

Defective Noun Phrases

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“Sit down before fact like a little child, and be prepared to give up every preconceived notion, follow humbly wherever and to whatever abysses Nature leads, or you shall learn nothing.”

T. H. Huxley¹

o. **The nature of the beast**

This paper is an attempt to characterize what happens when things begin to go wrong for noun phrases. Traditional grammarians have used the term *defective* for lexical elements which do not have forms which would fill all the cells in a conjugational or inflectional paradigm, as when a noun has no dative plural form, or when a verb does not occur in the past tense. The term thus always implies a comparison between what lexical items of a class usually do, and what exceptional elements of the class do. I believe it to be the case that the term has always been used for items which manifested fewer behaviors than the other members of the class, never when they manifested more. Thus in a language which had only a general morpheme for plural, traditional grammarians would not call a noun defective which had, in addition to a plural form, a dual form.

I think, in fact, that we can see that traditional usage of the notion of defectivity requires that a clear majority of some class of items behave in some specifiable way; with such a regularity as a backdrop, sporadic exceptions to it may be termed defective. Thus no English grammarian would ever say that the verb *be* is defective, in that it exhibits more contrasts in person-marking than any other verb, let alone saying that all other verbs in English are defective in not making as many distinctions as *be* does. Thus defectivity is clearly seen as being reserved for the few and freaky.

I propose to extend this traditional use of the term defective to phrasal behaviors, in a way which I hope will be seen as natural. I want to examine as closely as possible a group of contexts in which constituents which look like fairly decent NP's – they are headed by nouns, they (usually) can have some determiners, can (often) be modified by things which are relative clauses (or which look reasonably much like them), and so on – nonetheless cannot jump through all the hoops that we grammarians like our best and brightest NP's to be able to jump through. They will only jump through *some* of these hoops; they are thus defective. I believe that it may be demonstrable that there is a certain “directionality” to defectiveness in general; that, for instance, the first thing to go may be the ability of a NP to be replaced by a definite pronoun, and that a subset of non-pronominalizable NP's may require that they be followed by a relative clause. I think, however, that we will never find the reverse to be the case – that would be a case in which NP's which could be pronominalized freely nonetheless always, when non-pronominal, had to appear with a following relative clause. In other words, unpronominalizability seems always to be a lesser blemish upon the repute of an NP than a necessity of being modified.

This all may be a bit difficult to understand in the abstract, but I think that it will become much clearer as we begin to look at examples of types of defectivity, a sport to which I now turn.

Before starting with a detailed look at the phenomena which have led me to the notion of (phrasal) defectivity, however, it may be relevant to say briefly what general area of grammatical thinking they are to be seen as contributing to, namely, grammaticalization. We are accustomed to saying that the morpheme *-tween* of *between* is a grammaticalized form of the noun *twain*, and even that the NP *the side* is partially grammaticalized when it is found in such a sentence as *Hank kissed Hermione by the side; of a bubbling brook* [NB: * . . . *by it_i*]. But I think that previous workers on grammaticalization have not felt that measure phrases, say, as in *This watch will cost \$24_i* [NB: * . . . *will cost them_i*] may profitably be seen as cases of what might be referred to as *incipient grammaticalization*. Possibly measure phrases and some of the other types of phrases which I will be discussing below have seemed flexible enough in their shapes and behaviors that they may have been seen as doing business as usual. I certainly intend no criticism of the extremely exciting work in today's active community of researchers on grammaticalization (cf. Heine, Claudi and Hünemeyer (1991), Hopper and Traugott (1993), and Traugott and Heine (1991a, b)) – on the contrary. Rather, I see the present paper as an attempt to link such studies even more closely to what some might want to call “pure syntax” – a field of study which might want to see itself as being separable from research in grammaticalization. I want to argue against any attempt to separate. To understand any living system, we need to know both how it might have evolved, and how this evolution may want to proceed further.

And now let us sit down like little children.

I. **The behavior of purebred NP's**

Prototypically, NP's are characterized by exhibiting all of the following syntactic behaviors:

- A. Definite pronominalization (both inbound and outbound). In the former, a definite pronoun can replace or stand for the NP in question; in the latter, the NP can be referred to by such a pronoun.
- B. Modifiability by various determiners and by full or reduced relative clauses, both restrictive and appositive². Modifiers are optional and not required.
- C. Pluralizability, including, when the NP in question is in subject position, the triggering of Subject-Verb Agreement
- D. The ability to undergo various movement rules, rules
 1. that are local and governed, like Passive, *Tough*-Movement, Middle, etc.,
 2. that rip constituents over long distances, like Topicalization, Cleft Sentence Formation, Pseudo-cleft Formation, Question Formation, Relative Clause Formation, Heavy NP Shift, etc.
 3. and that copy constituents, like various types of dislocations.

Should we enquire as to where we might find purebred NP's, the immediate response would be: where else? Only in the finest environments, to wit: as subjects, direct objects, indirect objects, of the best verbs, natch, as the objects of (some) both locative and non-locative prepositions, and as some possessors. We might add that topicalized and dislocated NP's are also purebreds.

2. **Types of defective noun phrases (DNP's)**

Given the behaviors in §1 above as a kind of baseline, let us now look at a selection of various constituents that are headed by nouns, and which exhibit some of the things we expect of good nouns, and thus might be thought to be NP's – but they are somehow not quite up to snuff. In some cases, which I will start off with, grammarians have noticed that the phrases in question differ significantly from the baseline, and have thus shied away from calling them NP's. This was a move I made myself, in the first paper I presented at the LSA in 1964, a paper thankfully never published: “The grammar of measure phrases in English.” Another type of noun-phrasoid is predicate nominals, which have been dominated by nodes like PredNom, or PN, in some analyses. And another is the case of what are sometimes called “cognate objects,” or “inner objects” – things like *I dreamed a beautiful dream*, *They were roaring blood-curdling roars*. I am not aware of any particular node, distinct from NP, that may have been suggested as a category for such constituents.

Grammarians have noted that these objects were different (in this last case, the cognate objects must obligatorily be modified), but have not, I believe, tried to relate the differences encountered in cognate objects to those encountered in “measure phrases” or “predicate nominals.” This is one basic aim of this paper.

I believe that all three of the above noun-phrasoids differ from the goody-goody-two-shoes NP's of §1 in the same kinds of directions, and further, that the phrasoids occur in the same parts of clauses. My terminological suggestion is that they all be recognized as being kinds of *defective noun phrases*, or DNP's. My theoretical suggestion is that it is time to turn to the question as to what might be the cause(s) of such nominal defectivity. I do not intend to propose any formal mechanisms yet for the representation of defectivity [“DNP” is not a suggestion for a new phrase structure node]; formal mechanisms will come on their own when the time has ripened a bit more. My examples will be drawn from English only, but I would be very surprised if there were to turn out to be a language in which there is nothing comparable to nominal defectivity. Even if such languages should prove to exist, it is clear that many of these problems are going to crop up in other grammars, with interesting mutations. I think that formal analyses should be deferred until we have some idea as to what is out there typologically.

This theoretical throat having been ritually cleared, let us get down to tacks that are brasser. Below, I will list some types of DNP's, in each case showing some of the ways in which they deviate from the baseline of §1. After the various ungrammaticalities encountered, I will append one of the letters A – D, to indicate which of the four kinds of expected behaviors of §1 is failing to make it. Occasionally, I will highlight the contrast by citing a purebred example.

- | | | |
|-----|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| A. | Measure phrases (MP's) | |
| (i) | ai. | <i>Jed gave me \$20, but the motor will cost more than \$20 / that / *them.</i> [A – Inbound pronominalization] |
| | aai. | <i>I got \$20 when I was eight, and I still have it / that / them.</i>
[baseline – objects of <i>have</i> can normally be pronominalized] |

- aiii. *This rattlesnake costs \$20, and I don't have it / that / *them.*
[A – outbound plural pronominalization is blocked]
- b. *We will be in Dallas for two hours, but I don't want to explore the city [*/for that / *for the hours / *for the two hours / % for those hours ≤ % for those two hours³].* [B – determiner restrictions]
*180 pounds [is / **are] what I want to weigh next month.* [C – measure phrases very rarely trigger plural number agreement.]
- di. **Two hours is tough for me to imagine the concert lasting.* [D – failure of Tough-Movement to apply]
- dii. But relative clausoids are possible: *I earned the \$20 that the popsicle will cost.* [D – I say “relative clausoid” here and elsewhere, because these clauses have funny wrinkles that regular copper-clad relatives don't: they exclude negatives – **that the popsicle won't cost*, and they require articles – (dii) becomes ungrammatical if the *the* before \$20 is deleted.]
- diii. And Topicalization is OK: *Two hours this concert will never last.*
- B. Predicate nominals
- (2) ai. **My cousins are not yet drunkards; but will soon be them;*⁴ [A – failure of inbound pronominalization]
- aii. *?*Being computer freaks; in the Sahara is a drag – they; have to travel so far to be able to buy memory chips.* [A – failure of outbound pronominalization]
- b. **My cousins are not yet [the / these / some / Ann's] drunkards.*
[B – determiner restrictions]
- c. **My cousins are drunkard / *My cousin is drunkards.* [C – These examples show that the number on predicate nominals is not free – it is determined by agreement with the number of some earlier NP. Prototypically, NP's are free, independent, unlinked to other constituents. Thus any such restriction as that on number which we are seeing here should cause defectivity.]
- di. *A drunkard is tough for me to imagine Hankins [biting / ?being].*
[D – failure of Tough-Movement to apply]
- dii. Again, relative clausoids are possible: *My cousins are not yet *(the) drunkards that my uncles (*never) were.*
- diii. Topicalization is only sometimes OK:
 - i. *Hopeless drunkards my roomies are ?(not).*
 - ii. **A total flop I fear that the play will be.*
- C. Inner objects [a.k.a “cognate objects”]
- (3) a. **Jim slept the sleep; of the just, and will always sleep it;* [A]
- b. **Jim slept [a / some / no / his] sleep of the just.* [B]
- di. **The sleep of the just is hard for me to imagine Jim sleeping.*
[D]
- dii. *??The sleep of the just Jim may never sleep again.* [D]
- diii. *Jim must be needing the deep sleep that we (*don't) see him sleeping every night.* [D – again, negativeless clausoids only]
- div. **The sleep of the just, that Jim may never sleep again.* [D – Left

Dislocation is impossible. Actually, this * may be being caused by the inability of inner objects to be pronominalized by *that*; note that *(3a) is not improved by replacing *it* by *that*. Thus this restriction may possibly best be seen as a type A defectivity.]

The next type of DNP that I will take up is what generally goes, in the trade, by the name of *idiom chunks*. I have written at some length about the squishiness of the idiomaticity of the phrases headed by the boldfaced nouns (?) in such idioms as *take this **tack** on, keep **tabs** on, keep **track** of, pay **heed** to*, etc. (cf. Ross (1973)), and I will only have room to discuss certain of their limitations in the present context.

