

ADJECTIVES IN ENGLISH: ATTRIBUTION AND PREDICATION*)

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SUMMARY

The traditional relative-clause transformation fails to account for many if not most instances of attributive adjectives. Its attractiveness has possibly been due to two factors: to our tendency to think up easy examples, which are apt to have semantically barren words like *man* whose reference systems are close to their grammatical categories, and to the suggestive power of classical syllogisms. One proof of failure is that instead of clearing up ambiguity the transformation creates it. There is a clear functional difference between predicative modification and attributive modification. Two solutions are offered to account for the restrictions. The first is that *be* predications in so far as they are involved at all are of the aspectual type *be_{temp}* which selects adjectives whose meanings can have a temporal spread. The second is that two types of generation be recognized, one, termed reference-modification, being in the kernel and allowing for a 'kind of' slot among the determiners, the other, termed referent-modification, being by way of a predication which is joined by conjunction rather than by subordination.

Is the relationship between predicative and attributive adjectives in English close enough, quantitatively and qualitatively, to justify describing one transformationally in terms of the other? Assuming that it is, but less so than, say, the relationship between active and passive, does it follow that some transformations are better than others? Assuming that it is not, are other transformational descriptions possible, or should attribution be placed in the grammatical kernel? Or is it better to use one approach for some attributive constructions and the other for the rest?

Questions like these need to be discussed informally before deciding to move in one direction or the other. For all its attractiveness, generativists have been a bit rash in adopting without much

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debate the Port Royal description of attributive adjectives, which can be expressed transformationally as follows:

I bought the table }
 The table was big } → I bought the table that was big →
 I bought the table big → I bought the big table

Superficially this looks good; but an example that resembles it somewhat and that might appear equally attractive is the following:

The poor man contributed generously → The poor man
 generously contributed

Yet the second sentence is more properly based on the same kind of embedding that produces *The poor man's contributing was generous* and *It was generous of the poor man to contribute*, i.e.,

The poor man contributed }
 It was generous } → The poor man generously
 contributed

since when moved to the left the adverb modifies the sentence as a whole. The obvious transformation is not always the right one. I shall try to show that this is true of adjectives as well – that most predicatives with *be* are fundamentally different from attributives and that this is reflected in their acceptability orderings, restrictions, and in other ways.

Before attempting to analyze the difference let us reassure ourselves that it exists, and not in any marginal sense.

1. SHORTCOMINGS OF *be* PREDICATIONS

There are many attributive adjectives that are never predicative. Some examples, without regard to subclasses:

the main reason; *The reason is main
 a crack salesman; *The salesman is crack
 a fond old man; *The old man is fond
 a runaway horse; *The horse is runaway
 a total stranger; *The stranger is total

Others allow particular attributive uses that lack a predicative counterpart:

an angry storm; *The storm is angry
 a medical man; *The man is medical

There are also adjectives, but fewer of them, that are predicative but seldom or never attributive, at least in the same sense:

The man is asleep; *an asleep man

The man is flush ['has a lot of money temporarily']; *a flush man

The girl is sorry; *a sorry girl

(*Sorry* in its other sense allows attribution but not predication: *a sorry sight*; **The sight is sorry*). By itself the fact that many more adjectives are restricted to attributive position than to predicative position is suspicious; if anything the reverse should be true if we want to base attribution on predication.

Our suspicions are heightened by another fact, related to one of the chief advantages of generative grammar: that it enables one to disambiguate constructional ambiguity. Instead of clearing up ambiguity the traditional predicative-attributive transformation creates it. With most adjectives the contrast is subtle, but if we look first at the perfect participle we can see it in bolder form: *The jewels are stolen* is ambiguous as between action (passive voice) and characteristic (I shall try to justify this term later). *The stolen jewels* and *the jewels stolen* are unambiguous – characteristic for the first, action for the second.¹⁾ If we derive *the stolen jewels* from *The jewels are (were) stolen* we therefore not only derive a less ambiguous construction from a more ambiguous one but, since *the jewels stolen* is supposed to be an intermediate step on the way to *the stolen jewels*, we get the illogical sequence \pm characteristic \rightarrow – characteristic \rightarrow + characteristic.

With adjectives the contrast – when postposition is possible – is along somewhat different lines, since the passive voice is not involved; instead of characteristic vs. action it is characteristic vs. occasion. Examples with the *-able* adjectives are most typical: *The only river that is navigable is to the north* does not tell us whether

¹⁾ The relation of the latter to the passive voice is evident in the acceptability ordering of *The stolen jewels were his*, *The stolen jewels are his*, *The jewels stolen were his*, *The jewels stolen are his*. The last sentence is lowest on the scale: *jewels stolen* pretty clearly refers to one act of stealing, in the past, which sorts better with a following *were*. Also, for those who distinguish between *burned* and *burnt*, the normal positions are shown in the examples *The paper burned was my letter* and *The burnt paper was thrown away*.

the temporary states of rivers are referred to ('The only river that happens to be navigable at the moment'), or the classes of rivers. But *the only river navigable* is unambiguously occasion, *the only navigable river* unambiguously characteristic. Similarly with *Who were the guilty people?*, which characterizes and classifies, vs. *Who were the people guilty?*, which relates the guilt to an occasion; and with *The visible stars were Aldebaran and Sirius*, referring to stars inherently visible (i.e. of a high magnitude), vs. *The stars visible were Aldebaran and Sirius*, referring to what could be seen on a cloudy night. The contrast shows also in the acceptability ordering of *The candidates most active in the campaign were the ones elected* (as a result of their temporary activity) and *The most active candidates in the campaign were the ones elected*; a better context for the latter is *The most active candidates in the campaign were Joe Smith and William Butler*. It sometimes happens that an adjective develops two distinct senses related to its positions. Thus *The man is responsible* is ambiguous as between 'trustworthy' and 'to blame', but *the man responsible* is unambiguously 'to blame' and *the responsible man* is almost unambiguously 'trustworthy'. *Whiskey straight* is a drink, readied for the occasion; *straight whiskey* is a product, so characterized by its label.²⁾

A third reason for skepticism about *be* predications as a necessary source for attributives is the more obvious relationship, in many instances, to predications of other kinds. I do not argue for these other predications as SYNTACTIC sources of attributive adjectives – only as being more plausible than *be* predications. I can think of the following four:

(1) Adverbial predications from which the adverb is recovered as an adjective. Thus while *a daily occurrence* may relate to *The occurrence is daily* (even though the latter is less frequent), *a daily newspaper* seems to relate to *The newspaper appears daily*. *A stray bullet* relates not to **The bullet was stray* but to *The bullet went astray*. *She is a constant companion* relates to *She is constantly a companion*; *He is an eternal friend* relates to *He is eternally a friend*. *He is a fair shot* could be related to *He shoots fairly* except that that sense of *fair* is not adverbialized; it appears more clearly as *His*

²⁾ For additional examples see Bolinger, 'Linear modification', *PMLA* 67 (1952) 1117–1144, esp. pp. 1133–1137.

shooting is fair. A *big eater* relates to something like *He eats a lot* (though **He eats big* is not used, there is an analogy in *He talks big*). A *northern state* has only a dubious counterpart in ?*The state is northern*, but a good one in *The state lies to the north*. An *occasional sailor strolled by* relates to *A sailor strolled by occasionally*.³⁾ An *erstwhile friend* relates to *Formerly he was a friend*. Some attributives can be accounted for only on the theory that adjectives exercise a kind of hegemony in modification, and tend to crowd out adverbs. Examples like the following are fairly common: *The car lost complete control of itself* (completely lost control of itself); *I am out of all sympathy with that movement* (I'm all out of sympathy); *These pans are slight seconds*, an advertisement (are slightly seconds); *There is a definite shortage of gum* (There is definitely a shortage of gum).

