ALT-10: Valency classes in the world's languages

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Valency classes cross-linguistically: parameters of variation

Introduction

- Goals of the Leipzig Valency Classes Project:
- http://www.eva.mpg.de/lingua/valency/
  - Systematic cross-linguistic investigation of valency patterns in 30 languages, based on the Leipzig Valency Questionnaire
  - http://www.eva.mpg.de/lingua/valency/files/database_manual.php
  - 80 verb list as a toy lexicon: which verbs cluster together in terms of coding and alternations across languages
  - publication of the volume "Valency Classes: a comparative Handbook" (edited by Comrie and Malchukov), which including general chapters, as well as chapters on 30 individual languages
  - publication of the database (ValPaL, edited by Hartmann, Haspelmath & Taylor) with contributions on individual languages based on the Database Questionnaire

Introductory

- **In my presentation:**
  - Talk about cross-linguistic variation in valency classes:
    - By coding frames
      - (cf. Haspelmath et al., this conference)
    - By alternations
      - (cf. Wichmann et al., in preparation)
  - Discuss a phenomenon of voice ambivalence (also addressed in some other workshop contributions)

Valency classes: variation in coding

- Background of the Project:
  - Systematic in-depth studies of valency classes in individual languages (cf. by Levin 1993 on English and Apresjan 1967 on Russian) showed that syntactic properties of verbs (syntactic distribution, alternation potential) reflect semantic classification of verbal lexicon
  - Yet it is not clear to what extent these results can be generalized cross-linguistically, and to what extent valency classes will depend on structural properties of the languages
- In our project we study:
  - How universal are valency classes
    - As identified by coding frames
    - By alternations (unmarked or verb-marked)
  - By coding frames certainly not universal
    - In particular, depends on availability of coding frames which is derivative of the inventory (in particular inventory of case markers)

Valency classes: variation in coding

- Consider variation in Tungusic (Malchukov & Nedjalkov, 2013+)
  - In Even/Evenki 14 cases
  - In Manchu 5 cases: as a result Dative case takes on general Oblique function, reducing the number of possible coding frames
- In Mapadungun (Zúñiga 2013+) and Sliammon Salish (Watanabe 2013+) there is one general oblique prepositions not distinguishing between different kinds of extended transitives and extended intransitives
  - Generally, in head-marking languages such neutralization is rather widespread; in Bora (Seifart 2013+), only locative arguments are set apart (as "extended intransitives") from other bivalent verbs which pattern transitively
  - Similarly, isolating languages tend to neutralize a distinction; e.g., postverbal NP in Chinese (Lu, Zhang & Bisang 2013+) is not restricted to (direct) objects

Limits of neutralization

- The transitive-intransitive distinction is most robust cross-linguistically, but still can be weakened in some languages
- In Jakarta Indonesian (Conners, Bowden & Gil 2013+), no categorical valency differentiation, still valency classes can be distinguished on the basis of preferential use in certain constructions (cf. Gil, this workshop, on "valency preference classes")
  - They can be also distinguished on the basis of alternative pattern for different kind of verbs (involving prepositional marking of arguments)
- Similarly in Chintang (Schikowski, Paudyal and Bickel 2013+), where most verbs allow for a transitive use subclasses can be distinguished on the basis of S/A and S/O ambitransitive alternations

Universals of coding?

