Equi (short for *Equivalent Noun Phrase Deletion*) and **Raising** (short for *Subject Raising*) are two syntactic rules (aka *processes*, *transformations*, or *alternations*) that relate sentence structures. There are hundreds of such rules in every language, of many types.

Equi and Raising are both governed cyclic rules. A **governed** rule is one that may only apply if there is a particular verb as the main verb in the clause it applies to. A **cyclic** rule is one that may only apply in a single clause, but may be applied repeatedly in subordinate clauses. Governed cyclic rules constitute a major type of syntactic rule; cyclic rules tend to be governed, and vice versa.

Equi and Raising are important rules of English:

- because they help to categorize verb classes one often speaks of 'Raising verbs' or 'Equi verbs', for instance, as a shorthand for the class of verbs that govern one or the other process.
- because they're very common in use; that is, there are a lot of Equi verbs and Raising verbs, so it's a major classification.
- because they both produce the same kind of structures sentences that look alike from different initial structures, so they're easy to confuse and they require special tests to distinguish.

Both rules apply to complement clauses. **Complements** are noun clauses – subordinate clauses that function as the subject or <u>the object</u> of particular verbs. There are **four types** of complements in English, each of which can occur either as subject or as object, depending on the main verb:

- Two **finite** types, which must contain a verb in the present or past tense:
 - o *that* clauses, which start with *that* (often deleted)

Subj: That he practiced the tuba at 3 AM surprised me.

Obj: I think that he practiced the tuba at 3 AM.

o **embedded questions**, which start with a *wh*-word

Subj: Why he practiced the tuba at 3 AM surprised me.

Obj: I know why he practiced the tuba at 3 AM.

- Two **non-finite** types, which contain verb forms that don't take present or past tense endings:
 - o **gerund clauses**, which use the *-ing* form of the verb:

Subj: *His practicing the tuba at 3 AM annoyed me.*

Obj: I protested his practicing the tuba at 3 AM.

o **infinitive clauses**, which use the root form of the verb and usually (but not always) precede it with *to*.

Subj: For him to practice the tuba at 3 AM would annoy me.

Obj: *She forbade him to practice the tuba at 3 AM.*

Of these types, infinitives are by far the most complex, occur in the most constructions, and participate in the most rules. Equi and Raising both apply to infinitive complements; Equi also applies to gerund complements, but there it can't be confused with Raising, since Raising is restricted to infinitive complements.

(Other rules that can apply to infinitives include **Extraposition**, which moves the infinitive phrase to the end of the sentence and leaves *it* behind as subject in the main clause:

It's easy (for him) to practice the tuba.

and **Tough-Movement**, which raises the <u>Object</u> of the complement clause to become subject of the main clause:

The tuba is easy (for him) to practice.)

Both Equi and Raising have the effect of reducing an infinitive complement clause to a simpler nonclausal structure (normally appearing at the end of the sentence). Such reductions can't occur with finite clauses, only non-finite ones; consequently neither Equi nor Raising applies to finite complements like *that* clauses or embedded questions.

Both Equi and Raising occur in two versions, called *A* and *B*. We will be concerned here with the *A* configuration, since the arguments and tests work the same way for the *B* configuration. So, from now on, unless otherwise noted, *Raising* refers to *A-Raising*.

• **A-Raising** occurs with Subject complements and raises the subject of that complement to be the subject of the main clause, moving the infinitive phrase that's left to the end of the main clause:

For Bill to leave early is likely. \rightarrow *Bill is likely to leave early.*

Most verbs that govern Raising with infinitive subject complements require it, since they tend to be verbs that frame some predicate in the complement and don't have much meaning by themselves, e.g, *seem, appear, tend, fail, happen, start, turn out*. These verbs don't sound right when they appear at the end of a sentence, and the impulse is to put something after them, an effect that Raising produces:

```
*For Bill to enjoy the play seemed. → Bill seemed to enjoy the play.

*For Bill to enjoy the play appeared. → Bill appeared to enjoy the play.

*For Bill to be late tends. → Bill tends to be late.

*For Bill to attend the meeting failed. → Bill failed to attend the meeting.
```

*For there to be an accident happened. \rightarrow There happened to be a accident.

*For it to snow started. \rightarrow It started to snow.

*For Bill to be the winner turned out. \rightarrow Bill turned out to be the winner.

Notice that A-Raised sentences have the structure

Subject - Verb - to - Infinitive phrase

This is the A Configuration, produced both by A-Raising and by A-Equi.