(2) A few relics of the ancient perfect tenses with *be*: *The Indians are (have) vanished* → *the vanished Indians*; *The guests are (have) departed* → *the departed guests*.⁴⁾

(3) The passive voice. It can be argued that a phrase like *stolen jewels* ought to be related most directly to *be* predications like *He refused to buy the jewels because they were stolen* rather than to the passive. The trouble with this is that countless perfectly good attributions do not have a counterpart *be* + state construction. We readily say *increased prices* but never or almost never *These prices are increased* in the sense 'These prices are higher'. With a *fancied difference* we tend to nominalize the predicate if we want it to refer to state: *The difference is a fancied one*. *The deposited money* and *the refused invitation* have no counterpart stative **The money is deposited* and **The invitation is refused*. A better case can be made for deriving the stative *be* predicatives from attributives than for

³⁾ This transfer of the adverb is possible because of what might be called stroboscopic singulars. In *Occasionally a sailor strolled by* we have a true singular in *a sailor*: the *occasionally* applies to each sailor + event separately: 'It occasionally happened that a sailor strolled by'. But in *A sailor strolled by occasionally (now and then)*, *a sailor* integrates the sailors – it is a sailor who occurs sporadically on the scene. The stroboscopic singular can be modified by an adjective referring to events: *an occasional sailor*, *an infrequent visitor*, *a sporadic shot*.

⁴⁾ That these are relics is apparent in the impossibility of using close synonyms in the same way. *Disappear* is a newer word than *vanish*: it entered the language too late for the attributive conversion of *be* perfects to take effect: **the disappeared Indians*.

doing the reverse. If we are to derive these from sentences it seems best to go to the passive voice directly.

(4) Predications from which the verb is recovered as well as its complements. These are typically compound *-ings* and compound deponent *-eds*:

The man walks slow → a slow-walking man

The girl loves home → a home-loving girl

The scene fills the eye → an eye-filling scene

The child behaves badly → an ill-behaved child

The woman travels widely → a widely-travelled woman

It would be possible of course to put a *be* predication somewhere between the extremes here, thus:

The girl loves home → The girl is home-loving → the home-loving girl

but since only well-established forms like *home-loving*, *eye-filling*, and *ill-behaved* favor it, i.e.,

The slouch chews tobacco → *The slouch is tobacco-chewing → a tobacco-chewing slouch

The man hates women → *The man is woman-hating → a woman-hating man

Your friends write letters → *Your friends are letter-writing → your letter-writing friends

are not good derivations, as with the passive a better case can be made for deriving the *be* predications from the attributives – the compound adjective finds its way to the predicate only after it has become entrenched.⁵⁾

Observe now how differently we react to the kind of transformation represented by the last set of examples, as compared with active-passive. It causes us no surprise when some new verb appears in the active and immediately shifts to the passive: *They napalmed the village* gives (God help us) *The village was napalmed* immediately. But the great majority of predications are not transposable to attributive position: a secretary who erases mistakes is not a *mistake-erasing secretary*, nor is a wife who wakes her

⁵⁾ It goes without saying that these are to be distinguished from the type *wire-cutting tool*, *rug-cleaning device*, where *for* is implied: *a tool for wire-cutting*.

husband a *husband-waking wife*. These must wait the day when we have some interest in characterizing secretaries as mistake-erasing or wives as husband-waking. They are lexical coinages tied to a time and a place, not free-flowing syntactical transformations that move as smoothly in one direction as in the other. This restriction confirms the existence of a set meaning for pre-adjunct adjectives, which I have called 'characterization'.⁶⁾

⁶⁾ Lexical transformations and syntactical transformations I think belong at different places in the grammar. The evidence of non-compounded *-ings* is equally convincing. For all their fecundity as a source, there are un-systematic restrictions. Chomsky makes a good case for verbs having the syntactic feature [+Abstract]... -... [+Animate]], i.e., verbs allowing abstract subjects and animate objects, as a prolific source of adjectival *-ings* and, where the latter are lacking, of adjectives with other variant suffixes, e.g. *scrry* for *scaring*: *The vision scared John, a scary vision*. But when he says (*Aspects*, 227) that these verbs seem invariably to have an adjectival use, it is easy to find exceptions. The most notable are synonyms of *to anger*, including *to anger* itself.

The remark angered John, *an angering remark

The remark peeved John, *a peeving remark

And so for *to miff*, *to pique*, and *to chagrin*, though *infuriate* and *exasperate* do give *-ings*. It might seem that figurativeness could be a contrary factor in a verb like *to tickle*, in view of

The remark tickled John, *a tickling remark

The remark floored John, *a flooring remark

but then we find

The remark flattened John, a flattening remark

with the same meaning as **flooring*, just as figurative, and acceptable. Other examples:

The remark mortified John, a mortifying remark, BUT

The remark shamed John, *a shaming remark

The remark deceived John, a deceptive remark, BUT

The remark fooled John, *a fooling remark

The remark frightened John, a frightening remark, BUT

The remark panicked John, *a panicking remark

The experience shattered John, a shattering experience, BUT

The experience broke John, *a breaking experience

The mishap confused John, a confusing mishap, BUT

The mishap dazed John, *a dazing mishap

As might be expected, if there is no truly syntactic transformational relationship here the semantic features are often not the same between the verb and the *-ing*:

The remark affected John (perhaps angered him)

an affecting remark ('causing pity')

Other possible sources of attributive adjectives leave us in doubt whether to include a *be*-predicative stage or not. Take the adjectival *-ed* suffix, which can be related to predications with *have*:

The man has one eye, the one-eyed man

The road has crooks, the crooked road

(The typical fossilizations of lexical transformations show up here in the virtual non-use of *has crooks* nowadays). One might or might not include the extra step with *be*:

I know the man
The man has one eye } → I know the man who has one eye →

I know the man who is one-eyed → I know the one-eyed man

It is obvious that the transformations that can fill the attributive slot have many sources other than simply *be* predications. Let us see now whether even among the *be* predications themselves all can be used. The first step will be to show how some attributives and predicatives have restrictions that bear out the semantic label 'characterization' and suggest the need for recognizing two kinds of *be* predications.

2. CHARACTERIZATION

The attributive set with the most striking restrictions is that of the perfect participles. The predicative set similarly endowed is that of adjectives that I shall call 'temporary'.

The remark maddened John ('drove him out of his mind')
a maddening remark ('an exasperating remark')

Also there are commonplace *-ings* whose verbs are not used, or are rarely used, in corresponding predications:

an arresting experience, *The experience arrested John

a scathing contempt, *Her contempt scathed John

a fetching look, *Her look fetched John

And there are other restrictions, e.g. the verb should not be specified Negative:

The remark didn't faze John, *a fazing (*unfazing) remark. Synonymic pressure is a factor in the existence of these adjectives. If they are coinages rather than syntactic transformations then we will not coin unless we feel some real or capricious need; and if there is already a word that satisfies us, we don't need, and we won't coin. We have *bothersome*: we don't need *fazing*; we have *a debilitating disease*: we don't need *a weakening disease*.

