines am Himmel Befindlichen Name ist der gleiche' (to the suffix *-sän*, *-šen* has been added the adessive suffix *-lān*, *-len*) (Fuchs K Sz 13 96—). The Zyrian adessive suffix *-lōn* occurs in the function of a derivational suffix in the following example given by Wiedemann *kesarly kesarlōnsō, jenly jenlōnsō setō* 'gebet dem Kaiser das dem Kaiser Gehörige und Gott das Gott gehörende' (SGr 113) — to the adessive suffix *-lōn* here has been added the accusative suffix *-sō* of possessive declension. The Cheremis modal case suffix *-la*, e.g. *keglā tšonje-štā* 'fliegt wie ein vogel', occurs also in the function of an adjective suffix, e.g. *ruśla-türē* 'ruschisches muster' (Y. Wichmann JSFOu 30: 6 18).

The same phenomenon also occurs in other language families. It is especially striking in Altaic languages where it is present in all language groups, and is known as »double declension». E.g. the Turkish ablative suffix *-dān* and the instrumental suffix *-in* also occur as derivational suffixes (A. Gabain ATG 88—, 150—). According to Ramstedt in Turkish occur the dative *-ya* + the lative *-ru*, e.g. *gayanyaru* 'zum kaiser hin' (E II 38). In Chuvash e.g. according to J. Benzing the adverbial case suffix may be added to every dative, e.g. the dative *kil-ε* 'dem hause, zum hause', thereof the adverbial *kilelle* 'zum hause hin'; in the same way the ablative + instrumental may be added to every noun, e.g. *mal-dan-ba* 'von anfang an bis jetzt' (see further ZDMG 96 451—). In Mongolian there occurs e.g. dative-locative + ablative, e.g. (Khalka) *gertēs* 'aus dem hause' (*gerte* 'im hause' is locative of the word *ger*; *-ēs* is ablative suffix) (O. Pritsak UAJb 24: 1—2 62, see also Poppe GWM 77, KMG 68, Language 30 576—). In Tungus, words equipped with comitative suffixes *-nun* and *-tai*, if preceding as attribute a substantive in the accusative case,

are congruent with the latter, i.e. the accusative suffix is added to the comitative suffix, e.g. *kirančika-taj-wa awsa-wa amawra* 'die kiste mit dem adler tragend' (*-wa* is accusative suffix) (K. Bouda IF 60 19). The Instrumental, too, can be formed of the comitative. Poppe says that this double declension is due to the fact that in Tungus there is no sharp difference between derivation and flexion (M 6; cf. J. Benzing UAJb 25 115). In Mongolian almost all case suffixes may be added to the comitative with the suffix *-tai*, which according to Poppe was originally a denominal noun with the meaning 'possessing something' (GWM 78, KMG 68).

In Caucasian languages the Abkaz directive case suffix *-xi*, *-x'*, the Ubykh and Circassian comitative suffix *-la*, *-lä*, resp. *-ra*, *-re*, as well as the Ubykh local and instrumental case suffix *-k'ä* also occur as derivational suffixes (G. Dumezil IGC 66, 67, note 1). In the Melanesian Jabêm language the locative suffix *-ŋa*, which has several meanings, also occurs in the function of an adjective derivational suffix, e.g. *undambê* 'heaven', *undambêŋa* 'towards heaven, heavenly' (O. Dempwolff GrJ 26, 38, 48, 60, 76). In the same language the comitative preposition *to* (e.g. *dec to bu kêsa* 'blood together with water came out') has in some instances agglutinated with the principal word, forming adjectives, e.g. *towae* 'with fame = famous' (ib. 26—46—76). Cf. also Finno-Ugric comitatives, such as Estonian *sabaga täht* 'star with a tail (comet)', Livonian *mūmaks kala* 'rogner' (LGr 260); Vepsan *nečtse ak ractsajke* 'that woman is pregnant (with a stomach)' (Kettunen VLT 81); Ostyak *ūrdat voš* 'heldenstadt', *turat vat* 'ein mit morschem holze bestreuter ort' (Patkanow-Fuchs LFSO 98); in Ket (Yenissei-Ostyak) according to M. A. Castrén the prosecutive suffix *-bes* and caritive suffix *-fan* also occur as adjective suffixes (JOKS 26).

In the American Klamath language the accusative-dative (objective) suffix *-ash* also occurs as a noun derivational suffix (A. S. Gatschet KI 323), the partitive suffix *-ti* also occurs as a nominal and verbal derivational suffix (374—), the locative-instructive case suffix *-tka* also occurs as a verbal derivational suffix (476, 376); the locative suffix *-na* and the



inessive suffix *-i* occur also as verbal and nominal derivational suffixes. Without knowing the history of the language it is impossible to state which function is primary, that of the derivational suffix or that of the case suffix. Likewise it is impossible to know whether we in all such instances are at all concerned with identical suffixes.

*Transformation of the derivational suffix into the flexional suffix.*

*Flexional Suffixes of the Verb.*

There are numerous instances of the transformation of derivational suffixes into flexional suffixes. This process is especially striking with regard to the verb. Thus it is known that Finno-Ugric (FU) tense morphemes are former derivational suffixes (see Setälä TuM 173; Szinyei FUS 119—; Klemm FUF 17 265; Gy. Lazicius MNy 29 18—; J. Györke WU 90—, MEK 95—). E.g. the FU present tense morpheme *\*-k-* (e.g. in Estonian impersonal *saadakse* 'is obtained') is in all probability identical with the same deverbial noun derivational suffix, which occurs e.g. in Estonian *pilge* < *\*-ek* 'mockery'. The preterite morpheme *\*-i-* (e.g. Estonian *pesi* 'washed') is presumedly of identical origin with the Baltic Finnic (BF) nomen agentis suffix *-ja*, e.g. Estonian *paluja* 'begger, who begs', which Ravila believes to be equal to the deverbial noun suffix *-i* in words like Estonian *laul* < *laulu* < *-o* < *\*-oi* (Vir. 1945 151; cf. L. Hakulinen SKR I 195). Another FU preterite suffix *\*-š-*, e.g. Ostyak *mənəs* 'er ging' is likewise a former derivational suffix, cf. Ostyak *noməs* 'verstand, vernunft, sinn' (FUS 123—). Several Uralic present tense morphemes are originally frequentative verb suffixes, thus Votyak *-šk-*, Vogul *-nt-* (Horger MIT 95, Györke NyK 51 93—, K. Horváth ib. 130), Ostyak *-d-* ~ *-t-* (LFSO 176), Samoyedic *-mbi-*, *-bi-* ~ *-pi-*, *-ta-* (Györke NyK 51 62). According to Szinyei (NyK 112) the Hungarian future morpheme *-and-*, *-end-* was originally a frequentative verb suffix, and according to S. Simonyi and Horger (MIT 97) the verb suffix *-amod-*, *-emod-*, which occurs

e.g. in the verb *futamodik* 'to run away'. In Samoyedic the inchoative verb suffixes *-gu-* ~ *-ku-*, *-dā-* ~ *-tā-* occur as future morphemes (Györke NyK 51 95—).

In Indo-European languages e.g. the aorist morpheme *-s-* is equal to the derivational element *-s-*. The Armenian aorist *-ç-* is the former Indo-European verbal derivational suffix *-ske-*. The Greek aorist suffix *-θην-* has been explained by the Indo-European derivational element *-dh-* (cf. e.g. W. P. Lehmann Lg 19 22—). The Greek perfect *-k-* is according to Lehmann a derivational element (ib.), which also occurs in nominal forms. As regards other language families, e.g. the Dravidian future morphemes *-k-* and *-p-* are according to J. Bloch identical with derivational noun suffixes, *-k-* also being a dative morpheme and *-p-* a causative verb morpheme. It is interesting to notice that the preterite morphemes, *-t-*, *-in-*, *-an-* also are oblique case morphemes (SGLD 60). It may be assumed that the latter were formerly derivational suffixes.

All FU modal morphemes were also formerly derivational suffixes (Setälä TuM 166—). The imperative morpheme *\*-k-* (e.g. Estonian *pese* < *\*pesek* 'wash') is the same derivational suffix as occurs as morpheme of the present tense (FUS 126). The BF potential (FU conjunctive) morpheme *-ne-*, e.g. Finnish *saanen* 'perhaps I get, receive', is probably the same verbal suffix as occurs, e.g. in Estonian *põgenema* 'to flee' (FUS 125). The Estonian conditional morpheme *-ksi-* (< *\*-jksí-*) and Finnish *-isi-* (< *\*-jśi* or *\*-jś-*) has been connected with the derivational suffix which occurs, e.g. in Estonian *aritsema* 'to take care of, cure', Finnish *valaisen, valaitsen* 'I shed light upon' (Hakulinen SKR I 218—). Ravila has connected it with the noun suffix *-itse-*, *-ise-* which occurs, e.g. in Estonian *päitsed* 'bridle', *naise* 'woman (gen.)' (FUF 23 56—9).

In the sphere of the Altaic languages, according to Ramstedt, the Turkish conditional morpheme *-sa-*, *-se-*, for example, is a former denominal derivational verb suffix (FUF 29 120—).

The BF passive morpheme *-t(a)-* is probably identical with the causative verb suffix *-ta-* which occurs e.g. in Estonian *tõstan* 'I lift, raise' (T. Lehtisalo PUA 328, Hakulinen SKR I 214—). It has been assumed that the Hungarian passive

morpheme *-t-* is of the same origin (cf. Simonyi JSFOu 23: 12 2—, Szinnyei NyK 78; divergent opinion, Klemm MEK 186—). In Lappish dialects, Vogul and Ostyak occur passive morphemes *\*-β-* and *\*-j-*, which were originally reflexive verb suffixes (NyH 75, Lehtisalo PUA 43—, 77, cf. Mészöly NyK 51 2—).

Likewise all morphemes of infinite forms of the verb were originally derivational suffixes, properly speaking verbal noun suffixes. E.g. the BF infinitive morpheme *-ma* (e.g. Estonian *sööma* 'to eat') is the same derivational noun suffix as occurs e.g. in Estonian (*surm*:) gen. *surma* 'death', *sööma* (*aeg*) 'eat-time, meal' (FUS 81). The *t*-element which occurs in BF infinitive morpheme *\*-<sub>5</sub>ak* (e.g. Estonian *saada* 'to get, become') is a verbal noun suffix, cf. Vogul *nāmt* 'thought' (FUS 79).