D. Idiom chunks – two subtypes

- i. Type I – Postverbal
- (4) ai. ?*If you won't read the riot act_i to these ruffians, I will read it_i to them. [A]
- aii. *Once you have tripped the light fantastic_i with Sara, you will never want to trip it_i again with anyone else. [A]
- aiii. But some idiom chunks allow definite pronominalization: *They took this tack_i on desegregation and may take it_i again on depopulation.* [A]
- bi. *We read [that / a / some / each] riot act to them. [B]
- bii. We took [those tacks on that problem / a new tack on that problem / some tack *(that I would never have tried) on that problem / the tack *(that was most likely to succeed), etc. on that problem]. [B – the defectivity here resides in the fact that *tack* only allows certain determiners if a relative clause follows.]
- ci. I lost my temper(*s). / We lost our temper(s).
- cii. I craned my neck(*s) to see. / We craned our neck?*(s) to see.
- ciii. I kept my word(*s). / We kept our word(*s).
- civ. I raised my hand ≠ hands; We raised our hands; ??We raised our hand. [C – some idiom chunks require possessive pronouns that agree in person with NP's earlier in their clauses. Such *bound possessive pronouns* sometimes can agree in number with the nouns they are modifying – optionally, as in (4ci), fairly obligatorily, as in (4cii), not at all, as in (4ciii), or sometimes with differences in meaning, as in (4civ). Such a plurality-dependency on the part of one NP on the number of another causes various defectivities, of a selection of the types in §I. A serious study of the defectiveness of NP's involving bound possessives would doubtless exceed monograph length]
- di. *The riot act I will not read to them. [D – no Topicalization]
- dii. But some idiom chunks do topicalize: *This tack I would never take on that problem.* Which idiom chunks can prepose and which cannot is a currently unsolved problem, as far as I know.]

2. Type 2 – Articlelessness in the objects of prepositions

Singular count nouns normally require articles; but after certain prepositions, this requirement can be lifted, in the formation of idiomatic expressions. Some nouns may form idiomatic expressions even with their articles present: the noun *side* is articleless after *in* (*inside of the box*), but requires the definite article after *at* (*at *(the) side of the house*) or *by* (*by *(the) side of the road*).⁵

- (5) ai. *I bought *(a) bed; and then went to [bed / *it_i.]* [* if trying to mean “retired for the evening”] [A – inbound pronominalization]
- aii. **Jan is in bed; and I want to move it_i into the study.* [A – outbound pronominalization]
- b. *Oil was [on the (shiny) top of the car / on (*shiny) top of the car].* [B – articleless nouns can’t be modified – but for that matter, neither can nouns which can only be preceded by *the*: *by the (*rickety) side of the house*. The correct generalization may be that modifiers are impossible wherever there is no choice of determiners.]
- Oil was [on the top(s) of the cars / on top(*s) of the cars].* [C – as was the case with modifiers, discussed in (5b), plurals are possible neither with articleless nouns, nor with nouns which can only be preceded by *the*: *There was grass [by the side / by the side(??s)] of the house.*]
- di. *Maxine went to the bed. The bed Maxine went to. Maxine went to bed. *Bed Maxine went to.* [D – articleless DNP’s that are objects of a preposition can almost never prepose, as far as I know [a rare exception is *?Church I never go to* (compare the perhaps worse *??College I never went to*)], though some articleless nouns can prepose when they are direct objects: *Church I still attend* ≥ *??College I never attended*]
- diii. *The top of the car I put snail repellent on. / *Top of the car I put snail repellent on.* [D – locative nouns, like *top, front, back*, can never prepose when articleless.]

E. Locatives / Temporals

The next type of DNP’s are NP’s which are used in spatial and temporal expressions. Their grammar is complex in the extreme, and I can only touch on it in passing here. Broad-brushly, the way locative and temporal expressions work is as follows. While inanimate NP’s in non-adverbial contexts can only pronominalize with definite pronouns like *it* and *they*, such NP’s can or must be pronominalized with the pro-adverbs *there* and *then* when they are being “used adverbially.” Almost all of the problems involved in understanding what might be meant by “used adverbially” are unresolved (for some discussion, see Ross (1995b)). One of these has to do with what the class of nouns is which must be pronominalized with *there* “in locative contexts,” as opposed to those nouns with which such pronominalization is possible but not required. Names of countries and other geographic entities (islands, mountains,

bodies of water and the like) usually require *there* in spatial contexts, while artifacts like buildings allow it as well. This distinction is what lies behind such contrasts as those we see immediately below.⁶

- (6) a. *The house_i is beautiful. I have visited the house_i. I want to live in the house_i.*
*It_i is beautiful. I have visited it_i/ ?*there_i. I want to live [in it_i / there_i].*
Montana_j is beautiful. I have visited Montana_j. I want to live in Montana_j.
*It_j is beautiful. I have visited [?it_j/ ?there_j] I want to live [*in it_j/ there_j].*
The Azores_k are beautiful. I have visited the Azores_k. I want to live in the Azores_k.
*?They_k are beautiful. I have visited [??them_k. / ?there_k] I want to live [**in them_k/ OK: there_k].*

As can be seen from these examples, there are other factors which play a role in the choice of nominal versus adverbial proforms. An easy one to spot is plurality: plural places are much more reluctant to be pronominalized with the definite pronoun *they* than are singular nouns to be pronominalized with the singular *it*.⁷ An interesting factor is that of grammatical role: subjects can almost never be *thered*, while geographic objects of locative prepositions almost always must be. What happens in direct object position varies with the semantics of the verb. With *reach*, whose object is generally interpreted more as a Goal than as a Patient, *there* is preferred over *it* (cf. (7)). With *discuss*, whose object is interpreted “propositionally,” rather than spatially, only *it* is possible – (cf. (8)). And there seem to be intermediate cases, verbs which are spatially tinged, like *visit* and *enter*, for which *thereing* may not be totally impossible (cf. (9)).

- (7) a. *The Yellowknife Hilton is about 5 miles ahead – we should reach [it / ?there] by noon.*
 b. *Montana is the next state – we should reach [?it / there] by noon.*
- (8) *Montana is an interesting state – I hope to discuss [it / **there] next class.*
- (9) *Montana fascinates me – I’ve always wanted to visit [?it / ?there].*

To sum up, this section has presented cursorily some of the evidence which supports a claim of defectivity for five types of NP’s: measure phrases, predicate nominals, inner objects, two types of idiomatic expressions, and locative expressions. The next section will seek to characterize the contexts in which such DNP’s and others are found.

3. **The habitat of defectives**

(10a) says most of it, and (10b), it all:

- a. In general, defectives are postpredicative – the closer to subjecthood, the rarer defective noun phrases are.
 b. The huge majority of DNP’s show up in sentences whose main

predicates are verbs. Non-verb-linked defectives are grammatical hen's teeth.

This generalization covers a lot of territory. Let us examine the five types of defective NP's of §2, to see how (10a) and (10b) apply to each.

A. Measure phrases

Here, we find an interesting phenomenon: measure phrases are extremely rare in subject position. Here are some examples of the only type that I know of that do exist:

- (11) a. Two miles is a long way.
 b. 24 pounds is too heavy to carry.
 c. \$444 is an awful lot to pay for a guinea pig.

These are the only type of sentences that I have found in which it may make sense to claim that measure phrases can appear in subject position in remote structure. Significantly, it appears that the only possible main verb in such sentences is the copula *be*.

It might appear that such sentences as those in (12) should stand as counterexamples to this claim:

- (12) a. Two miles (into the [desert/*coastline]) ([on / *with] foot) (at 6 mph) will take us all morning.
 b. 24 pounds ([in/ *toward] your carry-on) will make us overweight.
 c. \$444 ([on/ for / *at / *of] a toaster) will put us in the poorhouse.

I believe, however, that such apparent counterexamples may eventually prove to be best analyzed as desentential – that such measure phrases should be taken as originating in post-verbally, as in sentences like (13).

- (13) a. **To go** two miles (into the [desert/*coastline]) ([on / *with] foot) (at 6 mph) will take us all morning.
 b. **To put** 24 pounds ([in/ *toward] your carry-on) will make us overweight.
 c. **To spend** \$444 ([on/ for / *at / *of] a toaster) will put us in the poorhouse.

The prepositions that head the PP's that follow the measure phrases in (12) are consistent with the choice of such verbs as those that I have suggested in (13), but there is many a slip between suggestion and proof, which latter this is not the place to attempt.

There are some verbs from the Commercial Transaction Frame (cf. Lawler (1989)) for which measure phrases specifying money can be direct objects, and thus be passivized. Cf. (14):

- (14) a. Samuelson paid \$12 to Gus for the huge popsicle.
 b. \$12 was / ??were paid to Gus for the huge popsicle by Stan.

Interestingly, I find a slight difference between the postverbal and preverbal tokens of the DNP \$12. In the former case, it must be treated as a mass noun, while

in the latter case, in subject position, it seems to perhaps also be faintly possible to treat it as a count noun – cf. *(15) and ??(16b), respectively.

- (15) a. Stan paid \$12, much of which was from the slush fund, to Gus for the huge popsicle.
 b. *Stan paid \$12, many of which were crumpled and greasy, to Gus for the huge popsicle.
- (16) a. \$12, much of which was from the slush fund, was paid to Gus by Stan.
 b. ??\$12, many of which were crumpled and greasy, were paid to Gus by Stan.

Thus one difference between subjects and non-subjects lies in the ability of the former to be classified in more ways than can be the latter. I think too that it is significant for the hypothesis that defectivity occurs primarily in post-verbal positions that it is a marked type of nouns – mass nouns – that we find in the active versions of *pay*, in (15). I am not suggesting in any way that this fact follows from the hypothesis in (10) – I have no explanation whatsoever to offer for it. But seem connected it does.

B. Predicate Nominals

Let us now move to predicate nominals, {I will refer to them as ‘PN’s’ below} which can occur in remote structure only postverbally. I do not know whether it has ever been observed or not, but it is a fact that these phrases only show up after verbs. Logically, we might expect to find PN’s after adjectives or other constituents, as in (17):

- (17) a. He is stingy ({of/with/etc.}) [a miser/*misers]_{PN}.
 b. They are stingy ({of/with/etc.}) [* a miser/OK: misers]_{PN}.

There are, to be sure, cases of sentences in which PN show up as adjuncts: cf. (18):

- (18) a. He returned home [a miser/*misers]_{PN}.
 b. They returned home [* a miser/OK: misers]_{PN}.

but these are arguably derivable from remote structures like those in (19), as I have proposed in Ross (1980).

- (19) a. He was a [a miser/*misers]_{PN} when he returned home.
 b. They were a [* a miser/OK: misers]_{PN} when they returned home.

When we ask whether PN’s can ever show up as subjects, it would seem that the only possibility of this happening would be for them to be surface subjects that had been derived by rules like the rule of *Tough*-Movement. The results of attempting to provide such a derivation can be seen below: in (20), we see a case of a *Tough*-moved entity-specifying predicate nominal, and in (21), a case of a *Tough*-moved predicate-specifying predicate nominal.