(1) Perfect participles. The typical perfect participle that can be used attributively is one that leaves a mark on something: *a dented fender, a wrecked train, a smashed table, a bruised cheek, a frozen branch, a smudged eyelid*. When one scratches one's head the result is not **a scratched head* but when one scores a glass surface the result is *a scratched surface*. Similarly we have *labeled goods* but not **sent goods, dented bells* but not **rung bells*. But 'leaving a mark' is only the unhewn side of characterization, the most obvious means of stigmatizing a thing by what appears on its surface. It is these examples that appear as easily in the predicate as in the noun phrase: *The goods are labeled, The fender is dented, Your eyelid is smudged*. More critical examples are those of verbs that do not leave marks. Take *to deposit* and *to withdraw*. Both can appear as statives in the predicate: *The money is already deposited, The money is already withdrawn*. But while we can refer attributively to *deposited money* we would seldom if ever say **withdrawn money*. There is some interest in deposited money because it contrasts, in our manner of keeping accounts, with invested money and pocket money. Withdrawing money does not put it in a situation that interests us – the culture does not recognize any class of money that can be so characterized. On the other hand *Money withdrawn does not yield interest* is normal, and is as close to a temporal as to an adjective clause: 'money when it is withdrawn'; the money is not characterized.⁷⁾

(2) Temporary adjectives. If an adjective names a quality that is too fleeting to characterize anything, it is restricted (with that meaning) to predicative, or to post-adjunct, position. The meaning of *ready* in *The man is ready* or *The materials ready will be shipped* is excluded from **the ready man* (and this has polarized *ready* to the extent that *a ready wit* is not easily interconvertible with *?His*

⁷⁾ Characterization by what is striking and exceptional probably accounts for the high proportion of negative participles and others with negative import: *undraped figure* more frequent than *draped figure*, *hated man* more frequent than *liked man* (we have to step the latter up a degree: *well-liked man*), *lost jewels* but not **found jewels*. Negation also affects the old *be* perfects referred to earlier: though *to arrive* is as old as *to depart*, we have *departed guests* but not **arrived guests*. An oddity like *It was decided by a tossed coin* probably reflects the hegemony of adjective modification already referred to: 'It was decided by tossing a coin'.

wit is ready). Similarly with *handy*: *Are your tools handy?* normally means 'Do you have them conveniently at hand'? whereas *a handy tool* normally means a useful one – a tool can hardly be characterized by the fact that it is momentarily within reach. *Flush*, for 'having a lot of money temporarily', is, as we saw earlier, not used in **a flush man*. One may say *The house was red in the sunset*, but it would take a poet to arrest this temporary image and say *the red house*. Adjectives referring to temporary states of health, sensation, mind, or spirits are similarly restricted: *How is your friend?* – *He's fine* (*great, swell, wonderful, lousy, dizzy, hot, blue*), vs. *your fine* (*dizzy*) *friend* in a different sense. *I've never seen a man so sick – he was positively green* does not sanction **a green man*. *All of a sudden the girl was faint* does not sanction **the faint girl*. *Did your friend like your performance?* – *Yes, he was quite laudatory* is unlikely as *?a laudatory friend*. Of an individual who takes a moment's liberties we can say *That man was pretty personal, wasn't he?*, from which we cannot get **a personal man*.

Restrictions on temporariness show up in another guise: its non-use in nominalizations. Of a person who for the moment speaks too faintly we can say *I can't hear you; you're not loud enough* but not **I can't hear you; you're not a loud enough man*. This contrasts with *I can't hire you; you're not clever enough* (*you're not a clever enough man*).

How temporary must a temporary adjective be for attributive position to reject it? There is obviously no measure for this. A speaker with a mind to exaggerate can do almost anything. Thus *The chairman was apologetic*⁸⁾ would not ordinarily be reflected by an attributive even in the temporary context: *Was the chairman apologetic?* – *?Yes, we had an apologetic chairman there for a minute*. But hyperbolically, with a few trimmings, *Yes, we had a very [red-faced and] apologetic chairman there for a minute (the most apologetic*

⁸⁾ That 'temporariness' is the catalyst here can be demonstrated by comparing an adjective like *apologetic* or *congratulatory* with one like *critical*. One is apologetic or congratulatory only long enough to express the apology or the congratulations. One may be critical indefinitely. So *critical person* is common, *apologetic person* is less so (it might be said of a Uriah Heep), and *congratulatory person* is rare. On the other hand, a message conveying congratulations remains what it is and can be so characterized: *a congratulatory message*.

chairman you ever saw). In answer to *Were you sorry?* one might hear *Boy, I was a sorry man all right, about the sorriest man you ever saw*.

But the temporary adjective is in a weak position for attributive use, and if anything conspires to weaken it further, attribution is proportionately more difficult. Conflict of homonyms could be cited for some of the examples already given (*green* 'sick', *green* 'color', *fine* 'healthy', *fine* 'good'), and for many more: *Your friend is high* ('drunk') does not give **your high friend* though *your tipsy friend* is normal. Temporary adjectives like *jumpy*, *downcast*, *upset*, and *ill* are possible, though a bit unusual, as predicatives – there is no conflict. The antonyms *present* and *absent* pose an interesting contrast: *your absent friend* but not **your present friend*. The latter is exposed to a conflict of homonyms and the former is favored by being negative (like *departed guests* vs. **arrived guests*).

The opposite may also occur – a temporary modifier becomes normal if the situation is such that nouns are distinguished by it. Adjectives (or adverbs doubling as adjectives or vice versa) referring to location in space and time in relationship to the speaker or to some other movable point of reference are noteworthy for their resistance to attributive position. The phrase *the then president* is about as far as English has gone in permitting temporal adverbs to be used attributively. **The now president* is impossible,^{8a}) and *here* and *there* are inadmissible. The adjective *nearby* can be used of something stable enough to preempt a location – *a nearby building*, *a nearby group* – but not of something that may conceivably move off the next moment: **a nearby man*, **a nearby bus*. *Near*, *far*, and *close* are also highly restricted. The predications *The man is close*, *The man is near*, *You're too far* are possible, but the corresponding attributions **the close man*, **the near man*, **the far figure* are hardly acceptable. Similarly *the left dog* and *the right dog*; we prefer *the dog on the left*. (*My friend is close* versus *my close friend* reveal the familiar change of meaning.) *The near side* and *the far side* or *the near corner* and *the far corner*, or *the hither side* and *the yon side*, are significant contrasting dimensions of these nouns, like *inside* and *outside* or *top side* and *bottom side*. A similar contrast

^{8a}) But almost as I write this an enterprising beverage company advertises *The now taste of Tab*.

enables the comparative to be used with *close*, *near*, and *far*; *the closer man*, *the nearer man*, *the farther figure*.

A temporary adjective may be cemented in place by a context that is equivalent to a predication. A *loose coat* normally means a loose-fitting coat, one so characterized; but *loose* can also mean 'unfastened', and in this sense of temporariness to say *You'd better button your loose coat* is a bit inappropriate – we are more likely to arrange the context as if to assume that a predication has just been made: *You'd better button that loose coat of yours before you catch your death of cold* (= *Your coat is loose* + *You'd better button it*). More examples will be given later of attributives that are built on predicatives – explicit predicatives, predicatives-in-discourse – in this way. *Loose rope* requires no predisposing context.

One set of temporary adjectives is distinguished formally: those having the prefix *a-*. These have been restricted to predicative and post-adjunct position both by their adverbial origin and by their sense of temporariness (the two factors are related, of course): *a house afire*, *a man asleep*, *arms akimbo*, *The people were alive*, *agog*, etc. Some are gradually edging their way into attributive position: *a sensitive and aware audience*;⁹⁾ *the only regular-season games they ever sold to television were the away games they played against each other*.¹⁰⁾ *Away games* contrasts with *home games*; a recognized class of games is given its attributive characterization.

Adjectives with complements of their own may of course be excluded by that fact from attributive position:

The man was loth to speak, *the loth man

The man is averse to speaking, *the averse man

But this has nothing to do with temporariness; the synonyms *unwilling* and *reluctant* can readily be attributive.

3. TWO KINDS OF PREDICATION

We have seen numerous examples of ambiguity with *be* predications which are cleared up by pre-adjunct or post-adjunct position of the adjective: the ambiguous *The river is navigable* vs. the unambiguous *river navigable* and *navigable river*, for instance. We have also seen interconvertible predicatives and attributives

⁹⁾ *Harper's Magazine*, Nov., 1963, p. 54/2.

