

AN INVENTORY OF ROMANIAN DERIVATIONAL AFFIXES

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Abstract. In this paper we present our research results about Romanian affixes. On the one hand, we focus on the semantic aspects involving them: the meaning they add to the stem and the possible semantic relations between affixes. The former implies grouping affixes according to their meaning, in synonymic series. An affix will occur in as many synonymic series as many meanings it has. The latter implies a further analysis of the meanings of affixes in terms of semantic relations, thus discovering antonymy, polysemy, homonymy, etc. among affixes. On the other hand, we show some combination possibilities manifested by suffixes, as far as the part of speech of the base is concerned. Initially, we group the suffixes into four groups, according to the part of speech they help to enrich. Eventually, we identify subgroups within the initial groups, this time according to the part of speech of the base to which the suffix attaches.

Keywords: derivation, suffix, prefix, semantic values of affixes, semantic relations, part of speech.

1. INTRODUCTION

The papers dealing with derivation in Romanian fall within two categories. On the one hand, there are those concerned with the description of the vocabulary, hence touching the subject of enriching it via internal means, derivation being one of them. On the other hand, there are papers focusing on the means of enriching the vocabulary, the most important one being *Formarea cuvintelor în limba română* (Word formation in Romanian) (FCLR henceforth) (edited by Graur and Avram, 3 volumes, 1970, 1978, 1989): the first volume deals with compounding, the second one is dedicated to prefixation, and the third to verbal suffixation. Relying on previous bibliography and on extensive focused documentation, FCLR establishes the research landmarks and offers a synchronic and diachronic perspective on the behaviour of each Romanian prefix and verbal suffix.

The more recent papers deal with the language in the newspaper articles from the last 23 years and the latest trends concerning derivation. Such articles adopt a synchronic perspective, they reflect the nowadays changes in the language, are descriptive, count frequencies, productivities, discuss stylistic effects (see, for instance, Preda (1992), Szathmary (2006), Stoichițoiu-Ichim (2007), Trifan (2010), among others). The main means of enriching the vocabulary discussed are the most productive ones, i.e. prefixation, noun suffixation and adjectival suffixation. As far as verbal suffixation is concerned, things were clarified long time ago: we notice the great productivity of the first conjugation, a phenomenon which is characteristic of the modern period and is still active.

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Our aim here is to make available an inventory of Romanian derivational affixes. Its uses are multiple, both for linguists and for language engineers. The former will find here a comprehensive list of productive affixes, grouped according to morphologic and semantic features, mainly. The latter can use this list for automatic generation of derived words, for morphologic analysis of derived words, for automatic spelling correction (especially for writing with *i* or with *â* inside words: if before the respective letter there is a prefix, then the letter must be *i*, otherwise it will be *â*), for generating or recognizing words families; such seemingly less important tasks are of extreme significance for more elaborate tasks in Computational Linguistics, such as Information Retrieval, Word Sense Disambiguation, Language Understanding and Generation and others.

The inventory of affixes in the annexes of this article can also be found online, at the address www.racai.ro/~vergi under Research.

In this article we start with some methodological remarks concerning our study (sections 2), we continue with a classification of affixes according to the part of speech criterion, namely according to the part of speech enriched by means of the respective suffix (section 3); thus, we will talk about noun suffixes, verbal suffixes, adjectival ones and adverbial suffixes. Then (in section 4) we present an inventory of the meanings displayed by each of the subgroups of affixes established in the previous section. We discuss about the semantic relations established among affixes in section 5. The combination possibilities manifested by each suffix are presented in section 6. The paper also has two annexes with all the productive Romanian affixes and with the combination possibilities they manifest.

2. METHODOLOGICAL REMARKS

Our inventory contains only affixes, that is suffixes and prefixes, as they are commonly understood in linguistics (see Marouzeau 1933: 63-4): affixes are elements susceptible to be attached to a word in order to change its meaning, value, function, role, without affecting its unity; when attached at the beginning of the stem they are called prefixes; when attached at the end of the word, they are called suffixes.

We left pseudoaffixes aside for several reasons, enumerated below:

- their status is controversial: some specialists consider them compound elements (Avram 1978, Dimitrescu 1995), others derivation elements (Jordan 1943, Coteanu 2007);
- they display characteristics that unequivocally differentiate them from affixes: the possibility of combining with each other in order to create words, without requiring a root: *geolog* ‘geologist’ (<*geo* + *log*);
- they can occur both at the beginning and at the end of a root to create a word: *termoelectric* ‘thermo-electric’ and *electrotermic* ‘electrothermal’.

In FCLR, the specialists discuss both about affixes easily recognizable in the structure of Romanian words, and about affixes that have not been productive in Romanian, but can be recognized in the internal structure of borrowings: *pen-* in *peninsulă*, *penumbră* and *penultim*. The latter affixes are not dealt with here. We share the view that they are not Romanian affixes, they belong to the language from which the words containing them were borrowed and they have never created words in Romanian, although, in the future, they might create.

An affix belongs to the Romanian language if and only if it has helped in the creation of new words in Romanian. If the affix was borrowed from another language, then it can be found both in loan words and in internally created ones, be they even calques. If the affix

was created in Romanian, we find it only in internally derived words. We are not interested here if, throughout time, other languages have borrowed these latter affixes, alongside with words containing them, from Romanian.

Another important remark is that we focus on literary language.

Last but not least, the reader careful of the correct etymology is advised to deal with the examples provided as instances of occurrence of the target affix; the examples are either loan words or words created in Romanian by adding the respective affix to a stem. As we do not clarify this and it is beyond our interest here, etymologies must be looked for in specialised dictionaries or papers.