- (20) a. It is tough for me to imagine your friend to have been the victim of a land swindle.

- b. ?? The victim of a land swindle is tough for me to imagine your friend to have been.
- (21) a. It is tough for me to imagine your friend to have been a drunkard.
- b. *A drunkard is tough for me to imagine your friend to have been.

As we see, the more defective of McCawley's two types of predicate nominals must be prevented from undergoing *Tough*-Movement, a restriction which (10) helps us to understand the rationale for. Let me mention briefly one reason for believing that predicate-specifying predicate nominals are more defective than are entity specifying ones. What is involved is the possibility of allowing the article which normally is required with all singular count nouns *not* to appear. The sentences in (22a, b) show us that normally, indefinite articles cannot be omitted before role nouns. The only exceptions to this generalization that we find are when such role nouns appear after copular-object-taking verbs:

- (22) a. We want to hire *(a) president of a small software firm.
- b. [A president / *President] of a small software firm was visiting us today.
Beatrice [is now / became] [president]_{PN} of a small software firm.
They have elected Beatrice [president]_{PN} of a small software firm.

We should expect articleless predicate nominals to be more reluctant to undergo *Tough*-Movement than are predicate nominals with indefinite articles. I believe that there is a distinction in my speech in the predicted direction, but the difference is much smaller than I would have expected, for reasons that elude me. The relevant sentences are found in (23b).

- (23) a. It is tough for me to imagine Beatrice to have been (a) president of a small software firm.
- bi. ?A president of a small software firm is tough for me to imagine Beatrice to have been. ≥
- bii. ?? President of a small software firm is tough for me to imagine Beatrice to have been.

C. Cognate objects

Let me pass on to the next group of DNP's – cognate objects. Again, the only way for us to see whether these can appear as subjects will be to try to get them there by applying rules that advance NP's to subject position, such as Passive or *Tough*-Movement. The logic of the situation is the following: if we find that there are cognate objects that can undergo such advancement rules, this will mean that (10) is too strong. If, however, we are unable to find any cognate objects that can be advanced, we will not know whether this is due to the lethal efficiency of (10), or to the fact that there are a number of processes that clauses with cognate objects do not undergo, say, Passive and some other advancement rules. The behavior of purebreds is shown in (24) below, and the extent to which cognate objects fail to toe the line is shown by (25).

- (24) a. *Calvin and Hobbes* cannot be translated into Malay.
 b. *Calvin and Hobbes* is not translatable into Malay.
 c. *Calvin and Hobbes* does not translate readily into Malay.
 d. *Calvin and Hobbes* remains untranslated into Malay.
- (25) a. *A beautiful dream was dreamt by Hector.
 b. *Beautiful dreams are rarely dreamable more than twice.
 c. *Nine-dimensional dreams do not dream readily.
 d. *Many important dreams remain undreamed because of poor planning.

I note in passing that “cognate object” is a Big Lie as a term, for it is easy to show that there are a number of kinds of such objects. A more careful treatment of them than I have space for here would have to distinguish between more frozen and idiomatic (and therefore less transitive [?]) cases and less frozen, more transitive cases. A case like *dream a dream* is probably somewhere in the middle of the spectrum of possible cognate objects, while *die a death* would probably rank with the most frozen cases, and *sing a song* with the least frozen and most transitive. Accordingly, we find that if we try to put these two cognate objects through (24)-like paces, we get dazzling ungrammaticalities for the former case (cf. (26)), and some pretty decent sentences for the latter (cf. (27)).

- (26) a. ** A miserable death was died by Hector.
 b. ** Blissful deaths are now di(e?)able in your own home, thanks to the wonders of the new improved Thanatron.
 c. ** Superior deaths die readily at your local Ethical Suicide Parlor.
 d. ** A hero’s death may remain undied merely because of faulty concentration.
- (27) a. Some songs should not be sung before midnight.
 b. Many songs are only marginally singable underwater.
 c. Drinking songs sing poorly for teetotalers.
 d. Two of these songs were to remain unsung for more than sixty years.

To return to the matter of DNP’s in subject position, while realizing the inherent limitations of the tests I am about to apply, let us see what *Tough-Movement* will tell us about the cognate object of *dream*:

- (28) ??A real sicko of an S & M dream is tough for me to imagine old Mrs. Winterduffer dreaming.

I find (28) flawed, but not as badly as the examples in (25) – clearly, some repair work on (10) is called for. But I must defer this to a future study, and pass on now to look at the next category of DNP’s – idiom chunks.

But before we leave the realm of cognate objects, let us note that they too are found only after true verbs – never after adjectives or predicate nominals. Thus sentences like those in (29) never spawn monsters like those in (30):

- (29) a. Max is violently jealous of Michele.
 b. These gardeners are merely enemies of the state.
- (30) a. **Max is jealous (P) [a violent jealousy]_{Cognate object} of Michele.
 b. ** These gardeners are enemies (P) [a mere enmity]_{Cognate object} of the state.

D. Idiom chunks

Here, we do find that there are many idiom chunks that can appear as subjects, due largely to the operation of Passive, but due also in part to the operation of *Tough*-Movement. Thus examples such as the following, in which the idiom chunks have been boldfaced, can be constructed:

- (31) a. **Headway** was made on the problem along a number of avenues.
 b. This **tack** will be tough for them to take on the recycling issue.

The main thrust of Ross (1973) was to demonstrate that such idiom chunks formed a squish – that is, that they could be viewed as being, in the terminology of this paper, of varying degrees of defectiveness. In that work, I reported an observation, not original with me, I do not believe, to the effect that with highly defective idiom chunks, it was sometimes possible to demonstrate that modification of the head noun in the DNP increased its passivizability. Possibly the clearest case of this effect can be seen with the idiom *pay heed to*:

- (32) I do not think that ?*(any) heed should be paid to this kind of sabre-rattling.

In the present context, the contrast in (32) points to an interesting conclusion. We learn from it that defectivity may reside not only in the ability to be modified, but in the actual association with a modifier. Thus *heed*, by itself, is too defective for it to be possible for the rule of Passive to convert it into a superficial subject of *be paid*. However, if such determiners as *no*, *any*, *some*, and possibly even *such*, appear before *heed*, its noun-phrasiness must be increased above the threshold required for Passive. Though this is not the occasion to enter the merry chase that these facts will doubtless lead some grimly determined future scholar, let us note in passing such variants as those in (33):

- (33) a. The Feds are going to have to keep tabs carefully on Old Zeb's stills.
 b. The Feds are going to have to keep careful tabs on Old Zeb's stills.

If it can be argued, as I think likely, that (33b) should be derived transformationally from (33a), a proposal going back at least to Zellig Harris, if not to traditional scholars like Jespersen, then if in addition there is a significant difference in grammaticality between the passivized variants of (33), which appear in (34),

- (34) a. ??Tabs are going to have to be kept carefully by the Feds on Old Zeb's stills. ≤
 Careful tabs are going to have to be kept by the Feds on Old Zeb's stills.

then some formal mechanism will have to be constructed that will assign degrees of noun-phrasiness (or, viewed from the half-empty bottle perspective, of defectivity) to all nominal nodes (or possibly only to certain ones?). Further, it will be necessary to specify that (some? all?) rules can augment or decrement such indices of noun-phrasiness. In the case of the conversion of (33a) to (33b), the adjunction of the deadverbial modifier *careful* to the head nounoid *tabs*, will, in keeping with our observations above, have to ensure that some minimal noun-phrasiness value for Passive has been attained.

Needless to say, to call such suggestions as these programmatic would be to treat them with a near-saintly charity. It will be interesting to see what can be worked out seriously one day in order to account for such challenging data.

Before leaving the topic of idiom chunks, I would like to make three more points. The first is that from the unified approach to various types of DNP's that I have been attempting above, the oft-noted rarity of idiom chunks in deep subjects is no accident. Furthermore, a previously unremarked restriction on such idiom chunks also comes into focus. This is the fact that without exception, to the best of my knowledge, all of the idiom chunks which can be found to occupy deep subjects are definite. A small selection appears in (35).

- (35) a. [The shit / *Shit] is going to hit the fan.
 b. [Devil (= The devil) / **Some devil / **A devil] take that blame rooster!
 c. [Cat (= the cat) / **A cat / **Some cat] got your tongue?
 d. [The/*A/*My] jig is up.
 e. [Beulah's/*Either girl scout's] goose is cooked.

Note, though, that proverbs can have indefinite subjects – I do not know why:

- (36) a. A stitch in time saves nine.
 b. A watched pot never boils.
 c. A bird in the hand is worth two if by sea, etc. etc.

The second point that I would like to make is that there is an interesting type of unattested idiomatic expression which (10) will help us to understand. The gap concerns the class of idiom chunks which were examined in (4cv) above – those which require bound possessive pronouns. Simply put, the unexpected gap is that stated in (37):

- (37) There are no bound possessives in subject position.

This is a fact that requires explanation, given the existence of dialects in which backward pronominalization into possessive NP's is possible. That is, while everyone can say (38a), many [though not me] can also say (38b):

- (38) a. Max's_i daughter loves him_i.
 b. % His_i daughter loves Max_i.

This being the case, why do we never find, even in those dialects which accept (38b), that an idiom like (39a) might have some such variant as (39b)?

- (39) a. Terry_i blew his_i stack.
 b. *His_i stack blew on Terry_i.

Equally, since there are dialects which can passivize (40a) to (40b) [presumably, the same speakers who accept (38b) will also accept (40b), though I do not know if this hypothesis has ever been checked],

- (40) a. Max_i loves his_i daughter.
 b. % His_i daughter is loved by Max_i.

unless we state something like (37), which is clearly related to (10), how can we rule out such passives of sentences like (39b) as *(41)?

(41) *His_i stack was blown by Terry_i.

Thus (10) provides us with a partial explanation of the non-existence of anything like *(39b) or *(41): the determiner of *stack* in (39) is not independent of all other constituents in the sentence, so *stack* is defective. (10) describes the pressure that keeps such DNP's as far away from subjects as possible. I have said that this explanation is only partial. This is because (10) is formulated as a tendency, not as an absolute prohibition – we do find some subject DNP's. Why, then, do we find none of the form of (39b) and (41)? Is this to be interpreted as being due to a cumulative pressure? Are we to say that sentences like (38b) lose some of their viability (cf. Ross (1986b), (2000) for this term) because of the backwards pronominalization, and then lose more because of the process of idiomaticization? We can raise such questions now, but I believe that we are very far from having anything like the depth of understanding of such issues that would allow us to find answers to them.

And the third observation: to the best of my knowledge, there are no idiom chunks after adjectives or nouns. Measure phrases, predicate nominals, cognate objects and idiom chunks all seem to turn up only in the ambit of verbs.

E. Locatives / Temporals

I will leave now, regretfully, the rich lodes of syntactic treasure that we find whenever we enquire into the way idioms come into being, and push on to the last of our five types of DNP's – spatial / temporal NP's.. In the case of such NP's, one set of examples can say about all that needs to be said, and it already has – cf. (6) above.