Even a certain number of FU personal morphemes were originally derivational suffixes. Thus the *-b*, *-va*-element in Estonian indicative present 3rd person sg. *-b*, pl. *-vad*, which occur as personal and not as present tense morphemes, as which they usually are treated in Finno-Ugric linguistic literature (see e.g. FUS 121),<sup>1</sup> was in all probability originally the same derivational suffix which in the present participle (e.g. Estonian *lugev*: gen. *lugeva* '(the one who is) reading') and e.g. in the word *lihav* 'fleshy, corpulent' is represented in the form *-v:-va*. That in the ending *-vad* the *-va*-element belongs to the personal morpheme and is no morpheme of the present tense, is also confirmed by the fact that it has also spread to the imperfect tense (e.g. in Estonian dialects *tulivad*, Finnish *tulivat* 'they came'). The same derivational element is also contained in the Lappish 1st person plural morpheme *-p*, *-B*, *-bie*, e.g. *männáp* 'we go' = Estonian *minev* 'who is going' (E. Itkonen MSFOu 98 304). The origin of the Hungarian personal morphemes of the verb is especially instructive, as only a part of them were originally pronominal person morphemes, whereas the other part were originally derivational suffixes or plural morphemes (see Z. Gombocz UJb 10 4—, Horger MIT 6—). Thus the 2nd person singular morpheme

<sup>1</sup> Cf. 1. *tule-n* 'I come', 2. *tule-d* 'you come', 3. *tule-b* 'he comes', plural 1. *tule-me* 'we come', 2. *tule-te* 'you come', 3. *tule-vad* 'they come.'

of subjective conjugation *-sz* is according to Szinnyei (NyH 64) in verbs like *tész* 'you do', *lész* 'you get, become', and according to Gombocz (UJb 10 5) also in verbs like *rársz* 'you wait', *adsz* 'you give', identical with the frequentative verb suffix *-sz* (cf. also E. Sámson MNy 49 341—). According to J. Juhász (MNy 35 284—) and E. Moór (ALH 2 81) the 2nd person ending *-l*, e.g. *eszel* 'you eat', is likewise identical with the frequentative verb suffix *-l* which occurs, e.g. in the word *sujtol* 'to strike'. The 1st person singular ending *-k*, e.g. *vétek* 'I sin', is according to G. Pais (MNy 27 143), Juhász (MNy 35 282—) and Sámson (MNy 47 229—) identical with the derivational noun suffix *-k*, cf. *vétek* 'the sinning', according to E. Moór (loc.c.) it is identical with the momentaneous verb suffix *-k* which occurred originally in inchoative function (differently Gombocz UJb 10— and Horger MIT 9—). The 3rd person morpheme *-n* in verbs like *teszen* 'he does', *leszen* 'he becomes' was originally a deverbal noun suffix, cf. e.g. *haszon* 'advantage, profit' (UJb 10 12).

The same phenomenon is also to be found in other linguistic families. Thus, according to Bloch, in Dravidian languages the Old Tamil 1st person future suffix *-al* (e.g. *kēt-p-al* 'j'écouterai', is identical with the noun suffix which expresses action, cf. *peyal* 'pluie', *peyardal* 'changement'; Bloch is inclined to interpret the Canarese 3rd person suffix *-gum ~ kum* as a substantive suffix (SGLD 43—).

#### *Plural suffixes.*

As regards the nominal flexion there are instances of the transformation of derivational suffixes into flexional suffixes especially in the sphere of plural suffixes. The BF and Lappish plural morpheme *-i* was according to Rivila originally an adjective suffix, which occurs e.g. in compound words, such as Estonian *sepikoda* 'smithy', *vakuraamat* (< \**vačkoi-*) 'district-book', Finnish *karjoi-piha* 'cattleyard', *aitoi-vieri* 'fence side', and which is probably identical with the diminutive suffix *-i* (FUF 23 52—; 27 86—; cf. J. Mägiste CLSE 30 460—).

EK 1933 125—, B. Wickman FOUL 148). This FU adjective and diminutive derivational suffix *-i* was connected with the plural morpheme *-i* by T. G. Aminoff as early as 1871 (Suomi II: 9 260). O. Grotenfelt was of the opinion (1876) that the derivational suffix *-i* originates from the plural *-i* (Suomi II: 12 358). Farkas also derives from the same (possessive adjective) derivational suffix the plural morpheme *-i-* which occurs in Hungarian possessive suffixes, e.g. *kezeim* 'my hands' (UJb 25 52—). According to Bubrih the plural morpheme *-i* may be connected with the BF local and collective derivational suffix *-ja, -jü* which occurs e.g. in Finnish *kaikki(j)alla* 'everywhere' (CESE 30 104, JaM 11 77, 79; as regards the suffix *-ja, -jü* see E. A. Tunkelo Vir. 1932 389—; 1933 9—; MSFOu 67 385—; cf. Uotila NyK 50 468, 473, N. Ikola FUF 29 155). Y. H. Toivonen alludes to the possibility that the derivational suffix contained in the plural morpheme *-i* may in the beginning have had a local meaning and that the adjective suffix *-i* and the suffix *-ja, -jü* are one and the same derivational suffix. As a matter of fact Toivonen connects the suffix *-ja, -jü* with the FU lative suffix *-i*, the existence of which he assumes in BF particles like Estonian *läbi* 'through', Finnish *auki* 'open', *halki* 'through', etc. (FUF 28 9—, 16—). Toivonen raises the question whether this lative *-i* might not be identical with the adjective suffix and plural morpheme *-i* (ib. 18—). According to Uotila the local suffix *-i, -i̇* with which Uotila also connects the Lappish plural genitive and instructive and *i̇*-diminutives, was formerly an adjective derivational suffix (Vir. 1945 129—). Concerning the occurrence of the same suffix *-i, -i̇* as coaffix in several Permic cases, see Uotila Vir. 1945 330—.

The plural suffix of the predicative adjectives which occurs in Permic languages, Zyrian *-eś*, Votyak *-eś*, e.g. Votyak *soos uzyreś* 'they are wealthy', was originally a possessive adjective suffix which occurs e.g. in *geneś* 'haarig' (Ravila FUF 27 100).

Still other FU plural morphemes have been connected with the derivational suffixes which originally denoted locality or the notion of collectivity connected with it. According to Ravila (FUF 27 68) it is possible that the Hungarian plural

morpheme *-k*, e.g. *házak* 'houses', is the same collective suffix *-kk* which occurs in Estonian, e.g. in *kuusik* 'spruce forest', *lepik* 'alder-tree forest' (see Lehtisalo PUA 360), and the collective meaning of which has developed from the notion of locality (cf. Hakulinen SKR I 136, cf. also Bubrih CLSE 30 103, JaM 11 78, 80). Farkas has arrived at the same result (UJb 24: 3—4 53—). The Ostyak-Samoyede plural suffix *-la*, e.g. *logala* 'foxes', is according to Lehtisalo identical with the Cheremis collective derivational suffix *-la* (PUA 151), but concerning the latter it must also be taken into account that it may be identical with the Tungus plural suffix *-l* (see D. Sinor AM 2 214—). The *l*-element in the East Finnish and Carelian plural suffix *-loi*, *-löi* (e.g. *taloloissa* 'in houses') was according to A. Ahlqvist a diminutive suffix (SKR 87—). Y. Wichmann (JSFOu 30: 6 17) raised the question that it might be connected with the Cheremis collective suffix *-la* (cf. also Lehtisalo PUA 150) whereas Bubrih connected it with the BF collective and local suffix *-la* (CLSE 30 104 note).

The transformation of original local and collective suffixes into plural morphemes also occurs in other linguistic families, e.g. Armenian *-stan* (J. Karst GrKA 196—, cf. Royen NKS 471, 649—). Basque *-eta* (H. Gavel GrB I Chap. II 54). As regards the transformation of collective suffixes into plural suffixes, there are numerous instances from various language families. E.g. of the Altaic languages Turkish *-lar* etc. (see further Pritsak UJb 24: 1 67—, 84—); of Indo-European languages, e.g. Middle Armenian *-ni*, *-di*, *-ri* *-ier*, *-an*, *-stan* (Royen NKS 641), Indo-European neutral plural *-ā* (ib. 596—, 604—), likewise in Polish (629—) and in Celtic (633—); further e.g. in Semitic languages (the so-called plurales fracti) (605—), in Sudanic Bari (607) and Massai (608), in Polynesian languages (609). A semantical parallel is the fact that the plural is expressed analytically by means of a noun or a particle which has collective meaning. This phenomenon occurs especially in the Far East languages, e.g. Tibetan expresses the plural with the particles *rnams*, *dag*, *cho*, etc., the original meaning of which is 'groupe, pièce, ensemble'; the same applies to Chinese, Japanese (C. Regamey ASt 1/2 60) and Malayo-Poly-

nesian languages. A great number of such words that denote the plural have subsequently agglutinated with the principal word, and have thus been transformed into plural suffixes.

### *Comparison suffixes.*

Comparison suffixes, too, are often former derivational suffixes. Thus the comparative and superlative *m*-element which occurs in some FU languages is identical with the denominal suffix *-m(a)* which is present in e.g. Finnish word *rantama* 'coast' and in the Estonian pronoun *tema* 'he, she' (Ravila FUF 24 41—); the *p*-element which is added to *m* is probably identical with the derivational suffix which occurs in adjectives like *lihav* 'fleshy, corpulent' (ib. 48—). The Votyak comparative suffixes *-gem* and *-ges* are also derivational suffixes (Fuchs FUF 30 165; on the occurrence of Vogul derivational suffixes *-η* and *-χ* as comparative suffixes, see ib. 156, and on Samoyedic. Castrén SamGr 189).

### *Genitive and Locative.*

There are relatively fewer positive instances of the origin of case suffixes from the derivational suffixes than concerning such genesis of other flexional suffixes. The FU genitive suffix *-n* is generally assumed to be a former adjective suffix (see e.g. Wiedemann MGr 21, Budenz NyK 20 439, Setälä ÄH 382, Szinnyei FUS 61, Beke Nyr 54 108—, Bj. Collinder UUA 1940: 8 41—. Farkas UAJb 25 67). This subject has been treated with particular thoroughness by Ravila FUF 27 (see esp. 75—). This assumption is sustained by the fact that in Mordvin and Cheremis adjectives occur with exactly the same suffix as that of the genitive, e.g. Mordvin *ošón* 'town-, of the town', Cheremis *pun* 'of wood' (see further Ravila FUF 27 75—).

Also in a series of other languages the genitive suffix has been connected with the adjective suffix. It is especially

noteworthy that in the Yukaghir and in the Chukchee language group the suffix *-n* also forms adjectives as well as genitives (J. Ankeria UUA 1951: 9 115—). In Altaic languages the Tungus genitive suffix *-ngi* (*-ńi*) is composed of the ancient genitive *-n* + adjective suffix *-ki* (A. Salonen JSFOu 49: 3 12 note 2). The Turkish genitive suffix *-nyng* was, according to Grönbech, formerly a derivational suffix which formed possessive substantives, having more or less the same meaning as the Modern Mongolian genitive suffix *-ā* (TS 106—). Concerning the *i*-case of the Indo-European *o*-stems, which was formerly an adjective, see Ravila op.c. 81, as to the adjective genitive of the Indo-Iranian languages, see Royen NKS 769—. The Basque attributive genitive suffix *-ko* is actually an adjective suffix (Gavel GrB I chap. II 23). The Semitic genitive morpheme *-ī* has in C. Brockelmann's opinion developed from an adjective suffix of the same element (Gr I 460). In Somali the adjective suffix *-i* is used to express the function of the genitive (Meinhof Scr. Tromb. 84). The genitive suffixes *-in* and *-am* of the Dravidian languages likewise occur as adjective suffixes (Caldwell GrD 293—). Bloch is of the opinion that the Dravidian Brahui genitive suffix *-nā* is probably derived from the suffix *-un* which occurs as an adjective suffix. This *-nā* genitive itself may also occur as a substantive, and new flexional suffixes may be added to it (SGLD 14—). In Australian Kabi language adjectives are formed from substantives by means of pronominal genitive suffixes (A. P. Elkin Oc. 8 157—; as regards relationship between genitive and adjective suffixes in other languages, see also, e.g. Royen NKS 771, L. H. Gray FL 197—; cf. also Caldwell GrD 288).

Wiklund considered the genitive *-n* to be equal to the instructive *-n*, assuming that both may be traced back to originally one and the same connective case (Fest. Qvigstad, see esp. 334—, 336—). Ravila (FUF 27 79—) and Collinder (SSUF 1946—48 13) agree with this opinion. Ravila also calls attention to the fact that in all Uralic languages the instructive coincides in form with the genitive, and that the functions of these cases may also be linked together. In spite



of this Ravila thinks that the genitive suffix is a former adjective suffix. Ravila calls attention to the fact that the difference between the genitive as an adnominal and the instructive as adverbial case disappears if we keep in mind that primarily there was also no difference between the noun and the verb.