3. MORPHOLOGIC CLASSIFICATION OF AFFIXES

An inventory of affixes can be organized variously, according to the aims followed. In Annex 1 to this article, we distinguished primarily between prefixes and suffixes. Then, for suffixes, we took into consideration a morphologic criterion: suffixes were split in four groups according to the part of speech to which the word created with the respective suffix belongs: noun, verb, adjective or adverb. (Other parts of speech can also be created by derivation, but they are beyond the scope of our investigation here.) Analyzing derived words, we made some further subgroups, depending on the part of speech of the stem. We noticed that via derivation, on the one hand, any part of speech can remain unchanged and, on the other hand, any part of speech can turn into any part of speech: nouns can turn into adjectives, into verbs or adverbs, adjectives can turn into nouns, verbs or adverbs, verbs can turn into nouns, adjectives or adverbs, and adverbs can turn into nouns, adjectives or verbs. In the table below we exemplify these modifications. The parts of speech on the first column are for the stem, while those on the first row are of the derived words.

Table 1

Examples of part of speech modifications triggered by suffixation

Derived Base	noun	verb	adjective	adverb
noun	<i>pantof</i> 'shoe'+ - <i>ior</i> > <i>pantofior</i> 'little shoe'	<i>dispreț</i> 'scorn'+ - <i>ui</i> > <i>disprețui</i> 'to scorn'	<i>spital</i> 'hospital'+ - <i>icesc</i> > <i>spitalicesc</i> 'specific to a hospital'	<i>cruce</i> 'cross'+ - <i>iș</i> > <i>cruciș</i> 'in a squint manner'
verb	<i>măzgăli</i> 'to scrawl'+ - <i>tură</i> > <i>măzgălitură</i> 'scrawl'	<i>linge</i> 'to lick'+ - <i>uși</i> > <i>linguși</i> 'to flatter'	<i>uita</i> 'forget'+ - <i>uc</i> > <i>uituc</i> 'forgetful'	<i>tupila</i> 'to hide'+ - <i>uș</i> > <i>tupiluș</i> 'stealthily'
adjective	<i>dulce</i> 'sweet'+ - <i>eață</i> > <i>dulceață</i> 'sweetness'	<i>murdar</i> 'dirty'+ - <i>i</i> > <i>murdări</i> 'to dirty'	<i>amar</i> 'bitter'+ - <i>ui</i> > <i>amărui</i> 'a little bitter'	<i>chior</i> 'blind'+ - <i>âș</i> > <i>chiorâș</i> 'in a squint manner'
adverb	<i>împrejur</i> 'around'+ - <i>ime</i> > <i>împrejurime</i> 'environs'	<i>încet</i> 'slowly'+ - <i>ini</i> > <i>încetini</i> 'to slow'	<i>anevoie</i> 'toilsomely'+ - <i>os</i> > <i>anevoios</i> 'toilsome'	<i>încet</i> 'slowly'+ - <i>inel</i> > <i>încetinel</i> diminutive of 'slowly'

It is widely accepted that prefixes do not change the part of speech of the stem they attach to. However, Petic (2011) gives two examples, chosen from more others found, that prove, in his opinion, the contrary: *antigrindină* (an adjective made up of the prefix *anti-* and the noun root *grindină*) and *încețoșă* (a verb created from the adjective root *cețos*). However, we consider that only the first is an appropriate example. As far as the latter is concerned, it is worth reminding that Avram (1989: 7) treats the verbal endings *-a*, *-i* and *-î* as being at the boundary between inflexional suffixes and lexical ones. The argument in favour of their inflexional character is their occurrence restricted to the infinitive, simple perfect and past perfect; their impossibility of occurrence with other verbal forms justifies Vasiliu (1989) to deny them the status of lexical morphemes. However, the careful reader will notice some discrepancies in the treatment of these endings throughout the third volume of FCLR (1989). Moreover, in the first volume of FCLR (1970) on the very first page of the Foreword, when presenting the means of enriching a vocabulary, the author gives as an example of parasyntetic derivation (i.e. derivation with both a prefix and a suffix) the word *îmbuna* (analysed as made up of the prefix *în-* plus the root *bun* plus the suffix *-a*). Considering these, we decided to treat these endings, *-a*, *-i* and *-î*, as lexical suffixes. Thus, a word like *încețoșă* is not a proof that prefixation can change the part of speech of the stem.

Nevertheless, prefixation alone seldom changes the part of speech of the stem. Other examples, besides the one mentioned above, include *antiglont*, *antigaz*, etc. Thus, we did not morphologically subclassify the prefixes in Annex 1 to this article.

4. INVENTORY OF THE MEANINGS OF AFFIXES

In what follows we illustrate each meaning with more examples involving different affixes; thus, we show the richness of the synonymic series of affixes. At the same time, affixes polysemy is evident.

4.1. Meanings of prefixes

Laura Vasiliu (1978) created a rich and refined inventory of semantic values of Romanian prefixes. We reorganized her inventory as below²:

- interiority: *endocraniu* ‘endocranium’, *îmigră* ‘immigrate’, *intramuscular* ‘intramuscular’, *introspecție* ‘introspection’;
- exteriority: *extraconjugal* ‘extramarital’, *expatria* ‘expatriate’, *decurge* ‘result’, *paraliteratură* ‘paraliterature’, *metafizică* ‘metaphysics’;
- anteriority: *antebraț* ‘forearm’, *cisalpin* ‘cisalpine’, *retrograda* ‘to retrograde’, *anticameră* ‘antechamber’, *prefață* ‘preface’, *propăși* ‘prosper’;
- posteriority: *metacarp* ‘metacarpus’, *transcarpatin* ‘transcarpathian’, *postfață* ‘postface’;
- proximity: *context* ‘context’, *acosta* ‘to dock’, *contrasemna* ‘countersign’, *juxtapune* ‘juxtapose’;
- position around: *circumpolar* ‘circumpolar’, *pericard* ‘pericardium’;

² When an example is given for two or more semantic values, it means the affix cumulates all those meanings.

