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Agents Expressed by Prepositionless Instrumental Modifying Czech Nouns Derived from Intransitive Verbs[1]

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Abstract. The present paper aims to provide corpus-based description of Czech deverbal nouns that allow for modification by Agent expressed by prepositionless instrumental, A_1(Ins). As the starting point we give frequency data of selected nouns derived from transitive verbs. Then we focus on nouns derived from intransitive verbs and show that modification by A_1(Ins) is possible not only with nouns derived from verbs that can be passivized, but also with nouns the source verbs of which cannot be changed to passive. The latter issue represents the most contributive finding of the paper; it concerns especially nouns derived from reflexive verbs, both transitive and intransitive. We also improve the up-to-now description by taking into consideration not only Czech nouns derived from verbs by productive means (e.g. *domlouvání* 'talking') but also the non-productively derived ones (e.g. *domluva* 'caution'), mostly left aside. Finally, the corpus material also gives an evidence for usage of theoretically ungrammatical constructions in which the second complementation (A_2) is omitted on the surface and only A_1(Ins) is expressed, e.g. *vyhrožování zaměstnavatelem* 'threatening by the employer', *domluva strážníky* 'caution by police officers'; the corpus-based examples lead to the revision of the statement about ungrammaticality of such constructions.

1   Introduction

Agents expressed by prepositionless instrumental (Ins) modifying Czech deverbal nouns have been studied mainly in connection with two topics: (i) relation of a nominalized structure with Agent in the form of Ins, i.e. A_1(Ins), to the corresponding passive verbal construction, and (ii) an action meaning (reading) of the noun modified by A_1(Ins); in the present paper, we focus on the topic (i), while the topic (ii) is only marginally discussed[2]. Both topics have been primarily studied on the material of nouns derived from transitive verbs; nouns derived from intransitive verbs have been marginally dealt with, on the basis of only few examples, and thus they deserve to be studied in detail. Traditionally, Czech nouns derived from verbs by productive means are in the centre of attention (e.g. "transitive" nouns *ošetření* 'treating', *přednášení* 'lecturing', and "intransitive" nouns *domlouvání* 'talking-IPFV' / *domluvení* 'talking-PFV', *dotýkání se* 'touching-IPFV' / *dotknutí se* 'touching-PFV'), while nouns derived from verbs by non-productive means or by the zero suffix are often left aside (e.g. the "transitive" noun *výuka* 'teaching / instruction' and "intransitive" nouns *domluva* 'caution', *dotyk* 'touch').

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[2] The possibility to be modified by A_1(Ins) serves as one of criteria for identifying an action meaning (reading) of the noun [7], [1], [21, p. 22], [20]. In real communication, A_1(Ins) is very rare [14, p. 123], [16, p. 80], [12, p. 59].

Our approach to issues of valency of Czech deverbal nouns is based on the theory of valency (especially valency of verbs) as developed in the framework of Functional Generative Description by [17], [18]. In accordance with this approach we consider the complementation expressed by prepositionless instrumental to be Agent (Actor, ACT).

As for the relation of nominalized structures with $A_1(Ins)$ to verbal passive constructions, the structures given in (2) and (4) are considered to be parallel to the structures given in (1) and (3), cf. [11], [9], [18], among others.

(1) *lékař ošetří pacienta*
'the doctor will treat the patient.'

(2) *lékařovo ošetření pacienta*
'doctor's treating of the patient'

(3) *pacient byl ošetřen lékařem*
'the patient was treated by a doctor.'

(4) *pacientovo ošetření lékařem*
patient-ADJ.POSS treating-NOM.SG doctor-INS.SG
'patient's treating by a doctor / treating of the patient by a doctor'

However, passivization is not limited to syntactically transitive verbs. According to [10] Czech verbs can be passivized when they have minimally two actants (A_1 and A_2), one of which (A_1) affects the second one (A_2). This situation covers not only syntactically transitive verbs, but also some intransitive ones, cf. (5). As for reflexive verbs, they are considered not to allow to be changed to passive, however, some exceptions exist, cf. (6) to (9).

(5) *Blondýnkám je nadržováno / pomáháno / lichoceno*
blond-DAT.PL be-3.SG.PRES favour-PASS.PART / help-PASS.PART /
flatter-PASS.PART
'Blonds are favoured / helped / flattered'

(6) *Soudce se paní kuchařky tázal / dotázal, zda…*
judge-NOM.SG REFL lady-GEN.SG cook-GEN.SG ask-3.SG.PRT if…
'The judge asked the lady cook if…'

(7) *Paní kuchařka byla soudcem tázána / dotázána, zda…*
lady-NOM.SG cook-NOM.SG be-3.SG.PRT judge-INS.SG ask-PASS.PART if…
'The lady cook was asked by the judge if…'

(8) *Petra se dotklo jednání toho člověka*
Peter-GEN.SG REFL offend-3.SG.PRT action-NOM.SG that-GEN.SG man-GEN.SG
'action of that man offended Peter'

(9) *Petr byl dotčen jednáním toho člověka*
'Peter was offended by the action of that man'

According to [9, pp. 40-41] and [20, pp. 43-44], Czech deverbal nouns derived from intransitive verbs allow for modification by A_1(Ins) when a noun is derived from non-ergative verbs, cf. (10) to (13), while with nouns derived from non-accusative verbs modification by A_1(Ins) is ungrammatical, cf. (14) and (15).