The assumption that the Uralic genitive and instructive were identical in the beginning, is supported by the circumstance that similar phenomena also occur in other language families. In Altaic languages, e.g. the instructive *-n*, *-in* is often phonically identical with the genitive, and Ramstedt thinks it possible that these two cases belong to each other etymologically (E II 43). According to Bloch the Dravidian case coaffix and instrumental case suffix *-in* is really an oblique case suffix «marquant la relation adnominale donnant au mot la valeur d'un génitif» (SGLD 12). The Tibetan genitive and instrumental, too, are probably of common origin, as their morphemes are very much alike (genitive: *-kyi*, *-gyi*, *-gi*, *'-i*, instrumental: *-kyis*, *-gyis*, *-gis*, *'-is*), and they in fact have also been intermingled in some texts. In this connection J. Bacot calls attention to instances where these two cases cover each other also in French: *aimé de Dieu* ~ *par Dieu*, *frapper de l'épée* ~ *par l'épée*, *l'oeuvre d'un tel* ~ *par un tel* (GTL 26).

Ravila considers it possible that the plural morpheme *-n* which occurs in possessive suffixes is also primarily identical with the genitive and instructive *-n*, e.g. in Mordvin (*tšorazo* 'his son' :) *tšoranzo* 'his sons' (FUF 27 87—).

Several authors have, on the other hand, connected the FU instructive with the locative, in which case the genitive would also be identical with the locative. Ravila does not think that the instructive might be connected with the locative, because these cases differ phonically until Samoyedic (op.c. 80). However, taking into account the relationship between the functions of these cases as well as their common *n*-element, the primary identity of the instructive and locative may be considered quite possible. The opinion that the instructive has developed from the locative

has been expressed e.g. by Budenz (UA 378), B. Munkácsi (BA 292), Fuchs (see e.g. KSz 7 116, FUF 18 210), Beke (NyK 55 47), Kettunen (LW § 75), Beronka (LK 74). Fuchs also calls attention to the phenomenon that in several FU languages the local suffixes have acquired instrumental function, thus Mordvin inessive, Hungarian inessive and superessive, whereas the Votyak inessive and instrumental are considered to be identical by Fuchs as well as Beke (KSz 7 116—, NyK 36 210). As regards the occurrence of Ostyak *na*-locative in instrumental and comitative functions, see F. Kara NyK 41 33—, Steinitz OGr 51.

Regarding other languages D. Sinor e.g. thinks that the Old Turkish case suffix *-n* which is usually called the instrumental, and which occurs in instrumental, temporal, local and modal functions, has originally been a local case (TP 37 138). The same is assumed by H. Hirt about the Indo-European instrumental (IG VI 58, HIS 59), and by Caldwell about the Telugu instrumental (GrD 275—).

Some authors have connected the FU genitive *-n* directly, without the intermediary link of the instructive, with the *n*-element of the locative suffix *-na*. Already Boller (SKAW 1853 972—) traced back all FU *n*-cases, genitive, instructive, locative. Estonian terminative *-ni* (< \**-unik*) and Finnish comitative *-(i)ne*, e.g. (*mies*) *raimoine* 'man with wife', to one case, viz. locative. The same standpoint was adopted by M. Veske in 1873 (VGFS 38—). Of the older scientists H. Winkler (UVS 208—) and M. Szilasi (NyT 1 15—) also held the opinion that the FU genitive is identical with the locative. Kettunen too is of the opinion that Veske's assumption is possible (LW § 57), basing his standpoint especially on the Livonian dative, e.g. *mī'mān* 'to me is. i.e. I have'. This case is in Livonian phonetically identical with the locative case and corresponds to the Finnish so-called dative-genitive, e.g. *minun on nälkä* 'to me is hunger, i.e. I am hungry', which according to Kettunen is certainly identical with the locative, and which Sziunyei traces back to the Finnic-Permic lative \**-ń*, cf. Lappish *-ńi*, *-n*, Votyak *-ń*, *-n*, Cheremis *-n* (*pelen* 'towards') (FUS 62, cf. also Hakulinen SKR I 87). Cheremis

and Mordvin use the construction genitive + 'to be' to express the notion of 'have', whereas other FU languages which lack the verb 'to have' use for denoting it a local case (see below 198) or dative (like Hungarian). The genitive is also used to express 'to have' in Samoyedic and Turkic languages (see further Beke JSFOu 30: 11 4—). Mészöly (MNy 23 152) and Bubrih (JM 11 82—) too are of the opinion that the *n*-genitive is a former locative.

Toivonen is of the opinion that it is possible in principle to connect the *n*-element which occurs in adjective, genitive, locative and possessive suffixes (FUF 28 18). Qvigstad (ASSF 12 141—), Beke (Nyr 55 47), Kettunen (LW § 75), Hakulinen (SKR I 93) and Bubrih (JaM 11 84—) think that the locative and Finnish comitative *n* are identical. Several authors held the opinion that the Finnish comitative is identical with instructive, thus Ahlqvist (SKR 114—), Setälä (ÅH 380), A. Kannisto (TS 4 1230), Beke (Nyr 55 47), Beronka (LK 75—). J. Mark does not consider it possible to connect the Finnish comitative and instructive (PS 228—). Ravila (FUF 27 45) thinks that the Finnish comitative was originally an adjective, thus *mies vaimoine* might have originally meant something like 'der Mann als mit einer Frau versehener'. In this case the *i*-element might be the same adjective suffix from which, as it has been assumed, the plural morpheme *-i* has evolved. Ravila does not consider it necessary to connect *-ne* with the locative *-na*. Ravila thinks it possible that *-ne* is a nomen possessoris suffix, but does not consider it particularly likely, leaving open the problem of the origin of *-ne*. Ravila points out parallel phenomena from Vogul and Zyrian to the development of the Finnish comitative from the possessive adjective. In Vogul the nomen possessoris suffix *-ńs* has developed into a comitative suffix, e.g. *té kwälté jáni jékwá puwíns óliji* 'in this house lives an old woman with (her) son'. In Zyrian the nomen possessoris suffix *-a* occurs as comitative, e.g. in the sentence *sijí panid loi kupéts tevar-dodđa* 'ihm entgegen kam ein Kaufmann mit einer Fuhre' (or rather 'ein Kaufmann als mit einem Warenschlitten versehener') (op.c. 44). The *n*-element of the BF terminative suffix may in all probability

also be connected with the locative *n* (cf. also O. Donner GV 67. Collinder UUA 1940: 8 35).

The assumption that the FU genitive may have originally been a locative, is sustained by the circumstance that the identity of these cases has also been stated or assumed in other languages. Thus according to G. Dumézil the genitive of the North Caucasian Andi language originates from the locative (IGC 75, 80). Dumézil thinks that the Basque (determinative or possessive) genitive suffix *-en* and the locative (inessive) suffix *-n* are also identical (ib. 126), which view is also shared by G. Lacombe (Conf. 5 16; concerning these cases see Gavel GrB I ch. II 16, 27). According to Caldwell the genitive suffixes *-attu*, *-attru-*, *-ti*, *-in*, *-ni*, *-na* of the Dravidian languages have originally been locatives, the three last occur even at present as locative suffixes (GrD 262, 287—, 305). Caldwell shows that sometimes there is but little difference between the locative, genitive and adjective. Thus e.g. the Tamil expression *kuḷattu mīn* (*kuḷam* 'tank', *mīn* 'fish') can be translated adjectively ('tank fish'), genitively ('the fish of the tank') or locatively ('the fish in the tank') (ib. 288). The Sudanic Ewe genitive particle *fé* is identical with the element *-fé* which denotes locality and which also occurs in the substantive *a-fé* 'wohnort, heim' (D. Westermann WE 17—). According to A. S. Gatschet in American Klamath language the genitive suffix *-lam* was originally a locative suffix and is related with the derivational suffixes *-āla* and *-lamna* (KI 474—). It is also noteworthy that in the Indo-European Ossetian language the substantive cases inessive and genitive have one and the same suffix *-ə* (H. Vogt AL 4 41).

It might also be noticed that according to Trombetti all cases, except nominative, originate from locatives (EG 671; cf. also ib. 673 concerning the identifying of the genitive and locative *-i* which occur in various languages). Concerning the genitive relation Trombetti says that primarily it was often nothing else but »una semplice relazione di vicinanza nello spazio, cioè per mezzo di forme di locativo». Trombetti quotes as an example from the Mundari language *en hatu-re* 'in this

village' : *en hatu-re-n hojo-ko* 'people in this village = people of this village', which he compares inter alia with Russian *у меня книга* 'with me is book = I have a book' (EG 267—). Here could be added e.g. Roumanian dialectal *la mine este* 'bei mir ist' which has the same meaning (E. Seidel BL 13 77). Similar expressions for 'to have' also occur in other languages, e.g. in the Altaic language family in Yakut, Mongolian and Tungus, in the Hamitic Temashek, in several Caucasian languages, in Burman, Tibetan and Yukaghir (Winkler UVS 208). From the FU languages one might compare Estonian *mul on raamat* 'I have a book', where a local case (adessive) also occurs. The same phenomenon is present in Permian languages where, moreover, the adessive also occurs in genitive function, e.g. Votyak *nijuzlen kijaz zarñi zundesez rjcem* 'an der hand des mädchen war ein goldener ring'. (cf. also Estonian *naine tal on haige* as well as Russian *жена у него больна* 'his wife is ill'. In Lappish dialects too, the inessive is used to express 'to have' (cf. further Beke JSFOu 30: 11 1 —). As a comparison it may also be mentioned that according to Dumézil all cases in the so-called a-group of the North-eastern Caucasian languages originate from local suffixes (IGC 80).

It is evident from the above that the origin of genitive from locative function is also possible as regards the FU genitive. If we on the one hand assume that the genitive suffix was originally an derivational adjective suffix, and on the other hand a locative case suffix, then it has to be assumed that the function of the derivational suffix is older. The question arises: was the original meaning of this derivational suffix general and abstract (more or less as the present Estonian adjective suffix *-line*) or concrete and local, signifying something like 'being in something'? This question is difficult to answer, and it is connected with the problem of the meaning of other derivational suffixes, which will be treated below. Hakulinen thinks it possible that the pronominal suffix *-na* in Estonian words *mina*, 'I', *sina* 'you' is identical with the denominal suffix *-na* (Lehtisalo PUA 119—), e.g. in Estonian *räpen* : gen. *räpna* 'vent-hole for smoke'. Hakulinen maintains that in such a case *mina* might have originally signified some-

thing like 'I here' and *sina* 'thou here' (SKR I 75, note). Thus Hakulinen ascribes to the suffix *-na* a local meaning. Munkácsi had already earlier expressed the opinion that the *n*-element of pronouns is probably a demonstrative pronoun (or rather deictic particle), which might be compared with constructions like the German *ich da, du dort*, Latin *tu iste*. In Tavgy-Samoyede forms *man-nañ* 'I', *tan-nañ* 'thou' *nañ* also probably is an abbreviated form of the demonstrative pronoun *ñamañ* (BA 252). The local meaning of the pronominal *-n* suffix also seems to be alluded to by words in other Uralic languages which are equipped with this suffix, e.g. Mordvin *tona* 'jener', Tavgy-Samoyede *ñamanie* 'dieser da', Yenissei-Samoyede *inō* 'dieser da' (Lehtisalo PUA 388—, Ojansuu AUFA B 1: 3 26—). It is probable that this pronominal suffix *-n(a)* had originally a local meaning as demonstrative pronouns are usually connected with the notion of locality (cf. e.g. on the languages of primitive peoples, Czermak, Fest. Meinhof 206—). If the pronominal suffix *-na* is identical with the denominal *-na*, then the original meaning of the denominal *-na* may also have been local. From this derivational suffix denoting locality, on the one hand adjective suffix, and on the other locative and genitive cases, as well as instructive and other cases with the *n*-element, may have originated. Bubrih also thinks that the locative *-n* is identical with the derivational suffix *-n* and has evolved from the local meaning of the latter (JaM 11 70—, 84—; UZ 2 64—). Sinor is of the opinion that the local suffix is identical with the FU deverbal nominal suffix *-n(a)*, e.g. in Estonian *kohin* (gen. *-na*) 'sough' (TP 37 151), which may probably be connected with the denominal suffix *-n(a)* (Hakulinen SKR I 172).