- intermediary position: *intracarpatic* ‘intra-carpathian’, *interspațiu* ‘free distance between two objects’, *perisistolă* ‘perisystole’;
- moving backward: *repatria* ‘repatriate’;
- moving outward: *anaseism* ‘anaseism’, *disloca* ‘dislocate’;
- movement: *transplanta* ‘transplant’;
- removing: *decupla* ‘decouple’;
- similarity: *împânzi* ‘to fill’, *parapneumonie* ‘parapneumonia’;
- interruption: *interveni* ‘intervene’;
- going beyond: *metafizică* ‘metaphysics’, *supraindividual* ‘superindividual’, *surplus* ‘surplus’;
- lost quality: *ex-ministru* ‘ex-minister’;
- origin: *apocodeină* ‘apocodeine’, *denominativ* ‘denominative’;
- preference: *afemeiat* ‘lecherous’;
- distance: *abjura* ‘abjure’, *apogalaxie* ‘apogalaxy’, *strămoș* ‘forebear’;
- superiority: *supracopertă* ‘slip cover’, *arhiplin* ‘overloaded’, *extrafin* ‘superfine’, *hiperaciditate* ‘hyperacidity’, *periciclu* ‘pericycle’, *superstrat* ‘overlay’;
- inferiority: *subcomisar* ‘under-commissary’, *hipoglicemie* ‘hypoglycemia’, *întredeschide* ‘to slightly open’, *netrai* ‘bad life’;
- opposition: *contrapantă* ‘counter-slope’, *antifascist* ‘antifascist’, *anagramă* ‘anagram’, *paratrăsnet* ‘lightning rod’, *reacționa* ‘react’;
- getting through: *parcurge* ‘travel through’, *transfăgărășan* ‘crossing the Făgăraș Mountains’;
- repetition: *războteza* ‘rebaptize’, *contravizită* ‘counter visit’, *revedea* ‘see again’, *anageneză* ‘anagenesis’, *subînchiria* ‘sublet’;
- inchoative meaning: *adormi* ‘fall asleep’;
- eventive meaning: *înfrunzi* ‘to leaf’, *evapora* ‘evaporate’;
- reciprocity, association: *conlucra* ‘work together’, *întrețese* ‘interweave’, *sindactilie* ‘syndactyly’;
- supplementary character: *extrasistolă* ‘extrasystole’, *hiperparazit* ‘hyperparasite’, *parasimpatic* ‘parasympathetic’, *supranume* ‘nickname’;
- unexpectedness: *surveni* ‘supervene’;
- instrument: *peroral* ‘peroral’;
- reference: *metalingvaj* ‘metalanguage’;
- substitute: *proconsul* ‘proconsul’;
- conformity: *alinia* ‘align’;
- support: *proafrican* ‘pro-african’;
- negation of the stem: *îmoral* ‘immoral’, *non existență* ‘nonexistence’, *depopula* ‘depopulate’, *antiartă* ‘anti-art’, *atermic* ‘athermic’, *displăcea* ‘dislike’, *nelămurit* ‘unclear’;
- absence: *aton* ‘silent’, *abocluzie* ‘abocclusion’, *dizarmonie* ‘disarmony’, *indisciplină* ‘indiscipline’, *neplăcere* ‘inconvenience’, *nonvaloare* ‘non-value’;
- intensifier: *abuz* ‘abuse’, *arhicunoscut* ‘overfamiliar’, *degusta* ‘taste’, *renume* ‘fame’, *răscoace* ‘overbake’, *sfărâma* ‘disintegrate’, *supernovă* ‘supernova’, *supraalimenta* ‘supercharge’, *surexcita* ‘overexcite’, *ultramodern* ‘ultramodern’;
- difficulty: *afrazie* ‘aphrasia’;
- insufficiency: *defocaliza* ‘defocus’;
- transformation: *metastibnit* ‘metastibnite’.

4.2. Meanings of noun suffixes

For noun and adjective suffixes there is no inventory of their semantic values. However, relying on a rich bibliography on such suffixes, we made a synthesis of their possible semantic values and they are presented below.

The Romanian noun suffixes can express:

– state: *puținătate* ‘fewness’, *deșteptăciune* ‘cleverness’, *dulceață* ‘sweetness’, *scumpete* ‘deariness’, *iscusință* ‘ingenuity’, *micime* ‘littleness’, *copilărie* ‘childhood’, *amețeală* ‘dizziness’, *sfințenie* ‘holiness’, *liniște* ‘silence’, *neteziș* ‘flatness’, *sărăcie* ‘poverty’;

– place: *singurătate* ‘solitude’, *locuință* ‘dwelling’, *închisoare* ‘prison’, *umbrar* ‘shelter’, *vărație* ‘place where sheep can graze in summer’, *săritoare* ‘waterfall’, *împrejurime* ‘surrounding’, *pitărie* ‘bakery’, *ascunziș* ‘shelter’, *urcuș* ‘ascent’, *așezământ* ‘establishment’, *stabiliment* ‘establishment’, *bostănărie* ‘melon field’, *stupină* ‘bee garden’, *cânepiște* ‘hemp field’, *frâșiniș* ‘ash forest’;

– origin: *bănățean* ‘person from Banat’, *danez* ‘Danish’, *bulgăroi* ‘Bulgarian’ (also a deprecatory meaning);

