Unit 1: Clause Types in Grammar and Use

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ESSLLI 2008: 'Optimizing the Future - Imperatives between Form and Function'

1.1 What is an "imperative"?

- basic distinction between different `clause types` (= `sentential moods`); start out thinking of entire sentences (vs. just the verb)

  (1) a. You are staying at the 'Hotel Amsterdam'. *declarative*
  b. Are you staying at the 'Hotel Amsterdam'? *interrogative*
  c. Stay at the 'Hotel Amsterdam'! *imperative*

- observation: many languages mark imperatives (Sadock and Zwicky 1985; van der Wurff 2007)

  claim: imperatives are of interest in semantics

- semantics: linguistic units carry literal meanings, are combined according to rules of morphology and/or syntax, (literal) meaning is combined in a systematic (hypothesis: compositional) way

  guideline to literal meaning: truth/falsity - information

- of interest to linguists, philosophers, computer scientists,... (w.r.t.: morphology, syntax, semantics, pragmatics, logic, artificial intelligence, ethics,...)

  Enjoyable and fertile as their relations may have been, linguistics and philosophy are uneasy bedfellows. Nowhere more apparently so than over the matter of imperatives. (Merin 1991:667)

What could be an "imperative"

- **functional individuation:** directive speech act/conduct guiding act in a conversation

  e.g. Hamblin (1987:3) suggests: *not to make a case for any particular use of the word imperative other than what I take to be the usual and natural one*

  (2) a. I hereby order you to leave.
  b. You must leave immediately!
  c. Could you please leave the room?!
  d. Out!

  no basis for a grammatical (semantic) investigation: huge amount of ambiguity; even indirect speech acts would be treated as ambiguities (for counter-arguments cf. Sadock and Zwicky 1985: (*i*) there is a particular effect of indirectness, (*ii*) no structural operations that disambiguate, (*iii*) not language specific)

- **formal individuation:** a certain form; e.g. English *matrix sentence plus uninflected verb that lacks a subject pronoun*

  problems: how to extend to other languages; why are these forms interesting to begin with (cf. (2))

  but note: interesting correlation root forms - imperatives (cf. `class I imperatives` (morphologically meagre verb form) vs. `class II imperatives` (person, number, tense, aspect oppositions), Rivero and Terzi 1995)

- **form-function-pairs:** clause types in the sense of Bach and Harnish (1979), Sadock and Zwicky (1985)

  clause types induce a partition on the (matrix) sentences of a language

  typological observation: most languages have declaratives, interrogatives, imperatives; many also: exclamatives and further minor types (e.g. permissives, concessives, optatives,...)

  clause types are pairs of form types and the speech act type they are prototypically used for

  notation:

  1. set of form types N (disambiguated, LFs): distinguished by syntax
  2. set of speech act types M: simple moves in a conversation (M = {ASSERT, QUESTION, ORDER, EXPRESS.EMOTIVE.ATTITUDE, PERMIT, CONCEDE,...}) speech acts change commitments the participants in a conversation have taken on (`epistemic` - what they are taken to believe; `deontic` - what they are obliged to do)

(3) `Clause Type System`

  a. $\texttt{declarative}_{ct}$:= <$declarative_{ft}$, ASSERT>
  b. $\texttt{interrogative}_{ct}$:= <$interrogative_{ft}$, QUESTION>
  c. $\texttt{imperative}_{ct}$:= <$imperative_{ft}$, REQUEST>
  d. $\texttt{exclamative}_{ct}$:= <$exclamative_{ft}$, EXPRESS.EMOTIVE.ATTITUDE>

- `imperative`: sentence level form type that is best used for ordering (or requesting): ⟨*imperative clause*,ORDER⟩

  in many languages, the imperative clause type is marked by a particular inflectional form of the verb, the *imperative verb*; I will reserve *imperative* for the clause type or the form type at sentence level

- compare terminology:

  clause types: 'sentential mood' (cf. Lohnstein 2000: 'Satzmodus')

  form type at sentence level: 'Satztyp' Lohnstein (2000)

  speech act type assigned to an utterance: 'illocutionary mode'/'illocutionary point'

  speech act performed with an utterance: 'illocution'

