1. Object backgrounding (detransitivization)

- Reflexive: the A and P are coreferential

(1) Eastern Armenian (Indo-European)

a. mayr-ə imeline e  Seda-yi-n
   mother-DEF  wash-PRES  AUX  Seda-DAT-DEF
   ‘Mother is washing Seda.’

b. mayr-ə  lva-cv-um  e
   mother-DEF  wash-REFL-PRES  AUX
   ‘Mother is washing (herself).’

- Reciprocal: the A and P are acting upon each other

(2) Ngiyambaa (Pama-Nyungan; Australia)

   miri  gadha-la-nha
   dog  bite-REC-PRES
   ‘The dogs are biting each other.’

- Deobjective: totally removes the P from the argument structure,

(3) Tzutujil (Mayan)

a. x-uu-ch'ey
   PAST.3SG.OBJ-3SG.SUBJ-hit
   ‘He hit him.’

b. x-ch'ey-oon-i
   PAST.3SG.OBJ-3SG.SUBJ-hit-DEOBJ-PAST
   ‘He was hitting.’

2. A valence-increasing process (creates a new object): Applicative constructions

- Applicativization is a valence-changing process of transitivization, cf. the unproductive derivation English:

(4) to run (faster than John) - to outrun John
to play (better than John) - to outplay John

- Productive morphological applicatives: Chichewa (Bantu):

(5) a. basic construction

   ndi-na-tumiz-a  kalata  kwa  mfumu
   ISG.SUBJ-PAST-send-ASP  letter  to  chief
   ‘I sent a letter to the chief.’

b. applicative construction

   ndi-na-tumiz-ir-a  mfumu  kalata
   SUBJ.AGR-PAST-send-APPL-ASP  chief  letter
   ‘I sent the chief a letter.’
(6)  a.  basic construction

fisi a-na-dul-a chingwe ndi mpeni
hyena SUBJ.AGR-PAST-cut-ASP rope with knife
'The hyena cut the rope with a knife.'

b.  applicative construction

fisi a-na-dul-ir-a mpeni chingwe
hyena SUBJ.AGR-PAST-cut-APPL-ASP knife rope
'The hyena cut the rope with a knife.'

- the verb in (b) bears the *applicative* affix
- semantic roles are the same in (a) and (b), but grammatical functions are different
- SUBJ is the same
- in (b) the former prepositional object behaves like a direct object (this is sometimes called *applied object*)
- that is why it is similar to the English double object constructions

● The applied object can be identified with the OBJ₁ function: it behaves like an object of the monotransitive verb
- optional object agreement triggered by OBJ₁ (but not OBJ₂)

(7)  anyani a-ku-u-phwany-ir-a muala dengu
baboons(2) SUBJ(2)-PRES-OBJ(3)-break-APPL-ASP stone(3) basket
OBJ₁ OBJ₂

The baboons are breaking the basket with the stone.

- passivization: OBJ₁ → SUBJ (but OBJ₂ cannot be promoted to SUBJ)

(8)  a.  basic construction

alulu a-na-gul-a nsapato kwa mbidzi
hare(1) SUBJ(1)-PAST-buy-ASP shoes(10) for zebras(10)
OBJ₁ OBJ₂

‘The hare bought the shoes for the zebras.’

b.  passivization of the basic construction (OBJ₂ → SUBJ)

nsapato zi-na-gul-idw-a kwa mbidzi ndi kalulu
shoes(10) SUBJ(10)-PAST-buy-PASS-ASP for zebras(10) by hare
OBJ₁ OBJ₂

‘Shoes were bought for the zebras by the hare.’

(9)  a.  applicative construction

kalulu a-na-gul-ir-a mbidzi nsapato
hare(1) SUBJ(1)-PAST-buy-APPL-ASP zebras(10) shoes(10)
OBJ₁ OBJ₂

‘The hare bought zebras the shoes.’

b.  passivization of OBJ₁ (applied object)

mbidzi zi-na-gul-idw-a nsapato ndi kalulu
zebras(10) SUBJ(10)-PAST-buy-APPL-PASS-ASP shoes(10) by hare
OBJ₂ OBJ₂

‘The zebras were bought the shoes by the hare.’
c. It is impossible to passivize OBJ₂ (non-applied object)

*nsapato zi-na-gul-idw-a mbidzi ndi kalulu
shoes(10) SUBJ(10)-PAST-buy-APPL-PASS-ASP zebras(10) by hare
OBJ₁ OBJ₂ OBL

‘Shoes were bought for the zebras by the hare.’

