

Language Typology and Language Universals Sprachtypologie und sprachliche Universalien La typologie des langues et les universaux linguistiques

An International Handbook /
Ein internationales Handbuch / Manuel international

Edited by / Herausgegeben von / Edité par
Martin Haspelmath · Ekkehard König
Wulf Oesterreicher · Wolfgang Raible

Volume 2 / 2. Halbband / Tome 2

Offprint / Sonderdruck / Tirage à part

Walter de Gruyter · Berlin · New York
2001

66. Causatives

1. Definitions
2. Formal types of causatives
3. Causative and related categories
4. Syntax of causative constructions
5. The semantics of causative verbs
6. Diachronic sources of causative affixes
7. Special abbreviations
8. References

1. Definitions

Causatives can be defined as verbs which refer to a **causative situation**, that is, to a causal relation between two events, one of which (P₂) is believed by the speaker to be caused by another (P₁); cf. e.g. Nedjalkov & Sil'nickij 1969a, 1973; Kastovsky 1973. In other words, a causative is a verb or verbal construction meaning 'cause to V_o', 'make V_o', where V_o stands for the embedded base verb. (For other possible definitions of causatives, see § 3.1.). Examples of **causative constructions** (hereafter, CC) are (1–3):

- (1) *John opened the door*
- (2) *Peter made John go*
- (3) Turkish (Comrie 1976: 263)
Ali Hasan-ı öl-dür-dü
 Ali:NOM Hasan-ACC die-CAUS-PAST
 'Ali killed Hasan.'

Opened, *made go*, and *öl-dür-dü* in (1–3) are causative verbs, because they refer to causal relations between causing events ('John did sth.', 'Peter did sth.', 'Ali did sth.') and caused events ('the door opened', 'John went', 'Hasan died') and thus all mean 'CAUSE to V_o' ('cause to open', 'cause to go', 'cause to die').

In some languages causative markers apply to both verbs and nominals (nouns, adjectives), forming verbs with the meaning 'make Q', where Q is a quality or the like (*transformatif* in Mel'čuk 1994: 323–324). This is, for instance, the case in Lakota, Nahuatl (cf. Tuggy 1987: 607–614) and many Austronesian languages. So, for example, in Karo Batak we find *galang* 'big' – *pe-galang* 'expand' and similarly in Acehnese *duek* 'sit' – *peu-duek* 'to place', *raja* 'king' – *peu-raja* 'make king; treat as a king', *dit* 'few' – *peu-dit* 'make few' (Durie 1985: 78–81); see also § 5.1.4.

The term **factitive** used to be employed in nearly the same sense as *causative*, particularly often to refer to causatives meaning 'make Q' ('make red', 'make angry', etc.). Nowadays it occurs rarely, except perhaps in the French and Semiticist traditions (cf., for instance, a detailed discussion of the causative/factitive distinction in Kouwenberg 1997: 237 ff.), although some grammars still use it to denote denominal causatives (see above). For a special sense of the term *factitive* adopted within the tradition of the Leningrad/St. Petersburg Typological School, see § 5.1.2.

2. Formal types of causatives

Formal types of causatives can be distinguished according to how the meaning 'cause' is expressed (for a survey, see Nedjalkov & Sil'nickij 1969b: 20–28 [= 1973: 1–10], Baron 1974: 302–310, Song 1996: 20–72).

2.1. Morphological causatives

In **morphological** causatives the causative morpheme is an affix which applies to the base (non-causative) verb, as in Turkish (cf. (3)), Sanskrit (cf. *pat-* 'fly' – *pāt-āya-ti* 'makes fly'), Arabic (cf. *fariha* 'be glad' – *farraha* 'make glad'); for a survey of morphological processes for marking causatives, see e.g. Dixon 2000: 33f.

2.2. Syntactic causatives

In **syntactic** causatives (other terms: *periphrastic*, or *analytic*, *causatives*) the causative morpheme is a free form, typically a verb meaning 'cause', 'make', 'let', 'give', etc.; cf. English *make go*, *let know*, German *gehen lassen*, French *faire aller*, *laisser aller*. Syntactic causatives are distinguished by many authors from constructions which refer to causative situations but do not represent cohesive units, thus being biclausal sentences. (The latter type of construction is sometimes also regarded as a syntactic causative, but this terminological use is less common; cf., for instance, Song's (1996: 35–67) *AND* type and *PURP(ose)* type as opposed to *COMPACT* type as well as the discussion in Moore & Polinsky 1998: 235 ff.). For instance, English *make* + INF, German *lassen* + INF, French *faire* + INF constructions are syntactic caus-

atives, while English *cause to* + INF, German *zwingen zu* + INF, Russian *zastavljat'* + INF are not. There are a number of syntactic and morphological criteria and features for distinguishing syntactic causatives (monoclausal CCs) from non-fused biclausal CCs; cf. Nedjalkov & Nikitina 1965, Nedjalkov 1971: 25–28 [= 1976: 35–39], Comrie 1976: 296–303, De Wolf 1985, Dixon 2000: 34–37 (where biclausal CCs are called 'periphrastic causatives' as opposed to 'same predicate' causatives) and the extensive literature on the clause union features (e.g. Fauconnier 1983, Zubizarreta 1985, Davies & Rosen 1988). Thus, verbs like German *lassen* or French *faire* in syntactic causatives lack many typical features of independent (non-auxiliary) verbs; in particular, they cannot have their own arguments, and they typically do not passivize (cf. (4d)), etc.:

- (4) (a) *Man zwang den Studenten abzureisen.*
'One forced the student to leave.'
(b) *Der Student wurde gezwungen abzureisen.*
'The student was forced to leave.'
(c) *Man ließ den Studenten abreisen.*
'One made/let the student leave.'
(d) **Der Student wurde abreisen gelassen.*
'The student was made leave.'

The distinction between syntactic causatives and non-fused CCs is by no means clear-cut; on the contrary, here we are obviously confronted with a continuum of degrees of fusion, rather than with a 'monoclausal/biclausal CCs' dichotomy.

2.3. Lexical causatives

Lexical causatives are verbs meaning 'CAUSE V_o' but lacking any regular and productive causative marker. They typically are in a suppletive relation with their non-causative counterparts, cf. *kill* – *die*. Historically, lexical causatives may go back to morphological causatives with a marker which was regular and productive in the older language, cf. Old English *cwellan* (> English *kill*) – *cwelan* 'die', English *fell* – *fall*; *lay* – *lie*, Russian *suš-i-t'* 'make dry' – *sox-nu-t'* 'become dry' (the suffix *-i-* in the Russian example is likely to go back to the same Indo-European source as the Sanskrit causative marker in *pāi-āya-ti* quoted in § 2.1., namely to IE *-ejele-). Lexical (lexicalized) causatives can even synchronically co-exist with the morphological causatives in which they originate, cf. Imbabura Quechua

wañu- 'die' – *wañu-chi-* 'cause to die' (morphological causative) – *wanchi-* 'kill' (lexical causative) (Muysken 1981: 450). In some cases it is difficult to draw a clear-cut distinction between morphological and lexical causatives; see e.g. Shibatani (2000: 525–528) on Japanese causatives.

There is a rich literature dealing with the problem of why lexical causatives like *kill* cannot be semantically derived from their non-lexicalized paraphrases. The discussion on why *kill* does not mean *cause to die*, triggered by McCawley (1968), arose chiefly in the framework of generative semantics; for a survey, see e.g. Shibatani (1976). The most comprehensive treatment of the issue and detailed argumentation against McCawley's approach can be found in Wierzbicka (1975); cf. also Horn (1984: 27–29). In particular, unlike lexical causatives, analytical CCs of the type *cause to die* lack such features as unity of place (*John caused Peter to die in Africa* does not imply that John was in Africa, while *John killed Peter in Africa* does), implication of physical contact, etc.