- in an actual conversation, there is a prototypical pairing (sentence uttered belongs to a clause type, i.e., a *form type* with a PROTOTYPICAL FUNCTION) and an actual pairing (linguistic unit uttered in a conversation used for a particular purpose)
  - prototypical function and particular usage need not match, still, the sentence belongs to the clause type it formally belongs to
  - issue: how do we identify prototypical usage?
  - issue: actual pairing vs. indirectness
- observation: even if imperatives are good for ORDERing, we use them for many more things...

  based on Donhauser (1986) for German (cf. also typological studies like Palmer 1986; Bybee, Pagliuca, and Perkins 1994; Xrakovskij 2001; semantic studies like Portner 2005; Portner 2007; Grosz 2008)

(4) a. Lies das!
read.IMP this
'Read this!' ORDER

b. Bleib weg vom Projektor!
stay.IMP away from-the projector
'Stay away from the projector!' WARNING

c. Geh nicht auf diese Party!
go.IMP not to this party
'Don't go to the party!' PROHIBITION

d. Hab viel Spaß auf der Party!
have.IMP lot fun at the party
'Have fun at the party!' WISH

e. Dreh bitte das Licht ab.
turn.IMP please the light off
'Turn off the light, please!' REQUEST

f. Nimm den A, wenn du nach Harlem willst.
take.IMP the A, if you to Harlem want
' Take the A train if you want to go to Harlem.'[1] ADVICE

g. Fahr zur Hölle!
go.IMP to-the hell
'Go to hell!' CURSE

(5) a. (Es beginnt um 8, aber) komm früher, wenn du magst!
(it starts at 8, but) come.IMP earlier, if you like
'(It starts at eight, but) come earlier if you like!'[2] PERMISSION

b. Ok, dann komm eben nicht! (Wenn du dich für so schlau hältst.)
ok, then come.IMP PRT not (if you yourself for so clever take)

[1] Billy Strayhorn/via Sæbø (2002).
[2] Example from Hamblin (1987).

'All right, don't come then! (If you think you are so clever.)'
CONCESSIVE

(6) a. Komm pünktlich und du kriegst einen Sitzplatz.
come.IMP in-time and you get a seat
'Come in time and you'll get a seat.' `Conditional and, (IaD)`
b. Komm pünktlich oder du verpaßt den ersten Vortrag!
come.IMP in-time or you miss the first slot
'Come in time, or you'll miss the first slot!' `Conditional or, (IoD)`

(7) The **Problem of Functional Inhomogeneity (FIP)**
Cross-linguistically, imperatives get associated with a rather inhomogeneous range of speech act types (COMMANDS, WARNINGS, PROHIBITIONS, WISHES, REQUEST, ADVICE, CURSES, PERMISSIONS, CONCESSIONS, ...) and, at least in some languages, are even used on a sub-speech act level (namely, as conditional antecedents).

- observation: **quantificational inhomogeneity**

  COMMANDS, WARNINGS, PROHIBITIONS, WISHES, REQUEST, ADVICE, CURSES: constrain the space of possibilities - associated with universal quantification/necessity

  PERMISSIONS, CONCESSIONS: open up new possibilities - associated with existential quantification (btw: adding possibilities is problematic in the standard dynamic view, `problem about permission`, cf. Lewis 1979)

  (8) The **Quantificational Inhomogeneity Problem** (QIP)
  The functional spectrum associated with imperatives in many natural languages includes both elements that are normally associated with universal quantification in semantics (COMMANDS, REQUESTS, WISHES,...) and elements that are usually associated with existential quantification in semantics (PERMISSIONS, CONCESSIONS).

- **potential worry 1**, e.g. (4c): imperatives containing negation or `prohibitives`?

  observation: many languages do not combine 'ordinary/propositional' negation with 'ordinary' imperative morphology/syntax (cf. van der Auwera 2005; van der Wurff 2007)

  Italian (Romance): suppletive form of imperative morphology:

  (9) (Non) parli. - Parla!/Non parlare!
  (not) speak.2PSGPRESIND - speak.IMP/not speak.INF
  'You (don't) speak. - Speak!/Don't speak!'