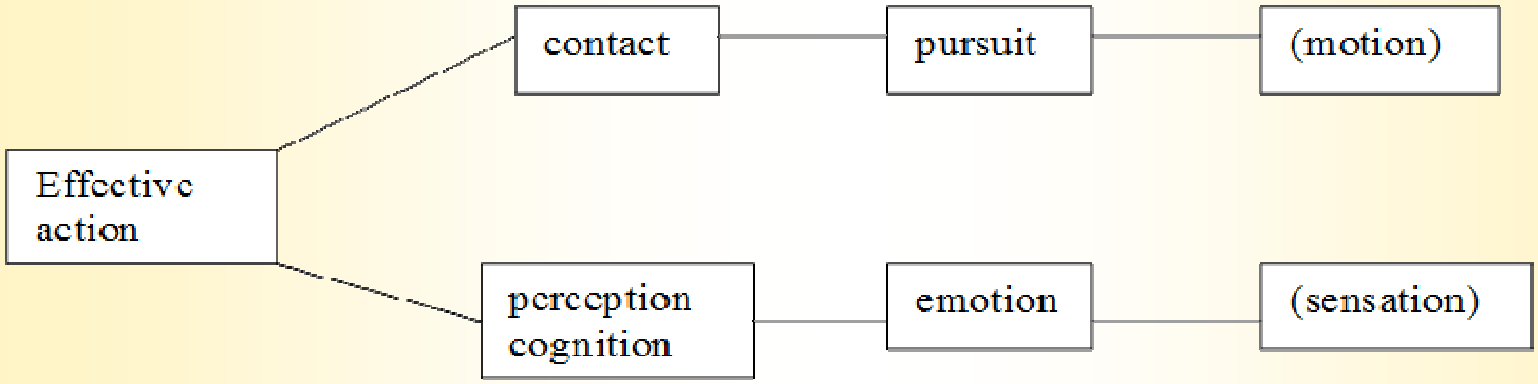
- What are the consequences of the differences in the size of inventories for universality of valency classes (coding classes)
- Does it mean that the distinction is language particular and subject to infinite variation?
- No, both aspects can be combined in a semantic map approach, as shaped by two competing motivations (as in Malchukov 2005):
  - Iconicity (Faith Role), constraining application of case markers (dative for Recipients, etc)
  - Markedness (Transitive Default): extensions of the unmarked/default strategy
- NB semantic maps can be seen as multidimensional versions of the hierarchy (such as Tsunoda's transitivity hierarchy)

Transitivity hierarchies: frames

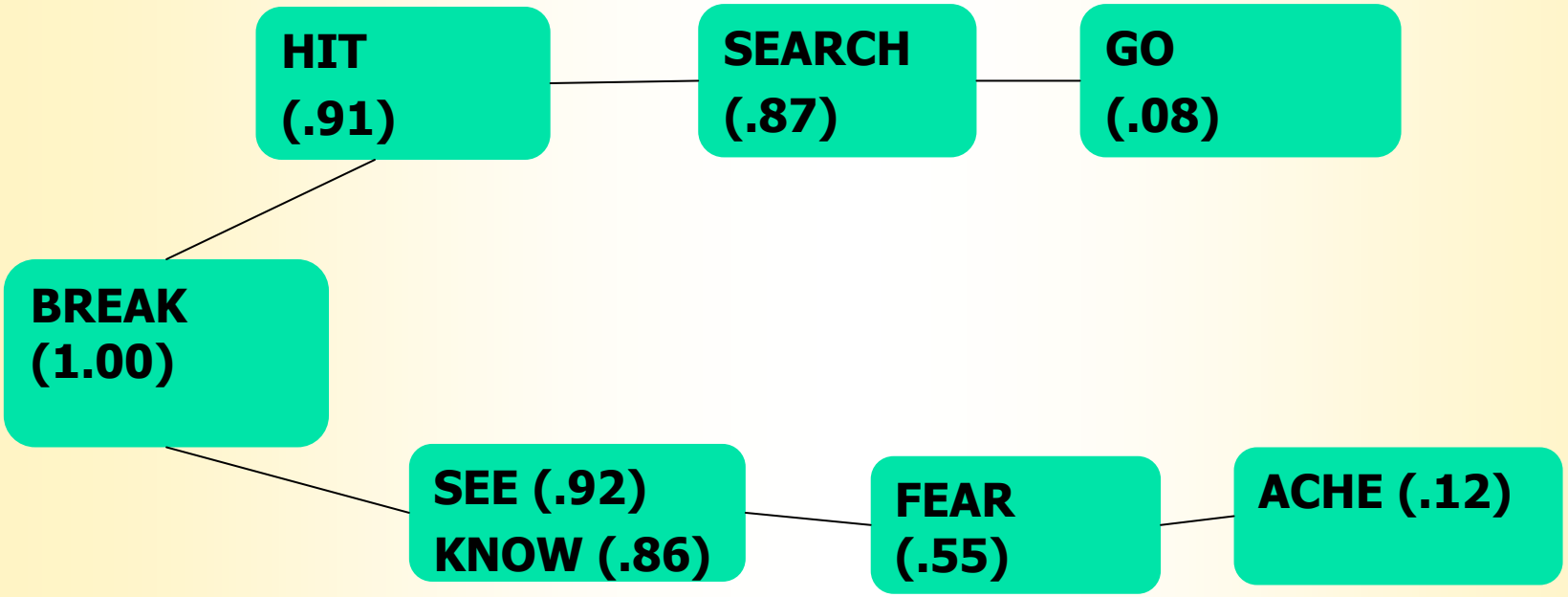
- **Tsunoda's (1981) transitivity Hierarchy**