• A-Equi deletes the subject of an Object complement because it's identical with the subject of the main clause. That is, there are really **two** references to a given noun in an Equi sentence; one as the subject of the main clause, and one as the subject of the subordinate (complement) clause, even though only one appears in the actual sentence. Conventionally, we say that the one in the subordinate clause is deleted (there are other ways of dealing with this fact, but this is the way Equi views it).

So, in an Equi sentence like

Bill wants to leave at noon.

Bill is the subject of *want*, therefore referring to the person doing the wanting, and also is the subject of the complement infinitive *to leave*, therefore referring also to the person doing the leaving. This is not the case with Raising; a Raised subject of a Raising verb does not really have an independent relation with that verb; i.e, in

The casserole seems to be done.

the casserole is clearly the thing that is done (subject of the complement to be done), but it's just as clearly **not** the thing that is doing the seeming. Seeming isn't an activity or state that can happen independently. So there's only **one** instance of that noun phrase in an Raised sentence, which originates as the subject of the complement infinitive, but shows up on the surface as the subject of the Raising verb.

That's the basic difference between Raising and Equi:

o 2 identical subject nouns in an Equi sentence,

one upstairs in the main clause, and another downstairs in the object complement;

[$\underline{Bill_1}$ wants [[(for) $\underline{Bill_2}$] to leave at noon]]

Equi deletes the one downstairs,

leaving only the infinitive at the end.

 $[Bill_1 wants [__2 to leave at noon]]$

o 1 (and only 1) subject noun in a Raising sentence,

downstairs in the subject complement;

[[(For) the casserole] to be done] seems]

Raising moves it upstairs to be subject of the main clause,

and moves the infinitive to the end.

[The casserole seems [to be done]]

This distinction between Equi and Raising is essentially one of **meaning** – two different kinds of verbal meaning – and can be seen by investigating meaning; but meaning is kind of a slippery subject to deal with, and syntactic research prefers to have syntactic tests.

Luckily, such tests exist; they have the same status in syntax as slide stains have in biology – they allow real differences to be made evident by taking advantage of some accidental property of the data to produce a clear distinction. There are dozens of such tests (see Paul Postal's book *On Raising: One rule of English grammar and its theoretical implications*, MIT Press 1974 for more than anybody would want to know about testing for Raising), but the two easiest ones to understand and apply are the **Funny NP** test and the **Passive Equivalence** test.

• *Funny NPs* are idiomatic noun phrases that are known to be limited to particular phrases or constructions, and can't occur just anywhere. Frequently they are **dummies**, i.e, words like the <u>it</u> in <u>It</u>'s a long way to Tipperary that don't refer to anything at all, but are just there to hold a subject slot open.

Since funny NPs have limited occurrence, if they occur elsewhere they **must** have been moved there. So grammatical occurrence of a funny NP as subject of a Raising verb with the right kind of complement is evidence that the NP is Raised; contrariwise, since Equi verbs have real subjects, Funny NPs can't occur with them. So we can generate clear differences, for instance (in the usual idiomatic senses) [with conclusions]:

The cat seems to be out of the bag.

*The cat wants to be out of the bag.

The shit is likely to hit the fan.

*The shit is eager to hit the fan.

There appeared to be a unicorn in the garden.

*There tried to be a unicorn in the garden.

It started to snow yesterday.

*It arranged to snow yesterd ay.

[seem governs Raising]
[want governs Equi]

[be likely governs Raising]
[be eager governs Equi]

[appear governs Raising]

[try governs Equi]

[start governs Raising]

[arrange governs Equi]

• *Passive Equivalence* refers to the fact that an active sentence means the same thing as its passive transformation (Passive is another cyclic governed rule). So

Bill examined Mary.

is equivalent to

Mary was examined by Bill.

If one is true, so is the other, and if one is false, so is the other. The only difference between them is in which NP is the subject. This fact can be exploited by noting that a Raising verb will raise whatever NP happens to be the subject of its complement, and thus doesn't care whether the complement is active or passive; it will mean the same thing either way. So

Bill seems to have examined Mary.

is equivalent to

Mary seems to have been examined by Bill.

However, with an Equi verb, there is a different NP as subject of the main clause in each case, so the sentences **aren't** synonymous, even though the complements are:

Bill wants to examine Mary.

≠ Mary wants to be examined by Bill.

These mean **different** things, and the conclusion is then that they have different subjects, hence Equi applies, not Raising.