– part: *ostaș* ‘soldier’;

– action: *iertăciune* ‘foregiveness’, *biruință* ‘victory’, *plânsoare* ‘crying’, *învățătură* ‘learning’, *semănat* ‘seeding’, *însurătoare* ‘marriage’, *crescut* ‘growing’, *călătorie* ‘journey’, *pățanie* ‘adventure’, *îndrăzneală* ‘audacity’, *antrenament* ‘training’, *mineriadă* ‘miners’ revolt’;

– sports competition: *balcaniadă* ‘Balkan competition’;

– quality: *duioșie* ‘fondness’, *agerime* ‘quickness’;

– quality and the time span it covers: *pruncie* ‘childhood’;

– abstract: *rămășag* ‘bet’, *cutezanță* ‘boldness’, *limbaj* ‘language’, *similitudine* ‘similitude’;

– abstract and concrete: *împuțițiune* (‘stinky smell’ and ‘something that stinks’), *ninsoare* (‘the action of snowing’ and ‘snow’), *măzgălitură* (‘the act of doodling’ and ‘unneat writing’), *cuminecătură* (‘Eucharist’ and ‘the wine and bread for Eucharist’), *împărăție* (‘the status of an emperor’ and ‘place where or period when an emperor rules’), *găteală* (‘the act of attiring oneself’ and ‘what is used for attiring oneself’), *suiș* (‘the act of climbing’ and ‘the place for climbing’), *sărutare* (‘the action of kissing’ and ‘the kiss’), *învățământ* (‘tuition’ and ‘lesson, message’), *emisi(un)e* (‘the act of sending signal’ and ‘the programme’);

– literary work: *țiganiada* ‘epic poem about gipsies’;

– being: *ființă* ‘being’; feminine from masculine: *româncă* ‘she-Romanian’, *boieroaică* ‘she-aristocratic’; masculine from feminine: *mătușoi* ‘he-aunt’; feminine noun designating the wife of the person designated by the corresponding masculine noun: *preoteasă* ‘wife of a priest’, *morăriță* ‘wife of a miller’, *ministresă* ‘wife of a minister’;

– job and person doing the job: *brutar* ‘baker’, *cerșetor* ‘beggar’, *culegător* ‘cropper’, *drumeț* ‘tripper’, *cântăreț* ‘singer’, *măscărici* ‘buffoon’, *birtaș* ‘saloon keeper’, *pârâș* ‘accuser’, *cărăuș* ‘carrier’, *duelgiu* ‘duelist’, *ziarist* ‘journalist’, *informatician* ‘computer scientist’, *asistent* ‘assistant’, *bucătăreasă* ‘she-cook’, *chelnăriță* ‘waitress’, *brodează* ‘embroideress’, *balerină* ‘ballerina’;

- possessor of a quality: *vietate* ‘living body’, *seducător* ‘seducer’, *pisălog* ‘insistent’, *zeflemist* ‘ironist’;
- a person by his/her condition: *bancrutar* ‘bankrupt’;
- mythologic being: *strigoi* ‘genie’, *zrițuroaică* ‘bad woman’, *zeiță* ‘goddess’;
- collective: *creștinătate* ‘Christianity’, *negureață* ‘fog’, *păsăret* ‘birds’, *băligar* ‘dung’, *stejărime* ‘oak trees’, *broscărimă* ‘frogs’, *apărie* ‘much water’, *apăraie* ‘much water’, *stupină* ‘beehives’, *frunziș* ‘leaves’, *aparataj* ‘apparatuses’, *îmbrăcămintă* ‘clothes’, *echipament* ‘equipment’;
- recipient: *săruriță* ‘salt cellar’, *zaharniță* ‘sugar bowl’, *scrumieră* ‘ashtray’;
- disease: *gurar* ‘abscess in the mouth’, *pântecăraie* ‘diarrhoea’, *stomatită* ‘stomatitis’, *glaucom* ‘glaucoma’, *furunculoză* ‘disease with furuncles’;
- chemical substance: *eucaliptol* ‘eucalyptol’, *șoriceasă* (‘poison for mice’), *doctorie* ‘medicine’;
- diminutive: *ciocănel* ‘little hammer’, *cărțicea* ‘little book’, *pătuțel* ‘little bed’, *pătuț* ‘little bed’, *măsuță* ‘little table’, *pantofior* ‘little shoe’, *pălărioară* ‘little hat’, *glăscior* ‘little voice’, *căscioară* ‘little house’, *țărișoară* ‘little country’, *acușor* ‘little needle’, *cepușoară* ‘little onion’, *lopățiță* ‘little shovel’, etc.;
- augmentative: *căsoaie* ‘big house’, *băietan* ‘big boy’, *familion* ‘big family’;
- sound: *foșnet* ‘swish’;
- result: *zgârietură* ‘bruise’, *abonament* ‘season ticket’, *saturație* ‘saturation’, *unsoare* ‘ointment’, *sfârșit* ‘ending’, *zicătoare* ‘saying’;
- instrument: *încuietoare* ‘fastener’, *arzător* ‘burner’, *răzătoare* ‘grater’, *jucărie* ‘toy’, *șurubelniță* ‘screw driver’, *botniță* ‘muzzle’;
- clothes: *pieptar* ‘vest’, *îțari* ‘trousers’;
- food: *brânzoaică* ‘pastry containing cheese’, *albuș* ‘egg-white’;
- domain of activity: *oierit* ‘sheep raising’, *cărăușie* ‘carriage’;
- title: *dregătorie* ‘title of a dignitary more than two centuries ago’;
- tax: *morărit* ‘tax on milling’, *tutunărit* ‘tax on cultivating tobacco’;
- time period: *răsărit* ‘sunrise’.