Effective action>> Perception >> Pursuit >>Knowledge >>Feeling >> Relation

- **Malchukov's (2005) semantic map for two-argument events**
  - The Transitive-Motion route (decrease in affectedness)
  - The Transitive - Psych-verbs route additionally decrease in agentivity

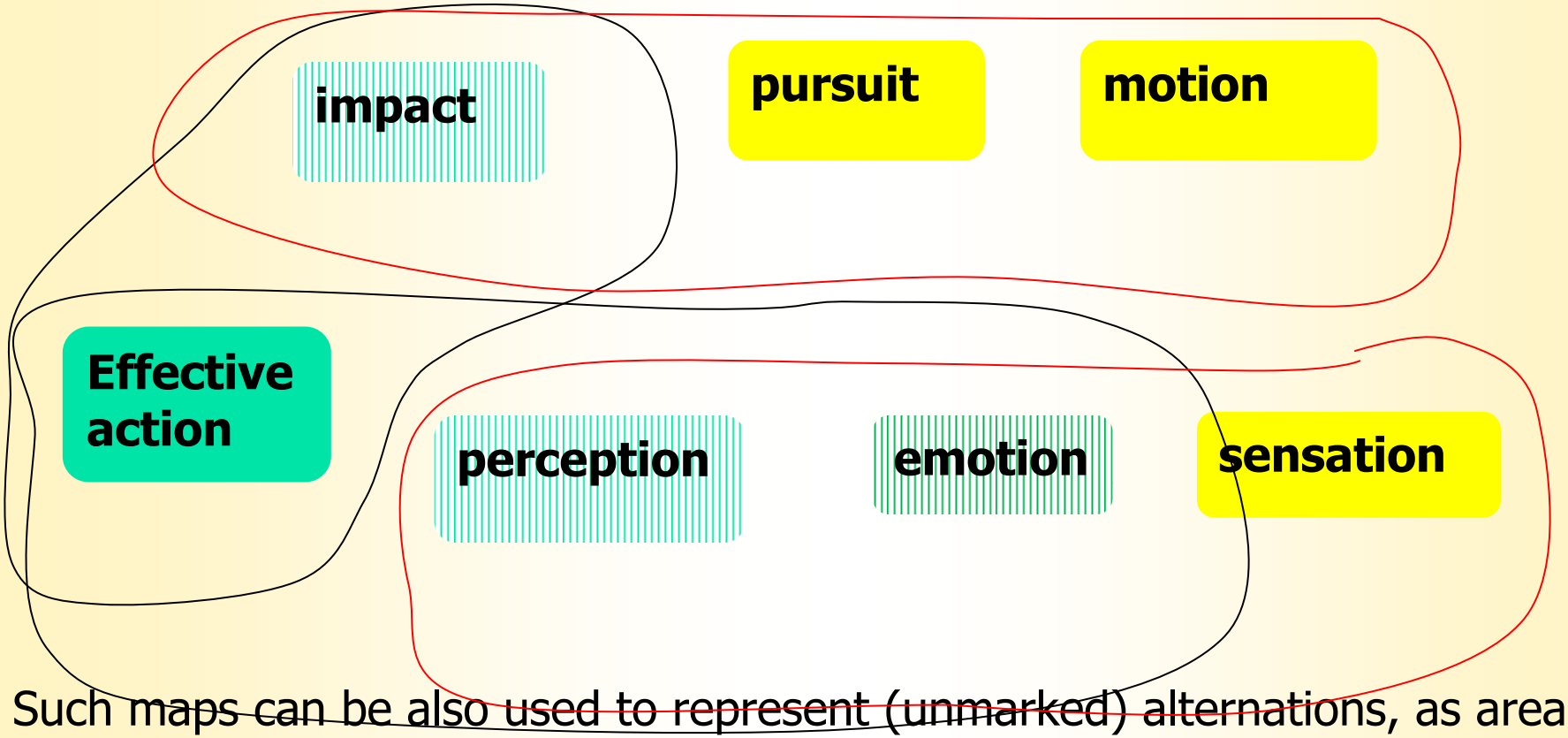


Maps and alternations



- Semantic map with percentages of the transitive pattern appended (percentages from ValPaL reported in Haspelmath, Hartmann & Malchukov, this conference)
- Motion and Sensation predicates show a clear intransitive preference, but the former can be ambitransitive in some languages (like Mandinka; Creissels, this workshop), while the latter can pattern transimpersonally (as in Nen)