That's how the A Configuration works. The B Configuration is similar, but with an extra noun object between the main verb and the infinitive:

Subject - Verb - to - Object - Infinitive phrase

There is both **B-Raising** and **B-Equi**; both occur in object complements. B-Raising raises the downstairs subject to become the upstairs object, while B-Equi already has an upstairs object (an indirect object, the receiver), and deletes the downstairs subject by coreference with it.

Some contrastive examples of B-Raising and B-Equi, with tests applied:

*Bill wants it to rain tomorrow. [want governs B-Raising]
*Bill ordered it to rain tomorrow. [order governs B-Equi]

Bill believes there to be no reason for that. [believes governs B-Raising]

*Bill told there to be no reason for that. [tell governs B-Equi]

Bill considers Mary to have beaten Mike. [consider governs B-Raising]

= Bill considers Mike to have been beaten by Mary.

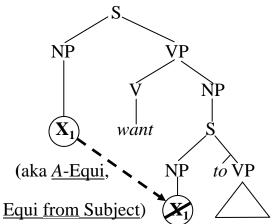
Bill forced Mary to beat Mike. [force governs B-Equi]

≠ Bill forced Mike to be beaten by Mary.

Equi-NP-Deletion vs Subject Raising

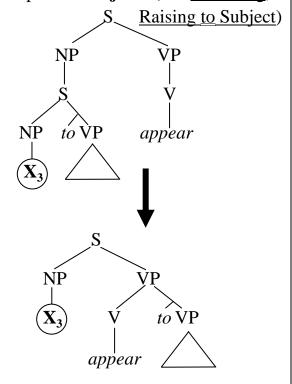
(Subject or Object Infinitive Complements only)

2-Place <u>Equi</u> (e.g. want, try, eager) Upstairs **Subject** coreferential to Downstairs Subject (deleted)



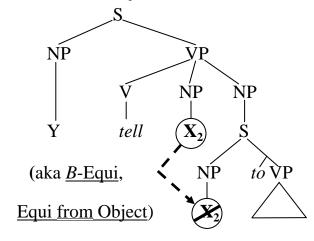
 X_1 wants to VP

1-Place <u>Raising</u> (e.g. *seem, appear*) Downstairs Subject Raised to become Upstairs **Subject** (aka <u>A-Raising</u>,



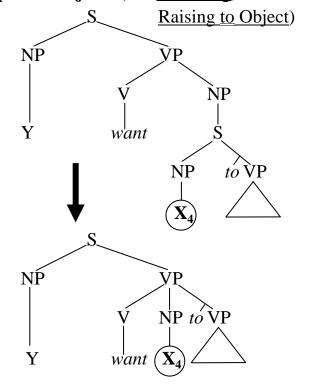
 X_3 appears to VP

3-Place <u>Equi</u> (e.g. *tell*, *order*, *make*)
Upstairs (Indirect) **Object** coreferential to
Downstairs Subject (deleted)



Y told X_2 to VP

2-Place <u>Raising</u> (e.g. want, believe, consider) Downstairs Subject Raised to become Upstairs **Object** (aka <u>B-Raising</u>,



Y wants X_4 to VP

Tests for Equi-NP-Deletion vs Subject Raising

Dummies (it, there)

There seems/*wants to be a party tonight.
There is likely/*afraid to be a party tonight.

I expect/*advise it to rain tomorrow.

I expect/*advise there to be a party. It's likely/*afraid to rain tomorrow. It seems/*wants to be raining out.

Idiom chunks

<u>The cat</u> seems/is likely/*wants/*is afraid to be <u>out of the bag</u>. <u>Advantage</u> seems/*wants to have been <u>taken</u> of Mary. <u>The shit</u> is likely/*afraid to <u>hit the fan</u> soon.

Metonymy

Max is heavy. Max seems to be heavy. (Max = Max's body)Max is Jewish. Max seems to be Jewish. $(Max \neq Max's body)$

Chomsky seems to be published in Massachusetts. (Chomsky = Chomsky's writings)
Chomsky wants to be published in Massachusetts. (Chomsky ≠ Chomsky's writings)
Canberra contains a large central plaza. (Canberra = the city of Canberra)
Canberra refuses to compromise. (Canberra = the capital of Australia)

Canberra seems/*wants to contain a large central plaza.

All-detachment

All of the men seem to be running.
The men all seem to be running.
The men seem to all be running.