4.3. Meanings of verbal suffixes

Laura Vasiliu also made an inventory of the semantic values of the verbal suffixes (Vasiliu 1989). Starting from it and from the monographies of the verbal suffixes available in FCLR vol III, we propose the inventory below:

- to experience: *agoniza* ‘agonize’, *emoționa* ‘thrill’;
- to subject to: *jefui* ‘rob’, *categorisi* ‘categorize’, *achiziționa* ‘acquire’;
- to feel: *invidia* ‘envy’;
- to take part: *complota* ‘conspire’, *chiuli* ‘play truant’;
- to attribute the object: *incrimina* ‘incriminate’, *pensiona* ‘retire’;
- to insert itself into: *întrușoa* ‘embody’;
- induce a feeling, a mood, a state: *extazia* ‘make become enraptured’, *teroriza* ‘terrorize’, *disprețui* ‘despise’, *stupefia* ‘stupefy’, *alarmă* ‘alarm’, *îngrijora* ‘worry’;
- have, confer or acquire the job, role, function, to be subject to, to live like: *nomadiza* ‘make become nomad’, *șchiopăta* ‘limp’, *filosofa* ‘philosophize’;

- to do an action, to behave as: *polemiza* ‘polemize’, *ovaționa* ‘acclaim’;
- to belong or make belong to a group: *calviniza* ‘make become a calvinist’, *rusifica* ‘russify’, *creștina* ‘christianize’;
- to produce or make produce, to realize, to emit: *spumega* ‘foam’, *fructifica* ‘fructify’, *evidenția* ‘highlight’, *prânzi* ‘lunch’, *anexa* ‘annex’;
- to display, acquire or make acquire the quality, the status, to turn into: *fonfăi* ‘sniffle’, *stratifica* ‘stratify’, *minimaliza* ‘minimize’, *perfectiona* ‘improve’, *nazifica* ‘nazify’, *culmina* ‘culminate’, *ciufuli* ‘dishevel’, *acidula* ‘acidify’, *acri* ‘sour’, *diftonga* ‘diphthongize’;
- to do something by means of the object designated by the stem: *biciui* ‘whip’, *crucifica* ‘crucify’, *cauteriza* ‘cauterize’, *naviga* ‘navigate’, *glăsui* ‘voice’;
- to give or take the object designated by the stem: *mitui* ‘bribe’, *pensiona* ‘retire’;
- to endow with, to cover with: *prăfui* ‘dust’, *accentua* ‘stress’, *canaliza* ‘canalize’;
- to act (usually in a negative way) upon the object: *borfăi* ‘to search through clothes’, *beregătui* ‘throttle’;
- to utter the shout: *chițăi* ‘squeak’, *mârăi* ‘growl’;
- to make the movement: *hopăi* ‘hop’;
- to address: *porcăi*, *porcări*, *scrofăli*, *porci* all with the meaning ‘to discharge a volley of insults’;
- to do an action in the circumstances rendered by the stem: *apropia* ‘move closer’, *împrejmu* ‘surround’;
- approximation: *dormita* ‘doze’;
- iterative meaning: *gustări* ‘keep tasting’, *clipoci* ‘lap’;
- instantaneous: *pocni* ‘bang’;
- onomatopoeic: *băzăi* ‘buzz’, etc.

4.4. Meanings of adjectival suffixes

The semantic values of adjectival suffixes include:

- kind: *țărănesc* ‘specific to the countryside’, *actoricesc* ‘specific to actors’, *copilăresc* ‘childish’, *animalier* ‘specific to animals’;
- characteristic: *anarhist* ‘anarchist’, *muritor* ‘mortal’;
- belonging: *tomnatic* ‘autumnal’, *apusean* ‘western’, *săptămânal* ‘weekly’, *spitalicesc* ‘specific to a hospital’;
- local origin: *focșănean* ‘original from Focșani’, *moscovit* ‘original from Moscow’, *muntenesc* ‘original from the mountains’, *ecuatorial* ‘original from the equator zone’;
- position: *fruntaș* ‘headmost’;
- resemblance: *măgăresc* ‘like a donkey’, *țărănos* ‘like a peasant’, *roșiatic* ‘reddish’, etc.;
- possession of a quality: *burtos* ‘big-bellied’, *sugar* ‘suckling’, *buzat* ‘blobber lipped’, *lingușitor* ‘flatterer’, *slugarnic* ‘servile’, *uituc* ‘forgetful’, *puternic* ‘powerful’;
- possibility: *ouătoare* ‘layer (about hens)’, *măsurabil* ‘measurable’;
- approximation: *negricios* ‘blackish’;

- „that produces what the stem designates’: *buc^ulu^{ci}caș* ‘who produces troubles’;
- „that does the action designated by the verb well’: *lunec^oș* ‘slippery’;
- diminutives: *amăr^ui* diminutive of ‘bitter’, *frum^ușel* diminutive of ‘beautiful’, *căld^ui* diminutive of ‘warm’, *bolnă^vior* ‘diminutive of ill’;
- augmentatives: *be^țivan* ‘augmentative of drunkard’.

4.5. Meanings of adverbial suffixes

Adverbial suffixes are poor in semantic values. They can express:

- the manner: *tupil^uș* ‘stealthily’, *crucⁱș* ‘asquint’, *bărbăteș^{te}* ‘manfully’, *fatalmente* ‘fatally’;
- diminutives: *tupil^uș* ‘stealthily’, *frum^ușel* ‘prettily’, *tăricel* ‘a little loud’, *olecuță* ‘very little’, *repe^țior* ‘not too fast’, *demul^cior* ‘not too long ago’, *binⁱșor* ‘pretty well’;
- time: *actualmente* ‘actually’.