(10) *holkám je nadržováno učitelem*
girl-DAT.PL be-3.SG.PRES favour-PASS.PART teacher-INS.SG
'girls are favoured by the teacher'

(11) *nadržování holkám učitelem*
favouring girl-DAT.PL teacher-INS.SG
'favouring girls by the teacher'

(12) *synovi je domlouváno starostlivou matkou*
son-DAT.SG be-3.SG.PRES talk-PASS.PART worried-INS.SG mother-INS.SG
'son is talked to by his worried mother'

(13) *domlouvání synovi starostlivou matkou*
talking.NOM.SG son-DAT.SG worried-INS.SG mother-INS.SG
'talking to the son by his worried mother'

(14) **propadnutí obci majetkem*
passing village-DAT.SG property-INS.SG
'passing to the village by the property'

(15) **unikání strážníkům šťastným vězněm*
escaping.NOM.SG policeman-DAT.PL happy-INS.SG prisoner-INS.SG
'the escaping to the policemen by the happy prisoner'

Considering both nouns derived from transitive and intransitive verbs, modification by A_1(Ins) is expected only when A_2 is present [9, p. 40], [20, p. 41], cf. (16) to (18).

(16) **přednášení Evou*
lecturing Eve-INS.SG
'lecturing by Eve'

(17) *vyprávění ovčí babičkou*
telling sheepish-INS.SG grandma-INS.SG
'the telling by the sheepish grandma'

(18) *nadržování učitelem*
favouring teacher-INS.SG
'favouring by the teacher'

Karlík [9] studied in detail the relationship between internal structure of Czech nouns derived from verbs by productive means and their syntactic behaviour and claims that the structures given in (2) and (4) do not show structural differences corresponding with the active – passive voice distinction, therefore A_1(Ins) cannot be licensed through passivization (see also [21, p. 22]).

2   Nouns Modified by A_1(Ins): Corpus-based Observations

In the present paper, we focus on nouns derived from intransitive verbs (Section 2.2), because they have been only marginally dealt with and so they are less theoretically described than nouns derived from transitive verbs. "Intransitive" nouns do not represent the typical examples of nouns modified by A_1(Ins) and even the linguistic intuition of native speakers sometimes fails when language correctness of such constructions is discussed. In such a case we need sufficient source of data to prove or disprove our expectation or hypothesis; representative and balanced corpus data are irreplaceable then.

Non-typical and also rare examples of "intransitive" nouns modified by A_1(Ins) can be better evaluated when compared with typical examples of nouns modified by A_1(Ins), i.e. with nouns derived from transitive verbs. Thus we also probe into valency behaviour of selected "transitive" nouns (Section 2.1) in order to see how often these nouns occur with the modification by A_1(Ins). With most of "transitive" nouns we do not have doubts about the language correctness of the A_1(Ins) modification, however frequency of the modification based on corpus material has not been examined yet.

We do not use the terms non-accusative and non-ergative verbs, but try to identify particular semantic classes of the nouns (e.g. nouns of communication, nouns of mental action, nouns of motion)[3].

In the paper, we present results of searching for "intransitive" as well as "transitive" nouns modified by A_1(Ins) in morphologically annotated subcorpora of the Czech National Corpus (CNC; Český národní korpus); the following five CNC subcorpora were used: SYN2000, SYN2005, SYN2006PUB, SYN2009PUB and SYN2010. The nouns with the A_1(Ins) modification were mostly searched for by the following queries: ([lemma="…"] [!(tag="[Z|V|J].*")]{0,5} [tag="N...7.*"]) or ([lemma="…"] [!(tag="[Z|R|V|J].*")]{0,5} [tag="N...7.*"]). All found examples were manually checked and absolute frequencies of the examples that really match the required structure are summarised in Tables 1-4; we

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[3] For identification of the appropriate semantic class of the nouns, we use semantic classification of source verbs of the nouns, captured in the valency lexicon of Czech verbs, VALLEX [15]. However, VALLEX provides the information on the semantic classes only for selected verbs, thus some source verbs of nouns that we study in the paper are not semantically classified, e.g. *dožít se* 'to live to', *dovolávat se* 'to call for', *ujmout se* 'to take care', *vzdát se* 'to surrender'.

separate examples of nouns modified by both A_1(Ins) and another participant A_2 (category A in the Tables) from constructions with A_1(Ins) modification only (category B in the Tables; for more details see Section 3).

The manual checking of all found examples includes syntactic as well as semantic analysis of found strings. For example, we excluded all strings in which the form of instrumental could be interpreted as another participant or a free modification, especially the complementations with the semantico-syntactic function of means (marked in the paper by the functor MEANS, e.g. *lokální ošetření kortikoidem*.MEANS 'local treatment by a corticoid', *připojení telefonem*.MEANS 'connection using the phone', *dotazování telefonem*.MEANS 'questioning using the phone') and direction "which way" (marked in the paper by the functor DIR2, e.g. *průnik obranou*.DIR2 'penetration through the defence'). We had also to exclude numerous ambiguous constructions, cf. examples with the nouns *dotýkání se* 'touching-IPFV' and *dotknutí se* 'touching-PFV', exhibiting ambiguity of ACT and MEANS, cf. (19) and (20), and the example with the noun *výpomoc* 'help', illustrating ambiguity of ACT and Patient (PAT), cf. (21).