*The men want to get elected.

*The men want to all get elected.

Passive equivalence

Bill is likely to call Mary. = Mary is likely to be called by Bill.

Bill is afraid to call Mary. ≠ Mary is afraid to be called by Bill.

I expect Bill to call Mary. ≠ I expect Mary to be called by Bill.

I advised Bill to call Mary ≠ I advised Mary to be called by Bill.

Assignment: Problem # 1

For each of the following predicates, determine (and give evidence for) how many places it has, and whether it takes Raising or Equi.

afraid, appear, arrange, believe, care, cause, consider, eager, fail, force, happen, likely, make, manage, order, refuse, seem, start, teach, tell, tend, try, turn out, urge, want

NB: Restrict your inquiries to those senses of the verbs that take infinitive complements.

Afraid 2-place with A-Equi

I'm afraid to go.

*There's afraid to be a party tonight.

Albert's afraid to be examined by the doctor

≠ The doctor's afraid to examine Albert.

[This type of predicate (Psych-Movement adjectival predicate with Experiencer subject) tends to govern Equi from the experiencer, and to refer to some emotional state experienced with respect to the proposition in the infinitive complement. Sometimes, as in *seem*, *appear*, the experiencer is not the subject, but an optional oblique *to*-phrase, as with *There appears to me to be a unicorn in the garden*. This variant governs 1-place Raising instead of 2-place Equi, but leads to the same surface construction.]

Appear 1-place with A-Raising (virtually synonymous with seem, q.v.)

There appears to be a unicorn in the garden.

The cat appears to be out of the bag.

All the men appear to want to win.

The men all appear to want to win.

= The men appear to all want to win.

Arrange 2-place with A-Equi (volitional remote causation)

Josh arranged __ to leave early

Josh arranged for Helena to leave early.

No Equi, no Raising

Josh arranged Helena's leaving early. Gerund, no Equi, no Raising

Equi from **Josh**

Josh arranged that his wife leave(*s) early. Untensed that-clause. Malcolm arranged for there to be a party last night. No Equi. Raising?

*There (was) arranged to be a party last night. Definitely not Raising.

Believe 2-place with B-Raising (mental predicate, experiencer subject, propositional object)

Bill believes Frank to be a genius.

Bill believes there to be a party tonight.

We believe the women to have <u>beaten</u> the men.

= We believe <u>the men</u> to have been <u>beaten</u> by the women.

[NB: believe may also Passivize on the next cycle up, producing a rule sandwich:

= <u>The men</u> are believed to have been <u>beaten</u> by the women]

Care 2-place with A-Equi – infinitive

I don't care __to mow the lawn.

*There doesn't care to be a party tonight.

Jude doesn't care to be examined by the doctor.

≠The doctor doesn't care to examine Jude.

2-place with A-Equi – gerund; uses for as transitivizing preposition

I don't care for __ mowing the lawn.

Jude doesn't care for being examined by the doctor.

≠The doctor doesn't care for examining Jude.

Cause 2-place with B-Raising

She caused it to rain.

The verdict caused there to be a riot.

The recall caused the shit to hit the fan.

(NB: Raising is from object complement only; note control in subject gerund complement:

__ Scratching himself/*myself in public caused Bill to get arrested.)

Consider 2-place with B-Raising (may passivize after B-Raising)

Everyone considers Frank (to be) attractive.

= Frank is considered (to be) attractive (by everyone).

*She considers it *(to be) raining.*

Mr. Simpson considered the shit to have hit the fan.

Eager 2-place with A-Equi (Psych-Movement adjectival predicate with experiencer subject) Bill is eager to examine Fran.

- ≠ Fran is eager to be examined by Bill.
- *There is eager to be a party.
- *It is eager to be a long way to Schenectady.

Fail 1-place with A-Raising (aspectual predicate: epistemic negative completive)

There fails to be any good reason for that.

It failed to rain last month.

The shit never fails to hit the fan.

Bill failed to kiss Mary.

%=Mary failed to be kissed by Bill.

Happen 1-place with A-Raising (aspectual predicate: epistemic completive)

There happens to be a unicorn in the garden.

It happens to be snowing.

Marie happened to see Raj.

= Raj happened to be seen by Marie.

Likely 1-place with A-Raising (epistemic modal: cf possible, probable, unlikely)

Bill is likely to see Mike.

= Mike is likely to be seen by Bill.

There is likely to be a riot.

It's likely to snow tomorrow.