  Korean + verbs of negation (from Sells 2003; his (18b,17b,19b))

  (10) a. ka-ci anh-nun-ta
  go-COMP NEG-PROCESSIVE-DECL
  '(Someone) doesn't go.'

b. ka-ci mal-ala
go-COMP IRREALISNEG-IMP
'Don't go!'
c. *ka-ci anh-ala
go-COMP NEG-IMP

Tagalog (Austronesian): non-propositional negation:

(11) (Hindi) kakain ka. - (huwag/*hindi) kain!
(not) eat.FUT you - (not) call.IMP
'You (won't) eat. - (Don't) eat!'

Are these different clause types? (⇒ is there a semantic incompatbility between imperatives and negation?)

tendency: syntactic reasons (Rivero and Terzi 1995; Zanuttini 1994; Zeijlstra 2004; Wratil 2005,...; but cf. Postma and van der Wurff (2007) for a recent combination of syntactic and semantic properties)

1. some languages do allow for interaction with ordinary negation (e.g. German, Slavic languages) and their imperatives are otherwise similar to Italian,...
2. e.g., Zeijlstra (2004): languages with a non-head negative element do allow for ordinary imperative morphology + ordinary/propositional negation (e.g. German)

   (12) Du gehst (nicht). - Geh (nicht)!
   you go.2PSGINDPRES (not). - go.IMP (not)
   'You (don't) go. - (Don't) go!'

   intervention effects (minimality effects) between the imperative verb (head) and the negation (head)
3. besides PROHIBITIONS, same range of (non-deontic) speech act types as for positive imperatives (e.g. ADVICE, WISH,...), even same behaviour on sub-speech act level (cf. (14))

   (13) a. A: I think I'll go to the Rothko exhibition on Sunday.
   B: Oh no, don't go there on Sunday, it's too full.
   b. Have fun and don't hurt yourself!

   (14) **Tell her you love her** and she'll do anything. **Don't tell her** and you won't get very far.

conclusion: imperatives can contain negation; sometimes, such `negative imperatives` have different properties in surface syntax, at LF they look like their non-negated counterparts

open issues: different varieties of negative imperatives

– Tocharic (Indoeuropean, 450-†750): `inhibitives` (*stop!*) vs. `preventives` (*don't bring about!*); livelier candidate: Georgian; (p.c. Michael Job)

– Southern varieties of German might have something like an `inhibitive` (cf. (15); compare to (16))

(15) %Nicht **mach** die Tür auf!
not open.IMP the door VERBPRT
'Don't go open the door, will you!' (*implies*: it's about to happen)

(16) Nicht **dass** er die Tür aufmacht.
not that he the door open.3PSG.IND.PRES
roughly: 'I'm worried he might open the door, which he shouldn't.'

- **potential worry 2:** what about non-second person imperatives, suppletive forms, subjunctive main clauses,. . . ?

  assumption: to be resolved case by case; compositional encoding of the imperative semantics opens up the possibility of perfect match at LF (- imperative!) or similarity to any degree (- related clause type!)

  imperatives express a relation to the addressee:

(17) a. Get me a beer!
b. You get me a beer!
c. Somebody get me a beer.
d. Nobody move!
e. Don't anybody get up!

(18) Gib mir mal {wer,jemand} einen Stift!
give.IMP me PRT someone a pencil
'Someone give me a pencil!'

  in contrast, addressing the first person plural: *hortatives* (rarely grammaticalized to the same degree as imperatives; cross-linguistically rarer)

(19) a. Let's get started now.
b. Fangen wir endlich an!
start.1P.PL we finally VERBPRT
'Let's finally get started!'

  German infinitivals are not imperatives, even if they can be used in a very similar way

(20) a. Aufstehen!/Aufstehen?
get-up.INF/get-up.INF
'Get up!'/'Shall I get up?', 'What do you mean "get up"?, 'What about getting up, uh?'
b. Steh auf!/Steh auf?
get.IMP up/get.IMP up
'Get up!'/'What do you mean "get up"?, 'What about getting up,uh?'