The point of such examples is that while there are post-verbal contexts (though no post-adjectival or post-predicate-nominal ones) which can force an NP to be treated as a locative or temporal (and thus to be pronominalized with *there* or *then*, respectively), it is (almost) never possible to force a subject to be construed adverbially. The only exceptions I know of to this generalization are exemplified by such sentences as those in (42):

- (42) a. [Under the sink / There] is filthy beyond belief.
 b. [After 5PM / Then] would be the most convenient for Terry.
 c. [In the garage / Here] is our traditional place to put the Christmas tree.
 d. [Tuesday at 3AM / Then] would be a great time to go wassailing.

Let me sum this section up so far. We have seen repeatedly that the prototypical habitat for DNP's is post-verbal, and that they can be fronted only with various kinds of difficulty, difficulties which can either manifest themselves in a drop in grammaticality, or in a requirement for a modifier to up the nouniness of the fronted DNP.

But there is another interesting way to see the force of (10). What happens when we front a direct object, which can in its deep post-verbal position be either a definite or an indefinite? As we will see shortly, both of the rules which prepose constituents to positions before the subject (usually) impose a restriction on the preposee, to the effect that it be specific, and in the case of Left Dislocation, that the left-dislocatee be definite, as well. (43) shows these facts for the rule of Topicalization, and (44) for Left Dislocation.

- (43) Topicalization: the best topicalizees are not only definite, they are deictic. There appear to be many speakers who reject topicalizing altogether, and some who will only grudgingly tolerate it if the topicalized NP contains a deictic. In general, for all speakers, I believe, the farther along the continuum towards non-specific indefinites, the worse NP's are as topicalizees.

- a. ?A bed I bought.

If certain modifying elements are stressed, indefinite topicalizees are improved:

[*One* bed / [*Two* beds / ?**Two beds*] / Big beds / Beds from Suez] I bought.

Bafflingly, topicalizability is improved if the head noun of an indefinite specific NP is stressed:

- c. A *bed* I bought.

Modifiers save some non-specific indefinite topicalizees:

- d. Everybody *(who knows Gothic) he wants to pass.

But not all non-specific NP's can be topicalized:

- e. A bed that was painted white they couldn't find. [For me, this is acceptable if specific, but it sounds quite weak under a non-specific interpretation, unless preceded by McCawley's famous Star of David, the prefix for sentences which "sound Yiddish."]
- f. *A bed they couldn't find. [This modifierless version is bad for me on a specific reading, but even worse (or Yiddisher) under a non-specific reading.]

Finally, constituents which contain an incorporated negative can also be fronted by the rule of Topicalization.⁸ Thus (43g) can become (43h).

- g. Natasha will fool nobody in that costume.

- h. Nobody will Natasha fool in that costume.

These are clear counterexamples to my hypothesis that only specific NP's can be preposed, as of course are question clauses, for *wh*-words are prototypically non-specific indefinites. I am currently mystified as to why it should be easier to topicalize (some) non-specific indefinites [cf. (43d, h)] than it is to topicalize some specific indefinites.

- (44) Left-Dislocation: prototypically, this rule copies definites. It is not always good with indefinites, nor, hélas and however, always bad.

- a. *A squirrel_i, he_i was eating walnuts.
b. A squirrel_i *(that was eating walnuts), they didn't see him_i.

In the first part of this section, I gave evidence that DNP's are prototypically found post-verbally. They generally resist undergoing rules that would put them into subject position. And immediately above, I have tried to show how two popular rules (Topicalization and Left Dislocation), whose effect is to front NP's to the left of subjects, are prototypically centered on definite NP's, though this water is muddied by the two processes in English which occasion the inversion of the subject and tensed auxiliary in main clauses: Topicalization(?) of negative constituents (*Nobody from Kankakee will I ever kiss*) and Question Formation (*Who will I have to kiss?*). Burying our heads in the sand in the face of these, we can envision a general form of clause on the order of (45):

(45)	Definiteness and defectivity in clauses		
	Fronted elements	Purebreds	Defectives
	prototypically definites	anything goes	prototypically non-specific

4. **The case of chômeurs**

4.0 In this section, I will take up an interesting link between defectivity and chômage, the fundamental concept which was introduced into linguistic theory through the work of David Perlmutter and Paul Postal (cf. e.g. Perlmutter (1983), Johnson and Postal (1980)). Chômeurs are produced through the operation of rules which replace one term with another; the replaced term, "out of work," is placed en chômage. In English, most chômeurs are placed at the end of clauses, where we have seen DNP's to be. I do not know which is chicken and which egg, but the facts seem to be roughly as follows:

- (46)
- a. Chômeurs are (often) defective, with the extent of their defectivity varying with the unproductivity of the rule which puts them out of work. The greater the productivity of the chômeurizing rule, the less severe the defectivization.
 - b. A hierarchy of chômeuric definiteness
non-specific " specific " definite " definite pronoun

This hierarchy is to be interpreted in such a way that any element to the right implies all those to its left. Thus if a chômeur of some rule can appear as a definite pronoun, chômeurs for that rule could also be found which were definite, or specific, or non-specific. But there might be rules whose chômeurs could only be non-specific, or only specific and non-specific, etc. I have tried in (47) to state this same generalization slightly more imposingly:

(47) **The Law of Chômeurization-Linked Defectives**

If a chômeur arises as a result of any term-changing rule, that chômeur may be required to be defective only in the implicational order suggested in (46b): the mildest type of defectivity imposed will involve restrictions on definite pronominalizability, with increasingly severe

restrictions imposing that chômeurs be ever further removed from the definite pronominal core.

4.1. Chômeurs caused by the advancement of a term

Let us proceed from such fancy formulations to eat some pudding. In this section, I give a few examples of advancement rules whose chômeurs seem to exhibit some defectivity. In §4.2, I will discuss the case of chômeurs which arise through the application of ascension rules. Here, I will start with rules which only manifest this link with defectivity weakly, proceeding to stronger cases [Chômeurs will be boldfaced].

- (48) a. Passive: A strong, highly productive, rule. No detectable defectivization, except for the weakness of pronouns in the agent phrase which are coreferential with the subject or the object of the embedding clause (cf. Ross (1971) §2.1.5)

Ted_i told Janice_j that the test had been passed by Mike Wallace / *by him_i / *by her_j.

Now let us examine a weaker rule, one which works for a far smaller set of verbs than does the passive. This rule, Goal " 2, takes a Goal phrase which is the object of a preposition and turns it into the object of the main verb of the clause. The popular code name for this type of alternation is "the spray paint cases" – some verbs which undergo it are *spray*, *smear*, *spread*, *stuff*, *load*, etc. A full listing can be found in Beth Levin's invaluable recent work – cf. Levin (1993), §2.3.1, p. 50 ff. Two verbs from the relevant set are shown in action in (49) and (50) below.

- (49) ai. Harris sprayed the paint on the wall. "
- aii. Harris sprayed the wall with paint.
- bi. This paint is good stuff, but I won't spray it on the wall. ≥
- bii. This paint is good stuff, but I won't spray the wall with it. ≥
- biii. ?If you find any paint, let's spray the wall with it.
I am going to spray the wall with some paint ?(that I got at a yard sale).

In (49), we see that *spray* prefers to do Goal " 2 when the Theme, *paint*, is a non-referential NP; the rule can apply without further conditions, producing (49aii). The contrast between (49bii) and ?(49biii) is instructive: it suggests that there can be differences between pronouns that refer back to definite antecedents, as in the former case, and pronouns which refer back to non-referential NP's, as in the latter case. For me, *spray* sounds slightly worse when Goal " 2 applies with a chômeur containing the latter type of pronoun. The contrast in (49c) is also important, as it shows the necessity of the distinction made in the hierarchy in (46b) between non-specific and specific chômeurs. As mentioned above, (49aii) shows that *spray* usually requires that its chômeurized Theme be non-specific. However, in (49c), we see this verb stretching a point, allowing Goal " 2 to operate when the Theme, *some paint*, is specific, but only if this chômeurized Theme is modified. I must say that I find this contrast quite baffling – I would have expected the facts to be the opposite of what we find. It seems that we must conclude that a modified specific indefinite is more like a nonspecific indefinite than an unmodified one is.

- (50) ai. Raimundo loaded the bullets into the gun. " "
 aii. Raimundo loaded the gun with bullets.
 bi. ?These bullets are of such poor quality that Raimundo doesn't want to load the gun with them. ≥
 bii. ?*If you find some bullets, Raimundo can load the gun with them
 Raimundo loaded every bullet into the gun. [Ambiguous = each [+individuated] or all [+totality]] >>
 cii. *Raimundo loaded the gun with every bullet. ≤
 ciii. Raimundo loaded the gun with every bullet that he could find. [Unambiguous – only the totality reading is possible]

In (50), we see the pattern of grammaticalities produced by another verb that undergoes the Goal " 2 rule, but apparently not with the same alacrity with which *spray* does.⁹ The sentences in (49bii) and (49biii) are worse, for me, than are their counterparts in (50), namely (50bi) and (50bii). While the Theme of *spray* is prototypically liquid, thus a mass noun, *load*'s Theme can be either a mass noun (*load hay onto the wagon*) or a count noun, as in (50). When the Theme is a plural count noun, we find a difference in quantifiability between cases in which the Theme is a direct object, as in (50ci), and cases in which it has been chômeurized, as in (50cii and ciii). In the former case, a preceding *every* can have an individuated or a totality reading. Both of these seem impossible for me with an unmodified chômeur like the one in *(50cii), though the totality reading survives with a modifier of "the right kind."

What this right kind might be is a matter that I have not investigated in detail, but it seems to have to do with the auxiliaries that appear in the relative clause. A verb in the simple past normally suggests a closed set, while if modals like *could*, *might*, etc. appear in the relative clause, we encounter meanings which a logician would translate with universal quantifiers, and which can make use of English determiners like *any*. Some relevant contrasts appear in (51).

- (51) a. Raimundo loaded every bullet that he could find into the gun. [Ambiguous (?), though the [+individuated] reading seems favored]
 b. Raimundo loaded every bullet that he found into the gun. [Perhaps still ambiguous, though now there is a stronger preference for the [+individuated] reading]
 c. Raimundo loaded the gun with every bullet that he could find. [= (50ciii) – only totality]
 d. *Raimundo loaded the gun with every bullet that he found.

Let me now turn to a rule that is even less productive – Source " 1. Three verbs which undergo it: *drip*, *leak*, and *ooze*; a full listing is given in Levin, op. cit., §1.1.3, pp.32-33. The operation of the rule is shown in (52).

- (52) ai. Oil is leaking from this tap.
 aii. This tap is leaking (?that / Ted's) oil.
 b. *This oil is so viscous that I doubt that this tap will leak it.
 c. This tap is leaking the oil *(that I pour into the barrel).
 d. *This tap is leaking all oil *(?that I pour into the barrel).

It is clear that the chômeurized Theme in these examples is more defective than were the themes in the case of Goal 2. I think further comment is unnecessary.