Make 3-place with B-Equi (no *to* on infinitive; active equivalent of *cause* w/ volitional subj) *Mary made John admit Theresa*.

- ≠ Mary made Theresa be admitted by John.
 - **or** 2-place with B-Raising for epistemic causative sense:
 - ?* He made there be a party.

He made it rain.

Force 3-place with B-Equi

Mary forced John to admit Theresa.

≠ *Mary forced Theresa to be admitted by John.

%By talking like that, he virtually forced there to be a riot.

Manage 2-place with A-Equi – aspectual predicate: volitional completive

*There managed to be a riot.

Bill finally managed to examine Fran.

≠ Fran finally managed to be examined by Bill.

Order 3-place with B-Equi

Bill ordered Frank to be examined by Mary.

≠ Bill ordered Mary to examine Bill.

*Bill ordered there to be a riot.

*Bill ordered the shit to hit the fan.

Refuse 2-place with A-Equi

Bill refused to examine Fran.

≠ Fran refused to be examined by Bill.

Seem 1-place with obligatory A-Raising (if complement is infinitive)

Bill seems to have examined Frank.

= Frank seems to have been examined by Bill.

There seems to be a party tonight.

<u>It</u> seems to be snowing tonight. (NB: this is the Ambient <u>it</u> of snowing, not Extraposition it) **or** with obligatory Extraposition (if complement is *that*-clause)

It seems that Bill examined Frank.

It seems that there's a party tonight.

<u>It</u> seems that <u>it</u>'s snowing tonight. (NB: note the two <u>it</u>s; one ambient, one Extraposition) [seem and appear have implicit first-person experiencer;

i.e, it seems means it seems to me. Other experiencers can be expressed with to-phrases, but refer to speaker's perception of others' experience.

Bill seemed to Mary to be nervous. (reporting Mary's statement of her own experience)]

Start 1-place with A-Raising, infinitive or gerund – aspectual predicate: <u>epistemic</u> inceptive. *There started to be/being smoke in the hallway*.

The shit started to hit/hitting the fan.

The acid started to eat up the lineoleum.

= The linoleum started to get eaten up by the acid.

Bill started to faint.

or 2-place with A-Equi, infinitive or gerund – aspectual predicate: <u>volitional</u> inceptive.

Bill started to read the report, even though he didn't intend to finish.

[With separate references to the inception and to the event, both referring to the same agent; volitional predicates (fr. L *volo*, *volere*, 'want') work like *Want* (*vide infra*).]

Teach 3-place with B-Equi

*Bill taught there to be a riot.

Bill taught Harry to be flattered by John.

≠ Bill taught John to flatter Harry.

Tell 3-place with B-Equi (speech act verb with addressed object, similar to *order*)

*I told there to be a party.

Bill told Fran to examine Marie.

 \neq Bill told Marie to be examined by V.

Tend 1-place with A-Raising

When I give a party, there tend(s) to be too many people standing around in corners. John tends to be shocked by bad news.

= Bad news tends to shock John.

The queen tends to annoy the king.

?= The king tends to be annoyed by the queen.

[What kind of argument could you make if these last two are synonymous, and what would it show if these aren't synonymous? What if different people had different impressions?]

Try 2-place with obligatory A-Equi, with both infinitive

Bill tried __to open the door.

*Bill tried (for) Mike to open the door.

*There tried to be a party.

*It tried to be a long way to Tipperary.

and gerund complements

Bill tried __ opening the door.

*Bill tried Mike('s) opening the door.

*There tried being a party.

*It tried being a long way to Tipperary.

Bill tried to be/being examined by the doctor.

≠ The doctor tried to examine/examining Bill.

[NB: *Try* is subject to the <u>Equi-Subject Constraint</u> – its subject and the subject of its complement **must** be coreferential. Note also the difference between the meanings of the infinitive and gerund complements.]

Turn out 1-place with A-Raising (aspectual: epistemic eventual completive)

Bill turned out to be late.

There turned out to be a unicorn in the garden.

It turned out to be very hot when they got there.

Bill turned out to have examined Mary.

= Mary turned out to have been examined by Bill.

Urge 3-place with B-Equi

*I urged there to be a riot.

Bill urged Harry to be examined by the doctor.

≠ Bill urged the doctor to examine Harry.

Want 2-place with A-Equi (when subjects are coreferential)

Bill wants ____to leave.

Bill wants to be examined by the doctor.