5. SEMANTIC RELATIONS BETWEEN AFFIXES

Although semantic relations are generally used in discussions about words and the organization of vocabulary, we will use them in our semantic approach to the study of affixes.

Synonymy. The way in which we grouped affixes in their semantic descriptions above easily displays the synonymy among them: for example, *-atic*, *-ie*, *-ar* are synonyms when they help create nouns designating places: *văratⁱc* ‘place where sheep can graze in summer’, *pitărie* ‘bakery’, *umbrar* ‘shelter’; *-ar*, *-ean*, *-ez*, *-oi* are synonymous when creating nouns designating the origin, and so on.

Antonymy. Two affixes are antonyms if, when attached to the same stem, they help to create antonymic words. In Romanian, there are both suffixes and prefixes that help create antonyms; however, the former are rare (*-tor/-t*: *asupritor* ‘oppressor’ – *asuprit* ‘oppressed’ or *-tor/-s*: *învingător* ‘conqueror’ – *învins* ‘conquered’), while the latter are quite numerous: *în-/des-*: *înzăpezi* ‘make somebody be snowed in’ – *dezăpezi* ‘clear of snow’, *hipo-/hiper-*: *hipoaciditate* ‘hypoacidity’ – *hiperaciditate* ‘hyperacidity’, *ante-/post-*: *antedata* ‘pre-date’ – *postdata* ‘post-date’, *supra-/sub-*: *supraalimenta* ‘overfeed’ – *subalimenta* ‘underfeed’, etc.

Monosemy. Some affixes have only one meaning, irrespective of the stem to which they attach. The suffix *-bil* always expresses possibility, while *-ită* creates names of diseases.

Polysemy. Most affixes have several meanings: *-iza* can add to the base one of the meanings ‘to experience’ (in *agoniza* ‘agonize’), ‘to subject to’ (in *gargariza* ‘to gargle’), ‘to induce a feeling of’ (in *teroriza* ‘terrorize’), ‘to make belong to a group’ (in *calviniza* ‘make become a calvinist’), etc.

Homonymy. 1. We call homonyms two affixes that have the same form and create words belonging to different parts of speech, so with different meanings: *-tor_n* (noun suffix) – *-tor_a* (adjectival suffix): *-tor_n* creates nouns that designate male agents (*vopsitor* ‘painter’) or instruments (*sucitor* ‘rolling pin’), while *-tor_a* creates adjectives designating quality

(*arătător* ‘pointing’), possession of a characteristic (*lingușitor* ‘flatterer’), possibility (*pluitor* ‘that can float’). 2. We also call homonyms two affixes that have the same form, but different etymology and meanings: *a-1* and *a-2* that have the following characteristics: the former is of Latin origin (it was inherited) and can have the meaning ‘to acquire a characteristic’ (as in *asigura* ‘ensure’) and others. However, *a-2* has a Greek origin and was borrowed in Romanian in various ways: directly from Greek, via French or other modern languages. Generally, it has a negative meaning, as in *amoral* ‘amoral’.

6. POSSIBLE COMBINATIONS DISPLAYED BY AFFIXES

Affixes manifest part of speech preferences in their combination with the stem. We present in Annex 2 the possible combinations displayed by suffixes, as we could identify them by examining the 100,000 words in *Dicționarul invers al limbii române* (Căpățână 2007) and the words existing in the Romanian Wordnet (Barbu Mititelu 2013). All affixes that could not be found, so for which we could not establish combination possibilities, were not included in this table. A tick occurring in a cell means that the suffix on that row can attach to a word of the part of speech represented in the respective column. For example, the suffix *-ac* can attach to nouns, verbs and adjectives. The fact that this suffix creates nouns and adjectives can be found out from its occurrence both in the group of noun suffixes and in that of adjectival suffixes in Annex 1. In the table in Annex 2 we ignored homonymy between affixes: we included each form once.

7. CONCLUSIONS

In this paper we make available an inventory of productive suffixes and prefixes grouped mainly according to morphologic and semantic criteria. We can notice the rich list of meanings affixes have (so their polysemy: the suffix *-esc* designates the type in *țărănesc* ‘specific to the countryside’, the origin in *muntenesc* ‘original from the mountains’, resemblance in *măgăresc* ‘like a donkey’) and also their synonymy: the same meaning is expressed by many affixes: for example, the suffixes *-tor*, *-ăreț*, *-uș*, *-ant* are synonyms because they help to create nouns designating jobs: *vopsi* ‘paint’ + *-tor* > *vopsitor* ‘painter’, *cânta* ‘sing’ + *-ăreț* > *cântăreț* ‘singer’, *căra* ‘carry’ + *-uș* > *cărăuș* ‘carrier’, *manevra* ‘manoeuvre’ + *-ant* > *manevrant* ‘person who manoeuvres’.

A predictable model for combining stems with affixes cannot be found. Anyway, the study of derivation is a descriptive process, not one meant to offer solutions for combination of linguistic material. From a Computational Linguistics perspective, given a list of words, one can develop an algorithm for enriching it by finding the most productive possibilities for combination of morphemes, but the results will not be 100% reliable. They will be potential words (see also Petic 2011): some of them are actual, real words, others are used in colloquial language, and others are not encountered at all, speakers preferring either the combination of the same root with another affix or words with another root.

We are aware of the limitations of our study as far as the inventory of affixes, of their meanings and of their combination possibilities with roots are concerned. However, during our work we felt the need for the existence of such a paper. Further advancement in the Romanian studies on vocabulary and its means of enrichment and in the field of corpus linguistics will bring about a refinement of our undertaking.