- **potential worry 3:** the problem of **indirectness**:

(21) a. Close the door, please. REQUEST
b. A: How do I get to Harlem? - B: Take the A train. ADVICE

(22) a. Can you close the door? (...Can you get by, or do I have to get up?) QUESTION
b. Can you close the door, please REQUEST

hypothesis: indirect speech acts carry a particular effect (e.g. politeness) stemming from the exploitation of another speech act type;

FIP does not rely on an underlying speech act type of ORDERing; e.g., pieces of advice like (21b) evoke no particular effect like (im)politeness,...

main goal: take serious the uniformity of the form type picked out as the ORDERing-clause type; this is incompatible with many proposals in the literature

- bad news in general: imperatives do not just express operators of deontic logic (cf. von Wright 1963)
- *intention of the speaker that the addressee takes responsibility for changing the world in a particular way* (van Eijck 2000, p.41)

  problematic: ADVICE,WISH, sub-speech act level
- *actions which the addresse should take* (Portner 2005, who devises a much more favorable semantics in the course of the paper)

  problematic: WISH, stative or negative imperatives, sub-speech act level
- *a syntactically and/or semantically definable class of sentences of which all members share an interpretation of being some kind of instigation from the speaker to the hearer to perform some action* (Mastop 2005, p.10)

  problematic: WISH, sub-speech-act level; 'semantically definable'?

summing up: we are lookig for a semantics of imperatives, hence, (contra Mastop 2005), a **semantic individuation** is not opten to us; in the following, I will give prominence to the form type, unless there are good arguments for ambiguity (i.e., a difference at LF); semantics has to account for the full range of functions in (4) to (6) - challenge: it is hard to identify a uniform element

1.2 Clause types in grammar

- we distinguish declaratives, interrogatives, imperatives, exclamatives and maybe more, because they have a particular syntax and tend to be used differently
- the clause type of a sentence token is independent of its particular use:

actual utterance	clause type	actual speech act type
between friends:"*I will be home by 10.*"	$\text{declarative}_{clause-type}$ $\langle \text{declarative}_{form-type}, \text{ASSERTION} \rangle$	ASSERTION
mother to 8-year-old: "*I will be home by 10.*"	$\text{declarative}_{clause-type}$ $\langle \text{declarative}_{form-type}, \text{ASSERTION} \rangle$	PROMISE
mother to kid: "*Get on this train!*"	$\text{imperative}_{clause-type}$ $\langle \text{imperative}_{form-type}, \text{ORDER} \rangle$	ORDER
official to client: "*Get on this train.*"	$\text{imperative}_{clause-type}$ $\langle \text{imperative}_{form-type}, \text{ORDER} \rangle$	ADVICE
colonel to sergeant: "*Take an apple!*"	$\text{imperative}_{clause-type}$ $\langle \text{imperative}_{form-type}, \text{ORDER} \rangle$	COMMAND
between friends: "*Take an apple.*"	$\text{imperative}_{clause-type}$ $\langle \text{imperative}_{form-type}, \text{ORDER} \rangle$	PERMISSION
between friends: "*Can you open the window?*"	$\text{interrogative}_{clause-type}$ $\langle \text{interrogative}_{form-type}, \text{QUESTION} \rangle$	QUESTION
between friends: "*Can you open the window*"	$\text{interrogative}_{clause-type}$ $\langle \text{interrogative}_{form-type}, \text{QUESTION} \rangle$	QUESTION-as--ORDER

- two core issues arise:
  1. each form type comes with a particular prototypical function (the pair that constitutes the clause type) - *How are clause types encoded?* (Problem of Clause Type Encoding, PCTE)
     - at what level?

       (23) `Question of Modularity` (cf. Grewendorf and Zaefferer 1991)
       Are clause types encoded semantically or pragmatically? (= Is sentence mood a semantic or pragmatic phenomenon?)

       ⇒ claim here: **semantics**!
  2. each actual realization of a form type in an utterance is assigned a particular function (if all works out, the utterance corresponds to some speech act) - *How are utterances assigned particular speech act types?* (Problem of Assigning Types of Speech Acts, PASTA)
     - What role does the clause type play?
     - How come we can "overwrite" the prototypical function encoded in the clause type?

