## 1. Control

Control: the presence of a covert pronoun PRO in the subject position of a non-finite clause.

- (1) a. Joe-1 spoke loudly, PRO-1 waving his arms around like a madman.
  - b. Jill cannot play soccer herself, but she-1 enjoys PRO-1 watching the game and PRO-1 talking to people.
  - c. During the Great Recession, many companies-1 were forced PRO-1 to close doors.

PRO is unable to appear in the subject position of a tensed clause, the object position of VP and of a PP.

- (2) a. \*I think PRO heard something.
  - b. \*Joe saw PRO.
  - c. \*Jill bought a car from PRO

It has been widely accepted that control subsumes two subgroups, namely, obligatory control (OC) and non-obligatory control (NOC) (Williams, 1980). Arbitrary control is a case of non-obligatory control. OC requires a control predicate, which come in two types.

- (3) Predicative control predicates (Landau, 2015: 6)
  - a. Implicative: avoid, bother, compel, condescend, dare, decline, fail, force, forget, get, make sure, manage, neglect, refrain, remember, see fit
  - b. Aspectual: begin, continue, finish, resume, start, stop
  - c. Modal: have, is able, may, must, need, should
  - d. Evaluative: bold, cowardly, crazy, cruel, (im)polite, kind, modest, rude, silly, smart
- (4) Logophoric control predicates (Landau, 2015: 7)
  - a. Propositional: affirm, assert, believe, claim, declare, deny, imagine, pretend, say, suppose, think
  - b. Desiderative: afraid, agree, arrange, aspire, choose, decide, demand, eager, hope, in tend, mean, offer, plan, prefer, promise, ready, refuse, resolve, strive, want, yearn
  - c. Interrogative: ask, contemplate, deliberate, find out, grasp, guess, inquire, interro gate, know, unclear, understand, wonder
  - d. Factive: dislike, glad, hate, like, loathe, regret, sad, shocked, sorry, surprised

PRO in predicative control allows inanimate controller, not in logophoric control:

- (5) a. The letter1 failed/\*affirmed PRO1 to arrive.
  - b. The car1 began/\*wanted PRO1 to move forward.
  - c. The engine1 needs/knows PRO1 to be checked.

The reason is that predicative control is established via simple predication, whereas logophoric control must apply in attitude contexts. Since attitude holders are humans by definition, logophorically controlled PRO is therefore only compatible with human controllers

NOC, incl. arbitrary control does not employ a control predicate:

- (6) Non-obligatory control with specific interpretation
  - a. Joe1 walked away without PRO1 saying a word.
  - b. Jill1 stared at him, not knowing whether PRO1 to believe it or not.
- (7) a. PRO Making a large profit requires PRO exploiting the tenants. (Lebeaux, 1984)
  - b. It is dangerous for babies PRO to smoke around them. (Kawasaki, 1993)

# 2. Obviation

In many European languages including French, Italian. Spanish, Russian, Hungarian and Polish, there is a systematic contrast between control and so-called obviation. In these languages the subject of an embedded clause must be co-indexed with the matrix subject when the embedded clause is in the infinitive but not when the embedded clause is in the subjunctive.

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(8) a. [TP ... Subject-1 ... [TP PRO-1 T-<sub>INF</sub> ...]] (infinitive, control)
b. * [TP ... Subject-1 ... [TP Subject-1 T-<sub>SBJV</sub> ...]] (subjunctive, obviation)
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- (9) Control vs. obviation in French (Ruwet and Goldsmith, 1991: 2):
  - a. On dirait qu'il veut partir seems
     It that.he wants leave.INF
     'It seems like he wants to leave.'
  - b. On dirait qu'il veut qu'il parte
     It seems that.he wants that.he leave.SBJV
     'It seems that he1 wants for him\*1/2 to leave.'
- (10) Control vs. obviation in Hungarian (Szabolcsi, 2010: 3):
  - a. Szeretném meglátogatni Marit
     Would like.1SG visit.INF Mary.ACC
     'I would like to visit Mary.'
  - b. #Akarom, hogy meglátogassam Marit want.1SG that visit.SBJV.1SG Mary.ACC (Int.) 'I want for me to visit Mary.'

In the literature there are generally two ways to approach obviation: the Competition Approach and the Domain Extension approach.

According to the former view, bound subjunctive subjects are in competition with, and less preferable than, PRO (Bouchard, 1982; Farkas, 1992; Schlenker, 2005). Roughly, the infinitive form is used when its subject is co-indexed with the matrix subject, whereas the subjunctive form is used when its subject is disjoint in reference with the matrix subject.