I will now examine another type of rule, which also produces chômeurs – ascension rules. In such rules, a part of a subject or object rises out of its host, to take over the grammatical relation previously borne by the host term. The remainder of the host term must then enter into chômage.

The only ascension rule that I have found in English which is relevant is Possessor Ascension. I will discuss three ascension processes, all of which involving a possessor, but I am currently unsure as to whether they should be viewed as being subcases of the same (universally available?) rule, or whether they must be treated as being distinct rules. Let us leave this matter open; I think that it is in any case irrelevant for the present discussion, which concerns the link between chômage and defectivity.

The first process converts sentences like (53a) into others like (53b) [as above, the chômeurs are in boldface].

- (53) a. IBM's price increased.
b. IBM increased in price.

Some indications that *price* is indeed defective are the following. First, observe that *price* is unpronominalizable (cf. (54), and that no determiners whatsoever can precede it (cf. (55)).

- (54) a. First IBM's price_i went up, and then [IBM's price_i / it_i] went down.
b. First IBM went up in price_i and then IBM went down [in price / *in it_i].

- (55) Compaq went up in (?its / *that / *the / *another) price.

Note also that *price* cannot be pluralized, although notionally, one would expect that this should be possible: (56a) has no plural ascended version, as we see in (56b).

- (56) a. Macintosh's and IBM's prices rose.
b. Macintosh and IBM rose in price(*s).

Nor can *price* be modified by a relative clause when it has been chômeurized; compare (57a) and (57b):

- (57) a. A company's price (?that was calculated in farthings)¹⁰ began to go down.
A company began to go down in price (*that was calculated in farthings).

And ripping processes seem pretty generally unavailable – cf. (58):

- (58) a. ? It was in price that IBM began to go down.
b. *It was price that IBM began to go down in.
c. *Yesterday, IBM rose in over-the-counter price – what kind of price do you think it will rise in today?

It is thus clear that this kind of Possessor Ascension is linked to defectivity. Let us pass on to look at another kind, different, at least superficially. The earliest reference to it that I know of is in Postal (1970) – cf. p.89 there. Postal's example (203c), which I repeat here for convenience as (59a), would, as his discussion makes clear, be derived from (59b), by a sequence of processes he refers to as PROPERTY FACTORING, possibly those converting (59b) to (59c), and from there to (59a).

- (59) a. Tom is like Bill in coloring and eyebrow texture. [= Postal's (203c)]
 b. [Tom's {coloring and eyebrow texture}] and [Bill's {coloring and eyebrow texture}] are (a)like.
 " (59c) (*via* Right Node Raising of the NP *coloring and eyebrow texture*, which ends each of the two NP* conjuncts which make up the subject of (a)like)
 c. [Tom's and Bill's] coloring and eyebrow texture are (a)like. " (59d) (*via* Possessor Ascension of the coordinate possessor phrase [Tom's and Bill's], which chômeurizes the NP *coloring and eyebrow texture*, marking it with the preposition *in*, as in the analysis above of (53b) *IBM increased in price*)
 d. [Tom and Bill] are (a)like in coloring and eyebrow texture. " (59e) (*via* the much-maligned [but nonetheless valid] rule of Conjunct Movement: the rightmost conjunct of the subject of (59d), namely *and Bill*, is moved to post-predicate position, as a consequence of which, the conjunction *and* is converted to the preposition *to* [cf. its presence in the nominalized form of the sentence – *Tom's likeness to Bill*]. For more details about this rule, cf. Lakoff and Peters (1969))
 e. Tom is like to Bill in coloring and eyebrow texture. " (59a) (*via* a rule which deletes prepositions after predicates, exceptionally after marked adjectives)

We need not focus on all the details of this derivation; for our purposes, what is crucial is the conversion of (59c) to (59d) via Possessor Ascension, which is only possible if the NP *coloring and eyebrow texture* is defective. It is indeed defective, as I will show, simplifying the example somewhat, by removing one conjunct and performing neither Conjunct Movement nor the subsequent rule deleting *to* which converts (59e) to (59a):

- (60) a. [Tom's {coloring}] and [Bill's {coloring}] are alike. " (60b) (*via* Right Node Raising of the N *coloring*, which ends each of the two NP* conjuncts which make up the subject of *alike*)
 b. [Tom's] and [Bill's] {colorings} are alike. " (60c) (*via* Possessor Ascension of the coordinate possessor phrase [Tom's and Bill's], which chômeurizes the N *coloring*, marking it with the preposition *in*, and removing the plural -s of *colorings* in the process)
 c. [Tom] and [Bill] are alike in {coloring}.

In the examples that follow, I will contrast (60b) and (60c), putting them through the same paces that I put (53a) and (53b) through in (54)-(58) to demonstrate the defectivity of (53b)'s *price* – cf. (61)-(65).

- (61) a. At first, Tom's and Bill's colorings_i were alike, but then Tom's and

- Bill's colorings_i / they_i began to differ.
- b. At first, Tom and Bill were alike in coloring_i, but then Tom and Bill began to differ in coloring_i / *in it_i.
- (62) [Tom] and [Bill] are alike in (?their/ *that / *the / *another) coloring.
- (63) [Tom] and [Bill] are alike in coloring (*s).
- (64) a. Tom's and Bill's colorings (, which tend towards olive green,) are alike.
 b. Tom and Bill are alike in coloring (*, which tend(s) towards olive green).
- (65) a. It is in coloring that Tom and Bill are alike.
 b. *It is coloring that Tom and Bill are alike in.
 c. *At age 5, Tom and Bill were alike in eye coloring – what kind of coloring do you think they will be alike in at age 6?

In passing, I must observe that the parallels between the defectivity of *price* in (53b) and *coloring* in (60b) are so great that I suspect that it will be possible one day to demonstrate that they are produced by the same process of Possessor Ascension, rather than by two functionally similar rules. I know of nothing that would argue against such an amalgamation

Let me now turn to a third ascension rule, this one apparently quite distinct from the two (or one?) that we have just seen. This rule raises an animate possessor of a body part, *chômeurizing* the body part after the prepositions *on* or *in*. Examples of the rule's operation, in object and in subject position, and of the necessity of restricting the raising process to animates, are found in (66) and (67), respectively:

- (66) a. Achilles kissed Helen's mouth. " Achilles kissed Helen on the mouth.
 b. Achilles kissed the skunk's mouth. " Achilles kissed the skunk on the mouth.
 c. Achilles kissed the statue's mouth. " ??Achilles kissed the statue on the mouth.
- (67) a. My joints are stiff. " I am stiff in the joints.
 b. The mannequin's joints are stiff. " ?*The mannequin is stiff in the joints.

Let us now observe the ways in which the boldfaced *chômeurs* are defective:

- (68) Pronominalization
- a. Achilles kissed Helen's mouth_i and then he caressed it_i.
 b. ?* Achilles kissed Helen on the mouth_i and then he caressed it_i.
 c. * Achilles [kissed Helen's mouth_i / kissed Helen on the mouth_i], and then he caressed her on it_i.
- (69) Modifiability by determiner and relative clause

- a. Achilles caressed Helen on [the (other) / that (??other) / her (?other) / ?*an / *some] arm.
- b. Helen kicked Achilles in [the (*other) / *those / *many / *three / *some / *several] ribs.
- ci. Achilles kissed Helen's lips (, which were voluptuous).
- cii. Achilles kissed Helen on the lips (?*, which were voluptuous).

(70) Pluralizability – largely unimpaired

Helen hit Achilles in the ribs / on the knuckles / on the arm(?s);
kicked him in the shins / in the teeth / on the buttocks.

(71) Movement rules

- a. ? It was in the mouth that I punched Ichabod.
- b. *It was the mouth that I punched Ichabod in.
- c. ? It was the left arm that I punched Ichabod on.
- d. ??It was on the left arm that I punched Ichabod.
- e. It is fun to kiss Helen's mouth. " (*via Tough-Movement*)
- f. Helen's mouth is fun to kiss.
- g. It is fun to kiss Helen on the mouth. " (*via Tough- Movement*)
- h. **The mouth is fun to kiss Helen on.

Comparing the sentences in (66)-(71) with corresponding ones above for *price* (cf. (54)-(58)) and for *coloring* (cf. (61)-(65)), it appears that in general, the former type of ascension(s) is /are more restrictive. Whether this is due to the fact that the possessed nouns in the former cases are abstract, while those in the third ascension are concrete, or whether there is some other causal factor involved here, is a question for future research.

Let me change the subject and pass on to some cases in which *chômeurs* must pay the Supreme Penalty: these are the *chômeurs* that are so defective that we cannot even hear them.

(72) Maximal defectivization – Syntactic Black Holes

These are cases in which a *chômeur* is so defective as to not even attain audibility. Examples are passive clauses in (I believe, though I have no data available to me at present) Serbo-Croatian and Berber and (I also believe) in many other languages, in which agent-phrases cannot be expressed. For two home-grown examples, consider the cases of Unpassive and Middle, in (73) and (74) below, whose *chômeurs* are only expressible with the help of generic oil [i.e., the examples are grammatical if the boldfaced *chômeurs* are generic indefinites, ungrammatical otherwise].

- (73)
- a. This Ferrari is untested (*by Fangio).
 - b. This Ferrari is untested (?by any Formula 1 level driver).

- (74)
- a. COBOL translates readily into Coptic (*for Jason).
 - b. COBOL translates readily into Coptic (?for any EE major).

To sum up, this section has documented a connection between defectivity and chômeurization, a squishy connection in which the degree of defectivity sometimes depends on the degree of productivity of the process which creates the chômeur. However, most of the variation in defectivity remains to be explained.

5. **The case of chômeurs [Second pass] – the connection with innerness**

If a term-changing rule applies to a clause, an overall drop in the viability of the clause may result. Viability is a measure of a clause's ability to tolerate syntactic strain. While two clauses may appear to be equally grammatical in isolation, it can often be shown that one will survive various syntactic processes, while the other will not. For instance, while both of the sentences in (75) have an expletive there as their subjects, and are grammatical as they stand,

- (75) a. There is reason to doubt my sanity.
b. There emerged a consensus.

it is easy to show that the second is a far weaker, more fragile member of the set of English sentences – cf. some of the contrasts in (76) – (78):

- (76) a. Is there reason to doubt my sanity?
b. ?Did there emerge a consensus?

- (77) a. Reason to doubt my sanity there is.
b. ?* A consensus there emerged.

- (78) a. They say that there is reason to doubt my sanity, and there is.
b. *They say that there emerged a consensus, and there did.

In such cases, I would say that (75b) is less viable than (75a); I discuss the notion of viability in some detail in Ross (1986b), and some of the differences in sentences with *there*-subjects in Ross (1974). One of the ways in which diminished viability may surface is in the defectivization of chômeurs, as exemplified in §4 above, or in the “innering” of ripping processes which involve the chômeur [For the notion of inner (islands), cf. Ross (1984), and for further discussion, in several different frameworks, see Kuno and Takami (1992, 1995), and Rizzi (1990, 1992). An innered ripping process involving a chômeur is one which will not apply “in the presence of” negative elements, in an I hope obvious understanding of this term.], or possibly in a reduction of the allowable complexity of the auxiliaries in the clause.