Maps and alternations



Such maps can be also used to represent (unmarked) alternations, as areas of overlap between transitive and intransitive strategies

- conative alternation (*hit* ~ *hit at* in English)

- transitive-intransitive (DAT-NOM) alternation with (some) mental verbs in Japanese (miru ~mieru for LOOK/SEE, ki-ni-iru for LIKE)

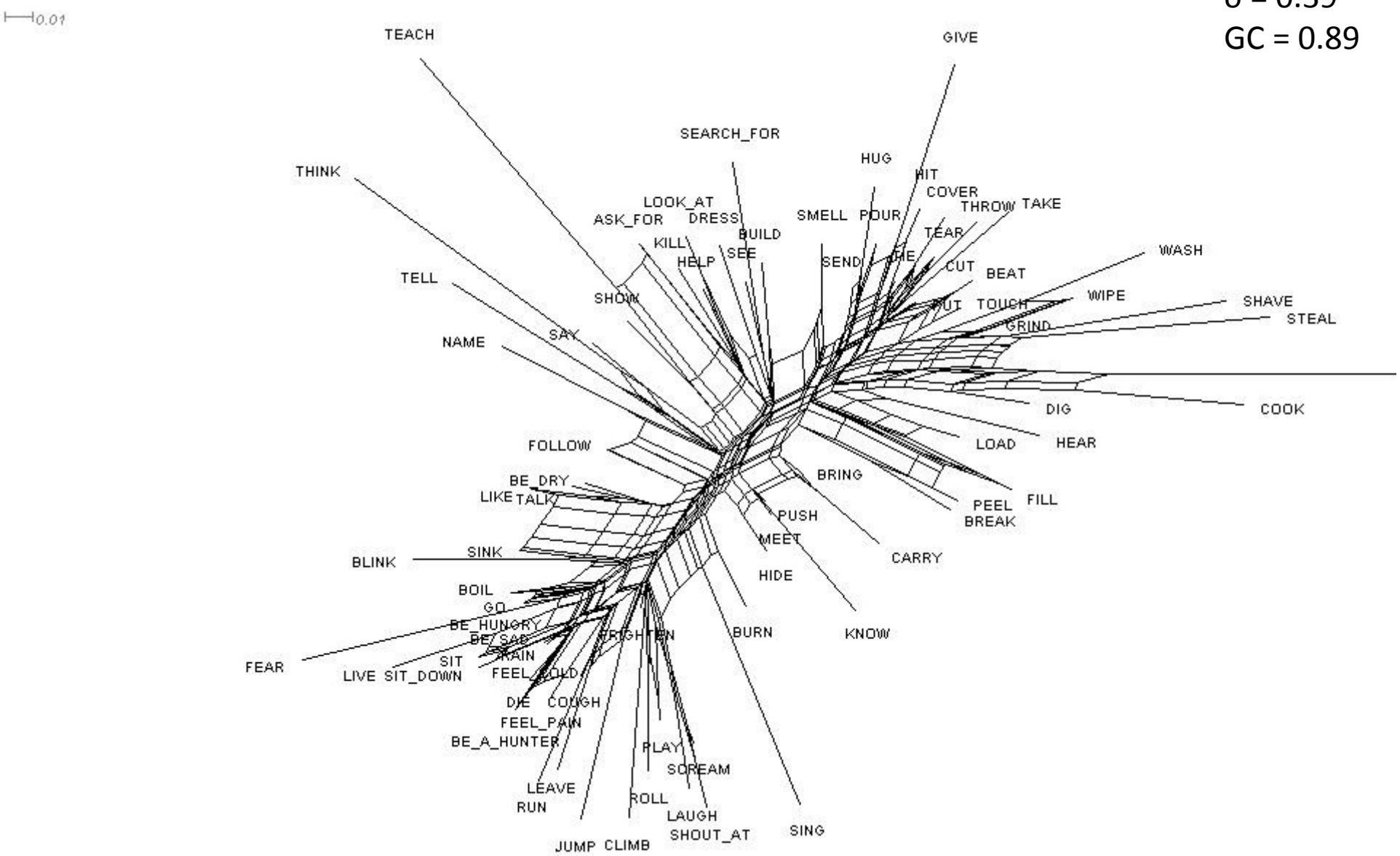
Valency classes by alternations

- To what extent are valency frames distinguished by alternations?
- Clearly, alternations are language specific, and some do not find easy parallels, so the resulting classification idiosyncratic
  - e.g., English *way*-alternation, Quantity-Ratio-alternation in Chinese, stem alternations in Arabic,…
- Yet most can be generalized in syntactic terms:
  - Subject-adding (causatives)
  - Object-adding (applicatives)
  - Subject-demoting/deleting (passives/anticausatives)
  - Object-demoting/deleting (antipassives)
  - Reflexive
- Each of these alternations can be marked or unmarked

Valency classes by alternations

- The question is whether such hierarchies can be established for certain verb types
- In the literature this question has been only addressed with respect to the inchoative-causative alternation (Nedjalkov, Haspelmath, Comrie, Nichols and others)
- Alternation Hierarchies (Wichmann, forthcoming; Wichmann et al., in preparation)
- Statistical analysis of the data in ValPal (still preliminary)
  - Through NeighbourNets (visualizing) clustering of verbs sharing certain behavior (here: availability of alternations) across languages
  - Guttmann Scales: a unidimensional representation of alternations reflecting the number of matching behavior of verbs with respect to certain general alternations (Subject-demoting, etc)