Ravila, mentioning the question of the »glottogonic» origin of the *n*-genitive, points to a possible explanation according to which the genitive *-n* was originally a sentence-phonetic »hatusfüllendes» element, similar to other phenomena of the same kind which occur in the present day Altaic and Uralic languages. Ravila refers to Yukaghir in which, according to Jochelson, it is not completely clear even at present whether *n* is a genitive suffix or a sentence phonetic element (FUF 27

84—). This possibility of explanation ought to be taken into account, though it cannot be considered convincing.

#### *Other Cases.*

Bubrih is of the opinion that the FU lative suffix *-k* is derived from the derivational suffix *-ka* ~ *-<sub>k</sub>a* which is added to pronominal stems, and which originally denoted place, e.g. in Finnish *siellä* < \**si<sub>k</sub>ällä* 'there', Finnish *muukalainen* 'stranger' (CLSE 30 104 note, JaM 11 85—, 82). According to Setälä this derivational suffix *-ka* ~ *-<sub>k</sub>a* is identical with the Samoyedic coaffix *-ha-*, *-ga-*, *-ka-* which occurs in the Samoyedic locative suffix *-kana* and the ablative suffix *-kata*, e.g. Yurak-Samoyede locative *jindakana* 'soul', Tavgy-Samoyede ablative *jankata* 'sea' (JSFOu 30: 5 23), and which O. Donner connected with the Mordvin prolative suffix *-ka*, *-ga*, *-ra* (MSFOu 71 60). The latter was connected with the FU lative suffix *-k* already by Budenz (UA 378). According to Ojansuu the pronominal *-ka* is probably related to the lative suffix *-k* and with the Mordvin prolative suffix (AUFA B 1: 3 9). Collinder is also of the opinion that Setälä's and Donner's hypotheses are consistent (UAJb 24: 3—4 11—).<sup>1</sup> Uotila (Vir. 1945 333—) also connects with the above the Permic adverbial case suffix *-ja*, the *a*-element of which Uotila considers to be identical with *-a* occurring in adverbs, such as Zyrian, Votyak *kuža* 'along', Zyrian *luna* 'in the daytime' which may have been derived from the suffix *-ka*, as well as the Lappish suffixes containing the element *k*, in such adverbs as *dei'kě* 'here, to this place', *ik'ko* 'at night, by night'. According to Uotila these Permic, Mordvin, Lappish and Samoyedic suffixes may be related to each other, if we assume that they all originate from the ancient derivational suffix *-ka* which has also been

<sup>1</sup> Collinder has connected the Samoyedic *-ka-* with the Yukaghir locative suffix *-ge*, *-go*, *-yo* which also has lative function, and the Samoyedic locative suffix *-kana* with the Yukaghir prolative suffix *-gen*, *-yon* (< locative suffix + *-n*) (loc.c. and UUA 1940: 8, 20—, 28, 30—).

used adverbially. The same suffix occurs, according to Uotila, in words like Zyrian Permyak dialect *tšeri-gađa*, Finnish *kajara*, Kola-Lappish *kājeg*. Uotila (as well as Lehtisalo) seems to connect the derivational suffix *\*-ka* occurring in these words with the BF derivational suffix *-k* in words like Estonian *leede* (<*\*-ek*) 'sand-bank', since Uotila indicates the corresponding passage in Lehtisalo's PUA (334-). According to Uotila the lative *-k* may be connected with it. Toivonen seems to be of the opinion that the *k*-lative is primary, and that the derivational suffix *-ka* ~ *-ka* has originated from it, just as he thinks it possible that the derivational suffix *-ja*, which has also been connected with the plural morpheme *-i* (see above 190) is »eine gleichartige Erweiterung des *i*-Lativs» (FUF 28 16--). It is, however, more probable that the derivational suffixes are primary, and that case suffixes have originated from them.<sup>1</sup>

According to Bubrih the ablative suffix *-ta* is identical with the derivational suffix *-t* and has originated from a local meaning (JaM 11 85).

The Finnic-Permic abessive suffix *-tak* which contains the same *t*-element as occurs in the Estonian caritive adjective suffix *-tu* (<*\*-ttoin* : *-toma*), e.g. *saamatu*, Finnish *saamaton* 'clumsy, helpless', is in all probability a former derivational suffix (cf. Wiedemann MGr 22—). The element *-k* of the abessive suffix is a lative suffix, and the Estonian expression *jäi rahata* '(he) was left without money' might have meant primarily something like 'became moneyless' (FUS 92; Hakulinen SKR I 91—). Cf. also the occurrence of the Estonian abessive suffix in the function of derivational suffix in constructions like *sabata koer* 'dog without tail, i.e. tailless dog', *kannatamata inimene* 'impatient man', *häbemata poiss* 'impudent boy', *kirjutamata kiri* 'unwritten letter', *hoolimata inimene* 'ruthless man': in Estonian dialects it even occurs that words equipped

<sup>1</sup> According to A. Nesheim the FU lative *-k* is identical with the *g*-element of the Lappish verbal derivational suffix, which occurs e.g. in verbs like *bonjägät* 'become twisted, crooked', *njuol gät* 'become straight, remain lying' (MSFOu 98 182—).



with abessive suffix are declined, e.g. *häbematađ inimesed* 'impudent people', etc. (Mägiste KTT 190—).

Ravila is of the opinion that in the Mordvin adverbs *vasolo* 'far', *ikele* 'in front, ahead' there is no FU locative suffix *-na*, but that the adessive function here is fulfilled only by a derivational suffix containing the *l*-element. Ravila thinks that here it is a question of the development of attribute into adverbial, and that possibly also in the Finnish adessive (< \**lna*) the locative *-na* is pleonastic (Vir. 1945 158). In connection with this Uotila has raised the question (Vir. 1945 334—) whether the *l(a)*-element which occurs as a coaffix in Finnic-Permic external local cases (see below 214) and which is thought to be identical with the derivational suffix *-l(a)* occurring e.g. in Estonian *edela* 'south-west', has not also occurred independently as a case suffix. Uotila, however, has no further proof of the above than the opinion that at the end of the Lappish adverb *máŋŋel* 'behind' occurs only *-la*, not *-lna*. In connection with this Uotila calls attention to the various functions of the Ugric *l*-suffix (which has been considered to be a representative of the FU ablative \**-ta*), e.g. the Hungarian ablative (*alól* 'from underneath'), the locative (*alul* 'below'), the essive and factive (*rendégül* 'as a stranger'), the modal (*jól* 'well'); the Vogul comitative (*āmpāl* 'with the dog'), the instrumental (*nālal* 'with the arrow'), the modal (*tī ūrāl* 'in this way'). Uotila states rightly that it seems strange that all these meanings should derive from the ablative, and adds: if this, nevertheless, should be a question of the FU ablative suffix \**-ta* (\**-ða*), then its varying meaning depends on the fact that we even here are concerned with an ancient derivational suffix (? = \**-ta*, \**-ða*), cf. e.g. Finnish *valkea* 'white; light', Lappish *vielgad*, Mordvin *valdo*, *valdä*, etc. (cf. MSFOu 65 94—5). Finally Uotila raises the question whether the derivational suffix *-la*, with which E. Moór later on has connected the Hungarian case suffix *-l* (Nyr 70 127), should not be taken into account here too.

Ahlqvist connected the BF translative suffix *-ksi* (< \**-kse*) with the derivational suffix *-kse* in words like Finnish *terras* 'tarry tree', *aidas* 'fence-pole', Estonian *vennaksed* 'brothers,

brethren', South Estonian *katukse* 'roof, gen.', thinking that the function of the case suffix was primary (SKR 109). O. Donner is also of the opinion that these suffixes belong to each other (GV 83). A. Genetz on the contrary thinks that the function of the derivational suffix is primary (SP 168). Uotila also thinks that Genetz' opinion is »very seductive» (Vir. 1945 336). The general view is that the translative suffix *-kse* consists of two lative suffixes (see below 206).

J. Krohn in 1872. (Wiron kielioppi. 162--). Genetz (SP 159) and Ludwig (*-nen* 6) in 1884, connected the BF prolative suffix *-tse* (*-tsi*) < *-\*tsek* (< *-\*tšek*), e.g. Estonian *meritse* 'by sea', *käsitsi* 'with hand, by hand', Finnish *ylitse* 'over' (see Toivonen FUF 19 164. Hakulinen SKR I 93—), with the derivational suffix *-tse* in words like Estonian *päitsed*, *suitsed* 'bridle', Estonian dialectal *soolatsed* 'salty', which is the same suffix as (*i*)*se-* in adjectives like Estonian *maised* 'earthy', *punased* 'red, pl.' (Hakulinen SKR I 106--). According to Setälä there is no doubt that the Estonian prolative forms are connected with the *-tse*, *-se* nouns (ÄH 189).

As we see, a great number of FÜ case suffixes have been traced back to derivational suffixes.

In studying the evolution of case suffixes from lexical elements it is most instructive to observe how case relations are expressed in those African languages which lack the case category. An interesting survey has been given by Meinhof. Scritti Tromb. 71—. In the Bantu languages, for example, the functions of cases are fulfilled, besides other means used for it, by class prefixes which to their essence are lexical elements and have more or less the same function as derivational suffixes. Meinhof writes: »Durch eine der drei Lokativpräfixe *mu-*, *pa-*, *ku-* wird ein beliebiges Nomen zur Ortsbezeichnung umgewandelt, z.B. Kunde *n-nyumba* (< *\*mu-nyumba*), *pa-nyumba*, *ku-nyumba*. Wenn wir diese neuen Worte in europäischen Sprachen auch mit Präpositionen übersetzen, also 'in dem Hause', 'bei dem Hause', 'nach dem Hause (von dem Hause)', so sind die Vorsilben für die Bantu keineswegs Präpositionen, sondern Präfixe, die mit den übrigen Bantu-präfixen durchaus gleich behandelt werden. Die Worte können

Subject und Objekt und Genitiv sein, sie können einen Genitiv regieren, sie bilden Demonstrative, Possessiva, Personalia, werden also völlig wie andere Substantiva behandelt. Wir können sie etwa übersetzen mit 'das Hausinnere', 'die nähere Umgebung des Hauses', 'die entferntere Umgebung des Hauses'. In einer ganzen Anzahl von Bantusprachen sind aber die Lokativpräfixe vor dem Substantiv geschwunden und ersetzt durch ein Suffix *-iní*, z.B. Suah. *nyumbani* von *nyumba* 'Haus', Zulu *ent'a'beni* von *int'a'ba* 'Berg'. Diese Form sieht nun wie ein Kasus aus, ist es aber nicht, denn auch sie kann Subjekt und Objekt, Genitiv und regierendes Nomen dem Verbum sein und nimmt die schon erwähnten Pronomina der Lokativklassen an, z.B. Suah. *mbua wa mwituni* ist ein 'Hund des Waldinneren' d.h. ein 'wilder Hund', *nyumbani pana miti* genau 'die nähere Umgebung des Hauses hat Bäume', d.h. 'bei dem Hause stehen Bäume' (78; cf. also Meinhof GrB 65—, E. Haddon AS 10 101 —). A similar phenomenon manifests itself in the class suffixes of the Papuan Nasioi language (see further Bubishi CJ II 54 —). In Somali occur the endings *-a*, *-o* »die wie Kasusendungen aussehen, es aber nicht sind. Sie haben vielmehr lokale Funktion, wobei unterschieden wird, ob der genannte Gegenstand dem redenden Subjekt nahe (*-a*), davon etwas entfernt (*-o*) oder davon weit entfernt ist (*-i*)» (Meinhof op.c. 82—).