2.4. Labile verbs

A special subtype of lexical causatives are those which are formally indistinguishable from their non-causative counterparts, cf. English verbs like *open* and *move* which can be used both intransitively and transitively (as in (1)). There is, however, neither any consensus on whether such verbs should be treated as one lexical unit with two different syntactic uses or as two separate lexical units (cf. e.g. Kastovsky 1973), nor is there any generally accepted term for such verbs/pairs. Some typologists have borrowed the term **labile** from Caucasian linguistics to denote verbs which can be employed in different syntactic constructions (e.g. both as causatives and corresponding non-causatives) with no formal change in the verb. Other terms occurring in the literature are, for instance, *causative-decausative* (Dolinina 1989: 26f.), *voice-neutral* (Theckhoff 1980), *optionally transitive* (Miller 1993: 179f.), *ambitransitive* (Dixon 1994: 18, 54, 217f. et passim; 2000: 38f.). In the English tradition of the last few decades the intransitive member of pairs like *The door opened* – *John opened the door* is often termed **ergative** (cf. Keyser & Roeper 1984); see Dixon (1994: 18–21) for a criticism of this terminological use and Kulikov 1999a for a general survey.

2.5. Causative vs. anticausative (decausative)

The label **anticausative** is used to refer to the non-causative member of the opposition in the case where the directions of the semantic ('V_o' → 'CAUSE V_o') and formal derivation do not match, i.e. in those instances where the non-causative is morphologically more complex than the causative, cf. Russian *lomat* 'break' – *lomat'-sja* 'break, get broken'. This term (introduced in Nedjalkov & Sil'nickij 1969b: 20) is not as widely accepted as *causative*; other terms used in (nearly) the same sense are *decausative*, *inchoative*, (*pure*) *intransitive*, *middle*, *pseudo-passive*, *eventive*, *fientive*, etc. In Indo-European studies of the last ten years written in German the term 'fientive' has become the standard term used to refer to intransitive verbs expressing spontaneous event; this is due to the influential monograph Gotō 1987 (cf. p. 25 ff. et passim). For a survey and analysis of anticausatives, see Haspelmath (1987), Kulikov (1998b), Padučeva (2001) and (→ Art. 52); see also Abraham (1997) for a discussion of the causative/anticausative opposition and labile patterns in Germanic languages.

2.6. Formal types of causative oppositions in the languages of the world and productivity of the causative derivation

According to whether the causative or non-causative member of the opposition is typically marked formally, languages can be divided into two classes, i.e. a fundamentally intransitive class in which formally marked causatives are preferred and a fundamentally transitive class in which formally marked anticausatives are preferred; see Haspelmath 1993 for a survey. Descriptive and typological studies have revealed that the (morphological) causative belongs to the most frequently occurring derivational verbal categories (cf. Nichols 1992: 154 f.). In many languages morphological causatives can be derived from all (non-derived) verbs, whereas in other languages there are restrictions on the derivational possibilities. Specifically, in some languages causatives can be derived only from intransitives (early Vedic, Arabic, Indonesian, Mayan, Klamath) and in others they can be derived from intransitive and transitive but not ditransitive verbs (Abkhaz, Basque). However, we probably will not find languages where causatives can be derived from transitives but not intransitives; in fact, this is a universal formulated by Nedjalkov

(1966); cf. also Nedjalkov & Sil'nickij (1969b: 25–26 [= 1973: 7–8]) and Song (1996: 170–174). The modern Indo-European languages of Europe, most of which either have syntactic causatives (Germanic, Romance languages) and lack productive morphological causatives or have morphological anticausatives instead (Slavic), thus represent quite a rare language type.

3. Causative and related categories

3.1. Causatives *sensu latiore*, *sensu stricto* and "(just) transitives": a terminological note

The definition given in § 1. encompasses all verbs and constructions which refer to causal situations, regardless of their formal features and position within the verbal system of a given language, i.e. causatives in a wider sense (*causatives sensu latiore*). This terminological use is quite common, for instance, in general typological and semantic studies, but in grammatical descriptions of individual languages the term *causative* is more often employed in a narrower sense. By *causatives sensu stricto* one typically means only those verbs which (i) stand in regular opposition both formally and semantically to the corresponding non-causatives within the verbal system of a given language, (ii) are formally more complex than their non-causative counterparts, and (iii) represent a more or less productive formation. Thus, only morphological (cf. Turkish *öl-dür* 'kill') and syntactic (cf. *make go*) causatives qualify as *causatives sensu stricto*, while lexical causatives (*kill*, *open*), as well as verbs which are morphologically simpler than the corresponding non-causatives (anticausatives, cf. Russian *lomat* – *lomat'-sja*) and non-fused CCs (*cause to go*) do not. Furthermore, in many languages where causatives can double up (see § 5.2.), first (simple) causatives are typically less regular and productive than second causatives and/or can be built only or mostly on intransitive verbs (see § 2.6.). Correspondingly, in a variety of descriptive studies on verbal systems of individual languages only second (double) causatives are regarded as causatives properly speaking, while first causatives are termed (*just*) *transitives* and treated separately from *causatives (proper)* (although not always consistently; see the diagram below). Since this terminological convention appears to be quite inconsistent and confusing, the

author does not see any good reasons to abandon the use of the term *causative* in those cases where the meaning of the verb in question can be rendered as 'CAUSE V_o'; cf. Nedjalkov & Sil'nickij 1969b: 34 [= 1973: 16], fn. 17. For a general discussion of the distinction between causativity and transitivity, see e.g. Zide 1972, Desclés & Guentchéva 1998, Shibatani 2000: 525–528, 548–563.

The relation between the wider and narrow concepts of causatives can be schematized as in Table 66.1:

Table 66.1

causatives sensu latiore	lexical	suppletive (<i>kill</i>)	("non-causative") transitives
		labile (<i>open</i>)	
		non-productive morphological (<i>fell</i>)	
	morphological	less productive	causatives sensu stricto
		more productive	
	syntactic (<i>make go</i>)		
biclausal CCs (<i>cause to go</i>)			

3.2. Causative and voice

In a number of grammatical descriptions (in particular, in many Altaic and Uralic grammars) the causative is considered as one of the voices (*causative voice*, *kauzativnyjponuditel'nyj zalog*); see, in particular, Shibatani (2000: 547–548). Given a more rigorous definition of voice, however (see especially Mel'čuk 1993), there are several reasons for treating the causative separately. Unlike prototypical voices, such as the passive, the causative changes the lexical meaning of the base verb (see § 1.). The causative can also be combined with several voices within one form as, for example, in the case of passives derived from causatives, causatives derived from reflexives, etc.; see, for instance, Muysken 1981: 457 ff. on the interaction between the causative and other derivational processes in Quechua. Moreover, the causative can double up (see § 5.2.2.); cf. Mel'čuk (1993: 11; 1994: 324–326). See also Babby 1983 where the causative in Turkish is regarded as a grammatical voice, in contrast with the (anti)causative in Russian.

4. Syntax of causative constructions

Leaving aside biclausal CCs and assuming that a causative structure results from a fusion of a matrix and an embedded predicate (cf. Comrie 1976: 262; for a different view, see Song 1996: 166 ff.), the causativization scenario can be represented as follows. The predication referring to the caused event P₂ is embedded into the matrix predication (C_o CAUSE [X], whereby C_o is the causer and [X] is some unspecified event) as its second argu-

ment. (Cf., e.g., (2) which results from *Peter CAUSED [John went]*, i.e. P₂ = [*John went*]). This process of embedding one clause into another to produce a single, derived clause has an important syntactic repercussion. With respect to the structure of the caused event, causativization entails the introduction of a new subject, i.e. the *causer* of the matrix predication, into the underlying structure of the clause. This in turn forces an alteration in the status of the subject of the original clause. Semantically, its role is changed to that of a *causee* (the one who is caused to do/undergo something); syntactically, it is ousted as subject of the derived clause and relegated to some other syntactic function within the clause. The syntactic properties and, above all, the case marking of the causee depend on the syntactic and semantic structure of the embedded clause (for a survey of case marking in CCs, see Dixon 2000: 45–59) and are one of the most widely discussed topics in contemporary syntactic studies. Nearly all syntactic theories have raised this issue, as some kind of "testing ground" for their theo-

retical apparatus, and even an enumeration of different approaches to the syntax of CCs would be impossible within this article. I will only focus on the two most influential approaches, which will be referred to, for convenience, as the *grammatical relations approach* and the *semantic roles approach*.