- Illustrated below for a few alternations (Subject-demoting/deleting, Reflexive), other alternations follow separate hierarchies

Object-demoting/deleting (Wichmann et al, in preparation)



Hierarchy for Object-demoting/deleting

- EAT, SHAVE, GIVE, THINK, STEAL > WASH, CUT, TAKE, COVER, WIPE, SEE, SEARCH FOR, HIT, THROW, HEAR > COOK, KNOW, ASK FOR, TELL > BEAT, TEAR > POUR > FILL, CLIMB, HUG, LOOK AT, HELP, NAME > BREAK, KILL, TOUCH, LOAD, TEACH, SMELL > FEAR, DRESS (1) > SHOW, SEND, CARRY, TIE, PUT > SING, GRIND, DIG > FOLLOW, SAY, BUILD, PEEL > JUMP, LIKE, SHOUT AT, LEAVE, LIVE, PLAY, MEET, TALK, HIDE > BLINK, LAUGH, ROLL, BURN, FRIGHTEN, RUN, BE DRY, PUSH, BRING > COUGH, SIT, GO, SCREAM, FEEL PAIN, SINK, BE A HUNTER, BOIL, SIT DOWN, DIE, BE SAD, FEEL COLD, BE HUNGRY, RAIN

Starts from "natural antipassives" (with an inherent or cognate object), extends to bivalent "manner-verbs" (Levin 2013+), then to bivalent result-verbs, with monovalent verbs at another pole

Hierarchy for Reflexive

- WASH, SHAVE, COVER, BEAT, HIDE, SHOW, PUT, LOOK AT, SEE, HIT, CUT > GIVE, THINK, DRESS (1), SAY, KILL, TOUCH, THROW, TIE, WIPE, HEAR, HUG, SMELL, FEAR, LIKE, KNOW, SEARCH FOR, ASK FOR, NAME > TAKE, PUSH > HELP > TELL > BREAK, TEAR > CARRY, TEACH, SEND, FRIGHTEN, TALK, BUILD, PEEL, FILL, LOAD, SING, ROLL, BRING, STEAL, COOK, FOLLOW, MEET, POUR, BURN, GRIND, EAT > SHOUT AT > LAUGH, SCREAM, SINK, DIG, BLINK, RUN, SIT, JUMP, GO, LEAVE, LIVE, FEEL PAIN, DIE, PLAY, BE SAD, BE DRY, BOIL, COUGH, CLIMB, SIT DOWN, FEEL COLD, BE HUNGRY, RAIN, BE A HUNTER

Reflexive alternations, starts for natural reflexives (grooming verbs) at the top of the scale, extending first to bivalent verbs with animate objects, then to other bivalent verbs, with monovalent verbs at the bottom.