≠ The doctor wants to examine Bill.

or 2 place with B-Raising (when subjects are **not** coreferential)

Bill wants Max to leave.

Bill wants it to rain/there to be a party.

Bill wants Max to be examined by the doctor.

=Bill wants the doctor to examine Max.

[NB: want does not passivize Raised objects:

*Max is wanted to leave by Bill.]

Problem # 2

- 1. He <u>considers</u> himself to be a genius.
- 2. He <u>considered</u> dieting to be unnecessary.
- 3. She <u>considered</u> that the waffle iron was broken.
- 4. He finally <u>managed</u> to get the bill paid.
- 5. I see you found the book.
- 6. When you see her dancing, you forget you hate her.
- 7. He is <u>aware</u> that he's a figure of fun.
- 8. He never <u>confessed</u> to robbing the bank.
- 9. You'd better forget about asking him again.
- 10. He <u>promised</u> me never to smoke another cigarette.
- 11. He <u>ordered</u> me never to smoke another cigarette.
- 12. She's afraid to confront him.
- 13. Don't forget he's a Black Belt.
- 14. They <u>saw</u> her leave.
- 15. I promised to wash the dishes.
- 16. He knows why we're here.
- 17. Will they know to come here?
- 18. I <u>listened</u> to him tell the story once again.
- 19. He <u>confessed</u> that he took the book.
- 20. Bill doesn't know what bit him.
- 21. Frank is aware of what bit him.
- 22. Joe never knew it bit him.

On the other side you will find some example sentences illustrating several processes that apply to **object complements** i.e, **noun clauses** that function as direct object). The **matrix predicates** (i.e, the heads of the VPs that have the noun clauses as objects) are underlined in each. These predicates are:

see promise know (about) (be) aware (of) forget (about)
order consider listen (to) confess (to) (be) afraid (of)

Each of these (like all predicates) has its special pattern of usage. The relevant variables in this pattern are the type(s) of complement (non-finite ones like infinitive and gerund, and tensed ones like *that* S and embedded *WH*-question) that are allowed or required by the matrix predicate, two rules that can apply to object complements:

- 1) **Equivalent Noun Phrase Deletion** (<u>Equi</u>; with non-finite complements)
- 2) **Subject-Raising** (<u>Raising</u>; with infinitives only)

and other rules, like **Passive**, that may be fed by these rules. Note that object complements can occur with both 2-place predicates (with Equi from Subject and Raising to Object) and 3-place predicates (with Equi from Object but without Raising).

Give syntax lab reports for each predicate, with example sentences (your own or ones from the data) for questions (1) - (4), noting any unusual phenomena. For example,

Predicate: believe 2-place predicate Test clause: PAST (WRITE (BILL, KK))

1)a Does the predicate take a plain gerund complement?

No. *I believe Bill('s) writing/having written "King Kong".

1)b Does the predicate take a gerund complement with Equi?

No. *Bill believes writing/having written "King Kong".

2) Does the predicate take a *that*-complement?

Yes. I believe (that) Bill wrote "King Kong". (Optional that)

3)a Does the predicate take a plain infinitive complement?

No. *I believe for Bill to write/have written "King Kong".

3)b Does the predicate take an infinitive complement with Equi?

No. *Bill believes to write/have written "King Kong".

3)c Does the predicate take an infinitive with Subject-Raising?

Yes. I believe Bill to have written "King Kong".
Bill believes himself to have written "King Kong".

3)d Does the predicate take an infinitive feeding Passive?

Yes. Bill is believed to have written "King Kong". (Fed by Raising)

4) Does the predicate take an embedded question complement?

No. *I believe whether Bill wrote "King Kong".

Summary: *That*-clause and Infinitive with Raising (optionally feeding Passive).

PREDICATE: see 2-place predicate Test clause: PAST (WRITE (BILL, KK))

1)a Plain gerund?

Yes. I saw Bill(*'s) writing "King Kong". (ACC only; sense verb)

1)b Gerund with Equi?

No. *Bill sees/saw writing/having written "King Kong".

2) *That*-complement?

Yes. I see (that) Bill wrote "King Kong". (Optional that)

3)a Plain infinitive?

No. *I see for Bill to write/have written "King Kong".

3)b Infinitive with Equi?

No. *Bill sees to write/have written "King Kong".

3)c Infinitive with Raising?

No. *I see Bill to write/have written "King Kong".

*Bill sees himself to write/have written "King Kong".

3)d Infinitive feeding Passive?