¹⁰⁾ *Saturday Evening Post*, May 2, 1964, p. 73.

like *The girl is foolish* – *the foolish girl* and predicatives that are not convertible like *The girl is faint*, **the faint girl*, where the same *is* appears in both. Or is it the same? Is it possible to project the *river navigable* vs. *navigable river* contrast onto the verb and come out with two different kinds of *be* predications?

A look at other verbs may help. Except for those with *be*, predications that can appear as attributives show occasional formal differences from the ones that cannot: *the dinosaurs ate the fish* does not give **fish-eating dinosaurs*;¹¹⁾ *The dinosaurs ate fish* does, in two of its three senses ('The animals known as dinosaurs were eaters of fish', 'The particular dinosaurs were eaters of fish' – non-restrictive and restrictive modification respectively; But not 'The particular dinosaurs dined off fish on a particular occasion or occasions'). In so far as predications show a formal difference between customary action and non-customary action, this difference is a clue to the ones that can be used attributively. *The man broke a leg* does not give **a leg-breaking man*; a bastard who ran rum (not *the* rum) during Prohibition was *a rum-running bastard*.¹²⁾ What one does customarily is useful for characterization.

With *be* + predicate adjective we do not find formal differences between customary and non-customary: *The man was mad* readily gives *the mad man* (and thence *the madman*) in the sense 'insane', but there is no formal difference between this and *The man was mad* in the sense 'The man was temporarily mad with anger' or just 'The man was mad' in the current sense transferred from the latter. (We see from this why *mad* in the sense 'angry' has never made it to attributive position). But on the strength of the formal differences elsewhere, one can argue for two kinds of *be* predications: the type *The girl was faint*, which analogizes with *The man broke a leg* and does not yield attributives, and the type *The girl was foolish*, which analogizes with *The girl owned property* and does yield attributives. The latter, if the analogy were carried out formally in attributives, would give *foolish-being girl* to parallel

¹¹⁾ This is a good as place as any to enter a caveat against deriving *fish-eating* from *is eating fish*. *Fish-eating* from the aspectual standpoint is the opposite of *eating fish* – the one is characteristic, the other is temporary. A form such as *house-hunting* (*He is house-hunting*) is highly exceptional.

¹²⁾ Since this is lexical transformation, it is not free; *rum-running bastard* is normal, but *rum-running man* would not be used – *rum-runner* is available.

property-owning girl. To distinguish the two aspects – temporary and non-temporary or customary – I shall call the two *be* predications *be_{temp}* and *be_{ntemp}*. It is *be_{ntemp}* predications that underlie most attributives with simple adjectives (others, as we have seen, relate to adverbial, passive, etc. predications). Unlike other verbs, the *being* of *foolish-being girl*, *red-being house*, *tall-being tree* is obligatorily deleted.

Copulative verbs that do retain the *-ing* with their attributives confirm the analogy between *be* and other verbs by showing the same restrictions with temporary adjectives as *be*. Thus *The tool looked handy* can mean either 'ready to hand' or 'useful', but *handy-looking tool* can mean only 'useful'. **Faint-looking girl* is as unlikely as **faint girl*, but *foolish-looking girl* comes as readily as *foolish girl*.

The appeal to customary aspect accounts for some of the restrictions on attributive adjectives.¹³) But there are others.

4. REFERENCE-MODIFICATION

A derivation like the following seems acceptable:

I saw a man	}	→ I saw a hungry man
The man was hungry		

But this one is less so:

I saw a student	}	→ I saw an eager student
The student was eager		

¹³) The semantic label 'customary' overstates the case, which is why I prefer *be_{ntemp}* to *be_{cus}*. Many instances of *be* predications and of other predications that can be viewed as underlying attributives do not accord fully with 'customary' in the sense in which it is applied to the aspects of verbs. It is far-fetched to say that *I am visiting a sick friend* has to do with someone customarily sick. The point is that he is not momentarily sick – *be_{temp}* is the marked term of the opposition. The parallel with customary aspect in predications with other verbs does not seem to be an accident, and there the case for 'customary' is stronger. We do find exceptions, e.g. *See that beer-guzzling character over at the bar?*, where the person referred to does not necessarily guzzle beer habitually, but this is best viewed as a figure of speech. Take away the strong feelings that lead to name-calling metaphors and one is less likely to find *-ings* used in this way – it would be unusual to hear *See that book-reading man over at the library table?* The *-er* agentives, whose ties with customary aspect are unmistakable (a buyer is one who makes a business of buying, not one who buys just once), are also used figuratively in the same way: *See that beer-guzzler over at the bar?*

Its failing comes clearer if both predications are with *be*:

The boy is a student }
The student is eager } → The boy is an eager student

It has a sort of undistributed middle: *The student is eager* uses *student* in a different sense, as a designation of an individual, and amounts to saying *The boy is eager*. *An eager student*, however, suggests someone who is eager qua student. The first is referent-modification, the second is reference-modification.

Predications, since they modify the referent rather than the reference of the noun, thus turn out to be unsatisfactory sources for many attributive adjectives. An extreme case is one like the following:

Henry is a policeman }
*The policeman is rural } → *Henry is a policeman who
is rural → Henry is a rural policeman

The ungrammaticality of **The policeman is rural* illustrates the divergent restrictions that apply to the two uses of the noun, as subject of a predication and as part of a noun phrase. In the first, which is referent-modification, it is restricted by the CATEGORY of the noun; in the second it may or may not be. *Rural* is not used with human subjects, though it may apply to an abstraction such as 'status of being a policeman'. We see this more clearly with an ambiguous adjective: *a regular policeman* vs. *The policeman is regular*. The attributive refers to regularity qua policeman; the predicative to regularity qua human being – it may mean that he brushes his teeth regularly or has regular bowel movements. The difference between reference-modification and referent-modification often selects different meanings of the adjective, e.g. in *a criminal lawyer* vs. *The lawyer is criminal*. Lawyers are classed as criminal, civil, etc.; an individual may be classed as criminal or as law-abiding.

If we are determined to do so, we can manage some kind of predicative foundation for reference modification. One device is with a predication that amounts to a definition: *Lawyers are criminal, civil, constitutional*, etc., or *A lawyer can be criminal, civil, constitutional*, etc.. This limits the semantic range of *lawyer* to the reference of the word, but in a transformation it begs the question:

John is a lawyer
Lawyers are criminal, civil, etc. } → ?

This has nowhere to go; one must fall back on a nominalization:

John is a lawyer
The lawyer is a criminal lawyer } → John is a criminal lawyer

The matter of nominalization is significant also in those few cases where a reference modifier CAN appear in the predicate in normal language. Thus along with *a commercial agent* one might find *This agent is commercial*, or even *Is John an insurance agent? – No, he's commercial*. But since in trade lingo the latter can be turned around with the result that there is no adjective at all – *Is John a commercial agent? – No, he's insurance* – it appears that *commercial* is a stand-in for a nominal.^{13a)} Nominalizations readily occur in sentences of this type without producing the sensation of excessive redundancy that they do elsewhere:

The agents in this building are mostly theatrical (ones, agents)
The novelists we studied were mostly regional (ones, novelists)
The addresses in these volumes are mostly presidential (ones, addresses)
The engineers in this department are all mechanical (engineers)
This calculus is integral (integral calculus, the integral kind)
The New York theater is mostly legitimate (theater)
These nouns are common (nouns)¹⁴

Contrast these with

The addresses in this volume are mostly interesting (?ones)
The girls in this dorm are all pretty (?ones)

where nominalizing is out of order unless the ground is carefully laid (e.g. by a mention of contrasting cases – *homely girls*, for instance – in the immediate context).

