(From: The Principle of Phonology-Free Syntax)
PEOPLE DELETION in English*

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English adjectives may freely be used as if they were plural
nouns in generic plural NPs like the good, the bad, the ugly,
which have the meaning those people who are good, etc. Jespersen
1933:80-1 observes: 'This is particularly frequent with those
adjectives denoting nationalities which end in a hissing sound'.
A closer examination of the occurrence of nationality adjectives in
generic plural constructions reveals a rather interesting apparent
counterexample to the principle of phonology-free syntax (Zwicky
1969), and one for which the possibility of a theoretically acceptable
and descriptively adequate reanalysis remains somewhat doubtful.

1. The Problem. The initial problematic data involve the existence
of some nationality adjectives that occur in the construction
mentioned above, illustrated in (1), and some that do not,
illustrated in (2).

(1) $\left\{\begin{array}{l}\text{The Chinese} \\ \text{The Swiss} \\ \text{The English} \\ \text{The Dutch} \\ \text{The French} \\ \text{The Welsh} \\ \text{The Irish}\end{array}\right\}$ disapprove of Nixon's policies.

(2) $\left\{\begin{array}{l}\text{*The Israeli} \\ \text{*The Australian} \\ \text{*The Greek} \\ \text{*The German} \\ \text{*The Pakistani} \\ \text{*The Czech} \\ \text{*The Monegasque}\end{array}\right\}$ disapprove of Nixon's policies.

It is immediately obvious that the source of the ill-formedness in
(2) is not semantic; for one thing, the word people could be added
after the adjectives in (2) to produce acceptable sentences parallel
to those of (1), and for another, we can actually find a synonymous
pair of nationality adjectives which fall into different classes:
cf. the Lettish, *the Latvian (pl.).
    The fact which raises the question of phonological constraints
in syntax is the generalization adumbrated by Jespersen: all the

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adjectives in (1) end in sibilants (strident and coronal in the framework of Chomsky and Halle 1968), while all those in (2) have nonsibilant final segments. If the scope of the constraint is restricted to nationality adjectives (excluding names of tribes like the Hopi, the Iroquois, the Bedouin) it turns out that this is a sufficient condition for characterizing the class of forms that are excluded from nounless generic plural contexts. If it proves also to be a necessary one, we have a counterinstance to the principle of phonology-free syntax.

One way of avoiding this conclusion would be to state the constraint as a surface structure constraint in the sense of Perlmutter 1971, since such constraints apply at the level where underlying phonological shapes have been assigned to the formatives in a syntactic surface structure--prior to the operation of phonological rules, but after all syntactic rules, including the lexical insertion process of 'spelling out'. It appears, however, that this cannot be done. In order to be able to state a restriction as a surface structure constraint, it must be the actual structure appearing that is impermissible, not the application of some particular rule. Frequently the argument used to establish the need for a surface structure constraint is that any of several rules may produce the structure in question, and that all these rules would have to be constrained identically if there were not an output condition on surface structures (the Condition Duplication argument). But in this case there are at least two other rules, in addition to whatever rule produces noun-less generic plural phrases, that yield outputs of the form $_{NP}[\underline{the}+Adj]_{NP}$, and the outputs of these rules are not constrained. Consider the data in (3).

(3) a. The town has excellent restaurants, the French, the Greek, and the Italian ones being particularly noteworthy.

b. I prefer the French restaurants in this town to the Greek.

In sentence (3a) it is Conjunction Reduction that is involved, and in (3b) it is the rule of Identity-of-Sense Anaphora. Both are permitted to produce a plural NP of the form $_{NP}[\underline{the}+Adj]_{NP}$ where the Adj is a nationality adjective with a nonsibilant final segment. It would therefore appear that there is no hope of stating an output condition of surface structures to cope with the ungrammaticality of the examples in (2); the condition will have to be placed on whatever rule generates the latter class of structures.