Yes. Bill was seen to have written "King Kong". (Fed by Raising)

4) Embedded question?

No. *I see whether Bill wrote "King Kong".

Summary: ACC-*ing*, *that*-clause, and infinitive with Raising obligatorily feeding Passive.

PREDICATE: order 3-place Test clause: WRITE (BILL, KK)

1)a Plain gerund?

No. *I ordered Mary Bill's writing "King Kong".

1)b Gerund with Equi?

No. *I ordered Bill's writing "King Kong".

2) That-complement?

<u>Yes.</u> I ordered (that) Bill write "King Kong". (NB: <u>un</u>inflected verb: *I ordered (that) Bill writes "King Kong".)

3)a Plain infinitive?

No. *I ordered Bill for him to write "King Kong".

3)b Infinitive with Equi?

Yes. I ordered Bill to write "King Kong".

3)c Infinitive with Raising?

No. (3-place predicate)

3)d Infinitive feeding Passive?

Yes. Bill was ordered to write "King Kong". (Fed by Equi)

4) Embedded question?

No. *I ordered whether Bill wrote "King Kong".

Summary: *That*-complement, obligatorily uninflected, and Infinitive with Equi, optionally feeding Passive.

PREDICATE: *promise* 3-place Test clause: WRITE (BILL, KK) 1)a Plain gerund? No. *I promised Mary Bill('s) writing "King Kong". 1)b Gerund with Equi? No. *Bill promised Mary writing "King Kong". 2) *That*-complement? Yes. I promised Mary (that) Bill would write "King Kong". (NB: Future reference in complement) 3)a Plain infinitive? No. *Bill promised Mary for him to write "King Kong". 3)b Infinitive with Equi? Yes. Bill promised Mary to write "King Kong". (NB: Equi from Subject) 3)c Infinitive with Raising? (3-place predicate) 3)d Infinitive feeding Passive? No. *Mary was promised (for Bill) to write "King Kong". 4) Embedded question? No. *I promised whether Bill would write "King Kong". Summary: That-clause, with future reference, and Infinitive with Equi, controlled by Subject. PREDICATE: consider 2-place Test clause: PAST (WRITE (BILL, KK)) 1)a Plain gerund? Yes. I considered Bill('s) writing "King Kong". (ACC or POSS) 1)b Gerund with Equi? Yes. Bill considered writing "King Kong". 2) *That*-complement? No. *I consider that Bill wrote "King Kong". 3)a Plain infinitive? No. *I consider for Bill to write/have written "King Kong". 3)b Infinitive with Equi? No. *Bill considered to write/have written "King Kong". 3)c Infinitive with Raising? Yes. I consider Bill to have written "King Kong". 3)d Infinitive feeding Passive? Yes. *Bill is considered to have written "King Kong". (fed by Raising) 4) Embedded question?

Summary: Gerund with optional Equi, Infinitive with Raising (optionally feeding Passive), and disjunctive Embedded Question.

(NB: Disjunctive Q – means 'the question of whether ...')

Yes. I considered whether Bill had written "King Kong".

PREDICATE: *know* (*about*) 2-place Test clause: PAST (WRITE (BILL, KK)) 1)a Plain gerund? Yes. I know about Bill('s) writing "King Kong". (ACC or POSS) 1)b Gerund with Equi? Yes. Bill knows about writing "King Kong". (NB: Equi or Indef) 2) *That*-complement? **Yes.** I know (that) Bill wrote "King Kong". (Optional *that*) 3)a Plain infinitive? No. *I know for Bill to write/have written "King Kong". 3)b Infinitive with Equi? Yes. Bill knew to write "King Kong". (NB: special sense; means Bill knew he was supposed write "King Kong".) 3)c Infinitive with Raising? Yes. I know Bill to have written "King Kong". 3)d Infinitive feeding Passive? Yes. Bill is known to have written "King Kong". (fed by Raising) 4) Embedded question? Yes. I know whether Bill wrote "King Kong". (NB: Conjunctive Q – means 'the answer to the question of whether ...') Summary: Everything except plain Infinitive; special sense for Equi Infinitive. PREDICATE: *listen* (to) 2-place Test clause: SING (BILL, DIXIE) 1)a Plain gerund? **Yes.** I listened to Bill(*'s) singing "Dixie". (ACC only; sense verb) 1)b Gerund with Equi? No. *Bill listened (to) singing "Dixie". 2) *That*-complement? No. *I listened (that) Bill sang "Dixie". 3)a Plain infinitive? Yes. I listened to Bill sing "Dixie". 3)b Infinitive with Equi? No. *Bill listened to write sing "Dixie". 3)c Infinitive with Raising? No. *I listened Bill to sing "Dixie". 3)d Infinitive feeding Passive? No. *Bill was listened to sing/have sung "Dixie". 4) Embedded question? No. *I listened (to) whether Bill sang "Dixie".