So it seems that the attributive use – which of course is the one embodied in a nominalization – is the primitive one and the pre-

^{13a)} Sayo Yotsukura in a projected paper discusses the type *I'm the fifty cents*, identifying oneself as the person to whom fifty cents is due. This I find normal in English.

¹⁴⁾ The unacceptability of such predications in any but a narrowly defining-and-classifying context can be noted in **I am going to study calculus that is integral: *We want to consult agents who are theatrical*.

dicative is derived from it, rather than the reverse. To say *Lawyers are criminal, civil, etc.*, or *Lawyers are criminal as well as civil, etc.* is a trick for saying *The word lawyer can be modified by criminal, civil, etc.*

The logical conclusion is to provide for this additional determination of the noun phrase – reference-modification – in the kernel:

Henry is a kind of policeman
 kind of → rural, urban, regular, special . . .
 The party was a kind of undertaking
 kind of → joint, individual, collective . . .

Non-predicative generation of this kind of determination is supported by a comparison that was made earlier between *be* and *look*. This was according to the following scheme:

The girl is foolish	} → {	foolish-being girl →
The girl looks foolish		foolish-looking girl
foolish girl		

where the predicative origin of *foolish-looking* is apparent but is obscured with *be* because of the rule deleting *being*. Applying the same test here we find that the adjectives that require an attributive slot and are not to be traced to any predication are exactly the ones that do not admit of a compound attributive modifier with *-looking*:

- *rural-looking policeman
- *mere-looking kid
- *old-looking school (in sense 'former school')
- *distant-looking cousin
- *personal-looking friend
- *tactile-looking organ

Attributive adjectives that can be traced to predications do admit of *-looking* (apart from situations where some other copulative may be called for, e.g. *melodious-sounding singer, crooked-acting cousin*):

- drowsy-looking policeman
- friendly-looking soldier
- useful-looking tool
- hard-looking surface
- deadly-looking cobra

The typical reference-only modifier is an adjective that does not take comparison: *These nouns are common (ones)*, **These nouns are very common (nouns)*. But many reference-modifiers do admit comparison. What is generated in the kernel is not a list of adjectives but a reference-modifying slot, occupied by adjectives some of which are free to appear in the predicate, others not, but all of which when in attributive position become modifiers of the reference system of the noun, not of any particular referent directly. Thus *a crooked lawyer* is one who is crooked in his practise (and this may take comparison: *a very crooked lawyer*), whereas *The lawyer is crooked* may refer to an individual's personal dealings. The reference system grips the attributive adjective more tightly than the predicative adjective. Thus *The contract is good* and *The marriage is good* can both mean 'binding'; but whereas 'binding' is germane to contracts, other meanings of *good* are more germane to marriages, and *good contract* can mean 'binding contract' whereas *good marriage* is unlikely to mean 'binding marriage'.

An attempt to subclassify reference-only adjectives is a study in itself, but here are some noteworthy types that show especially well the kinship to determiners:

(1) Adjectives that identify the reference of the noun with itself. They tell us that the noun means what it says. There is typically an indefinite determiner alongside:

He is a true poet (truly a poet); *The poet is true
 He is a regular champion; *The champion is regular
 He is a sheer fraud; *The fraud is sheer

Other examples: *plain fool, arrant rogue, utter incompetent, perfect ass, pure nitwit, unadulterated jackass, mere kid, ordinary policeman, common soldier, real friend, unmitigated liar, total stranger, actual fact, honest quart, straight whiskey*.¹⁵⁾

¹⁵⁾ It goes without saying that some of these adjectives may be used predicatively in other functions. We have already noted this with *This whiskey is straight*, a referent-modification in which the subject is a particular whiskey drink about which the question has been raised as to whether it is mixed. One would not hold up a sealed bottle and say *This whiskey is straight* – rather, *This is straight whiskey*.

The relationship of such adjectives as *mere* to the determiners has been pointed out by Sandra Annear, *Language* 40 (1964) 39.

(2) Adjectives that might be called intensifiers of the determiner *the*. As we look over this set we recognize that all of them carry meanings that are often expressed by accenting the word *the*, though doing this is more ambiguous. I distinguish three subsets:

(a) *The* in the sense 'already determined':

He is the very man (precisely the man) I was looking for;

*The man is very

This is the particular spot I meant; *The spot is particular

That is the precise reason I refused; *The reason is precise

For the second of these examples compare *This is thé spot*, with *the* accented. To this subset belong also *same*, *selfsame*, and (in the relevant sense) *identical*, *exact*, and *specific* (also *different*, as a case of not-*the*).

(b) *The* in the sense of importance:

Look for their main faults; *Their faults are main

He was named first citizen; *The citizen was first

He is our prime suspect; *The suspect is prime

They were the sole (only) survivors; *The survivors were sole

To this subset belong also *principal*, *chief*, and *topmost*. Note again the equivalence between *He is the prime suspect* and *He is thé suspect*.

(c) *The* in the sense 'recognized':

He is the lawful heir; *The heir is lawful

He is the rightful owner; *The owner is rightful

Alfonso is the true king; *The king is true

This is the right (wrong) book; *The book is right (wrong)

True has a double entry and some of the adjectives in this subset have other functions, e.g. *a lawful act*, *This man is right* ('acceptable') *for the job*, etc. Once more compare *He is the rightful owner* with *He is thé owner*. Though adjectival predicates are ruled out, nominalized ones are normal in all three subsets:

That man is the very one

Those faults are the main ones

That heir is the lawful one

(3) Adjectives that seem to qualify the tense of the verb in some underlying structure. Just as the preceding set can be regarded

as adverbial modifiers of *the* (*the very man* = *precisely the man*), so this set can be regarded as a tense modifier that has been shifted onto the noun:

He's the future king; *The king is future
 This horse is a sure winner; *This winner is sure
 This is my old school; *The school is old
 Kennedy is our late President; *The president is late

Other members of the set: *erstwhile*, *quondam*, *whilom*, *former*, *coming*, *budding*, and probably also *putative*, *possible*, *protable*, and *likely*. Since the adjective represents an adverbial on the verb, it is not surprising that when the noun is an event noun, predications are grammatical:

Future events cast their shadow; These events are future
 I can promise you a sure win; This win is sure
 We discussed certain old happenings; The happenings we discussed were old¹⁶⁾

5. REFERENT MODIFICATION

The apparent acceptability of

I saw a man
 The man was hungry } → I saw a hungry man

and the unacceptability of

I saw a lawyer
 *The lawyer was criminal } → I saw a criminal lawyer

I judge to be due to the semantically reduced status of *man*: it represents little more than the category Human, so that reference modification, which applies to the semantic range of the word as a word, and referent modification, which applies to the category (in this case Human), coincide. For the same reason one would not get, as a modification of the reply in *Who'll be our next chairman?* – *Your brother would be excellent* the sentence **He is an excellent brother (for the purpose)*, but could readily get *He is an excellent*

¹⁶⁾ Compare also the position of *only* and *just* relative to the rest of the noun phrase, suggesting an adverb: *only (just) a boy* = *a mere boy*.

man (for the purpose). Then the doubtfulness of

$$\left. \begin{array}{l} \text{I saw a student} \\ \text{The student was eager} \end{array} \right\} \rightarrow \text{I saw an eager student}$$

is due to the ambiguity of *The student was eager*. As a Human noun, *student* allows of *eager* in any relevant sense, including 'eager qua student' but also including 'eager to be off', 'eager to hear the latest racing news', or whatever. *Eager student*, on the other hand, normally means 'eager qua student' – reference modification.