(19) <u>*dotýkání se*</u> *oblaků*.PAT *konečky prstů*.ACT/MEANS
touching REFL cloud-GEN.PL fingertip-INS.PL
'touching of clouds by fingertips'

(20) <u>*dotknutí se*</u> *země*.PAT … *dolní končetinou*.ACT/MEANS (SYN2010)
touching REFL ground-GEN.SG lower-INS.SG extremity-INS.SG'
'touching of the ground by the lower extremity'

(21) <u>*výpomoc*</u> *přímou pečovatelskou službou*.ACT/PAT (SYN2009PUB)
help direct-INS.SG nursing-INS.SG service-INS.SG
'help by direct nursing service / help with direct nursing service'

2.1 Nouns Derived from Transitive Verbs

Nouns derived from transitive verbs represent very large group of nouns. For the present corpus-based study we selected 15 productively derived nouns (13 non-reflexive nouns, see Table 1, and 2 reflexive nouns, see Table 2) and 3 non-productively derived nouns (Table 3).

First we focused on nouns given as examples in the literature, i.e. *ošetření* 'treating', *vyprávění* 'telling' and *přednášení* 'lecturing'. Then we selected polyvalent (bivalent and trivalent) nouns representing particular semantic classes, e.g. nouns of communication (e.g. *oznamování* 'announcing', *výuka* 'teaching'), nouns of exchange (e.g. *odebrání* 'taking away', *vrácení* 'returning', *dodávka* 'delivery'), nouns of mental action (e.g. *uvědomování si* 'being aware'), nouns of ingestion (e.g. *požití* 'ingestion', *konzumace* 'consumption'). As for productively derived nouns, both aspectual counterparts were searched for (e.g. *odebírání* 'taking-IPFV away' / *odebrání* 'taking-PFV away'), provided they exist.

According to absolute frequencies[4] of productively derived nouns, given in Table 1 and Table 2, we can see that perfective nouns more often occur with A_1(Ins) modification than imperfective ones.

As for the semantic classification, productively derived nouns of communication and nouns of mental action modified by A_1(Ins) are the least frequent semantic classes. However, although some of them represent really isolated examples, we can see that they are unquestionably grammatically correct constructions. The second participant (mostly PAT) is expressed by prepositionless genitive, cf. (22), (23) and (25), or a possessive pronoun, cf. (26), or it is omitted on the surface, cf. (24).

(22) *důvody <u>neoznamování</u> trestného činu*.PAT *občany*.ACT (SYN2000)

reason-NOM.PL non-announcing-GEN.SG criminal-GEN.SG offence-GEN.SG citizen-INS.PL

'reasons for non-announcing of a criminal offence by citizens'

(23) <u>*přednesení*</u> *revizních zpráv*.PAT *jednotlivými členy*.ACT (SYN2000)

presentation-NOM.SG audit-GEN.PL report-GEN.PL particular-INS.PL member-INS.PL

'presentation of audit reports by particular members'

(24) *rozlišení základních vypravěčských typů (<u>vyprávění</u> postavou*.ACT *účastnou v ději – <u>vyprávění</u> vypravěčem*.ACT *stojícím mimo děj)* (SYN2005)

'distinguishing basic narrative types (telling by a character taking part in an action – telling by a narrator being outside an action)'

(25) *způsob <u>uvědomování si</u> okolního světa*.PAT *danou postavou*.ACT (SYN2010)

way being_aware-GEN.SG REFL outside-GEN.SG world-GEN.SG given-INS.SG character-INS.SG

'the way of being aware of the outside world by the given character'

(26) *u těchto statků můžeme předpokládat větší míru jejich*.PAT <u>*uvědomění*</u> *jednotlivcem*.ACT *než v případě...* (SYN2005)

'concerning this property we can suppose a larger degree of their realization by an individual than in case…'

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[4] Absolute frequencies given in Tables 1–4 would be better interpreted when supplemented with relative frequencies (i.e. the ratio of the absolute frequencies to the frequency of lemmas of the nouns as such).

Noun	SYN 2000		SYN 2005		SYN 2006 PUB		SYN 2009 PUB		SYN 2010		Total	
	A	B	A	B	A	B	A	B	A	B	A	B
odebírání 'taking-IPFV away'	1	0	0	0	1	0	3	0	0	0	5	0
odebrání 'taking-PFV away'	3	0	2	0	8	1	19	1	1	0	33	2
ošetřování 'treating-IPFV'	0	0	3	2	1	3	3	8	0	1	7	14
ošetření 'treating-PFV'	0	4	3	6	6	33	14	129	0	5	23	177
oznamování 'announcing-IPFV'	0	0	0	0	1	0	0	0	0	0	1	0
oznámení 'announcing-PFV'	2	0	0	1	14	2	18	9	0	1	34	13
požívání 'consuming-IPFV'	3	0	0	0	1	1	18	4	0	1	22	6
požití 'ingestion-PFV'	3	0	13	1	4	0	44	1	2	0	66	2
přednášení 'lecturing-IPFV'	0	0	0	0	0	0	0	0	0	0	0	0
přednesení 'presentation-PFV'	1	0	0	0	1	0	3	0	0	0	5	0
vracení 'returning-IPFV'	1	0	1	0	3	0	6	0	1	0	12	0
vrácení 'returning-PFV'	3	1	2	2	17	4	27	3	1	3	50	13
vyprávění 'telling-IPFV'	0	0	0	3	0	1	0	0	0	0	0	4
Total	17	5	24	15	57	45	155	155	5	11	**258**	**231**

Table 1. Productively derived, non-reflexive, "transitive" nouns modified by A_1(Ins): Ratio of presence of the second participant to its absence

Noun	SYN 2000		SYN 2005		SYN 2006 PUB		SYN 2009 PUB		SYN 2010		Total	
	A	B	A	B	A	B	A	B	A	B	A	B
uvědomování si 'being-IPFV aware REFL'	0	0	0	0	0	0	0	1	1	0	1	1
uvědomění si 'being-PFV aware REFL'	2	0	2	0	0	0	0	0	1	0	5	0
Total	2	0	2	0	0	0	0	1	2	0	**6**	**1**

Table 2. Productively derived, reflexive, "transitive" nouns modified by A_1(Ins): Ratio of presence of the second participant to its absence

For the present study, we selected three non-productively derived "transitive" nouns, representing three semantic classes, i.e. nouns of exchange (*dodávka* 'delivery'), nouns of ingestion (*konzumace* 'consumption') and nouns of communication (*výuka* 'teaching'). According to absolute frequencies given in Table 3, the nouns are comparably frequent when they are modified by A_1(Ins). The second participant (mostly PAT) is expressed by prepositionless genitive, cf. (26a), or a possessive pronoun, cf. (27), or it is omitted on the surface, cf. (54) to (56) below.