As an adaptation like this is going on in present day languages there is reason for assuming that the same process occurred in ages long past. Since it is natural to assume that there was a time when flexion did not exist, then it may also be assumed that not only auxiliary word morphemes had in the beginning lexical function, but that once a great proportion of the flexional affixes, too, had lexical function, i.e. they were derivational affixes. It is obvious that in languages whose history is known, the derivational affixes generally belong to an older stratum than the flexional affixes, i.e., derivation is older than flexion (cf. Trombetti EG 252, Ravila Vir. 1945 150). It is therefore natural to assume that flexion partly originated from derivation and that some of the derivational affixes were transformed into flexional affixes.

*Compound Case Suffixes.*

An interesting phenomenon in the domain of case suffixes is formed by those instances where it has been assumed that the present case suffix consists of two case suffixes. Thus Szinnyei assumed, for instance, that the first component of the Finnic-Permic illative, inessive and elative case suffixes is the lative suffix *-s*, whereas the second element in the illative is the lative suffix *-ń*, in the inessive the locative suffix *-n(a)*, in the elative the ablative suffix *-t(a)*. E.g. the Proto-Finnic illative *\*-sen* ~ *\*-hen* (< *\*-sen*), the inessive *-sna*, the elative *-sta*, cf. Finnish illative *taiVaaseen* 'into the heaven', inessive *kalassa* 'in the fish', elative *kalasta*. Lappish inessive *šälemesne* 'in the eye', Mordvin *onsne* 'in dream' (FUS 66—). The Čheremis illative suffix *-ške* is supposed to consist of the lative suffixes *-s* and *-k*, e.g. *jalšškâ* 'into the foot' (FUS 68, Ravila FUF 23 46). In Ugric languages, according to Szinnyei, a series of cases have as their first component the local suffix *-n* and as their second component (in the allative and the lative) the lative suffix *-z* or *-y* (cf. Bárcezi MNy 43 44—), (in the adessive and the comitative) the locative suffix *-t*, (in the ablative) the ablative suffix *-l*. E.g. Hungarian dialectal allative *bíróni* 'to the judge', adessive *bírónott* 'at the judge', ablative *bírónól* 'from the judge'; Vogul lative *βitná* 'into the water', Ostyak comitative *iminât* 'with wife', Vogul ablative *âmpnâl* 'from the dog' (FUS 65—, NyH 131—). In BF here belongs further the rudimentary excessive suffix *-nta* which consists of the locative suffix *-n* and the ablative suffix *-ta*, e.g. Estonian *kodunt* 'from home', *tagant* 'from behind', Finnish dialectal *takanta*, Ingrian *takkânt* (FUS 65). According to Mészöly the lative case suffix *-nig* which occurs in Hungarian dialects consists of two lative suffixes: *-ni* < *-né* + *-g* < *-k* (NyK 40 323—).

Similar case suffixes occur in Samoyedic: the dative Tavgy-Samoyede *-nta*, *-ntaj*, Ostyak-Samoyede *-nd*, *-ndi*, Tavgy *-taj* (= *-ta* + lative *-j* (< *-n*), Ostyak-Samoyede *-nik*, *-nig* (= *n*-lative + *k*-lative); the locative Tavgy *-tanu*, *-ntanu*, Yurak-Samoyede *-hana*, *-gana*, *-kana* (*k*-lative + locative), Ostyak-Samoyede *-k<sup>2</sup>n*, *-k<sup>2</sup>t*, Kamasin-Samoyede *-gana*: ablative

Yurak *-gada*, *-hada*, Tavgy *-gata*, *-kata*, Kamasin *-gatta*, *-ga'*, *-ka'* (Collinder UÅ 1940: 8 20—, Györke MNY 39 190—).

BF and Mordvin translative suffix *\*-ks(e)* is assumed to consist of the lative suffixes *-k* and *-s* (+ vowel) (Ravila FUF 23 46, cf. however Vir. 1945 158; Hakulinen SKR I 88). The Hungarian comitative suffix *-stal*, *-stül* is assumed to consist of the possessive adjective suffix *-s* — locative *-t* + essive *-ul* (see Ravila FUF 27 44), e.g. *családostal* 'with family'.

The transitive case suffix *-ti* in Permic languages consists assumedly of the locative suffix *-t* and of that local suffix *-i* which Toivonen calls the lative suffix (see above 190); e.g. Votyak *košakŕi* 'through the window' (Wichmann FUF 16 158, Uotila Vir. 1945 330).

The same phenomenon also occurs in other linguistic families. Thus in Altaic languages, the Mongolian ablative suffix *-dača* = the locative suffix *-da* + the ablative *-ča* (Smedt-Mostaert DM II 24). According to Ramstedt the Mongolian ablative ending *-āsa*, *-ās* consists of the old dative suffix *-a* in locative function and of the ablative suffix *-ča* (E II 33). According to Sinor the Turkish ablative suffix *-dan* consists of the ablative *-da* + the locative *-n*, whereas the locative suffix *-tün* consists of the adverbial suffix *-ti* + the locative *-n*. Compound suffixes are according to Sinor also the locative-ablative *-ta*, *-tä*, the dative *-qa*, *-kü*, the ablative *-tün* and *-tan* (TP 37 147—; cf. Benzing ZDMG 96 463, Gabain SO 14:5 10). According to K. H. Menges the ablative, Common-Turkic *-dan*, *-dän*. Ujy. *-tyn*, *-tün* < locative *-da*, resp. *-t* + instructive *-(y)n* (Anthropos 49 1109, 1112). The phenomenon of a case suffix consisting of two case suffixes may depend on several reasons, and therefore instances from other languages families (cf. e.g. on Basque, Gavel GrB I chap. II 26) cannot be used to solve the FU problems, as long as the history of these suffixes is not known.

How can the phenomenon of FU secondary case suffixes consisting of two primary case suffixes be explained? We may assume that at least in a certain part of these instances at the time when to one apparent case suffix another case suffix was added, the first suffix did as yet not occur as a case suffix,

but fulfilled more or less the function of a derivational suffix, i.e. it was conceived as belonging to the word stem. Here belong in the first place the internal local cases in BF and other languages, the first element of which is generally assumed to be the lative suffix *-s*. Opinions differ as to the process by which the lative *-ń*, the locative *-(n)a* and the ablative *-t(a)* were added to this element, and it is, in fact, difficult to find an explanation for this.

According to Szinyei the illative was the first case to come into existence, i.e. to the lative suffix *-s* another lative suffix *-ń* was added pleonastically, i.e. more or less in the same way as the addition of the Votian illative suffix *-sē ~ -sē̃* to the allative suffix *-lē ~ -lē̃* may be explained, e.g. *si.uu.iēsē* 'on the bridge', (*piāb mennā*) *ęja.iēsē* '(must go) to the brook', *kana.iēsē* 'to the hen', *emälēsē* 'to the mother', *ja.koi.iēsē* 'to the feet' (Kettunen VKÄ 75). Szinyei is of the opinion that: »Nachdem man den ihm zugrunde liegenden Lativ als Stamm auffasste, haben sich auch die beiden anderen Glieder dieser Gruppe herausgebildet» (FUS 66), i.e. inessive and elative. Here it remains incomprehensible how just at a stage when the *s*-element was conceived as belonging to the stem, the habit could start to use it as a case element in the inessive and elative. Here is an obvious contradiction. Szinyei's assumption is also contradicted by the circumstance that the illative is the most recent of the three internal local cases, as has been proved by Ravila. Ravila on his side presents the following explanation: if the internal local cases originate from the *s*-lative, then the »ruhecasus», i.e. the locative suffix, was the first that was added to it. Ravila adds that it is by no means an unknown phenomenon that case suffixes that have differing meanings are added to each other. However, it must be added here that this phenomenon in any case is in need of explanation. According to Ravila the ablative suffix, too, was subsequently added to the lative suffix *-s*, and after the original meaning of the lative *-s* had grown obscure, the second lative suffix, too, was added to it (FUF 23 46—). Ravila, nevertheless, has not explained how it was possible that the locative suffix was added to a case suffix having

lative meaning. A contrary phenomenon might be easier to explain, i.e. if lative and ablative suffixes, which give a closer indication of direction, had been added to the general local case — locative (cf. Uotila's explanation of the external local cases, *Vir.* 1945 335).

It is obvious that at the time when the locative suffix *-na* and the ablative suffix *-ta* were added to the suffix *-s* the latter could not have lative function, but it had either the function of a general local case or it was conceived as belonging to the stem. Since there is no foundation for the first assumption, then it is more natural to assume that at the time when the internal local cases sprang into existence, the *-s* suffix occurred as an element of the stem, i.e. as a derivational suffix. According to Collinder the internal local cases are formed »mit Hilfe eines lokalitätsbezeichnenden *s*-Formans» (*UAJb* 24: 3—4 11).<sup>1</sup>

It is also possible that at the time when those secondary local cases of which the locative suffix *-n* is supposed to be the first component, *-n* in them was as yet not a case suffix, but an element of the stem. As we have seen above (192—), the locative *-n* has been connected with the same possessive adjective suffix *-n* from which the genitive in all probability originated, and which may be identical with the substantive derivational suffix *-na*. The fact that in Yurak-Samoyede and Tavgy-Samoyede the plural suffix is not placed between the stem and coaffix, but between the coaffix and the case suffix (*-na*, *-ta*) seems to indicate that at the time when the Somyedic compound suffixes locative *-kana*, *-tanu*, and ablative *-kana*, *-kata* sprang into existence, the coaffixes *-ka*, *-ta* were not conceived as case suffixes but as derivational suffixes. E.g. Yurak-Samoyede (*ɲuda* 'hand' : loc. *ɲudahana* :) loc. pl. *ɲudahana* (cf. nom. pl. *ɲuda*'), (abl. *ɲudahad* :) abl. pl. *ɲudahat* (Castrén *SamGr* 115, 125); Tavgy-Samoyede (*kula* 'raven' : loc. *kulatānu* :) loc. pl. *kulatānu*, (abl. *kulagata* :) abl. pl. *kulagita* (ib. 159—); Yenisei-Samoyede (*libe* 'eagle' : loc. *libehone* :) loc. pl.

<sup>1</sup> Wiklund thought that the *s* of the internal local cases was a determinative element (cf. I. *Átányi NyK* 51 350—).

*libehine*, (abl. *libehoro* :) abl. pl. *libehito* (ib. 174). Here it is probable that e.g. in the Yurak-Samoyede locative *ηudah-* has been conceived as the stem to which the locative suffix *-na* has been added in the singular (*ηudahana*) and in the plural the plural sign ['] + the locative suffix *-na* (*ηudaha'na*), whereas in Yenisei-Samoyede *libeho-* has been conceived as the stem to which the locative suffix *-ne* (*libehone*) has been added, and in the plural the plural sign *-i* + the locative suffix *-na* (*libehine*) (cf. Munkácsi BA 253). According to Collinder in *Common Uralic* the case endings loc. *\*-na*, abl. *\*-ta* «could be combined only with such stems as expressed in themselves a local notion. Ordinary nouns . . . could be combined with these endings only through the intermediary of a derivative suffix, as *\*-ka*, *\*-kää*. Tavgi *kulaga-* is, historically speaking, a noun stem» (SSUF 1952—54 97).