- Applicative lexical rule

Consider argument structure of the applicative and non-applicative verb:

(10) a. gul <agent, theme, recipient>  
    |       |           |         |
    SUBJ  OBJ₁ OBL_rec

b. gul-ir <agent, theme, recipient>  
    |       |           |         |
    SUBJ  OBJ₂ OBJ₁

The applicative rule:

\[
\begin{cases}
  [X]_V \rightarrow [X-ir]_V \\
  OBL \rightarrow OBJ₁ \\
  OBJ₁ \rightarrow OBJ₂
\end{cases}
\]

- Interaction of the passive rule and the applicative rule: the order of rules is important!

(11) Correct order: applicative before passive

a. gul <agent, theme, recipient>  
    |       |           |         |
    SUBJ  OBJ₁ OBL_rec

b. gul-ir <agent, theme, recipient>  
    |       |           |         |
    SUBJ  OBJ₂ OBJ₁

c. gul-ir-idw <agent, theme, recipient>  
    |       |           |         |
    OBL_agent OBJ₂ SUBJ

(12) Incorrect order: passive before applicative. This would have derived (9c), so this order overgenerates.

a. gul <agent, theme, recipient>  
    |       |           |         |
    SUBJ  OBJ₁ OBL_rec

b. gul-idw <agent, theme, recipient>  
    |       |           |         |
    OBL_agent SUBJ OBL_rec

c. *gul-idw-ir <agent, theme, recipient>  
    |       |           |         |
    OBL_agent SUBJ OBJ₁

- The order of rules in (11) reflects the linear order of affixes: first applicative, then passive.

Mirror principle (Baker 1985): The order or affixation reflects the order of syntactic derivation.
● Languages with several secondary objects: Languages vary as to which semantic roles OBJ\textsubscript{2} (OBJ\theta) expresses. Like many languages, English OBJ\textsubscript{2} only expresses theme, while other languages may have a wider range of secondary objects.

● In Kichaga (Bantu) applicative constructions with more than two objects are possible, so a simple two-way distinction between OBJ\textsubscript{1} and OBJ\textsubscript{2} is not sufficient for a grammatical description. In (13) the semantically unrestricted OBJ\textsubscript{1} is the comitative (‘with them’), while the locative and patient arguments bear semantically restricted object functions OBJ\textsubscript{LOC} (‘there’) and OBJ\textsubscript{PATIENT} (‘it’) (Bresnan & Moshi 1990). All objects are expressed by pronominal affixes on the verb.

(13)  n-à-lè-kú-shí-kí-kó-rí-à
    FOC-1Subj-Past-17Obj-8Obj-cook-APPL-FinalVowel
    ‘She/he cooked it with them there.’

● Beck (2006, 2007, 2008) shows that in Upper Necaxa Totonac (Totonacan) applicativisation promotes topical nonobject arguments to object, and that the result is a multitransitive construction. Only one object triggers agreement and it can correspond to a number of semantic roles, e.g. patient (14a), instrumental (14b) or comitative (14c).

(14)  a. pu:lak-kauj    kin-la:x`ax na-ik-ka:-ta:-li:-tank’a:  kin-ta:s`a:kwa  wam’a:
        Class-ten  |1Poss-orangen  Fut-1SgSubj-PlObj-Com-Instr-fell  |1Poss-peon  this
        hen-tin    kin-machi`:ta”
        Cl-one  |1Poss-machete
        ‘My peon and I will cut down ten orange trees with this machete.’

b. hen-tu:tu’n machi`:ta’ na-ik-ka:-ta:-li:-tank’a:  pu:lak-ti’n  ki’wi’  wama’:  chixku’
    Class-three machete  Fut-1SgSubj-PlObj-Com-Instr-fell Cl-one tree this man
    ‘With three machetes I and this man will cut down a tree.’

c. na-ik-ka:-ta:-li:-tank’a:  pu:lak-ti’n  ki’wi’  chixku’-win  kin-machi:t-kan
    Fut-1SgSubj-PlObj-Com-Instr-fell Cl-one tree man-Pl  |1Poss-machete-Pl.Poss
    ‘I and the men will cut down a tree with our machete.’