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    (11) Competition account for the control-obviation contrast
    a. visit Mary → to visit Mary / I want PRO __ (I want to visit Mary)
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b. visit Mary → visit.SBJV Mary / elsewhere (I want that John visit Mary)

The Domain Extension approach, on the other hand, considers obviation as a con sequence of Principle B violation (Picallo, 1985; Raposo, 1986; Suñer, 1986; Kempchinsky, 1987; Rizzi, 1990; Progovac, 1993; Avrutin and Babyonyshev, 1997). Advocates of this view make additional assumptions about the subjunctive mood to the effect that the binding domain for subjunctive clauses must be extended to the matrix clause.

- (12) The Domain Extension account for obviation
  - a. [I1 want that John2 visit Mary]
  - b. \*[I1 want that I1 visit Mary]

However, it is not always the case that the infinitive and the subjunctive are in complementary distribution. For example, Szabolcsi (2010) observes that the disjoint reference requirement can be lifted in certain Hungarian subjunctive clauses.

- (13) Control and exemption from obviation in Hungarian (Szabolcsi, 2010: 4)
  - Nem akarok PRO leugrani
     Not want.1SG down.jump.INF
     'I don't want to jump down.'
  - b. Nem akarom, hogy leugorjak not want.1SG that down.jump.SBJV.1SG 'I don't want that I jump down.'

The collapse of the contrast has been considered by many (Picallo, 1985; Suñer, 1986; Costantini, 2005) as a major problem for the Competition approach.

Zu: "It is premature to reject the Competition approach or the insights it reflects based on the above examples."

### 3. Control & obviation

Landau (2013a) proposes that all obligatory control constructions share the following properties.

- (14) The OC signature (Landau, 2013a: 29)
  - a. The controller must be the co-dependent(s) of OC.
  - b. The subject of OC must be interpreted as a bound variable.

The first clause of (14) dictates that the controller of PRO must be local, and in a c-commanding position:

- (15) a. Joe1 said [that the boss2 decided [PRO\*1/2 to give him a raise]].
  - b. Joe's1 boss2 decided PRO\*1/2 to give him a raise.

The second clause of (14) essentially says that PRO is necessarily a subject and can only act as bound variables:

- (16) a. \*Jill1 hoped (for Joe) to kiss PRO1
  - b. Only Jill hopes to kiss Joe.
    - i. Bound. Jill is the only x such that x hopes that x kisses Joe.
    - ii. \*Free. Jill is the only x such that x hopes that Jill kisses Joe.

Newari: a language with a so-called conjunct-disjunct distinction on the finite verb.

In Newari, the subjects of conjunct verbs can be overt and always appear in fully tensed clauses, they share with PRO all the properties summarized in (14).

To begin with, both PRO and the subject of conjunct verb must find their antecedents in the immediately higher clause. When the conjunct verb is used, its subject must be co-indexed with the subject of the next clause up. The disjunct verb, on the other hand, occurs when the co-indexation is not local.

- (17) a. thanedara dhal-a ki [Shyam-a swikareyat-a ki that [wa daa kuy-a]]. policeman.ERG say-PST.DISJ that Shyam-ERG admit-PST.DISJ s/he money steal-PST.CONJ
  - 'The policeman1 said Shyam2 admitted that he\*1/2/\*3 stole the money.'
  - b. thanedara dhal-a ki [Shyam-a swikareyat-a ki that [wa daa kut-a]]. policeman.ERG say-PST.DISJ that Shyam-ERG admit-PST.DISJ s/he money steal-PST.DISJ
    - 'The policeman1 said Shyam2 admitted that he1/\*2/3 stole the money.'

Secondly, both PRO and the subject of conjunct verb need to be c-commanded by its antecedent. When the conjunct verb is used, its subject must be co-indexed with the matrix subject, rather than with a subpart of that subject. The co-indexation with the latter would trigger disjunct marking instead.

- (18) a. Shyam-ya baa-na dhal-a ki [wõ: s/he.ERG daa kuy-a].
  Shyam-GEN father-ERG say-PST.DISJ that money steal-PST.CONJ
  'Shyam's1 father2 said that he\*1/2/\*3 stole the money.'
  - Shyam-ya baa-na dhal-a ki [wõ: daa kut-a].
     Shyam-GEN father-ERG say-PST.DISJ that s/he.ERG money steal-PST.DISJ 'Shyam's1 father2 said that he1/\*2/3 stole the money.'

Thirdly, both PRO and the subject of conjunct verb must be interpreted as a bound variable.

- (19) Scenario: during interrogation, Shyam, Ram and Laxmi all admitted that he (Shyam) stole the money.
  - a. Shyam jaka dhal-a ki [wõ: daa kuy-a].
    Shyam only say-PST.DISJ that s/he.ERG money steal-PST.CONJ
    'Only Shyam1 said that he1 stole the money.' (True)
    Shyam = only x such that x said that x stole the money.
  - Shyam jaka dhal-a ki [wõ: daa kut-a].
     Shyam only say-PST.DISJ that s/he.ERG money steal-PST.DISJ 'Only Shyam1 said that he1 stole the money.' (False)
     Shyam = only x such that x said that Shyam stole the money

Conjunct constructions manifest obligatory control, and the subject of the conjunct verb syntactically behaves like an obligatorily controlled PRO. Unlike PRO, the subject of the conjunct verb can be overtly realized.