*Further Data on the Origin of the Case Suffixes.*

Taking into account all the above, it may be considered probable that at least a certain part of the FU primary case suffixes were originally derivational suffixes, or that originally there was no difference between the derivational and flexional suffixes (cf. Oertel-Morris HS 16 111, 114, and above 180 ---).<sup>1</sup> As regards the problem as to whether the FU primary case suffixes might be etymologically connected with derivational suffixes, only assumptions are possible. Assumptions which so far have been made concerning the genitive, locative, lative *-n*, lative *-k* and ablative *-ta*, have already been mentioned above.

The following might be added regarding the ablative suffix *-t(a)*. Uotila has raised the question if it could not be connected with the derivational suffix *-ta* ~ *-<sub>1</sub>a*, which occurs e.g. in adjectives such as Estonian *pimedä* 'blind' and in sub-

<sup>1</sup> The author of the present paper came to this opinion many years ago without knowing the standpoints of Ludwig or the other representatives of the adaptation theory, not to mention the later articles by Ravila, Uotila or Bubrih.



stantives like Estonian *hõbeda* 'silver' (see above 202). The meaning of the latter suffix, which resembles that of a possessive adjective, fits well into the ablative function (cf. the occurrence of the elative and ablative in the function of the derivational adjective suffix above 183). Especially noteworthy also are the BF local derivational suffixes *-usta* ~ *-ystä* and *-sto* ~ *-stö* (< \**-sta* + *i*), e.g. in the Finnish words *alusta* 'base, basis', *edusta* 'front', *kuusisto* 'spruce forest', *kalmisto* 'churchyard, burial place', in which *-ta* occurs in the function of a derivational suffix and probably is the same suffix as occurs in adjectives like Estonian *pimeda* (cf. Hakulinen SKR I 154—, 161).

As regards the accusative suffix *-m*, Ravila (Vir. 1945 158) has called attention to its resemblance to the corresponding derivational suffix (PUA 82—). Here in the first place the pronominal suffix *-m(a)* ought to be noticed, which is probably identical with the corresponding nominal suffix occurring e.g. in words like Estonian *tema* 'he, she', *nemad* 'they' (PUA 386—). Bubrih, who is of the opinion that the *m*-accusative occurred in the beginning only in pronouns, also calls attention to the *m*-element in FU pronouns, like Finnish *tämä* 'he, she', Ostyak *tam* 'this', *tom* 'that' (JaM 11 80, 84). In many languages the accusative suffix has originated through agglutination with demonstrative pronouns (cf. Tauli UAJb 24: 3—4 28; concerning the Vogul accusative cf. Lämola JSFOu 57: 1 25—). As the function of the accusative differs from that of the local cases, the accusative occupies a special position among the Uralic primary cases and may have originated in a different way than the other primary case suffixes.

### *The Origin of Derivational Suffixes.*

If we assume that a great part of the primary flexional suffixes were originally derivational suffixes, the question arises: what was the origin of the derivational suffixes? It has to be admitted that it is difficult to make any well-founded assumptions here. In the following we shall consider some possible explanations. To begin with there is a cardinal problem:

agglutination or secretion? In all probability derivational suffixes originated partly in agglutination, and partly in secretion.

As regards Ravila's pronominal hypothesis (see above 173), which is similar to Ludwig's and Trombetti's standpoints, it must be admitted that in principle it is quite possible. In addition to the explanations presented by Ravila, it might be mentioned, moreover, that the demonstrative pronouns, especially in the languages of primitive peoples, are always connected with the notion of locality, just as well as the local adverbs are derived from the stems of the demonstrative pronouns. Trombetti has emphasized the important part played by deictic particles in the development of language. Trombetti traces back to deictic particles almost the whole of the flexion of nouns; viz. genus, number, pronouns, numerals and post-position, the latter having according to Trombetti given rise to case suffixes (EG 284—, 748). It is most probable that in the primeval stage of the language the deictic particles played an important part. Czermak, too, says: »So geht jeder sprachliche Ausdruck auf Demonstration zurück und darum fühlen wir in allen Demonstrationspartikeln etwas »Urwüchsig-Primitives«» (Fest. Meinhof 206). Czermak also connects the personal pronouns with local conceptions (cf. the corresponding article on African languages *op.cit.* 204—). It is possible that some of the suffixes are former pronominal stems, as has been proved of the accusative in many languages. But there is no foundation for basing the whole of the flexion of noun on deictic particles, as Hirt and Trombetti do.

Related with the theory of adaptation and agglutination of deictic particles is further the semantic agglutination theory of Cuny. Cuny is of the opinion that in ages long past the so-called »empty words« which at the present time are called derivational suffixes, played in Indo-European and Hamito-Semitic languages more or less the same part as the class signs in Bantu languages. Later on the original function of these classifiers was forgotten (EP 201). Basing his standpoint on Szinyei's assertion about the FU verbal suffixes (FUS 103), in which Sz. points to the circumstance that the different

verbal categories are intermingled with one another, and that the meaning of many suffixes has weakened to such an extent that the meaning of the derived verb has become identical with the basic verb. Cuny concludes that the FU derivational suffixes, too, were originally nothing but such »empty words» the main function of which was »de »signales» comme verbes (plus anciennement comme noms verbaux, noms d'agents etc. . . .) des dérivés qui par là s'opposaient à une »racine» plus simple, semantiquement encore indivisé entre le nom et le verbe» (266. see further *ib.* 276). Meinhof also thinks that traces resembling the classificatory system characteristic of African languages can also be found in the derivation of words in African, Asiatic and European flexional languages, e.g. in the fact that nomen agentis and the abstract noun have fixed endings. Gray on the other hand is of the opinion that the Bantu class signs resemble Indo-European determinatives, i.e. derivational suffixes (FL 190. cf. also Finck HS 46). Derivational suffixes have been compared with the Bantu class signs already by Wundt (S II<sup>3</sup> 17. cf. also *ib.* 18).

As the function of the derivational suffixes to a certain extent is similar to that of the class signs in the sense that both classify words (cf. further Ramstedt JSFOu 55 103—), then they may be of similar origin. But this possibility by no means brings us nearer to a solution of the problem of the origin of the derivational suffixes, since class signs, as far as their etymology has been established, originated in several different ways, through agglutination as well as secretion and adaptation (cf. Royen NKS 780, Meinhof BGr 63—).

Beside agglutination, secretion has to be taken into consideration as a mode of genesis of derivational suffixes. A simpler subdivision of secretion which has been established in many languages in historical time, is the so-called *extension of suffixes* (Jespersen Lg, ch. XIX § 14), i.e. the phenomenon that the suffix takes over some sound or some sounds from stems to which it had been added. The spreading of these extended suffixes to other words, which have no such ending of the stem, proves that not the original suffix but the extended suffix is really conceived to be the

suffix. Only in such a case can we speak of secretion. Numerous instances of suffix extensions also occur in FU languages, especially among the derivational suffixes. A frequent phenomenon is that the vowel of the preceding stem has been added to a suffix which begins with a consonant. Such derivational suffixes extended by a vowel are, e.g. in BF *\*-e<sub>1</sub>a* (SKR I 105), *-us*: *ukse-* (122, 196), *-ek* (164), *-ukka* ~ *-ikka* (e.g. in words like Estonian *elukas* 'beast, creature', *maasikas* 'strawberry') (111), *-oi* (150, 189), *-oin*: *-oime* (168), Finnish *-isto* ~ *-istö* (155), verbal suffixes *-ele-* (233), *-oi-* (248, 267), Finnish *-utta* ~ *-yttä* (252). The consonant has been secreted from the stem and become coalesced with the suffix in e.g. the following suffixes: Finnish *-sto* (77), *-tti* (191), in verbal suffixes *-sta-* (ib.), *-rta-* (267).

A stem ending of no less than two syllables has secreted from the instructive of the infinitive of the Finnish *-ttele-* verbs, e.g. (*vuorotella* 'alternate'): *vuorotellen* 'alternating', and formed the suffix *-tellen* which has spread to words like *pai-ko(i)tellen* 'in some places, locally', *yksitellen* 'one by one, singly' (202). See also e.g., instances from Hungarian, Simonyi TMNy 380—586.

The same phenomenon also occurs in flexional suffixes. The vowel has secreted from the stem and coalesced with the suffix, e.g., in the following FU suffixes: Permic elative (Votyak *-is*, Zyrian *-iš*, *-is*), egressive (Votyak *-išen*) (Fuchs JSFOu 30: 14 7), inessive (*-in*) and instrumental (Votyak *-en*, *-in*, Zyrian *-en*) (see e.g. Fokos NyK 36 207--); the Hungarian 1st p. pl. ending *-unk*, *-ünk* (Horger MIT 11). Sometimes the original consonantal suffix has disappeared, whereas the vowel secreted from the stem alone continues to exist as a suffix. E.g. the former lative suffix *\*-k* ~ *\*-k* has disappeared from the ending of the Permic illative, Votyak *-ε*, Zyrian *-ε* (Beke Nyr 55 47), and of the Ostyak lative *-a* (FUS 58). Secretion of the consonant occurs in e.g. the imperfect morpheme *-si-* in Estonian, Livonian, Votian and Finnish south-western dialects, e.g. Estonian *elasin* '(I) lived', in which *s* has secreted from the contracted verbs and coalesced with the former imperfect morpheme *-i-*, e.g. Estonian *magasin* (< *\*maka<sub>1</sub>in*)

(Setälä TuM 91 --). The *s* in the Hungarian comitative suffixes *-stul*, *-stül* comes from the possessive nouns, ending in *-s*, such as *családos* 'having a family', to which were added the locative suffix *-t* + the essive suffix *-ul* (Beke Nyr 39 194—; Klemm MTM 214, Fokos NyK 44 327, Ravila FUF 27 44). The Hungarian translative suffix *-vá*, *-vé* was formerly *-á* ~ *-é*, *v* having spread to it from *v*-stems (see further Melich NyK 40 233—; cf. Beke Nyr 40 114—, Mészöly MNy 14 257—; 15 15--). According to Mészöly the Hungarian comitative suffix *-val*, *-vel* which Mészöly considers to be originally equal to the Vogul instrumental-comitative suffix *-l*, has also originated through extension of the suffix (FUF 21 56—, for criticism see Szinnyei FUF 22 67—). According to Fokos the comitative suffix *-vel* is identical with the gerund suffix *-vel* in which *v* is the verbal noun suffix *-v* ~ *-u* (NN 9 197). According to Klemm, in the Hungarian objective conjugation 1st p. sg. ending *-lak*, *-lek* the *l*-element has secreted from the 1 p. sg. verb forms of subjective conjugation like *\*sujtolok* '(I) strike', *kérelek* '(I) beg' where *l* belonged to the stem, being a derivational verb suffix, whereas *-k* was the personal morpheme (MNy 21 256—).

Similar extension of suffix by the final consonant occurs in all probability also in Finnic-Permic external local cases, in spite of Ravila's (Vir. 1945 157) and Uotila's (ib. 334—) more recent assumptions. According to the traditional view, in the Finnic-Permic allative (*-l* + lative *-n*), adessive (*-l* + locative *-n*) and ablative (*-l* + ablative *-t*) (BF *\*-len*, *\*-lana*, *-lta*, Permic *-lj*; *-len*, *-len*; *-liš*, *-leš*, the Chereemis allative *-lan* and (?) ablative *-letš*) case suffixes, the *l*-element belonged originally to the stem, and is the same derivational suffix which occurs e.g. in words like Estonian *edela* 'south-west', Finnish *setälä* 'the home of the fathers brother' (PUA 145—). Secretion of *l* to lative, locative and ablative suffixes from words which denoted local relations, corresponds to expectations, seeing that suffixes of local cases are most often added to them (Szinnyei FUS 63—, Ravila FUF 23 43—; 27 72, Hakulinen SKR I 78, 90—; cf. Wichmann JSFOu 30: 6 15, Uotila KPS 199, NyK 50 469; Beronka LK 219—).

