Nominalizations and Functional Heads

Workshop on Clausal and Nominal parallels
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‘It’s turtles all the way down...’

“I have been unable to find any published reference to it, so it may be that I have attributed it to the wrong man, or that it is apocryphal. Be that as it may, because of its bull’s-eye relevance to the study of syntax, I have retold it here.”

J. R. Ross, *Constraints on Variables in Syntax* (1967), attributing the anecdote to William James
Menu

- General outline
- Startdata
  - why clauses are different from nominals
- From 2\(^0\) grammatical categories to Functional Heads
- Issues of Lexical Specification
- \(\theta\)-role assignment
  - Voice as Functional Head?
- Predicate Type Phrases
The level of Functional Structure is relevant to Clause/Nominal differences, whereas the level of Argument Structure is potentially relevant to Clause/Nominal similarities. The level of Information Structure is irrelevant to either (pace Giuliana).

The argument will be that also the Argument Structure layer is a functional one - it is functional layers all the way down!
The Beginnings

“I noted earlier that the lexicalist position was not formulable within the framework of syntactic theory available at the time of Lees’s work on nominalizations. ....There was no other way to express the fact that the contexts in which refuse appears as a verb and refusal as a noun are closely related.”

Chomsky (1970: 23 – bold italics added)
The Beginnings
(Chomsky 1970)

2. a. John refuses/refused the offer
   b. John has/had refused the offer
   c. John is/was refusing the offer
   d. John will refuse the offer
   e. John may/might refuse the offer
   f. The offer is/was refused by John

1. a. John’s refusing the offer – Gerundive
    b. John’s refusal of the offer – Derived
    c. John’s refusing of the offer – ‘mixed’

4. a. The offer(‘s) being refused by John
    b. The offer’s refusal (by John)
    c. The offer(‘s) being refused by John

3. a. John(‘s) having refused the offer
    b. *John’s having refusal of the offer
    c. *John’s having refused of the offer
Commonalities

2. a. John refuses/refused the offer
   b. John has/had refused the offer
   c. John is/was refusing the offer
   d. John will/would refuse the offer
   e. John may/might refuse the offer
   f. The offer is/was refused by John

   Common property: Present a particular type of situation as having factual (or (d,e) potential) occurrence
   - Having a truth value

1. a. John’s refusing the offer – Gerundive
   b. John’s refusal of the offer – Derived
   c. John’s refusing of the offer – ‘mixed’

   Common property: Presuppose the factual occurrence (at some time, at some place) of a particular type of situation
   - Denoting a situation type

3. a. John(*’s) having refused the offer
   b. *John’s having refusal of the offer
   c. *John’s having refused of the offer

4. a. The offer(*’s) being refused by John
   b. The offer’s refusal (by John)
   c. The offer(*’s) being refused by John

   Common property: Present a particular type of situation as having factual (or (d,e) potential) occurrence
   - Having a truth value
Traditional V-Functional categories

Direct assigners of truth functionality
- Tense (Location in time, relative to DC)
- Mood
- Modality (Location in (abstract) space, relative to DC)

Indirect assigners of truth functionality
- Progressive (Location in time, relative to $S_1$)
- Perfect (Location in space, relative to $S_1$)

Some of these traditional V-category have been translated into Functional Heads
General Structure of Functional Heads

- FP
  - Spec
    - F
      - F^0
      - Complement
V-functional Heads

These are irrelevant for Clause/Nominal parallelism

There is one more traditional V-category to consider: Voice

- but no one - to my knowledge - has suggested a Functional Head based on Voice
A great many functional heads have been proposed within DP/NP - but it is not always clear where the demarcation line goes between the functional and the lexical layer.
The Lexicon

“Let us propose, then, as a tentative hypothesis, that a great many items appear in the lexicon with fixed selectional and strict subcategorization features, but with a choice as to the features associated with the lexical categories noun, verb, adjective.”

Chomsky (1970: 22 – bold italics added)
Information in Lexical Entries, in selected frameworks

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(1) Is the lexicon a ‘module’ of the grammatical system, with its own dedicated primitives and operations?

(2) If the answer to (1) is ‘yes’, what is the division of labour between ‘lexical’ operations and the recursive/generative syntactic computation (which must exist, by hypothesis)?