So conjunct constructions behave like obligatory control. But how about disjunct constructions? Do these behave like subjunctives?

- (20) Szabolcsi (2010): Exemption from obviation happens
  - a. when the embedded verb denotes a state,
  - b. when the embedded verb denotes an unintentional action, or
  - c. when the embedded verb denotes an action that is beyond the subject's control.

In Hungarian, when the embedded verb denotes a state, obviation does not obtain in subjunctives. For instance, being healthy is a stative predicate. It is possible for its subject to be bound:

(21) a. Szeretnék egészséges lenni like.1SG healthy be.INF 'I would like to be healthy.'

b. Akarom, hogy egészséges legyek want.1SG that healthy be.SBJV.1SG 'I want for me to be healthy.'

In Newari, when the embedded event is a state, the subject of disjunct verb may be co-indexed with the matrix subject. In fact, most state-denoting predicates, such as ciku: 'be cold' and siu: 'know', do not have a conjunct form in Newari:

(22) a. Shyam-a dhal-a ki [wa-ta ciku:]
Shyam-ERG say-PST.DISJ that s/he-DAT cold.be.DISJ
'Shyam1 said that he1/2 is cold.'

b. Shyam-a dhal-a ki [wõ: siu:] Shyam-ERG say-PST.DISJ that s/he.ERG know.DISJ 'Shyam1 said that he1/2 knew.'

Exemption from obviation also happens when the complement event denotes a mistake, an accident, etc.

(23) a. Nem akarok lelöni valakit.

Hung.

not want.1SG shoot.INF someone.ACC

'I don't want to shoot someone.'

Nem akarom, hogy lelöjek valakit.
 not want.1SG that shoot.SBJV.1SG someone.ACC
 'I don't want for me to shoot someone.'

(24) a. \*Shyam-a dhal-a ki [wõ: masika shun napal at- a] Newari Shyam-ERG say-PST.DISJ that s/he.ERG accidentally someone meet-PST.CONJ 'Shyam1 said that he1 accidentally ran into someone.' (Int.)

b. Shyam-a dhal-a ki [wõ: masika shun napal at-a] Shyam-ERG say-PST.DISJ that s/he.ERG accidentally someone meet-PST.DISJ 'Shyam1 said that he1 accidentally ran into someone.'

Finally, when the complement denotes an action which its subject has no direct control over, such as "receiving good grades", "getting a good job," etc., the subjunctive subject can be co-indexed with the matrix subject:

(25) a. Szeretnék jó jegyeket kapni like.1SG good grades.ACC receive.INF 'I would like to receive good grades.'

> b. Akarom, hogy jó jegyeket kapjak want.1SG that good grades.ACC receive.SBJV.1SG 'I want for me to receive good grades.'

(26) a. \*Shyam-a dhal-a ki [wa birami - ill juy-a] Shyam-ERG say-PST.DISJ that he become-PST.CONJ 'Shyam1 said that he1 became ill.' (Int.)

b. Shyam-a dhal-a ki [wa birami <sup>-</sup> ill jul-a] Shyam-ERG say-PST.DISJ that he become-PST.DISJ 'Shyam1 said that he1 became ill.'

Note: what distinguishes the infinitive-subjunctive contrast from the conjunct-disjunct contrast, is the strictness of complementarity between two competing expressions. In Newari, if the disjunct verb can be used, it must be used. In Hungarian, both the infinitive and subjunctive forms are acceptable in the exemption-from-obviation cases:

Complement	Infinitive	Subjunctive	Conjunct	Disjunct
denotes:				
State	OK	OK	*	OK
unintentional action	OK	OK	*	OK
uncontrollable actio	OK	OK	*	OK
Elsewhere	OK	*	OK	*

### 4. Canonical vs non-canonical control

Responsibility holds between an individual and a situation iff that individual intentionally brings about that situation. This relation helps distinguish two types of (logophoric) control (Farkas, 1992).

Canonical control arises when the controller bears the responsibility relation to the complement situation. This guarantees that the subject of canonical control is the agent of a free-will, non-accidental action.

Non-canonical control arises when there is no responsibility relation between the controller and the complement situation

In Newari, canonical control requires conjunct marking and vice versa. The subject of a conjunct verb is always a canonically controlled pronoun. The two verb forms are thus in complementary distribution.

In Hungarian, canonical control requires infinitives but not the other way round. Infinitives are compatible with both canonically controlled pro nouns and non-canonically controlled pronouns, whereas the subjunctive subjects, when they are bound, must be non-canonically controlled pronouns.