Alternation Hierarchies

- Wichmann (forthcoming) notes that results are different for different alternations, and generally offer limited support for Tsunoda's hierarchy (i.e., can't be described as extensions from the most transitive type to less transitive)
  - Yet, the explanation seems to be that ordering on different hierarchies is determined by several different factors (transitivity being just one of them)
  - For the Object-demoting/deleting hierarchy, one starts with events with natural antipassives like EAT, which are grammaticalized first
    - In some languages it is confined to this verb types (in Hoocąk, EAT the only verb taking an antipassive marker: Hartmann 2013+)
    - In other languages it can be extended to other verb types, including canonical transitives, and possibly intransitives

Conclusions on Alternation hierarchies

- So the decreased applicability of certain alternations can be due to two quite different reasons:
  - Either a voice alternation is not applicable for syntactic reason: e.g. Object-demoting does not apply to intransitives
  - Or it does not apply for semantic reasons, since it is not sufficiently frequent/grammaticalized with a particular verb-type
  - In the latter situation, it may not apply to canonical transitives (with a salient Agent and Patient), and won't fit the predictions of Tsunoda's Transitivity Hierarchy (can't be seen as extension from the transitive pole)
- Importantly, when a certain voice alternations are extended beyond the domain (verb type) of its (most) natural application, it can be reinterpreted leading to a phenomenon of voice ambivalence
  - Thus the reflexive marker can be reinterpreted as anticausative with verbs like BREAK (cf. Russian *slomatj-sja*), and as antipassive with verbs like EAT (cf. Russian *naestj-sja* 'have a fill')
  - Similar ambivalence in Mandinka ("unmarked passive"), and Eskimo (Central Alaskan Yupik)

Correlation between Hierarchies

- Further, Wichmann (forthcoming) noted a significant correlation between a number of Alternation Hierarchies (Subject-demoting/deleting, Object-demoting/deleting, Reflexives, Reciprocals), but the hierarchy for causatives was not correlated with any of the hierarchies
- To the extent this correlation is corroborated this seems to be an effect of transitivity (distinguishability of transitive vs intransitive poles): as all these alternations are detransitivizing and thus would show dispreference for monovalent verbs.
- Generally, this preliminary study makes clear that apart from the better researched inchoative-causative alternation, verb hierarchies can be established for other argument alternations as well.

Ambivalent alternations

- Voice forms (or broader, a valency-changing markers) are often **"ambivalent"**, i.e. perform different functions when applied to different valency classes of verbs.

- Some relevant observations in the typological literature concerning polysemy of individual valency categories (see, e.g., Shibatani 1985 on passives), still the general picture is lacking.

- Yet ambivalency of voice markers is commonplace

Ambivalent alternations: two examples

- As is well known (Nedjalkov & Jaxontov 1988), **resultatives** show an ergative behavior: when derived from intransitives the derived subject corresponds to S, when from transitives rather to P, as the familiar English examples illustrate:

(1) English

- *It is broken* (derived S = P),
- *He is gone* (derived S = S).

- So the same category is valency-reducing when applied to transitives, and valency preserving when applied to intransitives
- A separate category (resultative), or maybe two distinct categories? ('stative passive' when derived from transitives)
- In Bezhta (Comrie & Khalilova 2013+, this workshop), the **antipassive** generally has iterative/habitual meaning, when applied to intransitives

Passives of intransitives

- Voice ambivalence results from extension of the voice (valency-changing) category beyond its primary (most natural) domain of application.
- Thus, some languages restrict passives to transitives
- If a language extends passive to intransitives it might result in a reinterpretation, in particular, to modal meaning
- (2) Russian reflexive passive