Taking object agreement to be a primary object property, this means that any of several arguments can assume the primary object role (OBJ\textsubscript{1}) and control verb agreement, though only one argument at a time can do this, since in any particular sentence there is only one primary object. The remaining object arguments are thematically restricted objects.

3. A valence-increasing process (creates a new object): Causative constructions

● Causative situation: consists of two component situations, the cause and its effect (result). It requires at least two participants: the ‘causer’ and the ‘causee’.

From the point of view of valence, causativization adds an extra argument (transitivization).

(15)  a. John laughed.  [non-causative construction]

    $\mid$
    $\mid$
    agent

b. Mary made John laugh.  [causative construction]

    $\mid$
    $\mid$
    causeur    causee

(i) extra argument is added (causeur/agent)
(ii) former agent $\rightarrow$ causee
(iii) two separate situations/events; informally: Mary caused John to laugh and John laughed.
• Types of causative constructions:

There are *periphrastic* and *lexical* ways of expressing the causative situation. But more interesting linguistically are instances where both situations are encoded on the verb - either by means of a complex *analytic* construction with an auxiliary (English *make*, French *faire*) or by means of productive morphology.

(16) a. Lexical causatives: ‘to kill’ = ‘to cause to die’
   b. Periphrastic causatives:
      John made me laugh.
      John caused me to be late.
      John let me speak.
   c. Morphological causatives: Hungarian *köhög*– ‘to cough’ > *köhög-tet*– ‘to cause to cough’

• Semantic parameters of variation:

- *direct* vs. *indirect* causation (indirect causation can be unintended); usually in indirect causation the causee retains some degree of control (this may have to do with whether causation involves physical or verbal action on the part of the causer)

(17) a. The captain caused his boat to sink [by drilling holes in the bottom]
    b. The captain caused his boat to sink [by allowing too many passengers]

Some languages have totally different constructions to express these meanings:

(18) Telugu (Dravidian)

a. siita tammudi-ki annam tini-pinc-indi
Siita.NOM brother-DAT food.NOM eat-CAUS-PAST.3SG
‘Siita fed her brother [by hand].’

b. siita tammudi-ceeta annam tini-pinc-indi
Siita.NOM brother-INST food.NOM eat-CAUS-PAST.3SG
‘Siita fed her brother [she told him to eat].’

(19) Hungarian (Uralic)

a. én köhög-tet-t-em a gyerek-et
I cough-CAUS-PAST-1SG the child-ACC
‘I made the child cough [e.g. by slapping him on the back].’

b. én köhög-tet-t-em a gyerek-kel
I cough-CAUS-PAST-1SG the child-INST
‘I made the child cough [e.g. by asking him].’

- coercion vs. permission

(20) a. John made his daughter watch the match.
    b. John let his daughter watch the match.

• Syntactic parameter of variation: *monoclausal* vs. *biclausal* causative constructions

(21) a. John killed my cat. - clearly monoclausal
    b. John caused my cat to die. - monoclausal or biclausal?

The crucial question here: does the causee have any properties of SUBJ?
Normally, the causee in morphological and lexical causatives does not show SUBJ properties.

- In Turkish (Turkic) reflexives are clause-bound; the matrix clause subject cannot bind a reflexive element within the embedded clause, while the dependent subject can:

  
  (22) a. Ben [Hasan-in / *kendim-i yıka-maşına] sevin-dim
  
  I Hasan-GEN I-ACC / *myself-ACC wash-NMLZ pleased-PAST.1SG
  
  ‘I was pleased [that Hasan washed me / *myself].’ (non-reflexive pronoun)

  b. Ben [Hasan-in kendim yıka-maşına] sevin-dim
  
  I Hasan-GEN himself-ACC wash-NMLZ pleased-PAST.1SG
  
  ‘I was pleased [that Hasan washed himself].’ (reflexive pronoun)

In causative constructions the causer can antecedent the reflexive pronoun, while the causee cannot. This indicates that the causee does not behave like the subject.

(23) Ben Hasan-a kendim-i / *ben-i yıka-t-tım

I Hasan-DAT myself-ACC / *me-ACC wash-CAUS-PAST.1SG

‘I made Hasan wash me (literally: myself).’