(3) What is the relationship between lexical information and non-language dedicate parts of the mind/brain?
Active-Passive
(Adapted from Chomsky (1970): *John proved the theorem* vs. *Several of John’s proofs of the theorem*)

### John refused the offer

**Active:**
- $S \rightarrow N \rightarrow \text{John} \rightarrow \text{Spec} \rightarrow \text{past} \rightarrow V \rightarrow \text{refuse} \rightarrow \text{the offer}

**Passive:**
- $S \rightarrow N' \rightarrow \text{Spec} \rightarrow \text{Refuse} \rightarrow \text{the offer}

### John’s refusal of the offer

**Active:**
- $S \rightarrow N' \rightarrow \text{the offer} \rightarrow \text{was} \rightarrow V \rightarrow \text{by John} \rightarrow \text{refuse} \rightarrow t_i$

**Passive:**
- $S \rightarrow \text{the offer} \rightarrow s_i \rightarrow \text{Refuse} \rightarrow t_i \rightarrow \text{by John}$

"The offer was refused by John" vs. "The offer’s refusal by John"
Theta-role assigners

V's, A's and (P's) are theta-role assigners, N's are theta-role receivers (e.g. Williams 1994):

But what about these:

1. Experiencer Theme
   John, fears, the dark

2. Experiencer Source
   John, is afraid, of the dark

3. Theme Agent
   John, is frightened by, the dark

4. Experiencer Theme
   John's, fear, of the dark

5. Source Locative
   The fear of the dark, in, John

In (3) and (5), the Agent and the Locative relations are not assigned by the verb or the noun, but by the prepositions; being adjuncts, they do not carry theta-roles (only thematic roles, if you care to distinguish between them).

It’s similarities like (1) and (4) that lie behind the search for structural parallelisms.

So, it’s predicates that assign theta-roles
Theta-role assigners

Where does the –al in refusal come from?
V-Functional categories

Direct assigners of truth functionality
  Tense  (Location in time)
  (Mood)
  Modality  (Location in (abstract) space)

Indirect assigners of truth functionality
  Progressive  (Relative location in time)
  Perfect  (Relative location in space)

Assigners of Theta-roles
  Active – passive???

* Being refused/Having been refused  Refusal

*
Theta-role assigners

This suggests that $\pm$passive might be a property of Lexical Items, in contrast to the other traditional V-categories: ‘Lexical passives’
Voice as Functional Head?

John was refused the offer - The offer was refused John

Refuse has a wobbly status as a trivalent predicate; if acceptable in active form, no argument/oblique alternation possible:

′ We refused John the offer
"We refused the offer to John
It’s fully acceptable in the passive, but still no alternation:
"The offer was refused to John

It would be unusual for be to assign theta-roles, let alone two of them. So something is not right.
Predicate Types (PT)

John was refused the offer vs. John was refused

From here, normal syntactic processes take over. Merge of $\Lambda^0$ as an AP into the Complement of Voice is licensed by [+Passive]

The output of PT(Root) raises to a Stem. It is stems that we assign to word classes, here as $A^0$.

The Root projects relevant theta-structure in a Predicate Type Phrase (PTP).

PT is considered a function that takes a Root as argument to return a Stem of a given WC. (Dynamic Syntax tree formalism; cf. Kempson et al. 2001)
Passive Nominals?

The city’s destruction by the enemy

†The offer’s refusal by John

††Our waterways’ pollution by farmers with nitrate

he was refused a license by his bishop  †his refusal of a license by his bishop

Mr Reid maintains he was refused the right to call witnesses on his behalf  [by the judge]
†The refusal to Mr Reid of the right to call witnesses on his behalf  by the judge
††Mr Reid’s refusal of the right to call witnesses on his behalf  by the judge

His refusal of a penalty when Allen was fouled by Curle made matters worse – [his] = [the referee]
*Their refusal of a penalty when Allen was fouled by Curle made matters worse – [Their] = [Tottenham]
The refusal of a penalty when Allen was fouled by Curle made matters worse – [The] = [?]
Predicate Types (PT)

John’s refusal of the offer

‘Lexical insertion’ is a matter of merging an \( X^0 \) as a complement of a functional category in a tree. This merger – on a radical non-categorial account like Borer’s – is totally random. I wouldn’t go that far...

Derivational morphemes are considered material realizations of Predicate Types, carrying specific instantiations of the general feature specification \([\pm N, \pm V]\).
Gender (or Classifier Systems) is the ‘closest’ functional category to Nouns – even if it is no longer obvious in English. Even so, it is the category that determines pronominal reference. So, I take \( N^0 \) to be merged as its complement, the same way as \( V^0 \) is merged as the complement of Voice.
To conclude…

Functional syntactic layers

Functional morpho-syntactic layers
...it’s Functional Heads all the way down!