4.1. The grammatical relations approach

4.1.1. "Paradigm case": syntactic demotion

The grammatical relations approach was most explicitly elaborated by Comrie (1976) (cf. also Comrie 1985: 335 ff.). The basic principle (labelled by Comrie "paradigm case") determining the syntactic changes accompanying causativization can be formulated as follows: the causee, ousted from the subject position by the causer, is demoted down the grammatical relations hierarchy (other terms: *case hierarchy*, *noun phrase accessibility hierarchy*) (Subject > Direct object > Indirect object > Oblique object) to the highest (= left-most) free position. This means that if the embedded verb is intransitive, transitive, or ditransitive (i. e. is constructed with both DO and IO), the causee appears as DO, IO, or Oblique object, respectively. Paradigm cases are provided by Romance languages (French (cf. (5)), Italian) or Turkish (cf. (6–8) from another Turkic language, Tuvan):

- (5) French (Comrie 1976: 262–263)
 (a) *Je ferai courir Henriette* (DO)
 'I shall make Henriette run.'
 (b) *Je ferai manger les gâteaux à Jean* (IO)
 'I shall make Jean eat the cakes.'
 (c) *Je ferai écrire une lettre au directeur par Jean* (Oblique Object)
 'I'll get Jean to write a letter to the director.'

Cf. also the Tuvan examples (6–8), where all the three grammatical relations in question (DO, IO, Oblique object) are encoded by case suffixes only (Kulikov 1998a: 260):

- (6) (a) *ool doŋ-gan*
 boy freeze-PAST
 'The boy froze.'
 (b) *ašak ool-du doŋ-ur-gan*
 old.man boy-ACC freeze-CAUS-PAST
 'The old man made the boy freeze.'
 (7) (a) *ašak ool-du ette-en*
 old.man boy-ACC hit-PAST
 'The old man hit the boy.'

- (b) *Bajır ašak-ka ool-du*
 Bajır old.man-DAT boy-ACC
ette-t-ken
 hit-CAUS-PAST
 'Bajır made the old man hit the boy.'

- (8) (a) *Bajır ool-ga bižek-ti ber-gen*
 Bajır boy-DAT knife-ACC give-PAST
 'Bajır gave the knife to the boy.'
 (b) *ašak Bajır-dan ool-ga bižek-ti*
 old.man Bajır-ABL boy-DAT knife-ACC
ber-gis-ken
 give-CAUS-PAST
 'The old man made Bajır give the knife to the boy.'

However, probably no language conforms exactly to what Comrie calls the "paradigm case" (cf. Song 1996: 160, Dixon 2000: 54–56), and even in languages which, at first glance, meet Comrie's generalization perfectly, like French, we are often faced with an alternative case marking, cf. (5 b) as opposed to (5 d) below. Exceptions to the "paradigm case" fall into two main classes, *extended demotion* and *syntactic doubling*.

4.1.2. Extended demotion

In some languages, the causee can "skip" one or more free positions in the hierarchy and hence be demoted more than necessary according to the "paradigm case". The most frequent type of extended demotion results in the marking of the causee in the same manner as the agent in passive constructions, as if causativization applied to the passivized embedded clause. This alternative "passive marking" competes in some languages with that conforming to the "paradigm case"; for instance, in French both (5 b) and (5 d) are acceptable:

- (5) (d) *Je ferai manger les gâteaux par Jean*

For a possible way of accounting for "passive marking" see e. g. Saksena 1980 b.

Rarer are other types of marking of the causee and still rarer are languages like Gilyak (Nivkh), where the special case ending *-ax* is used solely to express the embedded subject of CCs (cf. Nedjalkov, Otaina & Xolodovič 1969: 195 [= 1995: 77]).

4.1.3. Syntactic doubling

The causee can be demoted to a position which is already occupied – for instance, it can appear as another NP in the accusative alongside the embedded DO (cf. Aissen 1979: 156–201). However, some sophisticated syn-

tactic tests and criteria may reveal differences between NPs which show the same case marking, for instance, between the embedded DO and "new DO". In particular, in many languages only one of these may become a subject in passive constructions (e. g. only the causee), control possessive reflexives, as in (9), etc.:

- (9) Korean (Kozinsky & Polinsky 1993: 197)
ku salam-i_i apeci-lul_j accessi-lul_k
 the man-NOM father-ACC uncle-ACC
*caki(-uy)_{i/j/*k} pang-eyse ttayli-key*
 self(-GEN) room-LOC hit-PURP
hay-ess-ta
 do-PAST-DEC
 'This man_i made the father_j hit the uncle_k in his_{i/j/*k} room.'

Thus, only one of the two identically marked NPs bears a DO relation and there is no true syntactic doubling. For a comprehensive treatment of this issue, see Kozinsky & Polinsky (1993), Polinsky (1994). Moreover, syntactic criteria reveal that the causee may behave differently from any other (prototypical) object and retain a number of subject properties – even in cases where there is no coding conflict in terms of case marking (cf. Falk 1991).

4.2. The semantic roles approach

The semantic roles approach, most explicitly elaborated by Cole (1983) (cf. also Saksena 1980a, Böhm 1981, Alsina 1992, Alsina & Joshi 1991, Kemmer & Verhagen 1994), is an alternative to Comrie's "paradigm case". The grammatical relation of the causee in a CC is said to be primarily determined by its semantic role ("theta role"), specifically by its position in the Agency Hierarchy (Agent > Experiencer > Patient), rather than by the syntactic structure of the embedded clause, as in (10):

- (10) Quechua (Cole 1983: 118–119; cf. also Muysken 1981: 451–453)
 (a) *nuqa Fan-wan rumi-ta*
 I Juan-INS rock-ACC
apa-či-ni
 carry-CAUS-1SG
 'I had Juan carry the rock.'
 (b) *nuqa Fan-ta rumi-ta*
 I Juan-ACC rock-ACC
apa-či-ni
 carry-CAUS-1SG
 'I made Juan carry the rock.'

- (c) *nuqa runa-man rik^hu-či-ni*
 I man-DAT see-CAUS-1SG
 'I showed it to the man.'

Case marking on the causee is said to correspond to its semantic role (more Agent-like causee in (10 a), more Patient-like causee in (10 b), Experiencer in (10 c)). The cases where the marking on the causee is better accounted for by the "paradigm case", rather than in terms of semantic roles, are treated as resulting from the grammaticalization of the semantically based principle. For instance, subjects of intransitive verbs are said to be prototypical patients, therefore the embedded subject (causee) may tend to be marked as DO in all cases where the embedded clause is intransitive, regardless of whether it is a patient or not.

4.3. Other approaches

The majority of other approaches can be characterized according to whether the grammatical relation or semantic role is regarded as the salient parameter or whether these two explanatory strategies are combined to a lesser or greater degree (for a survey, see Kulikov 1994). For instance, Foley & Van Valin (1984) introduced within the framework of Role and Reference Grammar a hierarchy of accessibility of semantic roles to the Actor/Undergoer layer, which thus serves as an interface between semantic roles and grammatical relations; by combining elements of the two aforementioned approaches, this theory provides an explanation for some exceptions to Comrie's "paradigm case". A similar approach ('a proto-role account' of argument selection) is presented in Ackerman (1994). For yet another approach to the problem see Song 1996: 174 ff. (but also see Moore & Polinsky 1998: 245–247 for some criticism).