Yet there are times when a noun that is not semantically bare, like *man*, takes modification that is clearly not reference modification, e.g. *A drowsy policeman sat at the door, supposedly to guard against intruders*. It is clear that *drowsy policeman* does not mean 'drowsy qua policeman'. Evidently there is a way for referent-modification to become attributive even with semantically rich nouns like *policeman*. And given the referent-modification of predicatives, it would be good to have predication as a source, to derive *drowsy policeman* from *policeman is drowsy*, or something like it.

Since referent-modification goes to the category of the noun, a predication that is to serve as the source ought not to specify semantic features for the subject. I suggest therefore an existence predication like the following:

$$\left. \begin{array}{l} \text{There is a person such that he is a policeman} \\ \text{There is a person such that he is drowsy} \end{array} \right\} \rightarrow$$

There is a person such that he is a policeman and drowsy →
There is a person such that he is a drowsy policeman

(where referent₁ = referent₂ and the *is* is *be_{ntemp}*). Or, using some more convenient designation for the subject,

$$\left. \begin{array}{l} \text{Henry is a policeman} \\ \text{Henry is drowsy} \end{array} \right\} \rightarrow \text{Henry is a policeman}$$

and drowsy → Henry is a drowsy policeman

In other words, a conjunction rather than a relative clause. The conjunction expresses the independent relationship of adjective and noun: his being drowsy has nothing to do with his being a policeman. It is not that *policeman who is drowsy* necessarily implies any dependence – it is simply neutral when what we need is to

specify independence.¹⁷⁾ To try to express this in the usual way,

Henry is a policeman
 The policeman is drowsy } → Henry is a policeman
 who is drowsy → Henry is a drowsy policeman

conceals the fact that *The policeman is drowsy* really means *The policeman Henry is drowsy* – *policeman* is a stand-in for the Human referent.

Reference-modification as one of the determiners, and referent-modification as the product of a conjunction, are evident in the following contrasts:

Henry is a distant cousin
 ?Henry is a crooked cousin
 Henry is a crooked cousin of mine
 Henry is a crooked lawyer

Distance in cousins and crookedness in lawyers are part of the reference systems of those nouns. Crookedness is not part of the reference system of *cousin*. To use *crooked* with *cousin* as part of an *is a* predicate calls for a predetermined referent, which is supplied by *a ... of mine*: 'There is a cousin of mine and incidentally he is crooked'. A similar example with an inanimate noun:

What's that piece of paper? – ?It's a gracious letter
 What's that piece of paper? – It's a gracious letter that I've just received
 What's that piece of paper? – It's a personal letter

Personalness is part of the reference system of *letter*; graciousness is not. But if a particular referent is determined, as by *that I have just received*, referent-modification can appear attributively: 'It's a letter that I've just received, and incidentally it is gracious'. Similarly with

Who is John Smith? – He's a famous lawyer (popular entertainer, respected minister, much sought-after speaker, greatly admired doctor, benevolent dictator)
 Who is John Smith? – *He's a nice cop
 Who is John Smith? – He's a nice cop that I know

¹⁷⁾ In a sense it does specify it here, since the *who* of *who is drowsy* is pure category: *who* = Rel_{human}. But this does not help with Inanimate antecedents, where *which* does not distinguish category from non-category.

Nice cop requires, in an *is a* predicate, something to indicate a particular referent.

Inanimate nouns show the contrasts less sharply than Human nouns, but they are present nevertheless. For example *This book is short* is more apt to be restricted only as to the category Material Object, hence to allow of any kind of shortness, including length in inches as well as length in pages, whereas *a short book* is more apt to mean shortness qua book, hence number of pages. To generalize the existence predication to include Non-human nouns merely calls for *There is an X such that* rather than *There is a person such that*.

Having provided for the two extremes of referent-modification and reference-modification, we can now assess the blending that frequently – perhaps more often than not – takes place between the two. While *a drowsy policeman* scarcely refers to someone who is drowsy qua policeman, *a friendly policeman* does suggest friendliness in the way in which policemen manifest it – courtesy in dealing with the public, helpfulness to old ladies, good fellowship along the beat.¹⁸⁾ *A happy agent* suggests one who is happy about his work. *The agent is happy* allows of any meaning of *happy* that can go with a Human subject – wearing a happy expression on his face as readily as happy qua agent. Blending is to be expected, given the nature of nouns, which both name classes and designate individuals, often doing both things at once. In their capacity as namers of classes they take reference-modification; as designators of individuals they take referent-modification.

¹⁸⁾ There is a certain amount of semantic adjustment in the corresponding predication too: *The policeman is friendly*. All that this means is that adjustment even across a conjunction – *policeman and friendly* – is to be expected. The friendliness referred to is more likely than not to be friendliness in the way policemen are usually friendly. But the predication is perfectly free to take on other meanings of *friendly*, whereas *friendly policeman* is much less so: *That policeman is certainly friendly* could refer to a neighbor who manifests neighborliness and only happens to be a policeman – *policeman* does no more than identify the person about whom we are speaking. This is why I think that the semantic adjustment should be sought within the attribution and not within a prior predication.

6. ESTABLISHMENT IN DISCOURSE

Transformational relationships presumably are paradigmatic. They define structures in terms of structures, the relationship between them being bi-directional and the notion of 'transformational history', i.e. of starting point and destination, having nothing to do with events in discourse. There is thus a paradigmatic and not a syntagmatic relationship between active and passive, for example. The active is related to the passive, but that does not mean that anyone has to say or to pretend to have said or heard an active before he can say a passive. A speaker can enter a room and say, out of the blue, *Did you see that boy? He was just run over by a truck!* without a preceding *A truck ran over the boy* having been said or assumed.

Despite the irrelevance of syntagmatic history to transformations, it is relevant to certain things that happen to the modification of nouns by adjectives. Establishment in discourse is a matter of usage which helps to determine how the grammatical resources of referent-modification and reference-modification can be tapped. Take these examples:

(1) *Short book*, as we have seen, is normally taken as 'short qua book', short in number of pages, lines, paragraphs, etc. One would be unlikely to say, on moving into an apartment and distributing articles among the shelves along the walls, *This short book is about right for that low shelf*, though *This book is short – it's about right for that low shelf* would be normal enough. Later, *Hand me that short book you had* would follow from the prior predication. On the other hand, *This short stick is about right to prop up the shelf* would cause no surprise. *Stick* selects from the semantic range of *short* only on the basis of Material Object. But with *sharp* the situation is different: *Get me some sharp sticks to stake up these plants* would refer to sharpened sticks, a kind of stick – sharpness is part of the reference system of *stick*. To refer to sticks that happen to be splintered and dangerous to handle – i.e., *sharp* in another sense than 'intentionally sharpened' – one would not say **Look out, those are sharp sticks* – rather, *Look out, those sticks are sharp*. Then having established this in discourse one may later say *I got my hands full of splinters from those sharp sticks*. With *bits of glass* nothing needs to be established in discourse: *Look out – those are sharp bits of glass*.

(2) Consider *short* when the noun is Human. *A short policeman* is normal reference-modification; physical size is relevant to being a policeman. But the predication *The policeman was short* can include any meaning of *short* that is congruent with a Human subject, e.g. he was curt or temporarily out of money. Having established this in discourse, *A short policeman is resented by people*, meaning curt, is possible. (*Short policeman* meaning 'temporarily out of money' would probably be excluded as a temporary adjective).

(3) *Older* applied to such a word as *daughter* is part of the reference system: *older daughter* has 'a set meaning in familial relationships. *The daughter is older*, on the other hand, can mean 'than I expected her to be, than the cousin', etc. Establishing this in discourse makes *older daughter* possible in a context like *The two daughters of our two friends' families were there, one older than the other; the older daughter (= the older girl) was skinny*.