Noun	SYN 2000		SYN 2005		SYN 2006 PUB		SYN 2009 PUB		SYN 2010		Total	
	A	B	A	B	A	B	A	B	A	B	A	B
dodávka 'delivery'	5	1	4	1	4	0	10	2	1	0	24	4
konzumace 'consumption'	1	0	5	1	8	4	23	8	2	3	39	16
výuka 'teaching'	0	1	1	1	3	0	17	8	3	3	24	13
Total	6	2	10	3	15	4	50	18	6	6	**87**	**33**

Table 3. Non-productively derived, "transitive" nouns modified by A_1(Ins): Ratio of presence of the second participant to its absence

(26a) *přehodnotili dodávku tepla*.PAT *firmou*.ACT *Thermo DDK* (SYN2000)
re-evaluate-PRT delivery-ACC.SG heat-GEN.SG company-INS.SG Thermo DDK
'(they) re-evaluated delivery of heat by the company Thermo DDK'

(27) ... *alkohol. Myslím tím jeho*.PAT <u>*konzumaci*</u> *špičkovými hráči*.ACT. (SYN2009PUB)

... alcohol. I mean it-PRON.POSS consumption-ACC.SG top-INS.PL player-INS.PL

'... alcohol. I mean its consumption by top players.'

2.2 Nouns Derived from Intransitive Verbs

Concerning nouns derived from intransitive verbs, our method is to predict particular nouns that, according to our linguistic intuition, could allow for the modification by A_1(Ins) and then to verify whether the nouns occur with the modification in the selected CNC subcorpora, mentioned above. We elaborated lists of both productively and non-productively derived "intransitive" nouns. We applied the same procedure as with the "transitive" nouns (described in Section 2), including manual checking of all found examples in all five CNC subcorpora used. However, the "intransitive" nouns modified by A_1(Ins) are considerably less frequent than the "transitive" ones (on the average, we found 2 examples of each "intransitive" noun in some of the five CNC subcorpora). Thus we cite the absolute frequencies of the respective constructions only in one summarizing table (Table 4). Again, examples of nouns modified by both A_1(Ins) and another participant or complementation (A_2; category A in the Table) are separated from constructions with A_1(Ins) modification only (category B in the Table; for more details see Section 3).

"Intransitive" nouns and their modifications	Nouns derived from non-reflexive verbs		Nouns derived from reflexive verbs	
	Productively derived nouns (5 lemmas)	Non-productively derived nouns (2 lemmas)	Productively derived nouns (8 lemmas)	Non-productively derived nouns (2 lemmas)
A_1(Ins) + A_2 (category A)	9	1	14	2
A_1(Ins) only (category B)	3	5	3	0
Total	**12**	**6**	**17**	**2**

Table 4. "Intransitive" nouns modified by A_1(Ins): Ratio of presence of the second complementation to its absence (on data of five CNC subcorpora)

Although the examples of "intransitive" nouns modified by A_1(Ins) are rather rare we consider the constructions to be grammatically correct[5]. In the following sections, we classify the nouns according to the form of the second complementation, distinguishing two basic groups of the "intransitive" nouns, i.e. nouns derived from verbs that can be passivized (Section 2.2.1) and nouns derived from reflexive verbs (Section 2.2.2).

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[5] The situation is similar to that of productively derived, "transitive" nouns of communication, discussed in Section 2.1.

2.2.1 Nouns Derived from Verbs that Can be Passivized

Considering nouns derived from verbs that can be passivized, we started with the two nouns mentioned in [9, p. 41] and [20, p. 43], i.e. *domlouvání* 'talking-IPFV' and *nadržování* 'favouring-IPFV', and then extended the list by semantically or syntactically similar nouns, especially by nouns of communication and nouns of mental action with a participant, i.e. Patient or Addressee (ADDR), in the dative form. We searched for 17 productively derived nouns[6] and for 5 non-productively derived nouns[7]. A_1(Ins) was found with 3 productively derived nouns, i.e. *vyhrožování* 'threatening-IPFV', *napomáhání* 'helping-IPFV / aiding-IPFV', *porozumění* 'understanding-PFV', cf. (27a) to (29), and with 2 non-productively derived ones, i.e. *výpomoc* 'help', cf. (30), and *domluva* 'caution'; the noun *domluva* 'caution' occurred with A_1(Ins) only, cf. (57) in Section 3.