In Indo-European languages also occur numerous instances of extension of suffixes (see instances quoted by Hirt IGr III 226—; about other languages see Royen NKS 478).

A phenomenon related to the genesis of suffixes through secretion is the metanalytic genesis of words from suffixes which is the reverse of the origination of suffixes from words through agglutination. E.g. according to Fuchs the Zyrian postposition *-míš* (*-míšt*) originated from the elative of verbal nouns ending in *m* and expressing accomplished action (such as *\*loktemíš* 'nachdem er gekommen war', *\*suegmíš* 'nachdem er gesagt hatte'), the final part *-míš* having been interpreted as postposition 'after' as which it has spread to expressions like *kík lun míš* 'after two days', where it is placed after substantives (FUF 18 201; cf. on the contrary Wichmann FUF 16 151—). The Vogul noun suffix *-laz*, which is a loan from Tatar, occurs in Tavda and Konda dialects also as an independent word (see further Liimola FUF 30 271—). In American English the substantive *ade* 'fruit juice' has been abstracted from words like *orangeade*, *lemonade* (W. Wartburg E 78). Not only suffixes or postpositions but new nouns, too, can originate through secretion. As a intentional method this has been employed especially in Hungarian language reform where it is called *elvonás* 'abstraction, back-formation'. Substantives in particular are often abstracted from verbs. E.g. from the verb *gyámol-ni* 'to support' (cf. *gyámol* 'the support') the substantive *gyám* 'trustee' has been created, from the verb *ábráz-ni* 'to depict' (*ábráz* 'face') *abra* 'figure' has been abstracted. Similar secretion also occurs in Hungarian dialects, e.g. from the verb *sétál* 'to walk' originates *séta* 'a walk' (US 161—, 282—; further Simonyi NyF 11).

Instances of extension of suffix and secretion from the history of languages which so far have been presented in literature prove, of course, that suffixes can originate in this way if the languages already have a system of corresponding grammatical categories and suffixes. However, how might the genesis of derivational suffixes through secretion be conceived at a stage of language development where no affixes and corresponding grammatical categories existed at all? Secretion

presupposes the association of the word ending with a certain meaning or function. Two possibilities may be assumed regarding the rise of such associations.

(1) The word ending has two different phonemic forms one of which subsequently acquires a special meaning, viz. the function of a derivational suffix. E.g. it may be assumed that owing to phonetic conditions depending on the position of the word in the sentence, certain sound changes may come about in the final part of the word, such as assimilations (sandhi), consonants that avoid hiatus, as has been assumed regarding e.g. suffixes *-n* and *-i, -j*, and the loss of sounds, etc. In different conditions different changes take place or the word remains unchanged. As a result the final part of the word has two (or more) different forms (thus a word may have one form when it precedes a word beginning with a vowel, and another form when it precedes a word which begins with a consonant) of which one later on adopts the function of a derivational suffix.

(2) The genesis of derivational suffixes may result from the »classifying instinct» (see above 178—). Such genesis of suffix may have proceeded from a single word, as has been proved by Jespersen's example of the origin of cat names in the language of a child. This process might be represented by the following plan. If e.g. an object or animal (e.g. cow) has been called  $B_1 + s$  (e.g., *punik* 'a red cow') then, following this pattern, other objects or animals of the same kind are later on called  $B_2 + s$ ,  $B_3 + s$  (e.g. *küüdik* 'a cow with a white stripe', *päütsik* 'a cow with white head')<sup>1</sup> etc. In this way the suffix *-s* (in our example the suffix *-ik* denoting cow names) has sprung into existence.

### *The Original Meaning of Suffixes.*

With the problem of the origin of suffixes is connected that of their original meaning. It is evident that if the primary

<sup>1</sup> These examples are given here only as symbols, the phonemic form of stems and suffixes of these words has no language historical value.

derivational suffixes originated by (semantic) agglutination, then they had some original meaning corresponding to the meaning of the word from which they originated (cf. Beronka LK 127—). If derivational suffixes originated from deictic particles or pronouns, then a development is feasible in which their original meaning weakened and they acquired a new meaning from the sentence connections, as e.g. Ludwig and Ravila have delineated this process (cf. also Bárczi TA 141, and on the original meaning of the locative *-na*, Collinder UAJb 24: 3—4 8—). Nevertheless, Ravila's assumption that the original function of suffixes was abstract, viz. that of connecting the words with each other, and that they were a kind of very ancient elements of construction, can scarcely be accepted as probable. This, of course, does not mean that derivational suffixes may not, to a certain extent, have acquired their meaning either through the so-called stem irradiation (cf. M. Bréal ES 39—, Zsirai CSLE 30 880, Brugmann K 313—) or from the sentence connections (cf. Klemm ME 155—, Ravila *Vir.* 1945 150).

If derivational suffixes originated by secretion then naturally they had, as inseparable parts of the stem, originally no separate meaning. But if secretion has come about as a result of the »classifying instinct», in the way delineated above, the suffix originated through it had a certain original meaning, since it denoted the names of certain objects or beings of the same kind. Later on the suffix that had originated in this way, may also have spread to other groups of words. This spreading of suffixes to new word groups may have taken place through such a net of associations as Wundt has assumed regarding the spreading of case forms (S II<sup>3</sup> 125, cf. Bréal ES 225—). The genesis of suffixes through secretion as well as their subsequent spreading to word groups presupposes a certain meaning having been associated with them, since otherwise neither secretion nor spreading would be thinkable. The meaning of the suffix may naturally change later on.

What the primary meaning of the old more extensively used suffixes was will, perhaps, never be established with certainty. Only most general assumptions may be made con-



cerning the period in which the suffix has already spread to a greater number of words outside its original area of distribution. As the distribution and meaning of suffixes has not originated through logical deduction, but through a net of associations, then in the beginning the meaning may have been complex and logically undifferentiated, though not abstract. It may be assumed that it, similarly to phenomena in the languages of primitive peoples, was of concrete character, though diffuse (cf. what Oertel and Morris say about the original complex notions HS 16 113—).

Taking into account the phenomena occurring in the languages of primitive peoples, as well as the later development of the meaning of FU suffixes, it appears possible that a great part of those derivational suffixes from which later on local cases evolved, had in the beginning a local meaning from which subsequently may have developed the meanings of adjective, genitive, plural and of local cases. Czermak says: »Fasst man alle jene lautlichen Zeichen die die grammatischen Beziehungen ausdrücken schärfer ins Auge, so erkennt man alsbald, dass, ebenso wie bei den »Wörtern«, durch ihre heutigen Bedeutungen letzten Endes etwas Konkret-Sinnliches durchschimmert». Czermak maintains further that the purely sensual is something local, and that »Jede Vorstellung, auch eine sprachliche, setzt ein Vorstellen der Dinge im Raume vor das Auge voraus» (Fest. Meinhof 204—, cf. also H. Jensen Actes I 179, H. P. Blok ON 75—; cf. on the contrary Delbrück GS 133).

It may be assumed that another ancient category of suffixes, besides the local, are the diminutive suffixes (cf. Mägiste ACUT B 12: 2 223). In principle there is nothing strange in assuming that the original meaning of many FU primary suffixes was diminutive (cf. also Lehtisalo PUA 3). Györke is even of the opinion that the original meaning of all Uralic nominal suffixes was diminutive, from which all other meanings have developed: *nomen possessoris*, *nomen possessi*, comparative, etc. (WU 81). Ravila says about the opinion according to which  $-m(a)$ ,  $-t(a)$ ,  $-j(a)$ ,  $-n(a)$ ,  $-\beta(a)$ ,  $-ŋ(a)$  and other verbal noun suffixes are diminutive suffixes: »It would be most curious if there really had been a time when an astoni-

shingly large number of different suffixes were employed for denoting »the small» (Vir. 1945 150). The situation, however, becomes more natural if we assume, proceeding from the secretion theory, that every diminutive suffix was originally used for a small class of words only. Thus one ending may have been used for denoting small vessels, another for small insects, a third for birds, still others for plants, fishes and other classes of animals and objects. This, of course, does not mean that, e.g. all the suffixes discussed above really have developed from a diminutive meaning. (Cf. in this connection also Hakulinen's opinion about the development of the local meaning from the diminutive as regards the suffix *-l(a)* (SKR I 112).

As regards both local and diminutive suffixes it may be assumed that in some instances their phonetic form may be due to sound symbolism (about local suffixes cf. Jensen loc.c.) Thus it is possible that the original meaning of e.g. FU suffix *-i ~ -j-* was diminutive, not adjective (cf. T. G. Aminoff Suomi II: 9 258—, Szinyei FUS 87, Mägiste op.c. 222, Uotila Vir. 1945 333), as the sound symbolic diminutive shade of the vowel *i* occurs in many languages (cf. e.g. Jespersen Lg 402—, Mägiste op.c. 210). Even if we assume that *-i, -j-* or some other suffix might have acquired its phonetic character through sound symbolism, this does not mean that the diminutive moment alone was associated with that suffix. It may be assumed that the suffix soon also spread to words where it did not have a diminutive meaning (cf. also Györke WU 81) so that the suffix acquired a complex meaning.

The genesis of the suffix, its spreading and subsequent development must be kept apart. In the later development of the suffix the formation of a more or less distinctly defined meaning, resp. meanings may be observed (cf. Oertel-Morris HS 16 94, 114—, Trombetti EG 249—, Cuny EP 276—). When a suffix has become phonemically differentiated, like e.g. *-j(a), -n(a), -t(a)* and almost all FU primary derivational suffixes, their meaning has also become differentiated, i.e. a special phonemic variant also has a special meaning of its own (cf. e.g. Finnish *-i ~ -ja, -n ~ -na*).

At the present stage of linguistic research the explanation of the origin and original function of the suffixes has to be limited to hypothetical assumptions only. The task of the present paper has been especially to show that, besides agglutination, secretion and adaptation have also to be reckoned with to a considerable extent. Even if the etymology of some FU suffixes should be explained in a different way in the future, which is probable, it will not destroy the principle of the standpoint which has been presented here.

V. TAULI.

### Abbreviations.

- Actes = Actes du congrès international de linguistes.  
 ACUT = Acta et Commentationes Universitatis Tartuensis.  
 AL = Acta Linguistica (Copenhagen).  
 ALH = Acta Linguistica Academiae Scientiarum Hungaricae.  
 AM = Asia Major  
 AS = African Studies.  
 ASSF = Acta Societatis Scientiarum Fennicae.  
 ASL = Asiatische Studien.  
 Atti = Atti del III congresso internazionale dei linguisti, Firenze 1935.  
 AUFA = Annales Universitatis Fennicae Aboensis.  
 BA = Budenz-Album. Budapest 1884.  
 Bacot GTL = Bacot Jacques, Grammaire du tibétain littéraire. I—II. Paris 1946—1948.  
 Bárzsi TA = Bárzsi Géza, A Tihany apátság alapítólevele mint nyelvi emlék. Budapest 1951.  
 Beronka LK = Beronka Johan, Lappische Kasusstudien. I—II. Oslo 1937—1940.  
 BL = Bulletin Linguistique.  
 Bloch SGLD = Bloch Jules, Structure grammaticale des langues dravidiennes. Paris 1946.  
 Bréal ES = Bréal Michel, Essai de sémantique. Paris 1921<sup>5</sup>.  
 Brockelmann Gr = Brockelmann Carl, Grundriss der vergleichenden Grammatik der semitischen Sprachen. I—II. Berlin 1908—1913.  
 Brugmann K = Brugmann Karl, Kurze vergleichende Grammatik der indogermanischen Sprachen. Strassburg 1902—1904.  
 Budenz UA = Budenz József, Az ugor nyelvek összehasonlító alakтана. Budapest 1884—1894.  
 Caldwell GrD = Caldwell Robert, A Comparative Grammar of the Dravidian or South-Indian Family of Languages. London 1913<sup>3</sup>.