  Mne *ne* *spit-sja*

  me.DAT not sleep.PRES.SG-REFL

  'I cannot sleep'
- In Bora reinterpretation more pronounced as a reflexive-passive is valency-preserving with intransitives
- (3) Bora (Seifart 2013+)

  wajpi dsɨɨné-meí-hi

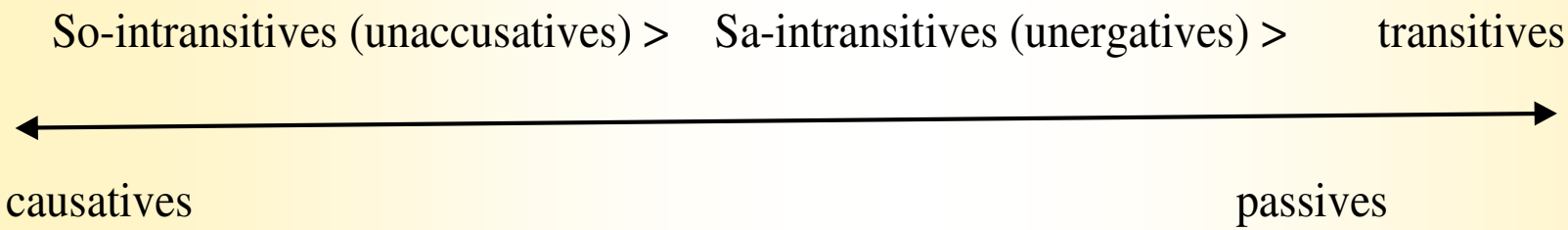
  man run-REFL-PRED

  'The man tried to run'

Causatives of transitives

- Causatives, on the other hand, are known to show a preference for intransitives (Nedjalkov 1964)
  - In some languages (e.g. Ket; Vajda 2013 +), causatives can be formed only from intransitives, maybe only from inactive intransitives (e.g., in Yucatec Maya: Lehmann 2013+)

- Thus, preferences for causative formation seem to be opposite of that for passivization:



- Also, in some of those languages where causative is extended to transitives, it might develop a passive interpretation

Passive-causative polysemy

- Types of causative-passive polysemy
  - One common pattern is that basically a causative marker is interpreted as a passive marker (as in some Turkic languages).
  - Another case, when a basically a passive marker is used as a causative (in this case frequently called adversative passive), as in Japanese, or Even (Tungusic)

(4) Even (Malchukov & Nedjalkov 2013+; Malchukov 1993)

Bej (udan-du) udala-w-ra-n
man (rain-DAT) rain-INCH-ADV-NFUT-3SG
'The man was caught by the rain'

The polysemy of the voice category performing both valency-increasing and valency decreasing function is puzzling, but can be accounted for if we assume that the common denominator of both processes is A-demotion (cf. A-defocusing as a central function of passives in Shibatani 1985).

Causative-applicative

- The same marker performs two different functions (A-adding or O-adding) functions, which both result in valency increase
  - This polysemy is quite wide-spread cross-linguistically (Shibatani & Pardeshi 2002)
- Balinese (Austronesian; Shibatani & Artawa 2013+)
- When applied to intransitives (inactive/stative predicates) the meaning of the –*ang* marker is causative:

(5) a. Anak=e ento nge-mati-ang celeng=e.
person=DEF that AF-dead-CAUS pig=DEF
'The man killed the pig'

b. Ia nyikut-ang tungked ka natah=e.
s/he AF.measure-CAUS stick to yard=DEF
'S/he used a stick to measure the yard.'

- As before, the causative meaning shows a preference for inactive intransitives, while the applicative meaning shows a preference for active intransitives or transitives.

Causative-applicative

- Eskimo (Central Alaskan Yupik; Miyaoka 2013+) features a peculiar category of adversative, which performs both a causative and applicative functions.

(6) Eskimo (Central Alaskan Yupik; Miyaoka 2013+)

a. *Kic-i-aqa* *kicaq.*
sink-E_{ADV}-IND.1SG.3SG anchor.ABS.SG
'I had the anchor sunk (me negatively affected)'

b. *Ner-i-anga* *neqe-m* *neqca-mnek*.
eat-E_{ADV}-IND.3SG.1SG fish-REL.SG bait-ABM.1SG.SG
'The fish ate my bait *(on me)*.'

- Thus, the adversative category has the function of the adversative causative when derived from intransitives, but of adversative applicative when derived from transitives.

Applicative-antipassive

- This polysemy is attested in Eskimo, where the applicative is used as a Benefactive applicative (in 7a)) but also as an antipassive (in (7b)).

(7) Eskimo (Central Alaskan Yupik; Miyaoka 2013+)

a. Nalaq-ut-aanga *irnia-ma* *sass'a-mek*.
find-APPL-IND.3SG.1SG child-REL.1SG.SG watch-ABM.SG
'My child found *a* watch *for me*.'