5. The semantics of causative verbs

5.1. Semantic types of causatives

The main semantic types of causatives occurring in the languages of the world are most comprehensively discussed by Nedjalkov & Sil'nickij (1969b: 28–35 [= 1973: 10–17]), Shibatani (1975: 40–72), Dixon (2000: 61–74) (mainly from a typological perspective) and Talmy (1976) (mainly from a logical perspective, illustrated by English examples only). The linguistically relevant types of causative meaning (i. e. those which can be

distinguished by means of distinct morphemes within some languages) are the following.

5.1.1. Direct vs. indirect causatives

According to whether the causer physically manipulates the causee in bringing about the caused event or not, one may distinguish between direct and indirect causatives; other pairs of terms employed to refer to these types of causatives are *manipulative* vs. *directive* causation (cf. Shibatani 1976: 31–38), *contact* vs. *distant* and *immediate* vs. *mediated* causation. The following examples from Zyrjan (Finno-Ugric) illustrate this difference:

- (11) Zyrjan (Lytkin 1957: 105)
puk- 'sit' – *puk-t-* 'lay' – *puk-öd-*
 'cause to sit.'

To put it differently, direct and indirect causatives can be distinguished as *causer-controlled* and *causee-controlled*; for this and other related features, see, e.g., Wierzbicka 1988: Ch. 3; Li 1991; Dixon 2000: 67–70; Shibatani 2000: 549–563.

A special subtype of indirect causation is the *curative* meaning ('ask someone to bring about P₂') attested e.g. in Finnish (cf. Pennanen 1986) and some other Finno-Ugric languages, as in (12):

- (12) Mansi (Rombandeeva 1973: 156 ff.)
ünt(u)- 'sit down' – *ünt-t(u)-* 'seat' –
ünt-t-u-pt(a)- 'ask to sit down.'

Very few languages distinguish between other, even more subtle types of indirect causation, as, for instance, Naukan Eskimo, which has several curative suffixes (*-hijka-*, *-sihijka-* 'ask to do sth.', *-hijur(a)-* 'order to do sth.', *-hijusar(a)-* 'persuade to do sth.'; see Menovščikov & Xrakovskij 1970).

5.1.2. Permissive

Permissive causatives express the situation where the causer permits the causee to bring about the caused event (P₂), without actually causing the causee to do so. In logical terms, the permissive of V₀ can be defined as 'non-causing [somebody] not to bring about V₀' (e.g. *allow to sleep* ≈ 'not cause not to be awake'), i.e. NOT(CAUSE(NOT(V₀))). The non-permissive causative (causative proper) can be termed **coercive**. Yet another term for coercive, introduced within the tradition of the Leningrad/St.Petersburg Typological School, is **factitive** (cf. Nedjalkov & Sil'nickij 1969b: 28 [= 1973: 10]), but this terminological use

is not widely accepted. A causative morpheme can express both permissive and coercive (factitive) meanings (as in Georgian, Quechua, Turkish, etc.), and verbs of permission (like English *let*) can easily develop into normal (non-permissive) causative auxiliaries (as was the case with German *lassen* or Dutch *laten*). Languages with special markers for permissive are very rare (cf. Kulikov & Nedjalkov 1992: 142).

5.1.3. Assistive

Assistive (cooperative) meaning ('help to bring about P₂', 'assist at bringing about P₂') does not incorporate the meaning 'CAUSE' and, strictly speaking, should be treated separately from causatives *sensu stricto*, but it is often rendered by the same marker as ordinary causatives (as in Georgian). In some languages this meaning is expressed by special morphemes (Quechua, Guarani, Cashibo (Peru) and some other Amerindian languages).

5.1.4. Declarative

Yet another meaning often expressed by the causative marker is **declarative**: 'speak about sb. as if s/he were bringing about P₂' (instead of 'cause sb. to bring about P₂'), 'consider Q' (e.g. 'consider bad' instead of the proper causative 'make bad'), attested, for instance, in Arabic, Lakota. As is the case with the assistive, the declarative does not incorporate the meaning 'CAUSE' and thus does not belong to causatives *sensu stricto*, but their close relationship is obvious ('speak about sb. as if s/he were bringing about P₂' ≈ 'cause P₂ to come about in someone's mind'). The declarative usage is common for both causatives and non-causative transitives in literary texts, where "a poet or storyteller is regarded as actually bringing about the events of which he speaks" (Ingalls 1991: 202). Ingalls presents evidence for this from Sanskrit and Latin; cf., e.g., the following Latin example (ibid.: 203):

- (13) Latin
Turgidus Alpinus jugulat dum Memnona, dumque defingit Rheni luteum caput ... (Horace)
 'While the turgid [poet] Alpinus cuts the throat of [King] Memnon; while he disfigures the muddy headwaters of the Rhine ...'

Declaratives and some other meanings close to them, such as 'treat as P', 'provide with

P', 'use P on sth.', are typical of denominal causatives (see § 1.); cf. Acehnese *peu-raja* 'make king' (causative proper), 'treat as a king' (declarative); *nan* 'name' – *peu-nan* 'to name', *taloe* 'rope' – *peu-taloe* 'tie up'.

5.1.5. Deliberate vs. accidental causation and other semantic oppositions

The opposition between **deliberate** (intentional) vs. **accidental** causation (attested, e.g., in Kashmiri, Bella Coola, Squamish; for a semantic discussion of this distinction, see Paducheva 1997), as well as the semantically related opposition between the non-agentive (inanimate) and agentive causer (e.g. in Swahili and Karo Batak), is much more rarely morphologically relevant than those discussed under § 5.1.1.–3. See also Wierzbicka (1988: Ch. 3) for other semantic contrasts within the systems of causatives.

5.2. Second causative, double causative and iconicity in the form-meaning relation

5.2.1. First vs. second causatives

In the case where two or more causatives differing in meaning can be derived from the same verbal root, they can be termed **first causative**, **second causative**, etc. respectively (for a general survey, see Kulikov 1993). First and second causatives are ordered in terms of their formal (morphological) complexity and degree of fusion, according to the following hierarchy:

lexical causative < morphological causative (with one or more causative affixes) < syntactic causative (monoclausal CC) < biclausal causative sentence

The main semantic types of opposition between first and second causatives are listed under § 5.1. Assuming that contact (direct) and coercive (factive) causation is more elementary than distant (indirect) and permissive, semantic and formal (morphological) complexity can be said to correlate iconically with each other, as well as with the productivity and regularity of the causative verb formation (see e.g. Wachowicz 1976: 77–90, Kulikov 1999b, Shibatani 2000: 549–571). In particular, indirect causatives are typically more complex from the morphological point of view, whereby the corresponding marker often incorporates that of the direct ("first") causative as, for instance, in Hindi (cf. causative suffixes *-ā-* and *-vā-*; see Saksena 1982a;

1983 for discussion), Mansi (cf. (12)), etc. Furthermore, the morphologically simpler first causatives are often less regular from the semantic point of view. In particular, they can show some idiomatic semantic changes, denoting pragmatically more common unmarked (conventional) situations than second causatives do (e.g. 'play with [a child]' or 'amuse [a child]', instead of 'make [a child] play'; cf. Kulikov 1999b: 53–55, Shibatani 2000: 561–562). Such oppositions can be interpreted in terms of the division of pragmatic labor; cf. Horn 1984: 27–29. Likewise, English periphrastic *make*-causatives are syntactically and semantically simpler than *have*-causatives, which, in turn, are simpler than biclausal causative sentences with *cause*; cf. Baron 1974: 333–334, Givón 1975; Shibatani 1976, Terasawa 1985. On the subtle semantic differences between *make*- and *have*-causatives (and similar oppositions in other languages), which do not amount to the direct/indirect distinction, see Wierzbicka (1988: Ch. 3); see also Verhagen & Kemmer (1997) for an interpretation of the distinction between Dutch *doen*- and *laten*-causatives (= direct vs. indirect causation) in cognitive terms. For a general interpretation of the complexity of causatives in terms of iconicity (i.e. greater linguistic distance between cause and effect signals greater conceptual distance between cause and result and between causer and cause), see Comrie (1985: 332–334), Haiman (1985: 108–111), Kulikov (1999b), Dixon (2000: 74–78); cf. also Song (1992) for some counter-evidence.