2. PEOPLE DELETION. The analysis implicitly assumed by Ross 1967, who touches on the question on nounless NPs briefly, is that such phrases have an underlying head noun (he takes it to be ones) which is deleted at some stage (Ross 1967: sec. 3.2). It is doubtful whether the underlying head noun can actually be ones, since phrases like the strong are always interpreted as referring to the class of people who are strong and never to the wider class of strong entities

(nylon ropes, elephants, bridges, etc.), whereas <u>the strong ones</u>
is not so restricted (<u>Look through this box of rubber bands and</u>
<u>pick out the strong ones</u>; cf. <u>??and pick out the strong</u>). Further-
more, <u>ones</u> would seem quite unsuited to be the underlying head noun
in the phrases <u>the known</u>, <u>the inevitable</u>, <u>the supernatural</u>, which
do have nonhuman sense. However, if we duck the problem of this
latter type of abstract NP and consider just the nounless NPs
interpreted as having human, generic plural heads, we may assume
that some head noun is present in underlying structure (for it is
reasonable to think that every NP contains a noun at the underlying
level), and that it has at least the features [CONCRETE], [ANIMATE],
[HUMAN], and [PLURAL]. If we refer to this head noun by the
abbreviatory tag PEOPLE, we may think of NPs like <u>the strong</u> being
derived via a rule of PEOPLE DELETION, which we may state very roughly
as:

(4)   PEOPLE DELETION (optional)

X - the - Adj - PEOPLE - Y

1   2   3   4   5 $\Rightarrow$ 1 2 3 $\emptyset$ 5

Such evidence as is available regarding the surface category
membership of <u>strong</u> in <u>the strong</u> supports the claim implicit in
(4) that it does not become a noun itself but remains an adjective:
(a) it takes comparative and superlative inflections (<u>the stronger</u>
<u>should protect the weakest in the community</u>); (b) it may be modified
by adverbs (<u>the really strong</u>) and the adjective intensifier <u>very</u>
(<u>the very strong</u>); and (c) it can never take the plural morpheme
(<u>*I've been doing a comparative economic study of the poors of</u>
<u>different countries</u>). The fact that we also find constructions
like <u>the pampered rich</u> does not mean that <u>rich</u> is a noun, but rather
that <u>pampered</u> modifies the whole NP <u>rich PEOPLE</u>.

One other piece of evidence that there is a rule of PEOPLE
DELETION is provided by the correspondence between the paradigms in
(5), where a NP that has its head noun deleted is seen to be
incompatible with the possessive morpheme <u>'s</u>, and (6)

(5)   a.   (i)   I was offered lots of cakes, but I didn't
                 eat one c̶a̶k̶e̶.
            (ii) *I was offered lots of cakes, but I only ate
                 one's icing.
      b.   (i)   The job was done to the satisfaction of all
                 o̶f̶ ̶t̶h̶e̶m̶.
            (ii) *The job was done to all's satisfaction.
      c.   (i)   Renfield caught lots of flies, but he
                 didn't eat any o̶f̶ ̶t̶h̶e̶m̶.
            (ii) *Renfield caught lots of flies, but he
                 didn't pull any's wings off.
      d.   (i)   I haven't seen any alligators round here,
                 but my wife saw the tails of
                 {some a̶l̶l̶i̶g̶a̶t̶o̶r̶s̶
                  a few a̶l̶l̶i̶g̶a̶t̶o̶r̶s̶} disappearing down sewers.

(5) d. (ii) *I haven't seen any alligators round here,
            but my wife saw {$^{some's}_{a\ few's}$} tails
            disappearing down sewers.[1]
    e. (i) One petal which this t̸u̸l̸i̸p̸ has is damaged.[1]
       (ii) *One petal of this's is damaged.
    f. (i) The execution of that m̸a̸n̸o̸e̸u̸v̸r̸e̸ was faultless.
       (ii) *That's execution was faultless.
    g. (i) These c̸h̸i̸l̸d̸r̸e̸n̸ are orphans.
       (ii) *These's being orphans may have something
            to do with it.

(6) a. The houses of the poor p̸e̸o̸p̸l̸e̸ aren't as interesting
        to visit as those of the rich p̸e̸o̸p̸l̸e̸.
    b. *The poor's houses aren't as interesting to visit
       as the rich's.

In keeping with its origin as an inflexional affix on nouns, the
possessive morpheme may be used as a rather subtle test for
'nouniness' of NPs (note, for instance, how it attaches to those
pronouns that may fill N slots in underlying structure: <u>his</u>, <u>her</u>, <u>its</u>,
etc., but not to <u>there</u>, which can only fill a surface N position if
introduced by rule: *<u>There's being rain in the tire tracks is</u>
<u>suspicious</u>). The ill-formedness of (6b) is fully as expected in the
light of this.
  If we accept the PEOPLE DELETION derivation, we can now simply
add a condition to the rule as in (7) to attain observational adequacy.