- Castrén JOKS = Castrén M. Alexander, Versuch einer jennissei-ostjaki-  
schen und kottischen sprachlehre. St. Petersburg 1858.
- SamGr = Grammatik der samojedischen Sprachen. St. Petersburg  
1854.
- CLSE = Commentationes Litterarum Societatis Esthonicae.
- Conf. = Conférences de L'Institut de Linguistique de L'Université de  
Paris.
- Cuny EP = Cuny Albert. Études prégrammaticales. Paris 1924.
- Delbrück GS = Delbrück B., Grundfragen der Sprachforschung. Strass-  
burg 1901.
- Dempwolff GrJ = Dempwolff Otto. Grammatik der Jabèm-Sprache  
auf Neuguinea. Hamburg 1939.
- Donner GV = Donner O., Die gegenseitige Verwandtschaft der finnisch-  
ugrischen Sprachen. Helsingfors 1879.
- Drexel UWS = Drexel Albert. Ursprung und Wesen der Sprache. I—II.  
Zürich 1951—1952.
- Dumézil IGC = Dumézil Georges, Introduction à la grammaire com-  
parée des langues caucasiennes du nord. Paris 1933.
- EFr = Encyclopédie Française.
- EK = Eesti Keel.
- Evsev'ev OMG = Evsev'ev M.E., Osnovy mordovskoj grammatiki.  
Moskva 1928.
- Fest. Meinhof = Festschrift Meinhof. Hamburg 1927.
- Fest. Qvigstad = Festschrift til Rektor J. Qvigstad. Oslo 1928.
- Finck HS = Finck Franz Nikolaus. Die Haupttypen des Sprachbaus.  
Leipzig 1910.
- FUF = Finnisch-ugrische Forschungen.
- Gabain ATG = Gabain A., Alttürkische Grammatik. Leipzig 1941.
- Gatschet KI = Gatschet Albert Samuel. The Klamath Indians of South-  
western Oregon. Washington 1890.
- Gavel GrB = Gavel Henri — Lacombe Georges. Grammaire basque.  
I—II. Bayonne 1929—1937.
- Genetz SP = Genetz Arvid. Suomen partikkelimuodot. Helsingissä  
1890.
- Grasserie C = Grasserie Raoul de la, Des relations grammaticales con-  
sidérées dans leur concept et dans leur expression ou de la catégorie  
des cas. Paris 1890.
- Gray FL = Gray Louis H., Foundations of Language. New York 1939.
- Grönbech TS I = Grönbech K., Der türkische Sprachbau. I. Kopen-  
hagen 1936.
- Györke WU = Györke J., Die wortbildungslehre des uralischen. Tartu  
1934.
- HAIL = Handbook of American Indian Languages. I—IV. Washington  
—Glückstadt—Hamburg—New-York 1911—1941.
- Hakulinen SKR = Hakulinen Lauri, Suomen kielen rakenne ja kehitys.  
I—II. Helsingissä 1941—1946.

- Hirt HIS = Hirt Herman. Die Hauptprobleme der indogermanischen Sprachwissenschaft. Herausgegeben und bearbeitet von Helmuth Arntz. Halle/Saale 1939.
- IG = Indogermanische Grammatik. I—VII. Heidelberg 1927—1937.
- Horger MIT = Horger Antal, A magyar igeragozás története. Szeged 1931.
- HS = Harvard Studies in Classical Philology.
- IF = Indogermanische Forschungen.
- JaM = Jazyk i Myślenie.
- Jespersen Lg = Jespersen Otto, Language, its Nature, Development and Origin. London 1922.
- JSFOu = Journal de la Société Finno-ougrienne.
- Karst GrKA = Karst Josef. Historische Grammatik des Kilikisch-Armenischen. Strassburg 1901.
- Kettunen LW = Kettunen Lauri, Livisches wörterbuch mit grammatischer einleitung. Helsinki 1938.
- VKÄ = Vatjan kielen äännehistoria. Helsinki 1930<sup>2</sup>.
- VLT = Vepsän murteiden lauseopillinen tutkimus. Helsinki 1943 (MSFOu 86).
- Klemm MTM = Klemm Antal, Magyar történeti mondattan. Budapest 1928—1942.
- ME = A mondattan elmélete. Budapest 1928.
- Koppelman ES = Koppelman Heinrich. Die Eurasische Sprachfamilie. Heidelberg 1933.
- KSz = Keleti Szemle.
- KTT = Kultuuri ja teaduse teilt. Tartu 1932.
- Kuryłowicz EI I = Kuryłowicz Jerzy, Études indoeuropéennes. I. Kraków 1935.
- Lg = Language.
- Lehtisalo PUA = Lehtisalo T., Über die primären uralischen ableitungssuffixe. Helsinki 1936 (MSFOu 72).
- LM = Les langues du monde. Paris 1924<sup>1</sup>, 1952<sup>2</sup>.
- Lorimer BL = Lorimer D.L.R., The Burushaski Language. I. Oslo 1935.
- Ludwig -nen = Ludwig Alfred. Über die nominativbildung -nen im Finnischen (-ne im Ehnischen) von nominalstämmen auf -se (-si). Aus den Sitzungsberichten der königl. böhm. Gesellschaft der Wissenschaften. (1884).
- AoA = Agglutination oder adaptation? Prag 1873.
- Malinowski MOM = Malinowski Bronislaw, The Problem of Meaning in Primitive Languages in: Ogden C.R. — Richards I. A., The Meaning of Meaning, London 1936<sup>4</sup>, 296--.
- Mark PS = Mark Julius, Die Possessivsuffixe in den uralischen Sprachen. I. Helsinki 1925 (MSFOu 54).
- MEK = Emlékkönyv Melich János hetvenedik születésnapjára. Budapest 1942.

- Meinhof BGr = Meinhof Carl, Grundzüge einer vergleichenden grammatik der Bantusprachen. Hamburg 1948<sup>2</sup>.
- EFS = Die Entstehung flektierender Sprachen. Berlin 1936.
- MNy = Magyar Nyelv.
- MSFOu = Mémoires de la Société Finno-ougrienne.
- MSL = Mémoires de la Société de linguistique de Paris.
- MTAK = A Magyar Tudományos Akadémia Nyelv- és Irodalomtudományi Osztályának Közleményei.
- NN = Népünk es Nyelvünk.
- NTS = Norsk Tidsskrift for Sprogvidenskap.
- Ny = Nyelvtudomány.
- NyK = Nyelvtudományi Közlemények.
- Nyr = Magyar Nyelvőr.
- NyT = Nyelvészeti Tanulmányok.
- Oc = Oceania.
- Oertel LSL = Oertel Hanns. Lectures on the Study of Language. New-York 1902.
- ON = Orientalia Neerlandica. A Volume of Oriental Studies. Leiden 1948.
- Patkanow LFSO = Patkanow S. — Fuchs D. R., Laut- und Formenlehre der süd-ostjakischen Dialekte. Budapest 1911.
- Poppe GWM = Poppe Nicholas, Grammar of Written Mongolian. Wiesbaden 1954.
- KMG = Khalkha-mongolische Grammatik. Wiesbaden 1951.
- M = Materialy dlja issledovanija tungusskogo jazyka. Leningrad 1927.
- Ramstedt E II = Ramstedt G. J., Einführung in die altaische Sprachwissenschaft. II. Helsinki 1952 (MSFOu 104: 2).
- Royen NKS = Royen Gerlach, Die nominalen Klassifikations-Systeme in den Sprachen der Erde. Mödling bei Wien 1929.
- Sapir L = Sapir Edward. Language. New-York 1921.
- Scr. Tromb. = Scritti in onore di Alfredo Trombetti. Milano 1938.
- Setälä SKL = Setälä E. N., Suomen kielen lauseoppi. Helsingissä 1922<sup>10</sup>.
- TuM = Zur Geschichte der Tempus- und Modusstambildung in den finnisch-ugrischen Sprachen. Helsingfors 1886.
- ÄH = Yhteissuomalainen äännehistoria. Helsingissä 1899.
- Simonyi TMNy = Simonyi Zsigmond. Tüzetes magyar nyelvtan. I. Budapest 1895.
- US = Die ungarische Sprache. Strassburg 1907.
- SJa = Sovetskoe jazykoznanie.
- Sjögren LGr = Sjögren Joh. Andreas, Livische Grammatik nebst Sprachproben. St. Petersburg 1861.
- SKAW = Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften. Philosophisch-historische Classe. Wien.

- Smedt SM II = Smedt A. de — Mostaert A., *Le dialecte Monguor. II: Grammaire.* Peking 1945.
- SO = *Studia Orientalia.*
- Specht UID = Specht Franz., *Der Ursprung der indogermanischen Deklination.* Göttingen 1944.
- SSUF = *Språkvetenskapliga Sällskapet i Uppsala Förhandlingar.*
- Steinitz OGR = Steinitz Wolfgang, *Ostjakische Grammatik und Chrestomathie.* Leipzig 1950(?).
- Szinnyei FUS = Szinnyei Josef, *Finnisch-ugrische Sprachwissenschaft.* Berlin—Leipzig 1922<sup>2</sup>.
- NyH = *Magyar Nyelvhasználat.* Budapest 1927.
- Šahmatov MĚS = Šahmatov A. A., *Mordovskij étnografičeskij sbornik.* S.-Peterburg 1910.
- TP = T'oung Pao.
- Trombetti EG = Trombetti Alfredo, *Elementi di glottologia.* Bologna 1922—1923.
- TS = *Iso Tietosanakirja.*
- UAJb = *Ural-altaische Jahrbücher.*
- UJb = *Ungarische Jahrbücher.*
- Uotila KPS = Uotila T. E., *Zur Geschichte des konsonantismus in den permischen Sprachen.* Helsinki 1933 (MSFOu 65).
- UUA = *Uppsala Universitets Årsskrift.*
- UZ 2 = *Leningradskij Gosudarstvennyj Ordena Lenina Universitet. Vostočnyj Institut. Učenyje zapiski. Serija vostokovečeskikh nauk. Vypusk 2: Sovetskoe finnougrovedenie 1 (1943).*
- Vir. = *Virittäjä.*
- Wartburg E = Wartburg W., *Einführung in Problematik und Methodik der Sprachwissenschaft.* Halle (Saale) 1943.
- WBKL = *Wiener Beiträge zur Kulturgeschichte und Linguistik.*
- Weske VGFS = Weske Michael, *Untersuchungen zur vergleichenden Grammatik des finnischen Sprachstammes.* Leipzig 1873.
- Westermann WE = Westermann Diedrich, *Der Wortbau des Ewe. Abhandlungen der Preussischen Akademie der Wissenschaften 1943, Phil.-hist. Kl. nr 9.*
- Whitney LGL = Whitney William Dwight, *The Life and Growth of Language.* London 1875.
- Wickman FOUL = Wickman Bo, *The Form of the Object in the Uralic Languages.* Uppsala 1955.
- Wiedemann MGr = Wiedemann F. J., *Grammatik der ersa-mordwinischen Sprache.* St. Petersburg 1865.
- SGr = *Grammatik der syrjänischen Sprache.* St. Petersburg 1884.
- Winkler UVS = Winkler Heinrich, *Uraltaische völker und sprachen.* Berlin 1884.
- Wulff ChT = Wulff K., *Chinesisch und tai.* København 1934.

---

Wundt S = Wundt Wilhelm, Völkerpsychologie. Die Sprache. I. Leipzig 1911<sup>3</sup>.

— II. Leipzig 1904<sup>3</sup>, 1912<sup>3</sup>.

ZDMG = Zeitschrift der deutschen Morgenländischen Gesellschaft.

ZSPh = Zeitschrift für slavische Philologie.