(27a) <u>*napomáhání tomuto trestnému činu*</u>.PAT *státními orgány*.ACT (SYN2009PUB)
aiding this-DAT.SG criminal-DAT.SG offence-DAT.SG state-INS.PL body-INS.PL
'aiding and abetting by state (power) bodies'

(28) <u>*vyhrožování rozhodčím*</u>.ADDR *trenérem*.ACT (SYN2006PUB)
threatening referee-DAT.PL coach-INS.SG
'threatening to the referees by the coach'

(29) <u>*porozumění věci*</u>.PAT *širší veřejností*.ACT (SYN2006PUB)
understanding issue-DAT.SG general-INS.SG public-INS.SG
'understanding the issue by the general public'

(30) … *okomentoval* <u>*výpomoc domácímu týmu*</u>.ADDR *sudími*.ACT … *trenér* (SYN2009PUB)
comment-PRT help-ACC.SG home-DAT.SG team-DAT.SG referee-INS.PL coach-NOM.SG
'the coach commented on the help to the home team by the referees'

After that, we searched the CNC subcorpora for nouns the source verbs of which can be passivized and, at the same time, they can be modified by a participant (mostly PAT), or an obligatory free modification (direction "where", marked by the functor DIR3) which is expressed by a prepositional group. We searched for 9 productively derived nouns[8] and

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[6] Namely *domlouvání* 'talking-IPFV' / *domluvení* 'talking-PFV', *důvěřování* 'trusting-IPFV', *křivdění* 'wronging-IPFV' / *ukřivdění* 'wronging-PFV', *lichocení* 'flattering-IPFV', *nadávání* 'scolding-IPFV', *nadržování* 'favouring-IPFV', *napomáhání* 'helping-IPFV / aiding-IPFV', *podlézání* 'bootlicking-IPFV', *pomáhání* 'helping-IPFV', *porozumění* 'understanding-PFV', *spílání* 'berating-IPFV', *uvěření* 'coming to believe', *vynadání* 'dressing down', *vyhrožování* 'threatening', *zabránění* 'preventing-PFV / prevention'.

[7] Namely *domluva* 'caution', *lichotka* 'flattery', *nadávka* 'insult', *výhrůžka* 'threat', *výpomoc* 'help'.

[8] Namely *pronikání* 'penetrating-IPFV' / *proniknutí* 'penetrating-PFV', *přihlížení* 'taking into account-IPFV' / *přihlédnutí* 'taking into account-PFV', *přispívání* 'contributing-IPFV' / *přispění* 'contributing-PFV', *přistoupení* 'joining-PFV / accession', *vniknutí* 'penetrating-PFV / entry', *vzpomínání* 'remembering-IPFV'.

for 1 non-productively derived noun, i.e. *průnik* 'penetration'. A_1(Ins) was found only with 2 productively derived nouns, i.e. *přistoupení* 'joining-PFV / accession' and *vniknutí* 'penetrating-PFV / entry', cf. (31) and (32).

(31) *možnost <u>přistoupení</u> k dluhu.*PAT *rodinnými příslušníky.*ACT (SYN2009PUB)
possibility accession-GEN.SG to debt-DAT.SG family-INS.PL member-INS.SG
'possibility of accession to the debt by the family members'

(32) *při neoprávněných <u>vniknutích</u> do krypty.*DIR3 *samozvanými správci.*ACT
bývalého koncentračního tábora (SYN2006PUB)
'during unjustified entries to the crypt by self-proclaimed administrators of the former concentration camp'

2.2.2 Nouns Derived from Reflexive Verbs

Reflexive verbs are considered not to allow to be changed to passive. However, our corpus-based material shows that some nouns derived from reflexive verbs can be modified by A_1(Ins). It concerns especially productively derived nouns (see examples below). Contrary to expectations, A_1(Ins) was found also with one non-productively derived noun (derived from verbs with a participant expressed by prepositionless genitive), i.e. *dotyk* 'touch', cf. (40). As for the reflexive particle *se / si* accompanying nouns derived by productive means (the particle is labeled by REFL in following examples), according to occurrences found in CNC subcorpora used, the particle is often kept but it can also be omitted. Non-productively derived nouns do not keep it at all [8, p. 188].

The most numerous subgroup of the nouns derived from reflexive intransitive verbs is represented by the nouns derived from verbs with a participant expressed by prepositionless objective genitive, e.g. productively derived nouns *dotazování se* 'questioning-IPFV', *dotknutí se* 'touching-PFV', *dovolání se* 'calling-PFV for', *dožití se* 'living-PFV to', *ujímání se* 'taking-IPFV care', *vzdání se* 'waiving-PFV', *zmocnění se* 'seizing-PFV / seizure', see (33) to (39), and one non-productively derived noun, *dotyk* 'touch', cf. (40). Although some nouns derived from verbs with a participant (PAT or ADDR) expressed by prepositionless genitive allow for modification by PAT or ADDR expressed by a possessive pronoun (e.g. *jejich.*ADDR *dotazování* 'their questioning', cf. Kolářová, to appear), there is no occurrence of combination of PAT or ADDR expressed by a possessive pronoun and Actor expressed by prepositionless Ins, but only occurrences of combination of PAT or ADDR in prepositionless genitive and Actor in instrumental.

(33) *<u>dotazování</u> 31 analytiků.*ADDR *agenturou.*ACT *Bloomgerg* (SYN2000)
questioning-NOM.SG 31 analyst-GEN.PL agency-INS.SG *Bloomgerg*
'questioning of 31 analysts by the agency Bloomberg'

(34) *<u>dotknutí</u> míče.*PAT *předchozím hráčem.*ACT (SYN2009PUB)
touching ball-GEN.SG preceding-INS.SG player-INS.SG
'touching of the ball by the preceding player'

(35) _dovolání se neplatnosti_.PAT _smlouvy tím_.ACT_, kdo neplatnost sám způsobil_ (SYN2009PUB)

calling_for REFL invalidity-GEN.SG contract-GEN.SG that-INS.SG

'calling for the invalidity of the contract by that who caused the invalidity himself'