Summary: Plain Gerund and Infinitive only.

English Object Complements PREDICATE: (be) aware (of) 2-place Test clause: PAST (WRITE (BILL, KK)) 1)a Plain gerund? **Yes.** I am aware of Bill('s) writing/having written "King Kong". (ACC or POSS) 1)b Gerund with Equi? Yes. Bill is aware of writing/having written "King Kong". 2) *That*-complement? Yes. I am aware (that) Bill wrote "King Kong". (Optional that) 3)a Plain infinitive? No. *I am aware for Bill to write/have written "King Kong". 3)b Infinitive with Equi? No. *I'm aware (of/for) Bill to write/have written "King Kong". 3)c Infinitive with Raising? No. *I am aware (of) Bill to write/have written "King Kong". 3)d Infinitive feeding Passive? No. (aware does not take Passive.) 4) Embedded question? **Yes.** I am aware of whether Bill wrote "King Kong". (NB: Conjunctive Q – means 'the answer to the question of whether ...') Summary: Gerund with optional Equi, that, and conjunctive embedded Q. PREDICATE: confess (to) 2-place Test clause: PAST (WRITE (BILL, KK)) 1)a Plain gerund? No. *I confessed (to) Bill('s) writing "King Kong". 1)b Gerund with Equi? Yes. Bill confessed to writing/having written "King Kong". 2) *That*-complement? Yes. Bill confessed (that) he wrote/had written "King Kong". 3)a Plain infinitive? No. *I confessed for Bill to write/have written "King Kong". 3)b Infinitive with Equi? No. *Bill considered to write/have written "King Kong". 3)c Infinitive with Raising? Yes. I consider Bill to have written "King Kong". 3)d Infinitive feeding Passive? **Yes.** Bill is considered to have written "King Kong". (fed by Raising)

4) Embedded question?

Yes. I considered whether Bill had written "King Kong".

(NB: Disjunctive Q – means 'the question of whether ...')

Summary: Gerund with optional Equi, Infinitive with Raising (optionally feeding Passive), and disjunctive Embedded Question.

PREDICATE: *forget* (about) 2-place Test clause: PAST (WRITE (BILL, KK))

1)a Plain gerund?

Yes. I forgot about Bill('s) writing "King Kong". (ACC or POSS)

1)b Gerund with Equi?

Yes. Bill forgot about writing/having written "King Kong".

2) *That*-complement?

Yes. I forgot (that) Bill wrote/had written "King Kong".

3)a Plain infinitive?

No. *I forgot about Bill to write/have written "King Kong".

3)b Infinitive with Equi?

Yes. Bill forgot to write "King Kong". (NB: entails he did not write it)

3)c Infinitive with Raising?

No. *I forgot Bill to write/have written "King Kong".

3)d Infinitive feeding Passive?

No. *Bill is forgotten to have written "King Kong".

4) Embedded question?

Yes. I forget whether Bill wrote "King Kong". (NB: Disjunctive Q)

Summary: Gerund with optional Equi, *that*-complement, Infinitive with Equi, and disjunctive Embedded Question.

PREDICATE: (be) afraid (of) 2-place Test clause: WRITE (BILL, KK)

1)a Plain gerund?

Yes. I'm afraid of Bill(*'s) writing "King Kong". (ACC only)

1)b Gerund with Equi?

Yes. Bill's afraid of writing "King Kong".

2) *That*-complement?

Yes. I'm afraid (that) Bill wrote "King Kong".

3)a Plain infinitive?

No. *I'm afraid of Bill to write/have written "King Kong".

3)b Infinitive with Equi?

Yes. Bill's afraid to write "King Kong".

3)c Infinitive with Raising?

No. *I'm afraid (of) Bill to write/have written "King Kong".

3)d Infinitive feeding Passive?

No. (afraid does not take Passive.)

4) Embedded question?

No. *I'm afraid whether Bill wrote "King Kong".

Summary: ACC-ing with optional Equi, that-complement, Infinitive with Equi.