(4) *You'd better button your loose coat* we saw was a bit odd – since *loose coat* suggests loose qua coat, a coat of the loose-fitting type – unless cast in a form that implies a prior predication: *You'd better button that loose coat of yours* (= *Your coat is loose* + *You'd better button it*) or *You'd better button your loose coat there* (= *Look there, your coat is loose* + *You'd better button it*).

Prior predication, establishment in discourse, thus enables a speaker to transfer a referent modification to attributive position when otherwise an ambiguity or anomaly would result because of the more usual reference modification of the adjective. By this process *a criminal lawyer* may refer to someone who is himself criminal, not necessarily to someone who practises criminal law:

$$\left. \begin{array}{l} \text{X is a lawyer} \\ \text{X is criminal} \end{array} \right\} \rightarrow \text{X is a lawyer and criminal} \rightarrow \\ \text{X is a criminal lawyer}$$

– predicative generation rather than attributive.

If the adjective is one whose semantic features can apply only to the category, no prior predication is necessary. Thus the example *See that drowsy policeman over there?* needs no groundwork since *drowsy* modifies the category Human and is irrelevant to the reference system of *policeman*. *See that criminal lawyer over there?* would definitely need groundwork if *criminal* = 'evildoing'.

Since establishment in discourse is just a matter of usage, it might seem to have little interest in a discussion of grammar. But I suspect that it has influenced our grammatical thinking. We noted earlier that

$$\left. \begin{array}{l} \text{I saw a man} \\ \text{The man was hungry} \end{array} \right\} \rightarrow \text{I saw a hungry man}$$

which is the familiar transformational derivation of an attributive adjective, seemed possible because *man* represents little more than the category Human. There are just enough instances of such semantically reduced nouns lying around to make that transformation look plausible. Now we find another type that reinforces it:

$$\left. \begin{array}{l} \text{I saw a cobra} \\ \text{Cobras are deadly} \end{array} \right\} \rightarrow \text{I saw a deadly cobra}$$

– a classical syllogism, which happens to be the most striking illustration of its broader class, which is simply that of non-restrictive modifiers in general:

$$\left. \begin{array}{l} \text{Look at the Pacific} \\ \text{The Pacific is wide} \end{array} \right\} \rightarrow \text{Look at the wide Pacific}$$

To both *Cobras are deadly* and *The Pacific is wide* we could add *as everybody knows*. But common knowledge is not essential:

$$\left. \begin{array}{l} \text{Our secretary is taking dictation} \\ \text{Our secretary is beautiful} \\ \text{secretary is taking dictation} \end{array} \right\} \rightarrow \text{Our beautiful}$$

in which *Our secretary is beautiful* is known to the interlocutors, and functions in the same way as the examples of common knowledge. In other words, if we assume that *Our secretary is beautiful* has been established in discourse, all three of these apparently valid derivations involve non-restrictive clauses: *I saw a cobra, which is deadly*; *Look at the Pacific, which is wide*; *Our secretary, who is beautiful, is taking dictation*.

All of these are to be based, I think, not on the classical transformation but on the same kind of predicative-to-attributive that was posited for the *drowsy policeman* type. The difference here is that there is a prior predication which imposes a relationship of 'if-then' on the source sentences. Whether the prior predication is something actually said, or known to be universally true, or just assumed,

makes no difference; the adjective has a predicative source and the transformation is a conjunction:

$$\left. \begin{array}{l} \text{There is an X such that it is a cobra} \\ \text{[From the prior predication it follows that]} \\ \text{There is an X such that it is deadly} \end{array} \right\} \rightarrow \text{There} \\ \text{is an X such that it is a cobra and [therefore]} \\ \text{deadly} \rightarrow \text{There is an X such that it is a deadly cobra}$$

(Sentences of the 'everybody knows' type occur more naturally – less poetically or less epithetically – in contexts where the nouns are in contrast, e.g. *The tree world manifests great variety, all the way from evergreen hemlocks to deciduous cottonwoods*).

Non-restrictive modification with its prior predications has been, I think, one of the lures toward a clause transformation (*cobras, which are deadly*) rather than the conjunction transformation advocated here. But it also poses a problem for the difference between reference-modification and referent-modification: why not regard *deadly cobra* as 'deadly qua cobra' or *lousy cop* as 'lousy qua cop'? It would seem plausible, for people who think that all cops are lousy, to incorporate *lousy* in the reference system of *cop*. I see two reasons for avoiding this. One is that all sorts of disputed value judgments would have to be added to reference systems (*He's just a pettifogging lawyer* would incorporate *pettifogging* in the reference system of *lawyer*). The other is that the identical transformation applies to the *beautiful secretary* type in which the prior predication is individual, not universal, i.e.,

$$\left. \begin{array}{l} \text{There is an X such that she is our secretary} \\ \text{[From the prior predication it follows that]} \\ \text{There is an X such that she is beautiful} \end{array} \right\} \rightarrow \text{There} \\ \text{is an X such that she is our secretary and [therefore] beautiful} \\ \rightarrow \text{There is an X such that she is our beautiful secretary}$$

– in which *beautiful* is obviously not a part of the reference system of *secretary*. It is best to think of *deadly cobra* as a prior *cobra is deadly*, paralleling *secretary is beautiful*, but infinitely extended.

7. AGENTIVE NOUNS AND LEXICAL DERIVATION

In the examples thus far I have largely avoided agentive nouns. These appear superficially to be so definite a class and to reflect

so strongly on the predicative-attributive opposition that they deserve separate treatment. We shall consider whether they do.

There are two typical situations. In the first, an anomaly results when the reference-modifier is made a referent-modifier, mainly as a result of the Human category of the subject:

a subterranean explorer; *The explorer is subterranean
 a microscopic donor; *The donor is microscopic
 an electrical worker; *The worker is electrical
 a regional novelist; ?The novelist is regional

Where the adjective can modify Human referents, it may go in the predicate:

a stingy donor; The donor is stingy

The give and take between the two sources of attributives makes it possible to get a predication out of an attribution. Thus I would not be surprised at

an astronomical liar; That liar is astronomical

with a figurative extension of the adjective. If the subject is Inanimate, then some restrictions on predication fall:

an electrical connector; The connector is electrical.

In the second situation, with *good-bad* adjectives, either position is normal:

a masterful player; The player is masterful
 a first-rate cook; The cook is first-rate
 a skilled draftsman; The draftsman is skilled

But there may be a conflict of homonyms (or – what amounts to the same thing – a varying selection from two widely separated parts of the semantic range of the adjective):

a poor liar; The liar is poor
 a poor loser; The loser is poor
 a beautiful singer; The singer is beautiful

The adjectives *poor* and *beautiful* have been heavily polarized with Human referents.¹⁹) It is possible, but unusual, to have a sentence

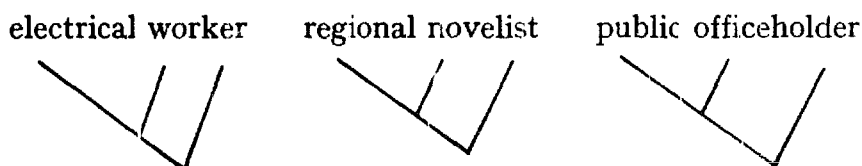
¹⁹) With *poor* the polarization is not so extreme as to exclude all but the meaning 'impoverished' in the predicate, if the reference of the subject admits the notion of 'skill' clearly enough. We see here the influence of

like *That singer is beautiful* referring to the singer's voice. But there is no problem with

a melodious singer; The singer is melodious.

Melodious is univocal and not anomalous with Human referents.