5.1 The innering of chômeurs produced by advancements

We have seen above that the Goal of such verbs as *spray* can advance to become a direct object (cf. (49)). This Goal can be clefted whether or not such an advancement has taken place, irrespective of the clause's negativity – cf. (79a). However, if the Goal has been advanced, and the underlying 2, *latex paint*, has been chômeurized, then this chômeur can only be clefted in affirmative clauses, as we see from the contrast in (79b). It is important to note that it is only movement rules that affect the chômeur that are affected by negation, as we see from the good sentences in (79c) and (79d).

- (79) a. It is the West wall that Harris sprayed / didn't spray the latex paint on.

- b. CRUDE oil tap 5 is not leaking/

5.2. The innering of chômeurs produced by ascensions

Other things being equal, we would expect that chômeurs produced by ascension rules should also be innered. I find some evidence of such innering, though not as much as I would like to. Some relevant examples follow. The rule of Possessor Ascension is what converts (78a) to (78b) [cf. the discussion above of example (46)]; sentences (47) – (51) showed the boldfaced chômeurs to be defective, to varying degrees. It would be nice if I could report a sharp contrast in acceptability in (78d), depending on whether the boldfaced chômeur had been ripped out of a negative clause or not, but I find little contrast there at all.

- (78) a. IBM's discount price has (not) increased.
 b. IBM has (not) increased in discount price.
 c. It is IBM's discount price that has (not) increased.
 d. It is in discount price that IBM has (not) increased.

In (52) and subsequent examples, I have demonstrated the operation of Postal's rule of Property Factoring, an ascension that is perhaps to be distinguished from that which converts (79a) to (79b). In (79a), which repeats (53a) for convenience, we see the source for (79b), which repeats (53c):

- (79) a. [Tom's {coloring}] and [Bill's {coloring}] are alike.
 b. [Tom] and [Bill] are alike in {coloring}.

Thus since in coloring is a chômeur, we might expect it to be innered:

- (80) a. It is Tom and Bill who are (not) alike in coloring.
 b. It is in coloring that Tom and Bill are ((?)not) alike.

But I am not sure that there is any distinction whatsoever between the affirmative and negative versions of (80b).

It is only when we examine the last type of ascension rule that I discussed above, the one involved in the process in (81), which repeats (59a),

- (81) Achilles kissed Helen's mouth. fi Achilles kissed Helen on the mouth.

that I find there to be an appreciable amount of innering in the predicted direction – cf. ?*(82b):

- (82) a. It was on the mouth that Achilles kissed Helen.
 b. ?* It was on the mouth that Achilles did not kiss Helen.

I thus leave the field here in disarray. On the one hand, it does seem to be the case that advancement chômeurs are reliably innered (as attested by the weakness of the negative versions of (72b) and (76b)), but ascension chômeurs seem in general not to be, a fact that is especially embarrassing to anyone like me who is attempting to link defectivity to innering.

6.0 **Innerness and DNP's not produced by chômeurization**

Since we have seen (in §4) that chômeurs are (variably) defective, and (in §5) that advancement chômeurs are innered, it is natural to enquire as to whether DNP's that are not chômeurs are also innered. With one class of exceptions, and sporadic exceptions in the class of idioms, all of the types of DNP's which we examined in §2 are innered, as is evident from inspection of sentences (83) – (86), and (88), below:

A. Measure phrases (MP's)

- (83) a. What did (*n't) the penguin cost?
 b. It was \$205.46 that the penguin (*didn't) cost.

B. Predicate nominals

- (84) a. What is(*n't) Maxine?
 b. It is a real friend in need that Clyde has(*n't) been.

C. Inner objects

- (85) a. How many dreams did(*n't) Sandy dream?
 b. It was a horrible dream that Selma [dreamt / *didn't dream].

D. Idiom chunks

- i. Postverbal
- (86) a. It is remarkably significant headway that Barbara has (*n't) made on her dissertation.
 b. It is very careful track that I am asking you (*not) to keep on these pigeons.

I note that there are some idiom chunks that are not innered – the noun *tack* in *take a tack on X* seems to be such a case:

- (87) It is this tack that you should (never) take on that explosive issue.

In Ross (1973), where I discuss a number of postverbal idiom chunks in some detail, attempting to array them in the form of a squish, I note that tack is the least restricted of all of those that I consider. I would bet my bottom monetary unit that this “not really very much of an idiom at all” status of tack is also what is behind the unexpected grammaticality of (87), though I have no proof of this idea as of yet.

2. Articlelessness in the objects of prepositions

- (88) It is Sunday school that she goes to every weekend / ?*doesn't go to every weekend.

In (5) above, I noted that articleless nouns generally do not prepose; thus there are few examples like (88) that can be checked. I believe that all are innered.

- E. Locatives – I believe that locatives are not constrained by innerness, for reasons that presently elude me, and will doubtless continue to.

To sum up sections 5 and 6, it would seem that there are significant connections between defectivity and innering, but it also seems that almost nothing can presently be said with much certainty about these connections. They will thus be expediently fobbed off on a later generation of thinkers in this murky area.

7. The “Two” Dislocations

DNP's can only be dislocated by Deictic Dislocation, not by the more familiar Left Dislocation. The former rule produces such famous surface structures as that in (89b), while the latter produces more routine surface structures such as that in (90b)

- (89) a. [To be or not to be]_i is the question.
 b. [To be or not to be]_i – that_i is the question
- (90) a. I detest treacle_i .
 b. Treacle_i , I detest it_i .

Typically, purebred NP's will allow the operation of either type of dislocative process, as we see in (91):

- (91) \$2_{4i}, I will pay that_i / it_i to Owen tomorrow.

However, we by this time will not be surprised to find that NP's that we have seen reason to believe to be defective in other respects manifest a distinction here too: while defective noun phrases can be dislocated deictically, they cannot undergo garden-variety Left Dislocation, as we see in (92) – (94), which exemplify this restriction for measure phrases, predicate nominals, and idiom chunks, respectively.

- (92) \$2_{4i}, the banana shouldn't cost that_i / *it_i.
- (93) A griper_i, Susan has never been that_i / *it_i.
- (94) Significant headway_i – we never made that_i / *it_i on phonology.

I refer to the new rule I am proposing as Deictic Dislocation, because it leaves in the place of the copied element either a distal deictic that or a proximal this. In (95), I show the operation of Deictic Dislocation, both to the left and to the right, starting from (95a), a non-topicalized structure, and in (96), I show its operation starting from (96a), a topicalized version of (95a), which some deictic dislocations with this seem to prefer, for opaque reasons.

- (95) a. I'd like to have [Tony's Eclipse]_i.
 b. [Tony's Eclipse]_i – I'd like to have that_i. ≤
 c. ? I'd like to have that_i – [Tony's Eclipse]_i.
 d. ? [Tony's Eclipse]_i – I'd like to have this_i.
 e. ? I'd like to have this_i. – [Tony's Eclipse]_i.
- (96) a. [Tony's Eclipse]_i I'd like to have.
 b. [Tony's Eclipse]_i – that_i I'd like to have.

- c. That_i I'd like to have – [Tony's Eclipse]_i.
- d. [Tony's Eclipse]_i – this_i I'd like to have. (compare with ?(97d))
- e. ? This_i I'd like to have – [Tony's Eclipse]_i.

I will end this brief discussion of all of these dislocations by noting the absurdity of believing for a minute that there could be more than one process involved. How could there be? “Both” rules work in both directions, “both” dislike non-specific indefinites (cf. (97)),

- (97) a. * [Nothing / everything / something from Arkansas]_i, he brought [it_i / that_i / this_i] to class yesterday.

and so on. Nonetheless, many differences are also to be found:

- (98) [War and Peace]_i, [this_i / that_i / *it_i] I want to read.

What we currently lack, it seems to me, is any theoretical perspective which would allow us to both have and eat this cake.

Nonetheless, improvements on any of the above rough characterizations of the “two” rules will have to wait. For now, let me close this section by noting the expected correlation of the defectivity of the object of *consist of* (cf. (99a)), the fact that it can only undergo Deictic Dislocation (cf. *(99b)), and the fact of its being innered (cf. *(99c)):

- (99) a. Motor parts should not consist of [(**the*) / (**your*)] styrofoam.
 b. Styrofoam_i, motor parts should not consist of [that_i / *it_i].
 c. It is styrofoam_i that motor parts should (**not*) consist of.

8. The Law of Relatives

At this juncture, I would like to call attention to a very strange phenomenon, which links the restrictive / non-restrictive clause distinction with two types of DNP's.¹¹ The two halves of the generalization in question appear in (100) and (101):

- (100) If the target NP in a relative clause construction is defective, in that only indefinites are allowed in the position from which it is ripped, that clause can only be used as a restrictive relative.

Environment allowing only indefinite NP's: / *consist of* ____

- a. This icing consists largely of (**the*) bat guano.
- b. The bat guano which this icing consists largely of was packed only last week.
- c. *The bat guano, which this icing consists largely of, was packed only last week.

- (101) If the target NP in a relative clause construction is defective, in that only specific NP's are allowed in the position from which it is ripped, that clause can only be used as a non-restrictive relative.

Environment allowing only specific NP's: / *five of* ____

- a. We bought five of some books (**that we had seen at the gallery*).

- b. Maxwell will read some books, which we bought five of, to the gila monsters.
- c. *Maxwell will read some books which we bought five of to the gila monsters.

I hold no brief on this correlation, which I find extremely bizarre. I mention it here in this context simply because it may be that future researchers on defective noun phrases may find it a useful tool.

9. The Syntactic Outback

Lehmann (1973) notes some parallels between clauses and syllables. Let me add to his observations the fact that in syllables, the consonants in the coda are always at greater phonetic risk than are those in the onset. The syntactic parallel of this fact is that in clauses, it is post-verbal NP's that are defective. It is in the caboose of the clause that we find such syntactic sports as: direct quotes, Siamese words (like *clickety-clack*, *higgledy-piggledy*, etc., etc.), onomatopoeia (e. g., *bow-wow*, *putt-putt-putt*, etc., even gestures – the primal ooze out of which real words may arise if they behave.

Below, in (102), I show a partial array of data which indicate a non-parallel between indirect quotes, which behave more or less as purebred NP's do – they topicalize (102b), passivize (102c), and undergo (long) Tough Movement (102d). And none of these expected behaviors is manifested by direct quotes.¹²

- (102) a. Jed never said [that he was hungry / “I’m hungry.”]
 b. [That he was hungry / *“I’m hungry”] Jed never said.
 c. [That he was hungry / *“I’m hungry”] was never said.
 d. [That he was hungry / *“I’m hungry”] is tough for me to imagine Jed never saying.

Note that in the same contexts we do not find onomatopoeic expressions:

- (103) a. The toaster doesn't go “skrrrronnnngg” anymore.
 b. *“Skrrrronnnngg” the toaster doesn't go anymore.
 c. [We are not surprised to find no passives here – *∅* is generally a poor candidate for passivization.]
 d. *“Skrrrronnnngg” is tough for me to imagine the toaster (not) going.