   (7) Condition on PEOPLE DELETION:
     If 3 is a nationality adjective, its final
     segment must be a sibilant.[2]

This will prevent the generation of the sentences in (2) without
affecting the derivation of well-formed sentences like those in (3).
But it looks so much like the arbitrary 'impossible' rules thought
up by Zwicky 1969:413 and Perlmutter 1971:87 to illustrate the
plausibility of the principle of phonology-free syntax (Zwicky's rule
that preposes a time adverbial unless it begins with [b], for example)
that a reanalysis would be highly desirable, if one could be found.

3. <u>Reanalysis: two hypotheses</u>. One initially attractive possibility
takes as its starting point the observation that the adjectives in
(1) share another property apart from their sibilant final segments:
none of them are homophonous to count nouns, except for <u>Swiss</u> and
the ones like <u>Chinese</u> ending in <u>-ese</u>, and those are exceptional
count nouns in that they take the zero form of the plural affix.
More to the point, all the adjectives in (2) represent the converse
type of case: without exception, they are homophonous with semantically
related count nouns, <u>an Israeli</u>, <u>an Australian</u>, <u>a Greek</u>, etc., and
all of these take the regular plural affix: <u>Israelis</u>, <u>Australians</u>,
<u>Greeks</u>. If we use these observations as a basis for generalizations

we can construct two closely related analyses that circumvent the
direct reference to phonology made in (7), both of which have a
promising air of plausibility that (7) lacks.

The first of them suffers from the slight drawback that it
takes not only Chinese and Swiss but also English, Dutch, etc. in
(1), as well as strong in the strong, to be nouns (albeit of a special
generic kind), and thus runs counter to the evidence presented at some
length above that they are true adjectives in surface structure.
But suppose we shelve that difficulty for the moment in order to
follow the argument. The proposal is that a lexical redundancy rule
be formulated having approximately the content of (8).

> (8) The Alternative Noun Principle.
>   For any adjective in the lexicon there exists a
>   corresponding (semantically related) generic plural
>   noun of the same phonological shape, except that
>   for nationality adjectives no such noun exists,
>   if there exists a lexical entry for a count noun
>   that (a) is semantically related to the adjective,
>   (b) has the same phonological shape, and (c) takes
>   regular plural affixation.[3]

The claim made by (8) is that *The Israeli disapprove is blocked
because of the existence of the regular count noun Israeli, whereas
The English disapprove is permitted because *an English is not. The
Swiss gets by because Swiss is not regular (two Swiss). This analysis
has the merit of suggesting that *The Israeli disapprove is out
because it sounds like an error for The Israelis disapprove (or
perhaps The Israeli disapproves), which is intuitively a very
appealing explanation for the phenomenon we are concerned with.

It has the demerit, however, that it does not work. First,
there is a minor problem about the fact that for some speakers but
not for others the existence of the nouns Dane, Swede, Finn, Pole,
Spaniard, and Turk prevents the use of the adjectives Danish, Swedish,
Finnish, Polish, Spanish, and Turkish as generic plural nouns, which
means that (8) has to be relaxed as regards the requirement of
phonological identity with the alternatively available count noun.
This relaxation must not permit uncomplimentary epithets such as
Chink, Jap, Gook, and Frog to block generic plural use of Chinese,
Japanese, Vietnamese, and French, and nor must it permit the existence
of Englishman, Dutchman, Frenchman, etc. to prevent the generation
of generic plural phrases with English, Dutch, French, etc. But
the further investigation that is necessitated as this line of
analysis dissolves into a morass of ad hoc conditions to cover
individual cases soon uncovers something much worse: a straightforward,
unavoidable counterexample. The crucial datum is given in (9).

> (9) *The Icelandic disapprove of Nixon's policies.

Since the relevant count noun in this case is Icelander, which is
neither a monosyllabic abusive epithet nor a noun ending in -man, and

since no speakers seem to use it in contexts like that of (9),
Icelandic would simply have to be indicated as an exception to (8).
Yet the phonological constraint (7) copes perfectly with this case,
as with all others cited (if we take the preference of some speaker
for the Danes over the Danish to be a matter of usage rather than
grammar).[4] Icelandic ends in a nonsibilant segment, so PEOPLE
DELETION would be blocked.

The second line of analysis starts similarly from a somewhat
implausible assumption about surface categories--the converse
assumption to the Alternative Noun analysis, namely that in The
Israelis disapprove, Israelis is at an earlier stage in derivation
an adjective, not a noun, despite its plural morpheme. This approach
has the merit of allowing the Americans to be ambiguous between a
plurality-of-individuals understanding and a generic plural one in
exactly the same way as the Vietnamese is. It could perhaps be
implemented by rewriting the correct set of nationality adjectives
in the appropriate structures as [+N] and [+PLURAL] so that the
regular plural affixation rule would attach the plural morpheme to
them in the usual way, and by making nationality adjectives with
sibilant final segments exceptions to this (essentially morphological)
rule.