- possible views on clause types:
  - **sentence radical** view (or: 'parametric view'); cf. Stenius (1967)

    (24) a. You are quiet. ASSERTION(*that you are quiet*)
    b. Are you quiet. QUESTION(*that you are quiet*)
    c. Be quiet. COMMAND(*that you are quiet*)

    Stenius himself: they all contain a common core (sentence radical, a proposition), plus an operator that is to be dealt with in pragmatics

    note: unclear what to do with *wh*-questions, cf. Bäuerle and Zimmermann (1991)

    Dummett (1973): all clause types correspond in Fregean sense (for us: they all denote propositions) + there is a force element to be interpreted in pragmatics

    Frege (1918): picture is correct for (24a) and (24b), but: *We would not wish to deny sense to a command, but this sense is not such that the question of truth can arise for it. Therefore I shall not call the sense of a command a thought. Sentences expressing wishes or requests are ruled out in the same way.* (p.62)
  - alternative: clause types are a semantic issue
    1. picture as in (24), but the element that indicates the clause type (e.g. **clause-type operator**) is to be treated in semantics
    2. there is yet another difference visible to semantics (e.g. Montague 1974; Parsons 1993: similar to truth-conditions for declaratives, semantics derives answerhood-conditions for interrogatives, and compliance conditions for imperatives;...)
       declaratives, interrogatives and imperatives differ in **logical type** (e.g. only declaratives denote propositions,...; cf. Portner 2005; Portner 2007)
- answering the question of modularity: clause types are encoded semantically (decides how to answer PCTE)

  (25) `Mediating Semantics Hypothesis for Sentence Mood` (MSHSM)
  Assume that the system of clause types for some language L is the set of ordered pairs $CT_L \subseteq N \times M$ (where N the set of LF-sentence level form types, M the set of speech act types).
  Assume further that $[\![\cdot]\!]$ is an interpretation function for L (assigns intensions to elements of L). Then, for each $a_i \in CT_L, a_i =< n_i, m_i >$, $[\![n_i]\!]$ determines m_i.

- in contrast, we can't answer PASTA in semantics if we want to account for FIP/QIP (else, most imperatives come out as indirect speech acts), hence:

  (26) `the Speech act Assignment Hypothesis` (SAH)
  The speech act type of an utterance c_E is determined by interplay of the semantic object $[\![c_d]\!]$ with properties of the utterance context c (to be described in terms of beliefs, desires, obligations, etc. of the participants to the conversation in c).

1.3 Arguments in favor of a semantic encoding of clause types

(for an early list comprising many of these issues, cf. McGinn 1977)

1. robust w.r.t. embedding ⇒ semantics

   (27) a. John knows that it is raining. *embedded declarative*
   b. John knows whether it is raining. *embedded interrogative*

   argument is somewhat weak for imperatives which cannot normally be embedded; often replaced by infinitivals (Portner 1997; Parsons 1993 call cases as in (28) embedded imperatives; this contrasts with our form-centered understanding)

   (28) a. John told me to go home.
   b. John is to go home.

   but there are cases of embedded imperatives after all: Korean (cf. Pak, Portner, and Zanuttini 2004; Portner 2007); Old Germanic (cf. Rögnvaldsson 1998; Platzack 2007):

   (29) Inho-ka Sooni-ekey cip-ey ka-la-ko malha-ess-ta
   Inho-NOM Sooni-to home-to go-IMP-COMP say-PAST-DEC
   'Inho said to Sooni to go home.'