5.2.2. Double causatives

Double causatives are derived from the first ("simple") causative by adding a second causative morpheme, thus representing a special subtype of the second causative with a complex causative marker incorporating the first causative marker. Such formations are especially common in agglutinative languages where affixes easily combine with each other and iterate. Double causatives (as well as rarer triple etc. causatives) typically express a double (triple, etc.) causative chain, as in (14):

- (14) Chuvash (Kornilov et al. 1969: 247 f.)
xīr- 'shave' – *xīr-tar-* 'ask to shave'
 – *xīr-tar-tar-* 'cause to ask to shave.'

Less trivial, but no less iconic, are the cases where iteration of the causative marker expresses intensivity, iterativity, plurality of some

participants of the causative situation or semantically more complex causative meanings discussed under § 5.1. such as the distant causation (cf. Kulikov 1993: 128–134; 1999b: 52–53).

5.3. Polysemy of causative markers

Alongside causative meanings proper, causative markers have other functions in some languages; for a survey of this polysemy, see Nedjalkov (1966), Nedjalkov & Sil'nickij (1969b: 35–43 [= 1973: 17–25]), Kulikov & Nedjalkov (1992: 143–145).

5.3.1. Valence-increasing derivations

Most such secondary functions belong together with causatives to the sphere of **valence-increasing** (transitivizing) **derivations**. These include the assistive and the declarative (both are often treated as subtypes of the causative meaning, see § 5.1.3.–4.) as well as the applicative. The applicative is attested, e.g., in Chukchee, some Australian languages, such as Pitta-Pitta, Kalkatungu and Yidiny (see Austin 1997), and in Uto-Aztecan languages, cf. Nahuatl *ni-mēwa* 'I arise' – *ni-k-mēwi-liya* 'I raise him', *ni-čahči* 'I shout' – *ni-k-čahči-liya* 'I shout to him' (see Tuggy 1987). The applicative includes different subtypes, in particular, the benefactive ('do' – 'do for someone', attested e.g. in Indonesian) and the comitative ('come' – 'come with someone', attested e.g. in Chukchee and many Amazonian (Arawak) languages, such as Tariana; see Wise 1990, Aikhenvald 1998: 56–58), sometimes treated as separate valence-increasing categories. For the causative/applicative polysemy, see, in particular, Austin (1997), Dixon & Aikhenvald (1997: 77 ff.), Shibatani (2000: 563–571).

5.3.2. Causative/passive polysemy

In Korean, some Altaic languages of Siberia (Tuvan, Yakut, Mongolian, Manchu and other Tungusic languages), some West African languages (Songhai, Dogon), Bella Coola (Amerindian) and some other languages of the world, verbs with causative markers can also function as **passives**, as in (15):

- (15) Manchu (I. Nedyalkov 1991: 5)
 (a) *Bata i-mbe va-ha*
 enemy he-ACC kill-PAST
 'The enemy killed him.'
 (b) *I bata-be va-bu-ha*
 he enemy-ACC kill-CAUS/PASS-PAST
 'He made (somebody) kill the enemy.'

- (c) *I (bata-de) va-bu-ha*
 he (enemy-DAT) kill-CAUS/PASS-PAST
 'He is/was killed (by the enemy).'

The passive usage is likely to have developed, most often and quite naturally, from the permissive (e.g. 'I let someone catch my hand' → 'I was grabbed by the hand', etc.) and/or from the reflexive-causative meanings ('I let someone photograph myself' → 'I was photographed'). For a general discussion, see Nedjalkov (1964), Andersen (1991: 75–82) (on cognitive sources of the causative/passive polysemy), I. Nedyalkov (1991), Plungian (1993), Washio (1993), Knott (1995).

5.3.3. Reciprocal

Yet another meaning of the valence-changing type which can be expressed by causative markers is the **reciprocal**. This rare type of polysemy occurs, for instance, in some Austronesian (e.g. Nakanai, Tanga; cf. Li 1991: 347–349) and Maipuran Arawakan languages (e.g. Piro, cf. Wise 1990).

5.3.4. Intensive, iterative, distributive

Some other functions, such as the **intensive** (as in (16)), the **iterative** or the **distributive** appear less motivated, since, unlike causatives, they do not imply any valence change:

- (16) Arabic (Premper 1987: 89–90)
 (a) *'alima* 'learn' – *'allama* 'teach' (causative);
 (b) *daraba* 'hit' – *darraba* 'hit strongly' (intensive).

This type of polysemy can probably be accounted for within the approach to transitivity as a complex set of features all concerned with the effectiveness with which an action takes place (Hopper & Thompson 1980). Causativization is a transitivity-increasing derivation and therefore may be secondarily associated with aspectual meanings (or *aktionsarten*) corresponding to a greater degree of effectiveness. Causing someone to do something implies channelling extra force from outside into the situation, the meaning 'more forcefully', 'more effectively' being thus the common semantic denominator shared by the causativity, on the one hand, and intensity, iterativity etc., on the other; for more evidence and discussion, see Li (1991: 349–351), Golovko (1993), Maslova (1993), Kulikov (1999c).

6. Diachronic sources of causative affixes

In some languages causative markers can be traced back to certain free forms or affixes with other functions. In particular, causative affixes can go back to syntactic causatives built with separate verbs meaning 'make', 'let', 'give', etc.; see under § 2.2. Other typical sources of causative morphemes are directional or benefactive affixes; cf. Song 1990: 169–193 [≈ 1996: 80–106]. For instance, in Lamang (Chadic) the causative suffix *-ŋà* may be related to the benefactive preposition *-ŋgà*; in Kxoe (Central Khoisan) the causative suffix *-kà* is identical to the directional preposition *-kà*. Finally, causative markers can develop from the verbal affixes with non-causative meanings listed under § 5.3.3. (intensive, iterative); cf. Li 1991.

Acknowledgements

I am much indebted to W. Abraham, W. F. H. Adelaar, P. K. Andersen, T. Bynon, M. Haspelmath, K. Kiryu, E. König, F. H. H. Kortlandt, A. M. Lubotsky, V. P. Nedjalkov, N. Nicholas, I. A. Nikolaeva, V. A. Plungian, N. M. Rodina, Th. C. Schadeberg, M. Shibatani, J. J. Song, T. Tsunoda, H. Vater, V. Velupillai and T. Zehnder for critical remarks and valuable comments on earlier drafts of this paper.

