APPENDIX I WORD-FORMATION

I.1

A form to which a rule of word-formation is applied is called a BASE (as distinct from STEM: see Note below), and the chief processes of English word-formation by which the base may be modified are:

(1) AFFIXATION (a) adding a prefix to the base, with or without a change of word-class (eg: author \rightarrow co-author) (App I.12 ff) (b) adding a suffix to the base, with or without a change of word-class (eg: drive \rightarrow driver) (App I.13 ff)

- (2) CONVERSION, ie assigning the base to a different word-class without changing its form ('zero affixation', eg: drive v → drive n) (App I.23 ff)
- (3) COMPOUNDING, ie adding one base to another (eg: $tea + pot \rightarrow teapot$) (App I.33 ff)

Once a base has undergone a rule of word-formation, the derived word itself may become the base for another derivation; and so, by reapplication, it is possible to derive words of considerable morphological and semantic complexity. A moderately complex example is the word *unfriendliness*, the derivation of which we set out as follows:

(1) friend	NOUN
(2) friend-ly	NOUN -> ADJECTIVE
(3) un-[(friend)-ly]	ADJECTIVE -> ADJECTIVE
(4) {un-[(friend)-li]}-ness	ADJECTIVE → NOUN

There are possibilities for mixing processes of derivation in the same word; for instance, compounding and affixation are both found in *colourblindness*, a word derived from the compound adjective *colour-blind* by the same rule which derives *happiness* from *happy*.

1.3 Word-formation

Apart from these major word-formation processes, English calls upon a number of minor devices – reduplication, clipping, blending, and acronymy (App I.43 f) – as means of forming new words on the basis of old.

Note

We distinguish the base of a derived word from the stem, which is the part of the word remaining after every affix has been removed: *friend* in the above example. In a word which has only one affix, such as *friendly*, the stem (*friend*) is also the base; *friendly* is the base, but not the stem, of *unfriendly*.

Prefixation

I.2

Prefixes do not generally alter the word-class of the base. Productive prefixes normally have a light stress on their first (or only) syllable, the main stress of the word coming on the base: *pre!fabricated*. This stress pattern will be assumed in the examples in the following tables, unless words are marked to the contrary.

I.3

Negative prefixes

ł.	meaning	added to:	examples
un- (cf App I.4)	'the opposite of' 'not'	adjectives participles	unfair unassuming unexpected
NON-	'not'	various classes	non-smoker non-drip (paint)
IN-	(as for un-)	adjectives	insane
DIS- (cf App I.4)	(as for un-)	adjectives verbs abstract nouns	disloyal dislike disfavour
A-	'lacking in'	adjectives nouns	amoral asymmetry

Note

[a] Non- can normally be regarded as corresponding to clause negation: non-smoker = one who does not smoke. It frequently contrasts with un-in expressing binary (nongradable) contrast, rather than the opposite end of a scale: eg: non-scientific vs unscientific.

[b] In- is realized as il- before /l/, eg: illogical, im- before bilabials, eg: improper, and irbefore /r/, eg: irrelevant.

I.4 Reversative or privative prefixes

	meaning	added to:	examples
UN-	'to reverse action' 'to deprive of'	verbs	untie unhorse
DE-	'to reverse action'	verbs abstract nouns	defrost deforestation
DIS-	(as for un-)	verbs participles nouns	disconnect discoloured discontent

I.5

Pejorative prefixes

meaning	added to:	examples
'wrongly'	verbs	misinform
'astray'	abstract nouns	misconduct
	participles	misleading
'bad(ly)'	verbs	maltreat
	abstract nouns	malfunction
N 260	participles	malformed
a"	adjectives	malodorous
'false,	nouns	pseudo-intellectual
imitation'	adjectives	(n or adj)
	'wrongly' 'astray' 'bad(ly)' 'false,	 'wrongly' verbs 'astray' abstract nouns participles 'bad(ly)' verbs abstract nouns participles adjectives 'false, nouns

Note

For other prefixes with pejorative overtones, see ARCH-, over-, UNDER-, and HYPER-(App I.6). Like pseudo- is QUASI-.