   (30) 'Verða kann það,' segir Arnkell, "en það vil eg við þig
   happen.INF can that says A. but that want I with you.ACC
   mæla, Þórarinn frændi, **að** Þú **ver** með mér Þar til er lýkur
   speak.INF Þórarinn relative that you be.IMP with me there until is ended
   málum þessum á nokkurn hátt."
   affair this in some mode
   'That may be', said Arnkell, 'but this I want to arrange with you, Cousin Þórarinn, **that you stay with me** until this affair is in some way ended.'
   Old Icelandic, (Eyrbyggjy saga)

   certain varieties of Colloquial German (cf. Poschmann and Schwager 2008):

   (31) Ich hab dir schon gestern gesagt, geh da heute hin.
   I have you already yesterday said go.IMP there today PRT
   'I already told you yesterday that you should go there today.'

   embedding under quantifiers:

   (32) a. Die meisten Anträge hat Hans nicht mal gelesen.
   the most proposals has Hans not PRT read.PARTPERF
   'For most proposals it is the case that John has not even read them.'
   b. Die meisten Anträge lies erst gar nicht.
   the most proposals read.IMPSG PRT PRT not
   'Most proposals don't even read.'

2. imperatives at a sub-speech act level (*pseudo-imperatives*)

   (33) Come one step closer and I'll shoot.
   $\approx$ *If you come one step closer, I will shoot.*

3. FIP: pragmatic encoding would have to assign one common speech act type/list all speech act types that can be assigned (looking at actual utterances only, they all exist on a par)

4. we already have a semantic meaning function; do we really need an additional pragmatic meaning assignment?

5. how can we distinguish indirect speech acts from direct speech acts? usually: it depends on the literal meaning + the speech act it would normally be used to perform - we need an additional layer. If the clause type is already a matter of pragmatics - how can it be overwritten in favor of another speech act type under the effect of indirectness?

6. non-intentional context: e.g. testing a microphone - clause type is still there and part of what we interpret - yet no (actual) speech act type is associated with the utterance

7. no way for compositional encoding of clause type in syntax, would have to be an extra-layer in syntax that is interpreted only post-semantically by association to some speech act/class of speech act types in pragmatics

- is a semantic answer dangerous?

  comparing the MSHSM to the **literal meaning hypothesis**

  (34) `The literal meaning hypothesis` (as ascribed to Searle 1975 by Gazdar 1981):
  For each context c, $c_d \in N$ is the full (syntactic) structural description of the linguistic object c_E uttered in c.
  There exists a function $\mathscr{F} \in M^N$ such that for all $c \in C$,
  $\mathscr{F}(c_d) \in \{m : m$ one of the speech act types performed in c with $c_E\}$.
  If c_d contains a performative prefix, then $\mathscr{F}(c_d) = m'$ where m' is the speech act type named by the performative verb in the prefix. Otherwise:
  $\mathscr{F}(c_d) =$ QUESTION, when c_d is interrogative
  $\mathscr{F}(c_d) =$ REQUEST, when c_d is imperative
  $\mathscr{F}(c_d) =$ ASSERTION, when c_d is declarative

  but: this is an attempt to answer PASTA in semantics; MSHSM addresses PCTE.

- **reconsidering clause types:** can we get rid of them once we have the semantic encoding?

  yes, they are only a heuristic device - it's sufficient to have the correct interpretation $[\![\cdot]\!]$ - the semantic object assigned to the LF of matrix sentences is enough to see what the prototypical function is

no, we need them as a heuristic device - clause-types can differ slightly across languages:

e.g. embedding (cf. above); subject marking (cf. Potsdam 1998; Schwager 2006); interaction with echo-questions:

(35) a. Mary stand by the door, John scatter the files, and I'll watch the front.
b. *Maria mach die Tür zu, Hans schließ das Fenster,
Maria make.IMPSG the door closed, Hans close.IMPSG the window,
und ich hole die Post.
and I fetch.1PSGPRESIND the mail

(36) a. A: Don't kill yourself! B: Don't kill myself?!
b. A: Bring dich nicht um! B: *Bring mich nicht um?
kill you not PRT kill me not PRT

we cannot rely on a fully language independent semantics of 'the imperative clause' (vs. Mastop 2005)

hypotheses:

- the semantics of imperatives results (compositionally) from a combination of various parameters
- some of these parameters may differ cross-linguistically; yet...
- the overlap is big enough to speak of one and the same clause-type across languages
- in particular: imperatives are particular modalized propositions that express which possible course of events is best w.r.t. a contextually specified parameter; the latter may, but need not, be deontic (obligations)