- Similarly, in Malayalam (Dravidian) reflexives are bound by the SUBJ, but the causee cannot bind them:

(24) accb[hən] kutti-ye swantam wiitil weccə kalippiccu

father.NOM child-ACC self’s house.LOC at play:CAUS.PAST

‘The father made the child play at self’s house.’

- Honorification in Korean: the suffix -si on the verb indicates that the subject of that verb is the person to whom the speaker shows respect

(25) a. the honorific affix on the dependent verb in the periphrastic causative construction

(causeur-NOM + causee-DAT + content verb + ‘to cause’)

haksayng-un [kyoswu-eyekey wus(u)-si-key] ha-ess-ta

student-TOP professor-DAT smile-HON-COMP cause-PAST-IND

‘The student made the (honoured) professor smile.’

b. in morphological causatives the honorific affix can only refer to the causer

(causeur-NOM + causee-ACC + verb-ki)

# haksayng-un kyoswu-lul wus(u)-ki-si-ess-ta

student-TOP professor-ACC smile-CAUS-HON-PAST-IND

‘The (honoured) student made the professor smile.’

- However, in Japanese permissive morphological causatives are biclausal, while coercive morphological causatives are monoclausal. So morphological causatives are usually monoclausal – but not always!

One of the subjecthood tests: in while clauses the subject of the dependent clause has to be coreferential with the subject of the main clause.

(26) a. in coercive causative only the causer can be coreferential with the subject of the while-clause

[Ø terebi-o mi-nagara] sensee-wa muriyari Jon-ni hon-o yom-ase-ta

TV-ACC watch-while teacher-TOP forcefully John-DAT book-ACC read-CAUS-PAST

‘The teacher forcefully made John read the book while watching TV [only he teacher was watching TV].’

b. in permissive causatives both the causer and the causee can be coreferential with the subject of the while-clause
So: both the causer and the causee are grammatical subjects in permissive constructions; this means that in permissive causatives we have two clauses.

- Grammatical functions in monoclusal causative constructions:

  - Argument structure of morphological causatives: the causative affix represents the abstract predicate CAUSE that takes two arguments (the causer and the caused event). The caused event is denoted by the content verb, which takes its own arguments.

  - The causer usually corresponds to SUBJ.

  

  CAUSE <causer, Event>
  |           |
  SUBJ  Verb <agent (‘causee’), … etc.>
  *

  - Expression of the causee/agent argument (*SUBJ): depends on the argument structure of the base verb but differs across languages.

- In causatives derived from intransitives the causee is usually the direct (primary) object (but: see Hungarian and Telugu examples above, where the grammatical function of the causes depends on the semantics).

(27) Turkish

Mehmet Hasan-i öl-dür-du
Mehmet Hasan-ACC die-CAUS-PAST
‘Mehmet caused Hasan to die.’

- Causatives derived from transitives:

  - the GF of the causee normally correlates with the GF of the recipient/goal argument in ditransitive constructions

  - ditransitive verbs: give <agent, recipient/goal, theme>

  - grammatical functions in ditransitives: the recipient is either OBJ\(_1\) or OBL\(_2\), depending on the alignment type of the language (English has both)

(28) a. recipient theme

    OBJ\(_1\) OBJ\(_2\)

  b. recipient theme

    OBL OBJ\(_1\)

- Causee as primary object (OBJ\(_1\)), e.g. in Swahili (Bantu):

(29) a. ditransitive construction (the recipient is OBJ\(_1\))

  Halima a-li-m-p-a Fatuma zawadi
  Halima S.AGR-PAST-O.AGR-give-ASP Fatuma gift

  ‘Halima gave Fatuma a gift.’
b. causative construction (the causee is OBJ)

\[
\begin{align*}
\text{Sudi} & \quad \text{a-li-m-pik-ish-a} & \text{mke} & \quad \text{wake} & \quad \text{uji} \\
\text{Sudi} & \quad \text{S.AGR-PAST-O.AGR-cook-CAUS-IND} & \text{wife} & \quad \text{his} & \quad \text{gruel}
\end{align*}
\]

‘Sudi made his wife cook some gruel.’

The causee is the primary object: evidence from word order, object agreement, passivization etc.