(36) _dožití se konce_.PAT _pojištění pojištěným_.ACT (SYN2009PUB)

living_to REFL end-GEN.SG insurance-GEN.SG insured-INS.SG

'living to the end of the insurance by the insured'

(37) _ujímání se zvířátek_.PAT _hodnými lidmi_.ACT (SYN2006PUB)

taking_charge REFL (small_)animal-GEN.PL good-INS.PL people-INS

'taking charge of small animals by good people'

(38) _vzdání se tohoto práva_.PAT _zaměstnavatelem_.ACT (SYN2010)

waiving REFL this-GEN.SG right-GEN.SG employer-INS.SG

'waiving of this right by the employer'

(39) _zmocnění se televize_.PAT _teroristy_.ACT (SYN2009PUB)

seizure REFL television-GEN.SG terrorist-INS.PL

'seizure of the television by terrorists'

(40) _Dotyk sítě_.PAT _hráčem_.ACT _není chybou_ (SYN2006PUB)

touch net-GEN.SG player-INS.SG is not a mistake

'Touch of the net by a player is not a mistake.'

Modification by A_1(Ins) could also be possible with nouns derived from reflexive intransitive verbs with a participant expressed by prepositionless dative. We searched for the following productively derived nouns, i.e. _posmívání se_ 'laughing-IPFV', _vysmívání se_ 'mocking-IPFV'_, vyhýbání se_ 'avoiding-IPFV' / _vyhnutí se_ 'avoiding-PFV', and for one non-productively derived noun, i.e. _výsměch_ 'mockery'. However, A_1(Ins) was found only with the non-productively derived noun _výsměch_ 'mockery', cf. (41).

(41) _výsměch právu_.PAT _zástupcem_.ACT _státní moci_ (SYN2009PUB)

mockery law-DAT.SG representative-INS.SG state power-GEN.SG

'mockery of law by a state power representative'

Agent expressed by the form of instrumental is possible also with some nouns derived from reflexive intransitive verbs with an obligatory free modification expressed by a prepositional group (or an adverb), e.g. productively derived noun _vloupání se_ 'breaking-PFV in / break-in', cf. (42).

(42) _vloupání neznámým pachatelem_.ACT _do kiosku_.DIR3 _se spotřebním zbožím_ (SYN2000)

'break-in by an unknown perpetrator into the kiosk with consumer goods'

3   Constructions with A_1(Ins) only

It has been already mentioned that both nouns derived from transitive and intransitive verbs are expected to allow modification by A_1(Ins) when A_2 is present; in other words, constructions in which only A_1(Ins) is expressed are considered to be ungrammatical, cf. Karlík [9, p. 40], Procházková [20, p. 41] and examples (16) to (18) above.
[1] In the present paper, on the basis of studied corpus material, we would like to point out that various nouns occur with A_1(Ins) not only when A_2 is present, but also when A_2 is omitted on the surface.[9] Thus the theoretical statement about ungrammaticality of such constructions should be specified.

A classification of deletion types is closely related to the type of coreference between the deleted word and its antecedent; the coreference may be grammatical[10] or textual; for types of deletions in nominalized structures see [12, pp. 83-86], among others.

We have found numerous occurrences of deletion of A_2 based on textual coreference. The antecedent of the deleted A_2 can be easily determined from the previous or following context, however the coreference relation cannot be explained by grammatical properties of the constructions. The deletions of A_2 based on textual coreference apply to both nouns derived from transitive verbs and nouns derived from intransitive verbs. Again, it concerns nouns derived by productive means as well as nouns derived by non-productive means. As for productively derived nouns, constructions in which A_2 is omitted on the surface are represented by both perfective and imperfective nouns. However, according to absolute frequencies of "transitive" nouns, given in Table 1 and Table 2, the constructions are more frequent with the perfective nouns; with some imperfective nouns they do not occur at all.

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[9] Even one of the nouns listed in the constructions that are in the literature considered to be ungrammatical, i.e. the noun *vyprávění* 'telling', occurs in CNC subcorpora with A_1(Ins) only, cf. (17) and (24) above, and Table 1.

[10] We have found few occurrences in which the antecedent of the omitted A_2 could be identified on the basis of grammatical coreference; it concerns several verbs exhibiting the property of Control and their derivates. For example, we think it is the case of the verbs *předurčit / určit koho / co k čemu* 'to predetermine sb to do sth / for sth', and their adjectival derivates, i.e. *předurčený / určený k čemu* 'predetermined for sth'; as for the verbs (not typical representatives of verbs of Control), the grammatical coreference relation can be identified between the Controller (i.e. PAT(Acc) of the verbs *předurčit / určit* 'to predetermine') and the unexpressed Controllee, which is ACT within the active embedded objective clause or its nominalization modifying the verbs *předurčit / určit* 'to predetermine' (e.g. *předurčit koho, aby vykonal něco / k vykonání čeho* 'to predetermine sb to do sth / for doing sth') or PAT within the passive embedded objective clause or its nominalization modifying the verbs *předurčit / určit* 'to predetermine' (e.g. *předurčit výrobek k tomu, aby byl konzumován / ke konzumaci* 'to predetermine the product to be consumed / for consumption'). Typically, Controllee is an unexpressed "subject" of an infinitival construction modifying a verb of Control, e.g. *odhodlat se odejít / k odchodu* 'to resolve to leave / for leaving', however, also some verbs of Control without possibility to express the respective complementation by an infinitival construction exist, see [19]. We assume that in constructions of the verbs *předurčit / určit* 'to predetermine' and their adjectival derivates, the coreference relation between omitted A_2 and its antecedent can be interpreted on the basis of grammatical coreference, cf. *výrobek (je) předurčený / určený ke konzumaci lidmi*.ACT 'the product (is) predetermined for consumption by people', i.e. <u>*konzumace*</u> *výrobku lidmi* 'consumption of the product by people' is concerned.