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ANNEX 1

ROMANIAN AFFIXES

Prefixes

a-	ex-	non-	re-
ab-	extra-	o-	s-
an-	hiper-	ob-	se-
ante-	hipo-	par-	sin-
anti-	in-	para-	spre-
apo-	infra-	per-	stră-
arhi-	inter-	peri-	sub-
circum-	intra-	po-	super-
cis-	intro-	poi-	supra-
co-	în-	post-	sur-
con-	între-	pre-	trans-
contra-	întru-	prea-	tre-
de-	juxta-	pro-	ultra-
des-	meta-	ră-	
dis-	nă-	răs-	
endo-	ne-	răz-	

Noun suffixes

-ac	-ate	-ătaie	-easă	-eț	-ism
-aci	-atic	-(ă/e/i)tate	-ească	-ețe	-ist
-adă	-a/ăție	-(ă)toare	-eață	-eu	-iș
-ag	-ațiune	-(ă)tor	-ează	-ez	-ișan
-(a)giu	-ă/iciune	-ă/itură	-ec	-eză	-ișană
-ai	-ălaș	-ău	-ecaș	-gan	-ișcă
-(a)ică	-(ă)lău	-ăun	-ece	-iadă	-ișină
-aie	-ăleț	-ân	-echi	-ian	-(i/u)șoară
-(a)iță	-ălie	-ână	-eci	-iaș	-(i)șor
-aj	-ăligă	-ârcă	-ei	-ic	-iște
-ală	-ălog	-ârlan	-eică	-ice	-iștină
-(a/e)lnic	-(ă)mânt	-ârlă	-ej	-icea	-it
-an	-ăn	-ârlău	-el	-icel	-ită
-and	-ănog	-âș	-(e)lniță	-ici	-itudinea
-andru	-ăraie	-ău	-elușă	-icică	-iu
-angiu	-ăranie	-că	-enci	-icior	-iz
-a/enie	-ăraș	-cel	-ent	-idă	-izm
-aniu	-ărașu	-cică	-e/or	-iduță	-iune
-ant	-ărea	-cuț	-ercă	-ie	-laie
-a/e/ință	-ăreasă	-dină	-erei	-ier	-lagă
-ar	-ăreață	-e	-erie	-ieră	-lan
-ard	-ăreț	-ea	-erșiță	-ig	-lie
-a/ire	-ărie	-eac	-esă	-ilă	-liște
-a/ăriță	-ărime	-eag	-eș	-ime	-lâc
-astru	-ăriș	-eagă	-et	-in	-loagă
-aș	-(ă)riște	-eală	-etă	-ină	-lui
-aștină	-ărit	-ean	-ete	-ioară	-luț
-at	-ăt	-eancă	-etiu	-ior	-ment

-neață	-oc	-otic	-uc	-ulică	-ușă
-nic	-oci	-ov	-ucă	-ulice	-ușcă
-nică	-og	-ovenie	-ucel	-ulie	-ușel
-niță	-oi	-oviște	-ug	-ulișcă	-ușor
-oagă	-ol	-oză	-ugă	-(u)liță	-ușteț
-oaică	-ola	-re	-ui	-un	-ut
-oaie	-om	-rel	-uică	-ură	-uț
-oană	-(o)man	-rnic	-uie	-uroi	-uță
-oancă	-on	-ruș	-ul	-uș	-uz
-oare	-oră	-șiță	-ulete	-(u)șag	-uză
-oasă	-oș	-șug	-uleț	-ușan	
-oașcă	-otei	-toreasă	-uleu	-ușană	

Verbal suffixes

-a	-ăți	-ezi	-ișa	-ota
-arisi	-ăza	-fia	-iți	-oti
-ăci	-âi	-fica	-iza	-ozi
-ăgi	-âna	-i	-î	-și
-âi	-âni	-ia	-li	-ți
-ăia	-âți	-ica	-ni	-ua
-ăla	-căi	-iei	-oca	-uca
-ăli	-ci	-ifia	-oci	-uci
-ălui	-efia	-ifica	-ogi	-ugi
-ăna	-efica	-iga	-oi	-ui
-ăni	-ega	-igi	-ola	-ula
-ăra	-eli	-ii	-oli	-uli
-ări	-eni	-ila	-ona	-una
-ășa	-era	-ili	-oni	-uni
-ăși	-eri	-ina	-ora	-ura
-ătăci	-eșa	-ini	-ori	-uri
-ăti	-eti	-iri	-osi	-uși
-ătui	-eți	-isa	-oșa	-uți
-ăța	-eza	-isi	-oși	

Adjectival suffixes

-ac	-av	-ân	-ian
-ache	-(ă/i)cios	-âc	-ic
-aci	-ălău	-âu	-ică
-ag	-ăn	-bil	-icea
-al	-ă/e/inat	-cesc	-icel
-alist	-(ă)nog	-ean	-icesc
-(a/e)lnic	-ănos	-ed	-icos
-an	-ăresc	-el	-ior
-ant	-ăreț	-enat	-ios
-ar	-ărit	-esc	-ist
-(a)rnic	-(ă)riu	-eș	-iș
-aș	-(ă/u)ros	-eț	-ișor
-at	-(ă)tor	-eu	-it
-a/eti/ec	-ău	-ial	-iu
-iv	-oi	-tel	-ulică

-laie	-or	-teț	-uliu
-lan	-os	-ticos	-un
-lean	-oș	-tos	-urescu
-liu	-otean	-țel	-uriu
-log	-rel	-uc	-uș
-luț	-rniț	-ui	-ut
-nel	-rog	-ug	-uț
-nic	-sesc	-uleț	-van