The main disadvantages of this analysis seem to be as follows:
(a) it is unashamedly ad hoc, carrying no real explanation of what
is going on (a complaint that can also be made about (7), of course);
(b) it conflicts strongly with our intuition that in a sentence like
The Russians are coming there is no item that is the slightest bit
adjectival; (c) it requires a definition of the structure referred
to that cannot be given without global reference to the effects of
the rules that derived it, since like the rejected surface structure
constraint analysis discussed above it would have to distinguish the
results of various identity deletion rules from the result of PEOPLE
DELETION, which is presumably still going to be needed anyway; (d)
besides this global identification of the deletion history of the
structure, the rule will be objectionably powerful in other ways
since it changes category membership, as Jackendoff 1973 argues that
no rules can, and appears to be a rule of the feature-switching type,
argued against by Delisle 1973; (e) its reference to sibilance
means that it must refer to the same phonological class as another
morphological or phonological rule, the one that handles the
alternations of the plural suffix, and this suggests that a
generalization is being missed. In view of these five objections it
can hardly be said to be an appealing candidate analysis even if it
attains observational adequacy. Indeed, it is hard to see that
its excessive power is less obnoxious from a theoretical point of
view than the much simpler phonological constraint on PEOPLE DELETION
it is intended to supplant.

4. Conclusion. It should, of course, be pointed out that only a
small, closed list of items is involved in this whole problem, and
that the descriptive work of the grammar of English could be done
to a reasonable standard of adequacy and economy if in this case the

adjectives in (2) and those like them were simply marked as lexical exceptions to PEOPLE DELETION in the way that ox and sheep are exceptions to the regular plural affixation rule. Just as there might be no linguistic explanation of why likely permits subject raising from its complement but probable does not (see Hudson 1972), there might be no linguistic explanation beyond a simple list for the phenomenon discussed here; our theory must allow for the possibility of coincidences, like the coincidence that morphology 'the study of (linguistic or biological) form' could be derived from the non-occurring potential word *form-ology by interchanging the initial and final segments of the root.

However, it is methodologically inadvisable to appeal too readily to 'coincidence' or similar categories when a theoretical principle is being defended. The preferable methodological procedure here would be to attempt to find an analysis that captures a generalization wherever possible. The simplest solution that works in the present case is the phonological constraint given in (7), and this means it has to be admitted that in this case the analysis that is better confirmed is the one that is incompatible with the principle of phonology-free syntax.

Footnotes

*Many people have contributed to the thinking out of the ramifications of the data discussed here. mong them must be mentioned Stephen Harlow and R. A. Hudson as well as a number of people who listened to a talk incorporating this material given to the London Linguistic Circle at University College London on February 27, 1974.

1. Ross 1972:62-3 uses data similar to (5e)-(5g) to argue for a structure-independent surface structure constraint blocking sequences of the form Demonstrative-Possessive, but it seems clear that a much wider generalization is possible. For instance, the incompatibility with the possessive morpheme evinced by demonstratives is paralleled exactly by just those wh-words which occur as determiners; thus we have What knife shall I use? and Which chair fell over? but not *What's execution was faultless? or *Which's legs are loose?, whereas in the case of a wh-word like who that cannot be used as a determiner (*Who linguist invented the asterisk?) we do get a possessive form (Whose knife shall I use?). It is surely the non-nouny property of being capable of occurring alone in determiner position that is the relevant one.

2. The ill-formedness of *The Yugoslav disapprove suggests that it is not sufficient to mention the feature [strident] here, since [v] is a strident segment in the framework of Chomsky and Halle 1968.

3. Notice that this statement quantifies over lexical entries and is thus translexical in the sense of Nessly 1973.

4. This is not the circularity it might seem to be. It is true that in the preceding paragraph the problem of the variable acceptability of <u>the Danish</u>, etc. was cited as a problem for the Alternative Noun analysis, but this is legitimate, since in that analysis the existence of an alternative noun is made the crucial factor on which the grammatical analysis depends; it thus becomes a problem that it is hard to specify precisely when an alternative noun counts for purposes of (8). The phonological constraint (7), on the other hand, requires no notion of alternative noun for its formulation, and thus the rather plausible position that people have differing degrees of preference for the use of a noun over the use of an adjective in certain contexts may reasonably be adopted by an advocate of (7).

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