7. Special abbreviations

CC	causative construction
DEC	declarative
INS	instrumental
PURP	purpose

8. References

- Abraham, Werner. 1997. "Kausativierung und De-kausativierung: zu Fragen der verparadigmatischen Markierung in der Germania". In: Birkmann, Th. et al. (eds.). *Vergleichende germanische Philologie und Skandinavistik. Festschrift für Otmar Werner*. Tübingen: Niemeyer, 13–28.
- Abraham, Werner & Kulikov, Leonid (eds.). 1999. *Tense-aspect, transitivity and causativity. Essays in honour of Vladimir Nedjalkov*. (Studies in Language Companion Series, 50). Amsterdam: Benjamins.
- Ackerman, Farrell. 1994. "Entailments of predicates and the encoding of causees". *Linguistic Inquiry* 25.3: 535–547.
- Aikhenvald, Alexandra Y. 1998. "Transitivity increasing operations in Tariana". In: Kulikov & Vater (eds.), 47–59.
- Aissen, Judith L. 1979. *The syntax of causative constructions*. New York: Garland.
- Alsina, Alex. 1992. "On the argument structure of causatives". *Linguistic Inquiry* 23.4: 517–555.
- Alsina, Alex & Joshi, Smita. 1991 [1993]. "Parameters in causative constructions". In: Dobrin, Lise M. et al. (eds.). *Papers from the 27th regional meeting of the Chicago Linguistic Society*. Pt. 1: The General Session. Chicago: Chicago Linguistic Society, 1–15.
- Andersen, Paul Kent. 1991. *A new look at the passive*. (Duisburger Arbeiten zur Sprach- und Kulturwissenschaft, 11). Frankfurt am Main etc.: Peter Lang.
- Austin, Peter. 1997. "Causatives and applicatives in Australian Aboriginal languages". In: Matsumura, Kazuto & Hayasi, Toru (eds.). *The dative and related phenomena*. Tokyo: Hitsuji Shobo, 165–225.
- Babby, Leonard H. 1983. "The relation between causative and voice: Russian vs. Turkish". *Wiener Slawistischer Almanach* 11 [Fs. I. Mel'čuk]: 61–88.
- Baron, Naomi S. 1974. "The structure of English causatives". *Lingua* 33: 299–342.
- Bennett, David C.; Bynon, Theodora & Hewitt, B. George (eds.). 1995. *Subject, voice and ergativity: Selected essays*. London: School of Oriental and African Studies, University of London.
- Böhm, Roger. 1981. "On causing without a subject". *Lingua* 53.1: 3–31.
- Cole, Peter. 1983. "The grammatical role of the causee in universal grammar". *International Journal of American Linguistics* 49.2: 115–133.
- Comrie, Bernard. 1976. "The syntax of causative constructions: Cross-language similarities and divergencies". In: Shibatani (ed.), 261–312.
- . 1985. "Causative verb formation and other verb-deriving morphology". In: Shopen, Timothy (ed.). *Language typology and syntactic description*. Vol. III. *Grammatical categories and the lexicon*. Cambridge: Cambridge University Press, 309–348.
- Comrie, Bernard & Polinsky, Maria (eds.). 1993. *Causatives and transitivity*. (Studies in Language Companion Series, 23). Amsterdam: Benjamins.
- Davies, William & Rosen, Carol. 1988. "Unions as multi-predicate clauses". *Language* 64.1: 52–88.
- Desclés, Jean-Pierre & Guentchéva, Zlatka. 1998. "Causalité, causativité, transitivité". In: Kulikov & Vater (eds.), 7–27.
- De Wolf, Charles M. 1985. "Case marking, causatives, and constituency: A non-transformational approach". *General Linguistics* 25.4: 236–272.
- Dixon, Robert M. W. 1994. *Ergativity*. (Cambridge Studies in Linguistics, 69). Cambridge: Cambridge University Press.

- . 2000. "A typology of causatives: form, syntax and meaning". In: Dixon & Aikhenvald (eds.), 30–83.
- Dixon, Robert M. W. & Aikhenvald, Alexandra Y. 1997. "A typology of argument-determined constructions". In: Bybee, Joan et al. (eds.). *Essays on language function and language type: Dedicated to T. Givón*. Amsterdam: Benjamins, 71–113.
- Dixon, Robert M. W. & Aikhenvald, Alexandra Y. (eds.). 2000. *Changing valency: case studies in transitivity*. Cambridge: Cambridge University Press.
- Dolinina, Inga B. 1989. *Sintaksičeski-značimye kategorii anglijskogo glagola*. Leningrad: Nauka.
- Durie, Mark. 1985. *A grammar of Acehnese*. (Verhandeligen van het Koninklijk Instituut voor Taal-, Land- en Volkenkunde, 112). Dordrecht: Foris.
- Eilfort, William H. et al. (eds.). *Causatives and agentivity. Papers from the Parasession on causatives and agentivity at the 21st regional meeting of the Chicago Linguistic Society*. Chicago: Chicago Linguistic Society.
- Falk, Yehuda N. 1991. "Causativization". *Journal of Linguistics* 27.1: 55–79.
- Fauconnier, Gilles. 1983. "Generalized union". In: Tasmowski, Liliane & Willems, Dominique (eds.). *Problems in syntax*. (Studies in language, 2). New York: Plenum Press; Ghent: Communication and Cognition, 195–229.
- Foley, William A. & Van Valin, Robert D., Jr. 1984. *Functional syntax and universal grammar*. (Cambridge Studies in Linguistics, 38). Cambridge etc.: Cambridge University Press.
- Givón, Talmy. 1975. "Cause and control: On the semantics of interpersonal manipulation". In: Kimball, John P. (ed.). *Syntax and semantics*, vol. 4. New York etc.: Academic Press, 59–89.
- Golovko, Evgeniy V. 1993. "On non-causative effects of causativity in Aleut". In: Comrie & Polinsky (eds.), 385–390.
- Gotō, Toshifumi. 1987. *Die "I. Präsensklasse" im Vedischen: Untersuchung der vollstufigen thematischen Wurzelpräsentia*. (Österreichische Akademie der Wissenschaften. Philos.-Hist. Klasse. Sitzungsberichte, 489). Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- Haiman, John. 1985. *Natural syntax: Iconicity and erosion*. (Cambridge Studies in Linguistics, 44). Cambridge etc.: Cambridge University Press.
- Haspelmath, Martin. 1987. *Transitivity alternations of the anticausative type*. (Institut für Sprachwissenschaft, Arbeitspapier, 5 (Neue Folge)). Köln.
- . 1993. "More on the typology of inchoative/causative verb alternation". In: Comrie & Polinsky (eds.), 87–120.
- Hopper, Paul J. & Thompson, Sandra A. 1980. "Transitivity in grammar and discourse". *Language* 56.2: 251–299.
- Horn, Laurence R. 1984. "Toward a new taxonomy for pragmatic inference: Q-based and R-based implicature". In: Schiffrin, Deborah (ed.). *Meaning, form, and use in context: Linguistic applications*. Washington: Georgetown University Press, 11–42.
- Ingalls, Daniel H. H. 1991. "A note on Pāṇini 3.1.26, *Vārttika* 8." In: Deshpande, Madhav M. & Bhate, S. (eds.). *Pāṇinian studies. Professor S. D. Joshi felicitation volume*. (Michigan papers on South and Southeast Asia, 37). Ann Arbor: Center for South and Southeast Asian studies, The University of Michigan, 201–208.
- Kastovsky, Dieter. 1973. "Causatives". *Foundations of Language* 10: 255–315.
- Kemmer, Suzanne & Verhagen, Arie. 1994. "The grammar of causatives and the conceptual structure of events". *Cognitive Linguistics* 5.2: 115–156.
- Keyser, Samuel Jay & Roeper, Thomas. 1984. "On the middle and ergative constructions in English". *Linguistic Inquiry* 15.3: 381–416.
- Knott, Judith. 1995. "The causative-passive correlation". In: Bennett et al. (eds.), 53–59.
- Kornilov, G. E.; Xolodovič, A. A. & Xrakovskij, V. S. 1969. "Kauzativy i antikauzativy v čuvašskom jazyke". In: Xolodovič (ed.), 238–259.
- Kouwenberg, Norbertus J. C. 1997. *Gemination in the Akkadian verb*. (Studia Semitica Neerlandica, 32). Assen: Van Gorcum.
- Kozinsky, Isaac & Polinsky, Maria. 1993. "Causee and patient in the causative of transitive: Coding conflict or doubling of grammatical relations?" In: Comrie & Polinsky (eds.), 177–240.
- Kulikov, Leonid I. 1993. "The 'second causative': A typological sketch". In: Comrie & Polinsky (eds.), 121–154.
- . 1994. "Tipologija kauzativnyx konstrukcij v sovremennyx sintaksičeskix teorijax". In: Belikov, Vladimir I. et al. (eds.). *Znak: Sbornik statej po lingvistike, semiotike i poetike pamjati A. N. Žurinskogo*. Moskva: Russkij učebnyj centr MS, 48–60.
- . 1998a. "Causative constructions in Tuvinian: towards a typology of transitivity". In: Johanson, Lars et al. (eds.). *The Mainz Meeting. Proceedings of the Seventh International Conference on Turkish Linguistics*. (Turcologica, 32). Wiesbaden: Harrassowitz, 258–264.
- . 1998b. "Passive, anticausative and classification of verbs: the case of Vedic". In: Kulikov & Vater (eds.), 139–153.
- . 1999a. "May he prosper in offspring and wealth (A few jubilee remarks on the typology of labile verbs and Sanskrit *pūṣyati* 'prosper; makes prosper')". In: Rakhilina, Ekaterina V. & Tselets, Yakov G. (eds.). *Tipologija i teorija jazyka: Ot opisanija k ob'jasneniju. K 60-letiju A. E. Kibrika*. [Typology and linguistic theory: From description to explanation. For the 60th birthday of Aleksandr