- Causee as OBL, e.g. in Turkish:

(31) a. ditransitive constructions: the recipient is encoded as the dative OBL

\[
\begin{align*}
\text{çocuğ-a} & \quad \text{pasta-yî} & \quad \text{ver-di} \\
\text{child-DAT} & \quad \text{cake-ACC} & \quad \text{give-PAST}
\end{align*}
\]

‘He gave the cake to the child.’

b. causative constructions: in transitive causatives the causee is also the dative OBL

\[
\begin{align*}
\text{müdür} & \quad \text{mektub-u} & \quad \text{imzala-dî} \\
\text{director} & \quad \text{letter-ACC} & \quad \text{sign-PAST}
\end{align*}
\]

‘The director signed the letter.’

\[
\begin{align*}
\text{dişçi} & \quad \text{mektub-u} & \quad \text{müdür-e} & \quad \text{imzala-t-tî} \\
\text{dentist} & \quad \text{letter-ACC} & \quad \text{director-DAT} & \quad \text{sign-CAUS-PAST}
\end{align*}
\]

‘The dentist got the director to sign the letter.’

(32) passivization test: only OBJ can passivize, but not OBL

a. ditransitive constructions: the recipient cannot be promoted to SUBJ via passivization

\[
\begin{align*}
\text{pasta} & \quad \text{çocuğ-a} & \quad \text{ver-il-dî} \\
\text{cake} & \quad \text{child-DAT} & \quad \text{give-PASS-PAST}
\end{align*}
\]

‘The cake was given to the child.’

*\[
\begin{align*}
\text{çocuk} & \quad \text{pasta-yî} & \quad \text{ver-il-dî} \\
\text{child} & \quad \text{cake-ACC} & \quad \text{give-PASS-PAST}
\end{align*}
\]

‘The child was given the cake.’

b. causative constructions: the causee cannot be promoted to SUBJ via passivization

\[
\begin{align*}
\text{Mehmet} & \quad \text{bavul-u} & \quad \text{Hasan-a} & \quad \text{aç-tîr-dî} \\
\text{Mehmet} & \quad \text{suitcase-ACC} & \quad \text{Hasan-DAT} & \quad \text{open-CAUS-PAST}
\end{align*}
\]

‘Mehmet caused Hasan to open the suitcase.’

\[
\begin{align*}
\text{bavul} & \quad \text{Mehmet} & \quad \text{tarafından} & \quad \text{Hasan-a} & \quad \text{aç-tîr-il-dî} \\
\text{suitcase} & \quad \text{Mehmet} & \quad \text{by} & \quad \text{Hasan-DAT} & \quad \text{open-CAUS-PASS-PAST}
\end{align*}
\]

‘The suitcase was caused by Mehmet to be opened by Hasan.’

*\[
\begin{align*}
\text{Hasan} & \quad \text{Mehmet} & \quad \text{tarafından} & \quad \text{bavul-u} & \quad \text{aç-tîr-il-dî} \\
\text{Hasan} & \quad \text{Mehmet} & \quad \text{by} & \quad \text{suitcase-ACC} & \quad \text{open-CAUS-PASS-PAST}
\end{align*}
\]

‘Hasan was caused by Mehmet to open the suitcase.’

- Causatives derived from ditransitives:

- Many languages do not allow them at all.

- In some languages they are possible. The causee then corresponds to OBL, the recipient to OBJ₂ and patient to OBJ₁.
The dentist got the director to show the letter to Hasan.

**Relational Hierarchy**: SUBJ > OBJ > OBJ2 > OBL

The causee occupies the highest (leftmost) position on the hierarchy that is not already filled:

Subcategorization of the base verb | grammatical function of the causee
--- | ---
<SUBJ> | OBJ
<SUBJ, OBJ> | OBL/OBJ₂ (if the language allows it)
<SUBJ, OBJ, OBL/OBJ₂> | OBL

If the base verb takes SUBJ and OBL but no OBJ, the causee corresponds to the OBJ:

(34) Turkish

a. Hasan okul-a başla-dî
   Hasan school-DAT start-PAST
   ‘Hasan started school’

b. baba-sî Hasan-î okul-a başla-t-tî
   father-his Hasan-ACC school-DAT start-CAUS-PAST
   ‘His father made Hasan start school.’

**Further references**

Beck, David 2006. ‘Control of agreement in multi-object constructions in Upper Necaxa Totonac.’ In Fujimori, Atsushi & Silva, Maria Amelia Reis (eds.) ‘Proceedings of the 11th Workshop on Structure and Constituency in the Languages of the Americas,’ Vancouver, pp. 1-11