"Transitive" productively derived nouns with A₁(Ins) only (e.g. perfective *odebrání* 'taking away', *vrácení* 'returning', *oznámení* 'announcing', and imperfective *ošetřování* 'treating', *požívání* 'consuming', *uvědomování si* 'being-IPFV aware / realization') are illustrated in (43) to (48).

(43) *čtyři [psi] jsou ... volní k odebrání novým chovatelem*.ACT (SYN2009PUB)
'four [dogs] are ... free for taking away by a new breeder'

(44) *průkazka bude, po vrácení poštou*.ACT*, uložena u nich* (SYN2009PUB)
'the identity card will be, after returning by the post office, deposited at their place'

(45) *Po oznámení rodiči*.ACT *policisté začali po neznámém muži pátrat.* (SYN20009PUB)
'After announcing by parents, policemen began to search for an unknown man.'

(46) *jeho zdravotní stav vyžaduje nezbytně ošetřování jinou osobou*.ACT (SYN2006PUB)
'his health condition requires indispensably treating by another person'

(47) *Maso nakažených zvířat je nevhodné pro požívání lidmi*.ACT. (SYN2006PUB)
'Meat of infected animals is not fitting for consuming by people.'

(48) *Soubor práv… byl budován po staletí uvědomováním si lidskou inteligencí*.ACT. (SYN2009PUB)
'Legal code was created during centuries by being_aware REFL by human intelligence.'

"Intransitive" productively derived nouns with A₁(Ins) only (e.g. *napomáhání* 'helping-IPFV / aiding-IPFV', *vyhrožování* 'threatening-IPFV', *vloupání se* 'breaking-PFV in / break-in', *dotazování se* 'questioning-IPFV', *vzdání se* 'surrendering-PFV') are exemplified in (49) to (53).

(49) *jakékoli napomáhání sestřičkou*.ACT *je … vyloučeno.* (SYN2009PUB)
'any helping by the nurse is … excluded'

(50) *horníci mluvili především o vyhrožování zaměstnavatelem*.ACT (SYN2005)
'miners talked mainly about threatening by the employer'

(51) *klasické vloupání neznámým pachatelem*.ACT. (SYN2000)
'classic break-in by an unknown perpetrator'

(52) *při běžném dotazování pracovníkem*.ACT (SYN2009PUB)
'during common questioning by the worker'

(53) *zánik platnosti zaregistrované ochranné známky např. <u>vzdáním se</u> jejím majitelem.*ACT (SYN2006PUB)

'expiration of the registered trademark e.g. by surrendering by its owner'

As for non-productively derived nouns, the "transitive" nouns with A_1(Ins) only, i.e. *dodávka* 'delivery', *konzumace* 'consumption', *výuka* 'teaching / instruction', are illustrated in (54) to (56).

(54) *v oblasti finálních <u>dodávek</u> velkou specializovanou firmou.*ACT (SYN2000)

'in the field of final deliveries by a big specialized company'

(55) *někteří lidé volí možnost <u>výuky</u> soukromým lektorem.*ACT. (SYN2009PUB)

'some people choose the possibility of teaching by a private language assistant'

(56) *rostliny, které... nejsou vhodné ke <u>konzumaci</u> člověkem.*ACT (SYN2006PUB)

'plants which ... are not fitting for consumption by a man'

The "intransitive" non-productively derived nouns with A_1(Ins) only, i.e. *domluva* 'caution', *výpomoc* 'help', are exemplified in (57) and (58). We find it interesting that there is even no occurrence of the noun *domluva* 'caution' modified by A_1(Ins) and A_2 (hypothetical example *domluva dětem strážníky* 'caution / talking to children by police officers'); there are three occurrences of the noun *domluva* 'caution' modified by A_1(Ins) only, i.e. without any other participant expressed.

(57) *Po <u>domluvě</u> strážníky.*ACT *děti z místa odešly.* (SYN2009PUB)

'After caution by police officers children left the place.'

(58) (in the context of the 30. anniversary of the occupation of former Czechoslovakia in the year 1968)

*30. výročí přátelské <u>výpomoci</u> spojeneckými armádami.*ACT (SYN2006PUB)

'30. anniversary of the friendly help by allied armies'

As for "transitive" nouns, the ratio of presence of A_2 (category A) to its absence on the surface (category B), in case a noun is modified by A_1(Ins), is captured in Tables 1-3; concerning "intransitive" nouns, the ratio is given in Table 4.

However, regardless the numerous examples of constructions with A_1(Ins) only, given above, there are nouns that probably really do not allow for modification by A_1(Ins) without expression of A_2 on the surface, and thus constructions with these nouns are hypothesized to be ungrammatical, cf. (59).

(59) ??<u>*ujímání se*</u> *hodnými lidmi.*ACT (introspective example)

taking_charge-NOM.SG REFL good-INS.PL people-INS

'taking charge by good people'

4   "Intransitive" Nouns: Discussion of the Results

In this section we summarize and discuss main observations concerning "intransitive" nouns that, according to the corpus material, allow for A_1(Ins). The total number of the "intransitive" nouns (lemmas) that occurred with A_1(Ins) is 17 (i.e. 13 productively derived nouns and 4 non-productively derived nouns) and the total number of occurrences of A_1(Ins) modifying the nouns is given in Table 4. However, despite the enlarged and corpus material, we do not answer the question why some nouns do not occur with A_1(Ins).