- E. Kibrik]. Moskva: "Jazyki ruskoj kul'tury", 224–244.
- . 1999b. "Remarks on double causatives in Tuvan and other Turkic languages". *Journal de la Société Finno-Ugrienne* 88: 49–58.
- . 1999c. "Split causativity: remarks on correlations between transitivity, aspect, and tense". In: Abraham & Kulikov (eds.), 21–42.
- Kulikov, Leonid I. & Nedjalkov, Vladimir P. 1992. "Questionnaire zur Kausativierung". *Zeitschrift für Phonetik, Sprachwissenschaft und Kommunikationsforschung* 45.2: 137–149.
- Kulikov, Leonid & Vater, Heinz (eds.). 1998. *Typology of verbal categories: Papers presented to Vladimir Nedjalkov on the occasion of his 70th birthday*. (Linguistische Arbeiten, 382). Tübingen: Niemeyer.
- Li, Fengxiang. 1991. "An examination of causative morphology from a cross-linguistic and diachronic perspective". In: Dobrin, Lise M. et al. (eds.). *Papers from the 27th regional meeting of the Chicago Linguistic Society*. Pt. 1: The General Session. Chicago: Chicago Linguistic Society, 344–359.
- Lytkin, Vasilij I. 1957. "Ponuditel'nyj zalog v permskix jazykax". *Učenyje zapiski Udmurtskogo NII IELJa* 18: 93–113.
- Maslova, Elena S. 1993. "The causative in Yukaghir". In: Comrie & Polinsky (eds.), 271–285.
- McCawley, James D. 1968. "Lexical insertion in a transformational grammar without deep structure". In: Darden, Bill J. et al. (eds.). *Papers from the 4th regional meeting of the Chicago Linguistic Society*. Chicago: Chicago Linguistic Society, 71–80.
- Mel'čuk, Igor A. 1993. "The inflectional category of voice: towards a more rigorous definition". In: Comrie & Polinsky (eds.), 1–46.
- . 1994. *Cours de morphologie générale (théorique et descriptive)*. Vol. II/2: *Significations morphologiques*. Montréal: Les Presses de l'Université de Montréal.
- Menovščikov, Georgij A. & Xrakovskij, Viktor S. 1970. "Kauzativnye glagoly i kauzativnye konstrukcii v škimoskom jazyke". *Voprosy jazykoznanija* 4: 102–110.
- Miller, J. Gary. 1993. *Complex verb formation*. Amsterdam: Benjamins.
- Moore, John & Polinsky, Mary. 1998. Review of: Song 1996. *Linguistic Typology* 2.2: 231–251.
- Muysken, Pieter. 1981. "Quechua causatives and logical form: a case study of markedness". In: Belletti, Adriana et al. (eds.). *Theory of markedness in generative grammar: proceedings of the 1979 GLOW conference*. Pisa: Scuola Normale Superiore di Pisa, 445–473.
- Nedjalkov, Vladimir P. 1964. O svyazi kauzativnosti i passivnosti. *Učenyje zapiski Baškirtskogo universiteta* 21. *Seriya filologičeskix nauk* 9 (13): 301–310.
- . 1966. Ob areal'nyx universalijax (na materiale kauzativnyx glagolov). In: *Konferencija po problemam izučenija universal'nyx i areal'nyx svojstv jazykov*. Tezisy dokladov. Moskva, 55–58.
- . 1971. *Kauzativnye konstrukcii v nemeckom jazyke: Analitičeskij kauzativ*. Leningrad: Nauka. (German translation: *Kausativkonstruktionen*. (Studien zur Deutschen Grammatik, 4). Tübingen: Narr, 1976).
- Nedjalkov, Vladimir P. & Nikitina, Tamara N. 1965. "O priznakax analitičnosti i služebnosti (na materiale kauzativnyx konstrukcij)". In: Žirmunskij, V. M. & Sunik, O. P. (eds.). *Analitičeskije konstrukcii v jazykax različnyx tipov*. Moskva – Leningrad: Nauka, 170–193.
- Nedjalkov, Vladimir P.; Otaina, Galina A. & Xolodovič, Aleksandr A. 1969. "Morfologičeskij i leksičeskij kauzativ v nivxskom jazyke". In: Xolodovič (ed.), 179–199. (English translation: "Morphological and lexical causatives in Nivkh". In: Bennett et al. (eds.), 60–81).
- Nedjalkov, Vladimir P. & Sil'nickij, Georgij G. 1969a. "Tipologija kauzativnyx konstrukcij". In: Xolodovič (ed.), 5–19. (German translation: "Typologie der kausativen Konstruktionen". *Folia Linguistica* 6.3/4 (1973): 273–290).
- . 1969b. "Tipologija morfologičeskogo i leksičeskogo kauzativov". In: Xolodovič (ed.), 20–50. (English translation: "The typology of morphological and lexical causatives". In: Kiefer, Ferenc (ed.). 1973. *Trends in Soviet theoretical linguistics*. Dordrecht etc.: Reidel, 1–32).
- Nedjalkov, Igor V. 1991. Recessive-accessive polysy of verbal affixes. *Languages of the world* 1: 4–31.
- Nichols, Johanna. 1992. *Linguistic diversity in space and time*. Chicago – London: The University of Chicago Press.
- Paducheva [Padučeva], Elena V. 1997. "Verb categorization and the format of a lexicographic definition (semantic types of causative relations)". In: Wanner, Leo (ed.). *Recent trends in meaning-text theory*. (Studies in Language Companion Series, 39). Amsterdam: Benjamins.
- . 2001. "Russkij dekauzativ i ego formal'nye modeli". *Naučno-texničeskaja informacija* (Ser. 2): 1, 23–34.
- Pennanen, Esko V. 1986. "On the so-called curative verbs in Finnish". *Finnisch-ugrische Forschungen* 47.2–3: 163–182.
- Plungian, Vladimir A. 1993. "Three causatives in Dogon and the overlapping of causative and passive markers". In: Comrie & Polinsky (eds.), 391–396.
- Polinsky, Maria. 1994. "Double objects in causatives: Towards a study of coding conflict". *Studies in Language* 19.1: 129–221.
- Premper, Waldfried. 1987. *KAUSATIVIERUNG im Arabischen* (Ein Beitrag zur sprachlichen Dimen-

sion der PARTIZIPATION). (Arbeiten des Kölner Universalien-Projekts [AKUP], 66). Köln: Institut für Sprachwissenschaft.

Rombandeewa, Evdokija I. 1973. *Mansijskij (vogul'skij) jazyk*. Moskva: Nauka.

Saksena, Anuradha. 1980a. "The affected agent". *Language* 56.4: 812–826. (= Ch. 4–5 in Saksena 1982b).