I have not had the time to investigate whether it is the case that in non-SVO languages, there are shared behaviors and distributions of DNP's and such things as direct quotes, onomatopoeic words, and gestures. I must confess to not being sanguine at this point. I will be both pleasantly and also fantastically surprised should it turn out that all, or even lots of languages make the same move as English does, in putting all of these syntactic oddfellows in (roughly) the same places in their clauses. But I do think that it may be a locally choosable option – that is, it may be that such parallels to DNP's as we have seen in (102) and (103) are significant in a language when they show up. As I said at the outset, this whole area seems pretty trackless to me now. I think that we will have to do a lot more crashing around in the bush before we will get much of an idea as to where we are in this forest.

10. (The) Good Stuff

I am coming to the end of my perorations. Before the great Schlußakkord, however, let me mention a couple of mysteries, some of which I have been wondering about, off and on, for many years. Let us start with the contrast in (104) and blend in the fact of the parallel contrast in Deictic Dislocation in (105).

- (104) a. What she married was a cosmonaut.
 b. *What married her was a cosmonaut.
- (105) a. A cosmonaut_i – that_i she would never marry. ≥
 b. ?A cosmonaut_i – she would never marry that_i.
 c. *A cosmonaut_i – that_i would never marry her.

I hope that the discussion above has suggested the general line I would try to take to account for the contrast between (105a) [and ?(105b)] on the one hand, and *(105c) on the other. I would like to be able to say that in *X married Y*, Y is more defective than X, and that therefore, even though *marry* selects human NP's for both subjects and objects, the (trace) defectivity of its object allows this object to be pronominalized by *what* and *that*. Note however, that merely being an object (of *marry*, e.g.) is not enough: the object, if it is to be *whatted* or *thatted*, should also be something like non-specific (usually – there are, however, contrasts like those in (106) which make me nervous . . . I would be less jittery if I were sure that ?(106b) and *(106c) were totally out.).

- (106) a. What she wants to marry is a cosmonaut. ≥
 b. ?What she succeeded in marrying is a cosmonaut.
 c. ?*What she wants to marry is the cosmonaut.
 d. *What she married was Jethro.

I will leave these mysteries to turn to different ones, this time involving the verbs *be* and *have*. We have already seen above that the objects of *be* can be defective (cf. (2)); that the inalienable objects of *have* are also defective is shown in (107).

- (107) I have [*the / *those / *some] [two brothers / *both brothers].

Two other indications of defectivity: first, the inalienable object of *have* cannot be questioned with *who*, as we might expect for a human noun like *sister* – rather, we must use *what*:

- (108) [What / *Who] would you like to have – a brother or a sister?

And secondly, the inalienable objects of *have* cannot freely undergo the fronting associated with *Tough*-Movement:

- (109) a. It would be tough for me to imagine you having two brothers.
 b. ?Two brothers would be tough for me to imagine you having.

Moreover, however good such sentences as (109b) may sound, observe what happens to them if their main verbs are changed to finite ones:

- (110) Two brothers [?is / *are] tough for me to imagine you having.

Such clauses, in which verbal disagreement seems to be the best option, remind us of the fact that another type of DNP, namely, measure phrases, also takes singular agreement, as I pointed out in connection with (1c) and (11) – (14) above:

(11) Two dollars [is />> ??are] what it cost.

And there are two other types of construction involving defectives in which we find a superficial plural favoring a singular element that is coreferential with it: consider first the deictic dislocations of such sentences as (112a), or of the more complex copula-switched pseudo-cleft version of the same sentence in (112c):

- (112) a. They want to be spies.
 b. Spies_i – [that_i / **those_i] they want to be.
 c. Spies is what they want to be.
 d. Spies_i – [that_i is / **those_i] are what they want to be.

The second construction involves the phenomenon of “plural places” which was discussed above in connection with (6c) – the locational nouns which are grammatically plural (like *the Barbados*, *the Straits of Magellan*, *the grounds of the Lollypop Foundation*, *the Pleiades*, etc.) – and which resist pronominalization when in adverbial contexts, as we saw from (6c) and can see in addition from (113):

(113) The Barbados_i are lovely – they_i have an Old World charm that makes me want to visit (?them_i) and build a shopping mall (*on them_i).

Such plural place NP’s can trigger plural deictic dislocations – cf. (114):

(114) The Straits of Magellan_i – those_i have to be navigated by day.

but when they appear in copula-switched pseudo-clefts, we again find only singular deictic proforms to be able to refer to them:

- (115) a. The Straits of Magellan might also be where we could establish a chain of floating Taco Buenos.
 b. The Straits of Magellan_i – [that_i / *those_i] might also be where we could establish a chain of floating Taco Buenos.

We thus see another property of DNP’s here: not only do they resist being pluralized, even when they do surface as plurals, they do so half-heartedly, and can sometimes be shown to be singular neuter nouns hiding in plural sheep’s clothing.

Let us now return to our discussion of inalienable have. Since this verb has a defective object, we might expect that it would be innered, but it does not appear to be:

(116) I hope you have the brothers that I (never) had.

Nonetheless, there is something rather remarkable about the relative clausoids that can modify the objects of *have*: the target NP in such clausoids must also be the object of inalienable have, as we see from the contrast in (117):

- (117) a. I have the legs that I need to [have / *exercise] to play pro ball.
 b. Belinda [had / *flexed] the legs that her daughter has.

We can stop here, to draw a general conclusion.

(118) The “If it’s one thing, it’s probably also another” Tendency

It is rare for NP’s to be defective in only one respect.

This is of course an extremely unhappy conclusion; what we want is to know what the causal connections are between defectivities in one area and those in another. But (118) is the best that I have been able to come up with in the present vastnesses of my ignorance.

Let me go on to present another case of defectivity which I believe to be related to the one we have just seen involving inalienable *have*. It involves *be*, which we have seen above to be defective (cf. §2A). As has been recognized since Emmon Bach’s pioneering work (cf. Bach (1967)), *be* is closely related to *have*. What is interesting is that the particular kind of defectivity which we found with inalienable *have* – namely, that the target NP of any relative clause modifying the object of *have* must also be an object of *have* (cf. (117) above) is also manifested in relative clauses modifying the predicate nominal objects of *be*. As we see in (119), a cognate restriction obtains for *be*:

- (119) a. Janice is *(twice) the doctor [that her father [was / *photographed] / *that kissed me].
 b. Janice was *(twice) the doctor [that her father had been / *that had kissed me].

Just to dot these i’s, we see in (120) that these relative clauses obey inner island constraints:

(120) Janice is half the doctor that her father was(*n’t).

While it is reassuring to find that *be* shares the weirdness that *have* manifests in (117), one would like to know a bit more as to what in tunket is going on with them ...

There is one last assorted observation about defectivity which I shall not resist the temptation to read into the record. Above, we have seen that fronted constituents tend not to be defective; below, I will show one case in which an NP contained in a fronted constituent is more purebred than it would have been in its unfronted position. Consider (121):

- (121) a. The Flame School_i is the best in Denton – children can follow their own inclinations [there_i / ?*at it_i].
 b.. The Flame School_i is the best in Denton – [there_i / ?at it_i], children can follow their own inclinations.

What we see in (121a) is that *the Flame School*, the object of the spatial preposition *at*, is defective with respect to pronominalizability, as long as the entire *at*-phrase remains in a postverbal position. I cited similar cases above, in (6b), so (121a) should come as no surprise: locative and temporal noun phrases are typically defective with respect to pronominalization. What is unusual about (121) is that the choice to front the *at*-phrase should make any difference. Normally, I believe, pronouns are as bad in fronted adverbial PP’s as in PP’s which have stayed in the post-verbal nest. Thus (122), which manifests no difference in grammaticality between post-verbal and fronted cases, is the default case.

- (122) a. The beach_i is wonderful – I love to relax [there_i / ?on it_i] every day.
 b. The beach_i is wonderful – [there_i / ?on it_i] I love to relax every day.

I hope it is clear that I consider myself to have barely scratched the surface of the restrictions involving such sentences as (6), (113)-(115), and (121)-(122). They will continue to be good stuff for years to come.

II. **Der Rausschmeißer**

It is time to sum up. It is clear that the above observations are no theory of what defective noun phrases are, or of what might be the causes of defectivity. In connection with this latter issue, I would like to thank my friend and colleague Bernd Heine for suggesting¹³ that the following, at least, should be seen as being among the probable causes of defectivity:

- (123) a. Discourse salience – the less salient a NP is in discourse, the more likely it is to be(come) defective.
 b. Conventionalization – the more conventionalized a NP, the more likely it is to be(come) defective.
 c. Idiomaticity – the more idiomatic an NP, the more likely it is to be(come) defective.
 d. Distance from the prototype – the further from nominal prototypicality an NP is, the more likely it is to be(come) defective.
 e. Ontological category – the less an NP denotes an object or a thing, the more likely it is to be(come) defective.

I think that these are all excellent suggestions, and I offer the considerations that I have described above as further guesses as to the things that will one day have to constrain any theory of nominal defectivity. We have seen above that there are various ways in which the left-right order of the elements in a clause interacts with defectivity; if it is true in English that the further to the left in a clause a NP is, the more salient it is in the discourse, we would have the beginnings of an explanation for the defectivity of *chômeurs* (which are always ordered to the right), as well as for the various difficulties that we have encountered in moving DNP's to the left, by various processes.

It is not clear to me that any of Heine's causal factors addresses the issue as to why DNP's should be innered. I am wondering whether we can attempt an explanation based on markedness for these facts. It is clear that negative clauses are more marked than are affirmative ones, and I suspect that defectivity is a marked state for NP's too, though if the analogy to syllables is correct, lenited variants of consonants in codal position are unmarked, not marked. I have been seeing DNP's a bit like "lenited NP's," so if that is correct, it would seem that they cannot be simultaneously seen as marked. That being the case, it would not be possible to claim that the general incompatibility of DNP's and innered processes is due to an excess of markedness in a clause. All of which is just to say that I currently have no explanation in hand or sight for the link between innering and defectivity.

There is one fact about the distribution of DNP's in clauses that I have thus far not mentioned, as there has been no convenient place to put it. It is this: there is never more than one DNP in a nuclear clause. By including the modifier here, I mean to exclude optional adverbs of place, which we have seen contain DNP's, and

which would therefore allow there to be more than one DNP in clauses like (124), where the two DNP's have been underlined:

(124) I made headway on my thesis in Martinique.

But if we do not count *Martinique* as belonging to the same nuclear clause as *headway*, then the generalization stands: no nuclear clause will contain more than one DNP. Furthermore, the generalization in (125) comes tantalizingly close to being able to be maintained:

(125) No purebred NP is ever required to come later in a clause than a DNP.

The exceptions to (125) that come to mind are the objects of idioms with post-verbal idiom chunks, like *make headway on*, which would present a clause structure like the following, in which the boldfaced purebred NP is ordered after the underlined DNP:

(126) Felix made headway on **his plan**.