Adverbial suffixes

-aș
-cior
-e
-el
-ește
-icel
-ior
-iș
-ișor
-mente
-ucuța
-uș
-ușel
-uț
-uță

ANNEX 2

COMBINATION POSSIBILITIES DISPLAYED BY SUFFIXES

Suffix	noun	verb	adjective	adverb
-a	√		√	
-ac	√	√	√	
-aci	√	√	√	
-adă	√	√		
-ag	√			
-agiu	√			
-ai		√		
-âi	√			
-aică		√		
-aie	√		√	
-aiță	√			
-aj	√	√		
-al	√	√		
-ală		√		
-alist	√			
-alnic	√	√		
-an	√		√	
-and	√			
-andru	√			
-angiu	√			
-anie		√		
-ant		√		
-anță		√		
-ar	√	√		
-ard	√			
-are		√		
-âre		√		
-arisi	√			
-ariță	√			
-arnic	√			
-astru	√			
-aș	√	√	√	√
-âș		√		
-aștină	√			
-at	√	√		
-ât		√		
-ate			√	
-atic	√		√	
-ață			√	
-ație		√		
-ațiune		√		
-âu			√	
-av	√			
-ăci		√		

-ăcios		√	√	
-ăciune		√	√	
-ăgi		√		
-ăi	√			
-ăia			√	
-ălău	√		√	
-ălie	√			
-ăligă	√			
-ălog		√		
-ălui	√			
-ământ		√		
-ăni	√			
-ănog			√	
-ăraie	√			
-ăranie		√		
-ăraș	√			
-ărea	√			
-ăreasă	√			
-ăreată	√			
-ăresc	√			
-ăreț	√	√		
-ări	√			
-ărie	√	√		√
-ărime	√			
-ăriș	√			
-ărit	√			
-ăriță	√			
-ăriu	√		√	
-ăros	√	√		
-ăt	√	√		
-ătaie	√			
-ătate		√	√	
-ătăci		√		
-ătoare		√		
-ător		√		
-ătui		√		
-ătură		√		
-ău		√	√	
-bil		√		
-că	√		√	
-cior	√			√
-cios		√		
-ciune		√		
-e	√		√	
-ea	√			
-eac	√			
-eag	√		√	
-eală		√		
-ean	√			

-eancă	√			
-easă	√			
-ească	√			
-eață	√	√	√	
-ează	√			
-eci	√			
-efia			√	
-ega	√			
-ei		√	√	
-eică	√			
-el	√		√	
-eliște		√		
-elnic	√	√	√	
-elniță	√	√		
-elușă	√			
-eni	√			
-enie		√	√	
-ent		√		
-ență		√		
-er		√		
-era	√			
-erie	√	√	√	
-erniță	√			
-esă	√			
-esc	√			
-eș	√			
-eșă			√	
-ește	√		√	
-et	√	√		
-etate			√	
-etă	√			
-ete			√	
-etic	√			
-eț	√	√		
-ețe			√	√
-eu		√		
-ez	√			
-giu	√			
-i	√		√	√
-ia	√			
-iadă	√			
-ial	√			
-ian	√		√	
-ic	√		√	
-ica	√			
-ică	√		√	
-ice	√			
-icea	√			
-icel	√		√	

-icesc	√			
-ici	√	√		
-icică	√			
-icios		√	√	
-iciune		√	√	√
-icos	√			
-idă	√			
-ie	√			
-ier	√	√		
-ieră	√			
-ifia	√			
-ifca	√		√	
-ig	√			
-ilă	√	√		
-ime	√		√	√
-in	√			
-inal			√	
-ină	√			
-ini			√	√
-ință		√		
-ioară	√		√	
-iona	√		√	
-ior	√		√	√
-ios	√			
-ire		√		
-isi	√			
-ism	√		√	
-ist	√		√	
-iș	√	√		
-ișag	√			
-ișcă	√			
-ișoară			√	
-ișor	√		√	√
-iște	√			
-it	√	√		
-itate			√	
-ită	√			
-itudine			√	
-itură		√		
-iță	√			
-iu	√		√	
-iune	√	√	√	
-iv	√	√		
-iza	√		√	
-î	√			
-lâc	√		√	
-laie	√			
-liu	√			
-lnic	√			

-man	√			
-ment		√		
-mente			√	
-neată	√			
-ni	√			
-nic	√		√	√
-nică	√			
-niță	√			
-oagă	√			
-oaică	√		√	
-oaie	√			
-oare		√		
-oasă	√			
-oașcă	√			
-oc	√			
-oci	√			
-og		√		
-oi	√	√	√	
-ol	√			
-olan			√	
-om	√			
-oman	√			
-on	√			
-ona	√			
-or		√		
-os	√	√		√
-otei	√			
-ovan			√	
-ovenie	√			
-oviște	√			
-oză	√			
-re		√		
-riște	√		√	
-șag	√			
-șug	√			
-ta	√		√	
-tate			√	
-tel			√	
-toare		√		
-tor		√		
-ua	√			
-uc	√	√		
-ucă	√			
-ui	√		√	
-uică	√			
-uie	√			
-uleț			√	
-uli	√			
-ulică	√		√	

-uliță	√			
-uliu	√			
-ura	√			
-ură	√	√	√	
-uri	√			
-uriu	√			
-uros	√			
-uș		√	√	
-ușă	√			
-ușcă	√		√	
-ușel	√			
-ușoară	√			
-ușor	√		√	
-ușteț	√			
-ut		√		
-uț	√		√	
-uță	√			√