A_1(Ins) occurs with nouns derived from verbs that can be passivized as well as with nouns derived from reflexive verbs that do not allow to be changed to passive. These observations seem to correspond to Karlík's claim that the structures given above in (2) and (4) do not show structural differences corresponding with the active – passive voice distinction and thus A_1(Ins) is considered not to be licensed through passivization.

Modification by A_1(Ins) is possible with "intransitive" nouns representing various semantic classes: e.g. nouns of communication (e.g. *dotazování se* 'questioning', *vyhrožování* 'threatening'; *domluva* 'caution'), nouns of mental action (e.g. *porozumění* 'understanding'), nouns of motion (e.g. *vniknutí* 'penetrating'), nouns of location (e.g. *vloupání se* 'break-in'), nouns of contact (e.g. *dotknutí se* 'touching', *zmocnění se* 'seizing / seizure'; *dotyk* 'touch'), nouns of combining (e.g. *přistoupení* 'joining / accession').

Considering forms of the second complementation, the "intransitive" nouns can be modified by A_1(Ins) and at the same time by the second complementation (A_2) expressed by a prepositionless case (not only prepositionless dative, mentioned in the literature, but also prepositonless genitive)[11] as well as by a prepositional group (or an adverb).

As for nouns derived from verbs with a participant expressed by prepositionless genitive, an analogy to constructions corresponding to verbal transitive constructions is possible, cf. (60) and (61). The original adverbal case (i.e. Acc vs. Gen) does not seem to be so important. A_1(Ins) serves as one of possible forms for expression of Agent, used especially in cases when a noun denotes an action and other forms of Agent (possessives or genitive) are not possible or they are not proper from another reason; for example, it is well-known that a possessive adjective can be derived only under certain conditions; as for the genitive form of the Agent, in case A_2 is expressed, it would lead to constructions with double post-nominal genitives, cf. (62). One of the reasons for usage of A_1(Ins) instead of A_1(Gen) in case A_2 is omitted on the surface, is probably the fact that the genitive form may be syntactically ambiguous, thus the form of instrumental is used to avoid the ambiguity; we have in mind especially the case of the syntactic ambiguity of ACT and PAT, cf. (63), or the syntactic ambiguity of ACT and ADDR, cf. (64). Usage of A_1(Ins) instead of A_1(Gen) in order to avoid syntactic ambiguity of the genitive form holds also for nouns derived from transitive verbs, cf. (65) and (66).

(60) *přepadení televize*.PAT *teroristy*.ACT (introspective example)
attacking television-GEN.SG terrorist-INS.PL
'attacking of the television by terrorists'

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[11] Prepositionless instrumental is probably impossible as such a hypothetical construction would consist of two participants expressed by Ins, e.g. ??*pohrdání kým*.PAT *kým*.ACT 'contempt of sb by sb', ??*nákaza čím*.PAT *kým*.ACT 'getting infected with sth by sb'.

(61) _zmocnění se televize_.PAT _teroristy._ACT (SYN2009PUB)
seizure REFL television-GEN.SG terrorist-INS.PL
'seizure of the television by terrorists'

(62) _dožití pojištěné osoby_.ACT _sjednaného konce_.PAT _pojištění_ (SYN2009PUB)
living_to insured-GEN.SG person-GEN.SG agreed-GEN.SG end-GEN.SG
insurance-GEN.SG
'living of the insured person to the agreed end of the insurance'

(63) _sudí pískají každý dotyk hráče_.ACT/PAT _jako faul_ (SYN2006PUB)
'Referees signal by a whistle every touch of the player as a foul.'
'the player touches / the player is touched'

(64) _dotazování pracovníka_.ACT/ADDR (introspective example)
questioning-NOM.SG worker-GEN.SG
'questioning of the worker, i.e. the worker asks / the worker is asked'

(65) _poskytovat informace pouze na základě zmocnění rektora_.ACT/PAT (introspective
example)
to give information only on the basis of authorization rector-GEN.SG
'to give information only on the basis of authorization by the rector / of the rector'

(66) _poskytovat informace pouze na základě zmocnění rektorem_.ACT (SYN2006)
to give information only on the basis of authorization rector-INS.SG
'to give information only on the basis of authorization by the rector'

Other "intransitive" nouns seem to use the instrumental form of Agent analogically as well, although the second complementation is expressed by the form different from prepositionless genitive.

Considering nouns derived from verbs by productive means, we suppose the nouns modified by A_1(Ins) exemplified in the present paper denote an action. Also several nouns derived from verbs by non-productive means occurred with A_1(Ins), e.g. _domluva_ 'caution'. It would be interesting to study in detail whether the non-productively derived nouns denote an action as well. However, this issue goes beyond the major topic of this paper, and so we leave it for further research.

5   Conclusion

Czech nouns derived from intransitive verbs, both productively and non-productively derived nouns, allow for modification by A_1(Ins) to a higher extent than it has been expected. However, in comparison with "transitive" nouns they are less frequent. On the basis of corpus material, we considerably increased the list of "intransitive" nouns that

allow for A_1(Ins) modification and provided more detailed classification of the nouns according to the form of the second complementation and the semantic class the noun belongs to. It has turned out that modification by A_1(Ins) is possible not only with nouns derived from verbs that can be passivized, but also with nouns the source verbs of which cannot be changed to passive (it concerns especially nouns derived from reflexive verbs, both transitive and intransitive). Modification by A_1(Ins) is possible even when the second complementation A_2 is omitted on the surface, which should lead to the revision of the non-specific statement about ungrammaticality of such constructions.

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