–. 1980b. "The source of causative contrast". *Lingua* 51: 125–136. (= Ch. 3 in Saksena 1982b).

–. 1982a. "Contact in causation". *Language* 58.4: 820–831. (= Ch. 6 in Saksena 1982b).

–. 1982b. *Topics in the analysis of causatives: with an account of Hindi paradigms*. (University of California Publications in Linguistics, 98). Berkeley: University of California Press.

–. 1983. "A semantic model of causative paradigms". *Lingua* 59.1: 77–94. (= Ch. 7 in Saksena 1982b).

Shibatani, Masayoshi. 1975. *A linguistic study of causative constructions*. Bloomington, Indiana.

–. 1976. "The grammar of causative constructions: A conspectus". In: Shibatani (ed.), 1–40.

–. 2000. "Issues in transitivity and voice: Japanese perspective". *Bull. Faculty of Letters, University of Kobe* 27: 523–586.

Shibatani, Masayoshi (ed.). 1976. *The grammar of causative constructions*. (Syntax and semantics, 6). New York etc.: Academic Press.

Song, Jae Jung. 1990. "On the rise of causative affixes: a universal-typological perspective". *Lingua* 82: 151–200. (= Ch. 3 in Song 1996).

–. 1992. "A note on the iconicity in causatives". *Folia Linguistica* 26.3–4: 333–338.

–. 1996. *Causatives and causation: A universal typological perspective*. London etc.: Longman.

Talmy, Leonard. 1976. "Semantic causative types". In: Shibatani (ed.), 43–116.

Tchekhoff, Claude. 1980. The organization of a voice-neutral verb: An example in Avar. *International Review of Slavic Linguistics* 5: 219–230.

Terasawa, Jun. 1985. "The historical development of the causative use of the verb *make* with an infinitive". *Studia Neophilologica* 57: 133–143.

Tuggy, David. 1987. "Náhuatl causative/applicative in cognitive grammar". In: Rudzka-Ostyn, Brygida (ed.). *Topics in cognitive linguistics*. (Current Issues in Linguistic Theory, 50). Amsterdam: Benjamins, 587–618.

Verhagen, Arie & Kemmer, Suzanne. 1997. "Interaction and causation: Causative constructions in modern standard Dutch". *Journal of Pragmatics* 27: 61–82.

Wachowicz, Krystyna. 1976. "Some universal properties of morphological causatives". *Working Papers on Language Universals* (Stanford) 20: 59–106.

Washio, Ryuchi. 1993. "When causatives mean passive: A cross-linguistic perspective". *Journal of East Asian Linguistics* 2: 45–90.

Wierzbicka, Anna. 1975. "Why 'kill' does not mean 'cause to die': The semantics of action sentences". *Foundations of Language* 13: 491–528. (= Ch. 5 in: Wierzbicka, Anna. 1980. *Lingua mentalis*. Sydney: Academic Press).

–. 1988. *The semantics of grammar*. (Studies in Language Companion Series, 18). Amsterdam: Benjamins.

Wise, Mary Ruth. 1990. "Valence-changing affixes in Maipuran Arawakan languages". In: Payne, Doris L. (ed.). *Amazonian linguistics: Studies in lowland South American languages*. Austin: University of Texas Press, 89–116.

Xolodovič, Aleksandr A. (ed.). *Tipologija kauzativnyx konstrukcij. Morfoložičeskij kauzativ*. Leningrad: Nauka.

Zide, Arlene R. K. 1972. "Transitive and causative in Gorum". *Journal of Linguistics* 8: 201–215.

Zubizarreta, Maria Luisa. 1985. "The relation between morphophonology and morphosyntax: The case of Romance causatives". *Linguistic Inquiry* 16.2: 247–289.

Leonid I. Kulikov, Leiden (The Netherlands)

Contents/Inhalt/Contenu

Volume 2/2. Halbband/Tome 2

X. Syntactic Typology Syntaktische Typologie Typologie syntaxique

64.	Beatrice Primus, Word order typology	855
65.	Gilbert Lazard, Le marquage différentiel de l'objet	873
66.	Leonid I. Kulikov, Causatives	886
67.	Konstantin I. Kazenin, The passive voice	899
68.	Konstantin I. Kazenin, Verbal reflexives and the middle voice	916
69.	Vladimir P. Nedjalkov, Resultative constructions	928
70.	Ray Freeze, Existential constructions	941
71.	Leon Stassen, Predicative possession	954
72.	Maria Koptjevskaja-Tamm, Adnominal possession	960
73.	Ekkehard König, Internal and external possessors	970
74.	Kaoru Horie, Complement clauses	979
75.	Leon Stassen, Comparative constructions	993
76.	Vera I. Podlesskaya, Conditional constructions	998
77.	Peter Siemund, Interrogative constructions	1010
78.	Viktor S. Xrakovskij, Hortative constructions	1028
79.	Laura A. Michaelis, Exclamative constructions	1038
80.	Knud Lambrecht, Dislocation	1050
81.	Hans Bernhard Drubig, Wolfram Schaffar, Focus constructions . . .	1079
82.	Leon Stassen, Noun phrase coordination	1105
83.	Bertil Tikkanen, Converbs	1112
84.	Andrej A. Kibrik, Reference maintenance in discourse	1123

XI. Lexical typology Lexikalische Typologie La typologie lexicale

85.	Peter Koch, Lexical typology from a cognitive and linguistic point of view	1142
86.	Cecil H. Brown, Lexical typology from an anthropological point of view	1178
87.	Cliff Goddard, Universal units in the lexicon	1190
88.	Niklas Jonsson, Kin terms in grammar	1203
89.	Brenda Laca, Derivation	1214
90.	Robert MacLaury, Color terms	1227
91.	Ewald Lang, Spatial dimension terms	1251

92.	David Gil, Quantifiers	1275
93.	Åke Viberg, Verbs of perception	1294
XII.	Phonology-based typology Typologie auf phonologischer Basis Typologie du domaine phonologique	
94.	David Restle, Theo Vennemann, Silbenstruktur	1310
95.	Thomas Krefeld, Phonologische Prozesse	1336
96.	Aditi Lahiri, Metrical patterns	1347
97.	Larry M. Hyman, Tone systems	1367
98.	D. Robert Ladd, Intonation	1380
XIII.	Salient typological parameters Typologisch besonders markante Parameter Paramètres typologiques particulièrement saillants	
99.	Peter Auer, Silben- und akzentzählende Sprachen	1391
100.	Walter Bisang, Finite vs. non-finite languages	1400
101.	Aleksandr E. Kibrik, Subject-oriented vs. subjectless languages	1413
102.	Johannes Helmbrecht, Head-marking vs. dependent-marking languages	1424
103.	Mark C. Baker, Configurationality and polysynthesis	1433
104.	Katalin É. Kiss, Discourse configurationality	1442
XIV.	Typological characterization of language families and linguistic areas Typologische Charakterisierung von Sprachfamilien und Sprachbünden La caractéristique typologique de familles et d'aires linguistiques	
105.	Östen Dahl, Principles of areal typology	1456
106.	Hans Goebel, Arealtypologie und Dialektologie	1471
107.	Martin Haspelmath, The European linguistic area: Standard Average European	1492
108.	Jack Feuillet, Aire linguistique balkanique	1510
109.	Karen H. Ebert, Südasien als Sprachbund	1529
110.	Christel Stolz, Thomas Stolz, Mesoamerica as a linguistic area	1539
XV.	Diachronic aspects of language types and linguistic universals Diachronische Aspekte von Sprachtypologie und Universalienforschung Aspects diachroniques de la recherche typologique et universaliste	
111.	Wulf Oesterreicher, Historizität – Sprachvariation, Sprachverschiedenheit, Sprachwandel	1554
112.	Andreas Blank, Pathways of lexicalization	1596