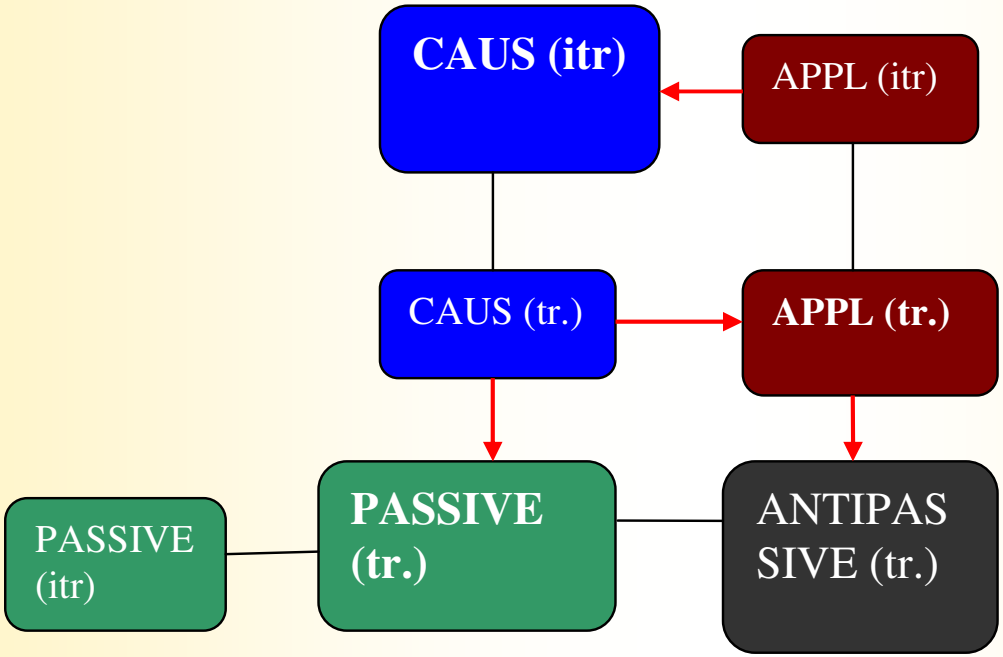
- b. Nalaq-ut-uq sass'a-mek.
find-APAS-IND.3SG watch-ABM.SG
'He found the watch.'

- This polysemy has seemingly opposite effects (valency-increasing or decreasing), but can be accounted by the fact that both applicatives of transitives and antipassives share the same function of P-demotion.
- A similar pattern is observed in Sliammon (where "active intransitive (= antipassive) marker" is identical to the benefactive ("Indirective") applicative marker), and other languages (Zúñiga, this workshop)

Ambivalent voice markers: a semantic map

- The challenge is how to capture (and predict) cross-linguistically consistent patterns of polyfunctionality on the part of „ambivalent" markers
- In my view, this can be done on the basis of shared (syntactic) features, as on semantic map approaches:
  - Causative-passive polysemy: share the property of A-demotion:
    - holds only for causatives of transitives (A demoted to an Oblique)
  - Applicatives-antipassives: share the property of P-demotion
    - holds only for applicatives of transitives
  - Causative-Applicative polysemy:
    - for transitives: both demote a term to an oblique
    - for intransitives: both are transitivizers
  - Passive-antipassive polysemy: both are detransitivizer
- But this approach shall be enriched through the dimension of (local) markedness (preferential use with certain verb types)

Semantic map for polyfunctional voice markers



Directions of shift indicated; preferential uses indicated by the cell size

Conclusions

- Yet, the map is incomplete, because in some cases there would be no shared syntactic components, or a shared component lies beyond the voice domain (cf. the situation in Bezhta, where the shared component is iterativity)
- It should be enriched by dimensions capturing
    - Semantic dimensions (cf. the connection between voice categories and aspectual categories in Shibatani 2006)
    - Diachronic dimensions (cf. grammaticalization path leading from reflexives to anticausatives and passives in Haspelmath 2003).
- Yet already in the present form the map capture markedness effects, the fact that a change of meaning is often the result of extending a voice category beyond ist natural domain of application (valency class)

References

- **(2013+) references** refer to forthcoming contributions to: Bernard Comrie & Andrej Malchukov (eds.). *Handbook of Valency Classes*. Forthcoming in Mouton
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