Does the fact that a noun is agentive have any bearing on the attributive-predicative problem? The particular adjectives that can be used are definitely affected by the various sources of attributive phrases containing agentive nouns. Some appear to have got their start from certain possibilities of phrase structure that would be impossible in predicative position; in the following (as above with *subterranean exploration* → *subterranean explorer*) the adjective modifies an Inanimate noun:



Others involve adverbs. These obviously cannot be made to depend on *be* predications of the traditional sort:

*The worker is hard → He's a hard worker

*The fighters are clean → They are clean fighters

But adverbial sources do seem indicated,

He works hard → He's a hard worker

They fight clean(ly) → They are clean fighters

He bids low → He's a low bidder

She cooks well → She's a good cook

He visits occasionally → He's an occasional visitor

especially if we allow the adverbial pattern to spread over constructions that never actually manifest it by grammatical sentences or if the adverbial sentences are less grammatical than the result:

He holds large amounts of stock → *He stock-holds large
(in-a-large-way) → He's a large stockholder

attributive on predicative: reference-modification becomes a factor in selecting the right meaning of an ambiguous predicate adjective. Thus while *He is a poor liar* is an incongruous match for *The liar is poor*, *She is a poor typist* may give, if not readily ?*The typist is poor*, at least rather readily *That typist is pretty poor*.

He gives low grades → He grades low → He's a low grader
 She eats tiny amounts → She eats tinily → She's a tiny eater
 He burgles professionally → He's a professional burglar

The last example is instructive in that it shows the process in reverse: *burgle* is a back formation. It begins to appear that we are again in the gray area of the type *A bullet went astray → a stray bullet*, i.e., of transformations that belong in the lexicon rather than the syntax. In an example like

He steals casually → He's a casual thief

the original meaning of the source sentence has been lost, and *casual* has been cast loose as an attributive modifier of Animate nouns; its historical origin determines one of its meanings, but is irrelevant to the fact that attribution selects one meaning (*a casual thief*) and predication another (*The thief is casual*). The attributive phrases that are easiest to derive adverbially, i.e. the *expert skier* type, are precisely the ones where we need no special derivation, for the situation is the same with non-agentive nouns; in

The young Augustine was a good trencherman but a lousy saint it would be rather difficult to regard *saint* as an agentive noun (to handle it adverbially would call for **He saint-is lousily → He's a lousy saint*), yet *He's a lousy skier* is of exactly the same type. And many of the attributive phrases where we need some special explanation, like *large stockholder* or *clean fighter*, are ones that (like *home-loving girl* or *90-mile-an-hour driver*) suggest an act of creation at a particular time and place. It does not appear to matter what these historical origins were. *A clever strategist* is one who plans strategy cleverly or who plans clever strategy or who is clever at planning strategy. What matters for our present concern is that agentive nouns like all others select the meaning of attributive adjectives on the basis of reference-modification. Since most agentive nouns embrace no more semantically than the action of the verb on which they are based, an origin like

He grades strictly → He's a strict grader

is tempting as a SYNTACTIC way of accounting for all such noun phrases. But once the agentive noun spreads its semantic range a bit, this no longer works:

He teaches strictly → He's a strict teacher

A strict teacher may be one who merely keeps his pupils quiet. He is strict in whatever sense is relevant to the noun.

8. ATTRIBUTION AND COMPOUNDING

There is a question whether any examples of the type *medical student*, *industrial machinery*, *maritime law*, etc. are freely associated adjectives and nouns rather than compounds created in this way instead of by drawing on some other resource such as noun + noun.²⁰) If we assume that a given phrase is a compound, then it follows that the adjective is inseparable and no predication will necessarily relate to it. The Pentagon is a *base* of operations and it is also *military* but it is not a *military base*. Similarly

The tape is adhesive → adhesive tape

gives a plausible (and no doubt historically true) generation. But it is no longer productive: we can say *Scotch tape is adhesive*, but not **Scotch tape is adhesive tape*. Similarly a *Shakespearian play* has lost the freedom of *The play is Shakespearian*, which does not have to mean 'by Shakespeare'. The typical case is the one where the predication makes the wrong selection of category:

nervous system; This system is nervous
alimentary canal; *The canal is alimentary
ethical drugs; *These drugs are ethical

and so for *inflationary spiral*, *purple passage*, and *candid camera*. Some instances of this sort are like the word *casual* in the preceding section: attributive position manifests a sense that is no longer active:

a happy coincidence; *The coincidence is happy

²⁰) There seems to be no good reason, for example, why the Civil War had noun + noun *Union Forces* on one side and adj. + noun *Confederate Forces* on the other, or any reason besides speech level why a man with a tin hat uses *construction materials* while one with a cap and gown uses *instructional materials* – word-formation is a transformational wilderness. We say a *medical man* for 'a doctor' but not a *dental man* nor a *surgical man* for 'a dentist' and 'a surgeon'. We keep a *dental appointment* and a *medical appointment* with a dentist and a doctor, but not an **electrical appointment* with an electrician. There are *legal minds* in the law but not **botanical minds* among botanists.

For some speakers *fortunate* is probably going the same way:

a fortunate accident; ?The accident was fortunate

There seems to be a kind of polarization of Human vs. Non-human in these and in

a brave sight; *The sight was brave;²¹) The man was brave
a proud moment; *The moment was proud

It appears that there is no way to draw a line between reference-modification and compounds. A good case could be made for recognizing most instances of exclusively attributive adjectives as raw material for compounding. They share with obvious compounds the inability to take the comparison,

cold cream, *colder cream
common noun, *commoner noun
military base, *more military base

We can apply this test to *narrow miss*, which might seem to be syntactically generated:

He fired. It was a narrow miss
He fired. It was a wide miss

These are both normal. But of

*That miss was narrow; you'll make it next time
That miss was wide; you'll have to aim better next time

the first gives me the same impression as

*That miss was near

based on a *near miss*. The comparative test applies:

*That was a narrower miss
That was a wider miss

and also the nominalization test:

That miss was a narrow one
?That miss was a wide one

So it appears that *narrow miss* is a compound by this reckoning, while *wide miss* is not.

²¹) The fact that *brave-looking sight* is normal suggests that *brave* was originally predicative in both its senses.

The argument is weakest with certain standardly classifying adjectives which rather freely take predicative position. Adjectives of nationality are the most noteworthy subclass:

These writers are American
The most famous paintings are Italian
This product is Canadian

And yet I note an inclination to nominalize, with a shift of stress to the adjective, exactly as happens with compounds:

These are Américan writers
This is a Canádivian product
The most famous paintings are the Itádivian ones.

And also a reluctance to use these adjectives predicatively for Human subjects:

He's American; preferably, He's an American

But where the adjective has the semantic feature of 'typical of such people', it more readily goes with individual Human referents:

Why does he behave that way? – Because he's (so) Irish

In my speech this is true of *English, German, Scotch, Chinese*, but not of *Australian, American, Canadian*, etc. Other similar nominalizations:

This is a mánudiv shift rather than This shift is manual
The pass he threw was a ládival one rather than The pass he
threw was lateral
This is déntal equipment rather than This equipment is dental
The call I made was a sódival one rather than The call I made
was social

(But, in a slightly different sense, This call is purely social).

By thus broadening the definition of compound, we can relegate most instances of the 'kind of + noun' generation (other than the *good-bad* ones), i.e. generation that has nothing to do with predication, to the level of word-formation, i.e., to the lexicon, leaving referent-modification as a genuine syntactic transformational source for attributive phrases that are not compounds, in addition to others that do become compounds partly through contextual

stereotyping in the course of time: *freshman, wet nurse, easy chair*,²²⁾ *single file, cold cream, silent partner, a likely story, a cool head*. Compounds in this sense would cover the spectrum of freedom, all the way from a phrase like *grammatical thinking* (p. 26 above), which is almost free (though one would not have **grammatical publishing*, in spite of *scientific publishing*), to one like *heavenly host*.

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²²⁾ *Easy chair* lacks the manipulability of *comfortable chair*; **The chair is easy, *an easier chair*.