There are many such idioms, and I have no way to wiggle out of them, at present. Thus (125) must be counted as false, though not by much. It may be an interesting enough falsehood to merit mention.

And another interesting thing: DNP's are always locally caused, or locally licensed. What does this mean? Simply that for each DNP in a structure, there is a trigger – an element with which it is connected, which either forces it or enables it to become defective, and that the DNP and the trigger must always be clausemates. Let us examine the DNP's that we have encountered thus far, to see what their triggers are:

(127) Triggers and DNP's

	Type	Trigger	DNP
a.	MP	<i>cost, weigh, etc.</i>	<i>\$200, 2 lbs.</i>
b.	PN	<i>be, become, etc.</i>	<i>president, e. g.</i>
c.	Idiom chunk	<i>make</i>	<i>headway</i>
d.	Articleless N	<i>in</i>	<i>bed</i>
e.	locative/temporal	<i>depart</i>	<i>Chicago</i>

The claim that I want to make is simply the following: consider the articleless DNP *college* which can follow the trigger *attend* – *Max attended college for four minutes*. What is impossible for DNP's are cases of long-distance triggering. Thus we will never find any complement-taking verb, like *doubt*, say, which would allow a DNP like *college*, say with a locative meaning, to appear in the object complement of *doubt*, as in (128):

(128) Jessica doubts that Max is working hard college.

I think that it is important to emphasize the fact that DNP's can only be locally triggered, because of the existence of negative polarity items, like *any* and *budge*, which can be triggered by elements in higher clauses – cf. (129), where the higher trigger is the verb *denied*:

(129) Telemann denied that anyone had budged an inch.

This means, too, that whatever mechanism is responsible for triggering DNP's is weaker than the mechanisms that handle idioms, for there are idioms that extend over two clauses, one being the one shown in (130):

(130) Who do you think (??that) you are, anyway?

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I think that before I end these musings, it would be well to say what I feel are the weakest points in the observations that I have made.

The first is a killer, only slightly less impertinent than "So what?" It is just this: what guarantee is there that the five types of construction that I list in §2 are all instances of one phenomenon? My weak rejoinder is: well, they all occur post-verbally; other than that, I have no indication that they do belong together. In particular, I wonder a lot as to whether articlelessness is really not a horse of a different color, since most articleless nouns are so completely inert syntactically. And the only reason for thinking that *chômeurs* may also fit in with the five types of DNP's in §2 is again their post-verbality. There is a ray of light in this general gloom – the hypotheses in (39) – (40). But I have not been able to look at enough cases of *chômeuric* defectivity to find out whether the proposed hierarchy can be confirmed. If it can be sustained for *chômeurs*, and if it should turn out that it holds also for the constructions in §2, in some version or another, then some answer to the impertinent question might emerge.

The kind of data that will be of the greatest interest in connection with this principal hypothesis of my paper – namely, that there is some connection between the defectivity of an NP and its position in its clause – will be the study of DNP's in languages whose basic order is anything but SVO. For any given language, is there one place in the clause in which all *chômeurs* are placed? And if such a syntactic graveyard exists, is it there that DNP's are also found?

In a way, it is embarrassing to be able to ask these questions, but to have no idea how they are going to turn out. However, on the other hand, they are wonderful questions to have to look at, because they are almost guaranteed to have important answers. Only in the worst case, which would be if there were no systematic connection between the positioning of *chômeurs* and the location of DNP's, would we not learn much about language. But if there is anything stronger that links DNP's and *chômeurs* [such as: they are, miraculously enough, always in the same place in a language's clauses; or, less strongly, a language can elect to have them in the same place – this is a local option that a language can elect], then we will have found out something about language that I think will have deep consequences.

Acknowledgements

Let me at the outset say what it was that started me thinking about defective noun phrases. It was a paper, called I now believe "Restrictive relative clauses and other matters," written around 1965 as a term paper at MIT, by my friend and fellow student Yuki Kuroda [This is the same paper which I thought was called "A note on English relativization," which I referred to in Ross (1986a), pp. 132-133]. As far as I know, Yuki has never published this one, which is a shame, I feel, because of the indelibility of some of the sentences: **Bill disappeared in an interesting manner, and Tom*

*disappeared in another one. *Janet was offended to a surprising extent, but Sarah was not offended to it.* Thirty years ago, these sentences were like artifacts from some unknown vanished civilization, sitting in a case by themselves in an anthropological museum, unlabeled, no clue as to how they might fit in to what. They fascinated me then, they continue to today. The present paper can be seen as a (pretty vain) attempt to link them up with wider classes of phenomena, to pull the web of causally connected fact that grammarians have woven over nearer to them, so that we may one day understand what they are trying to tell us about language. Meanwhile, I thank Yuki for addicting me to them.

I have been helped immeasurably by talking with or thinking about the work of the following scholars and friends, and many others, too many to name you all:

Pete Becker, Dwight Bolinger, Jack Du Bois, Rosália Dutra, Patricia Donegan, Rich Frankl, John Goldsmith, Yara Goulart, Ken Hale, Bernd Heine, Rich Hilliard, Paul Hopper, Bill Labov, George Lakoff, John Lawler, Win Lehmann, Paul Postal, Charles Pyle, Nicolas Ruwet, Harvey Sacks, Manny Schegloff, Dave Stampe, Sandy Thompson, . . .

They know whose doorstep the many inadequacies of the present work are to be laid at. Paul Postal helped me a lot with detailed criticisms of an earlier draft. To all of him and to all of you, *snachailya*, the Carrier word which best translates “thank you.” It does so in a great way – it says literally: You honor me (by doing what you did).

Footnotes

1. Quoted in Ferguson (1982), pp. 15 – 16.
2. Jim McCawley has cautioned me that the ability to be modified by an appositive clause is a property that is not obviously restricted to only NP’s, given the existence of such sentences as the following, after each of which I indicate the modified constituent type:
 - (i) Jenkins was on the field, which Hammersley was not. [PP]
 - (ii) Freen was mad at Zix, which Droft was not. [AP]
 - (iii) Al is vice-president, which Bill is not. [Pred Nom]
 - (iv) Batman was fighting crime, which Riddler was not. [“VP”]
 - (v) It’s hailing, which is a bummer. [S]

I believe that it can be maintained that each of these underlined constituents, except for (iii), which I do not understand, should be dominated by a higher NP, and that the fact that a constituent can be modified by an appositive does argue for its being analyzed as an NP, but to go beyond this profession of faith would be a tail that would wag the dog of this paper, which I will therefore abandon any attempt at doing.

Pending the honoring of this IOU, therefore, I will defer making any argument rest upon the certainly questionable claim that modifiability by appositives is an indication of nounphrasiness.

3. Jim McCawley has informed me (personal communication) that he finds (iaiii) pretty good with *for those hours*, and perfect with *for those two hours*. I agree with his perception of the difference in acceptability, which is why I have used the symbol ‘≤’ in (iaiii), but for me neither variant is perfect.

4. Jim McCawley has pointed out ((the same wonderful) p.c.) that there are two types of predicate nominals, those that denote entities, and those that denote predicates, or properties, and that they even have different proforms: *I'm glad I'm not him / that*. I have not investigated the entity type of PN yet; almost all the examples below will be of the property-specifying type of PN. I would expect that the entity-specifying type might be slightly defective, but would expect it to be less so than the property-specifying one. Whether this hunch will turn out to be confirmed must await further research.

Following up on McCawley's observation, we note that though *(2ai) is hopeless when the inbound proform is the entity-specifying *them*, when we substitute for it the predicate-specifying *that*, the sentence improves marginally:

(2) ai'. ?*My cousins are not yet drunkards_i; but will soon be that_i.

For me this type of inbound pronominalization can be rescued completely, if the proform is contrastively stressed and topicalized:

(2) ai''. My cousins are not yet drunkards_i; but THAT_i they soon will be.

For an extensive discussion of non-referential NP's, including both predicate nominals and others, and including detailed investigation of how pronominalization interacts with such NP's, see Kuno (1970).

5. I am grateful to Beatrice Santorini for calling my attention to this point in the discussion of the oral version of this paper. Her example was the idiom *on the verge of* – cf. **Martha was on the verge; of resigning, but I was never on it_i*.

6. I will not present the facts for temporal expressions, with their associated problems involving the conditions under which *thenning* is possible. The interested reader can find sentences like *Christmas is my favorite time of year – I hope that my thesis is finished by [then / *it]* which will parallel (6) in a temporal way.

7. This matter is discussed in some detail in Ross (1995a)

8. It seems reasonable to assume that constituents which contain an incorporated negative can also be fronted by the rule of Topicalization. Thus (i) can become (ii).

(i) Natasha will fool nobody in that costume.

(ii) Nobody will Natasha fool in that costume.

This is a clear counterexample to my hypothesis that only specific NP's can be preposed.

9. It is no accident that the Goal " 2 rule is metonymically associated with *spray*, which is probably its best customer, nor that in any discussion of this process, we will find first examples with *spray*, and only later with lesser luminaries like *load* or *smear*. The same is true in countless discussions of Raising, all of which use, in examples, *seem* for verbs, and *likely* for adjectives. Why so few examples with *prove* or *certain*? As soon as the question is asked, the answer is obvious: syntacticians don't like to

have their data self-destruct for irrelevant reasons, so they will go with the most robust lexical undergoers of a rule that they are studying. No harm in that, surely?

There would indeed be little harm if we remained aware of these automatic choices, and knew that most governed rules display a gamut of “alacrities” for undergoing the process in question on the part of the lexical items which the rule affects. We would then naturally move to the thorny question as to how some notion such as *coefficient of alacrity* might be formalized, and how it might be integrated into the difficult but apparently unavoidable calculus of viability (cf. Ross (1986b)).

But if we always stick to the prototypical examples, we are riding for a fall. In this preliminary work, I have only the time to compare *spray* and *load*, and that very cursorily at best. A more adequate treatment might devote a monograph to expanding the fragmentary comments I make in distinguishing (42) and (43) to include all of the verbs that undergo Goal $\bar{\bar{2}}$ [cf. Levin, op. cit., pp. 50-51], studying the doubtless myriad ways in which the notion of nominal defectivity could be understood just by looking at what the undergoers of Goal $\bar{\bar{2}}$ require of their chômeurs. I would love to see such a study carried out, even by myself, but we all must crawl before we can walk, a task to which I now, grumpily, return.

10. Modification of *price* by a restrictive relative clause here is not so hot, because possessivized NP's prefer appositive clauses. But even with appositives, we encounter the same contrast – chômeurs of Possessor Ascension are not modifiable by any type of relative clause:

A company's price (,which was calculated in farthings,) began to go down.

(ii) A company began to go down in price (*, which was calculated in farthings).

11. I would like to thank my friend and colleague Yara Goulart for many discussions which helped to let this phenomenon become visible.

12. I am greatly indebted to Rosália Dutra for many discussions about the multiple strangenesses of direct quotes, which led directly to the discovery of such facts as those cited in (102).

13. In a letter to me of September 19, 1995.

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