- (27) a. Conjunct constructions manifest canonical control.
  - b. Disjunct constructions manifest non-canonical control and non-control.
  - c. Infinitives manifest canonical and non-canonical control.
  - d. Subjunctives manifest non-canonical control and non-control.

But what determines whether there is canonical and non-canonical control? Is the choice of the predicate, or are the differences between canonical and non-canonical control syntactic in nature? Note that if canonical and non-canonical control, and non-control all involve different syntactic structures, that may reinstall the Competition approach (a specific structure for a specific reading).

## 5. RESP

Farkas (1988) identifies a group of control verbs, such as order, persuade and promise, under which the responsibility relation seems to always hold with the infinitive. These verbs are called RESP-

inducing verbs. Their infinitive complements always denote canonical control. The use of a stative predicate or nonvolitional predicate is quite odd with these verbs.

- (28) Non-canonical control is incompatible with RESP-inducing verbs (Farkas, 1988: 41,45)
  - a. #John convinced Pete to resemble Bill.
  - b. #John persuaded Pete to get struck by lightning.
  - c. #John requested Pete to be tall/intelligent.
  - d. #John ordered Pete to receive a letter.
  - e. #John promised Pete to be blue-eyed.
  - f. #John required Pete to (not) bleed.
  - g. #John helped Pete to be allowed to leave.

Crucially, not all control verbs belong to this group. Verbs like like, hope and want are perfectly happy with stative and nonvolitional predicates.

- (29) Non-canonical control is compatible with non-RESP-inducing verbs
  - a. John likes to be tall/intelligent/blue-eyed.
  - b. John hopes to be allowed to leave.
  - c. John wants to receive a letter/get struck by lightning.

Farkas argues that the control verbs in (29), which she calls "verbs of evaluation" (Farkas, 1988: 52), involve a different relation, that is, the about relation. This relation also holds between an individual and a situation, just in case the situation "must crucially involve" the individual.

What remains unsaid in her account is how she analyzes the following sentences where agentive predicates appear in the infinitive complements of "verbs of evaluation." Does the RESP relation obtain in this case? Do they exhibit canonical control?

- (30) Canonical control is also compatible with non-RESP-inducing verbs
  - a. Joe likes to run away from his responsibilities.
  - b. Joe hopes to study law at Harvard.
  - c. Joe wants to buy another iPhone.

There are two ways to approach this. Either we say the infinitives under "verbs of evaluation" are vague and simply not sensitive to the canonical vs. non-canonical distinction, or we take these infinitives as structurally ambiguous between the two types of control.

Zu opts for the latter. Her argument is based on PPI (anti-)licensing.

(31) Canonical vs. non-canonical control in English (Szabolcsi, 2004: 417)

a. I wouldn't want to eat something.
b. I wouldn't want to break something.
c. I wouldn't want to call someone.
d. I wouldn't want to offend someone.
(RESP, ??¬ > [CP/IP ∃])
(RESP, ??¬ > [CP/IP ∃])
(non-RESP, OK¬ > [CP/IP ∃])

This suggests for her that though canonical and non-canonical control can both appear in infinitives, they involve different structures. But see Julie's lecture from last week.

Another piece of evidence concerns for-infinitives. In English the subjunctive is not morphologically distinct from the indicative and is not as prevalent as its counterparts in many other European languages. The for-infinitive is used to introduce an overt subject in the complement clause.

This construction exhibits the same obviation effect as subjunctives in European languages. In forinfinitives, the overt pronouns generally do not like to be bound by a local antecedent.

- (32) a. I want for you to come back in my life.
  - b. I want for her to call me every week.
  - c. \*I want for me to call my mom.
  - d. \*I want for me to eat Shepherd's Pie.

However, when the infinitive complement denotes a state, an accident, an action that the subject cannot directly bring about, an action whose accomplishment has to rely on other people's good will, or an accident whose success depends on a lot more than the subject's own will and effort, the obviation effect is weakened

- (33) a. (?)I want for me to be in shape for tomorrow's game.
  - b. (?)I wouldn't want for me to forget to give my mom a call.
  - c. (?)I want for me to be buried in the village of my birth.
  - d. (?)I would like for me to already be gone.
  - e. (?)I would really like for me to lose some weight.

Since both the PPI anti-licensing and the condition B effect make reference to syntactic configurations, the examples for Zu suggest that infinitives are structurally ambiguous between the two types of control. Specifically, she takes the PPI anti-licensing requirement and the condition B effect to be lifted in the cases of non-canonical control.

Canonical and non-canonical control must thus involve different syntactic structures. Hence, all possible types of (non-)control involve different syntactic structures. This calls for a Competition approach (richer structures for richer meanings).