I.6

Prefixes of degree or size

	meaning	added to:	examples
ARCH-	'highest, worst'	nouns (mainly human)	archduke, arch-enemy
SUPER- (cf App I.8)	'above, more than, better'	nouns adjectives	^I super _I man, ^I super _I market supernatural
OUT-	'to do something faster, longer, etc than'	verbs (mainly intrans)	outrun, outlive

	meaning	added to:	examples
SUR-	'over and above'	nouns	Isurtax
SUB- (cf App I.8)	'lower than, less than'	adjectives	subhuman, substandard
OVER-	'too much'	verbs participles adjectives	overeat overdressed overconfident
UNDER-	'too little'	verbs participles	undercook underprivileged
HYPER-	'extremely'	adjectives	hypercritical
ULTRA-	'extremely, beyond'	adjectives	ultra-violet, ultra-modern
MINI-	'little'	nouns	Imini _I skirt

Note

Mini- is often used for humorous coinages. The contrasting prefixes maxi- ('large', 'long') and midi- ('medium') are less common, eg: maxi-skirt.

I.7 Prefixes of attitude

	meaning	added to:	examples
C0-	'with, joint'	verbs nouns	cooperate co-pilot
COUNTER-	'in opposition to'	verbs abstract nouns	¹ counteract (also counter ¹ act) counter-revolution
ANTI-	'against'	nouns denominal adjectives adverbs	anti-missile (attrib- utive) anti-social anti-clockwise
PRO-	'on the side of'	nouns denominal adjectives	pro-Common Market (attrib) pro-communist

Note

Antl- suggests simply an attitude of opposition, while counter- suggests action in opposition to or in response to a previous action.

I.8 Locative prefixes

	meaning	added to:	examples
SUPER-	'over'	nouns	super _i structure
SUB-	'beneath, lesser in rank'	nouns adjectives verbs	^I sub ₁ way subconscious sublet
INTER-	'between, among'	denominal adjectives verbs nouns	international intermarry interaction
TRANS-	'across, from one place to another'	denominal adjectives verbs	transatlantic transplant

I.9

Prefixes of time and order

	meaning	added to:	examples
FORE-	'before'	mainly verbs abstract nouns	foretell foreknowledge
PRE-	'before'	nouns adjectives	pre-war (attributive) pre-marital
POST-	'after'	nouns adjectives	post-war (attrib) post-classical
EX-	'former'	human nouns	ex-husband
RE-	'again, back'	verbs abstract nouns	rebuild, re-evaluate resettlement

Note

As an exception to the statement in App I.2, pre- and post- normally involve conversion from noun to adjective.

I.10 Number prefixes

	meaning	examples	
UNI-, MONO-	'one'	unilateral, monotheism	
BI-, DI-	'two'	bilingual, dipole	
TRI-	'three'	tripartite	
MULTI-, POLY-	'many'	multi-racial, polysyllabic	

1.13 Word-formation

Note

Bimonthly is notoriously ambiguous, in that it can mean either 'every two months' or 'twice every month'. *Biweekly* has the same ambiguity. *Biennial* normally has only the meaning 'every two years' (in contrast with *biannual* 'twice a year'), but many speakers find it as ambiguous as *bimonthly*.

I.11 Other prefixes

meaning	examples
'self'	autobiography
'new, revived'	neo-Gothic
'all, world-wide'	pan-African
'first, original'	proto ₁ type
'half'	Isemi ₁ circle
'deputy'	vice-president
	'self' 'new, revived' 'all, world-wide' 'first, original' 'half'

I.12

Conversion prefixes

	added to \rightarrow to form	examples
BE-	(a) nouns \rightarrow participial adjectives (b) $\begin{cases} verbs \\ adjectives \\ nouns \end{cases} \rightarrow \begin{cases} transitive \\ verbs \end{cases}$	(a) bewigged bespectacled (b) bedazzle becalm bewitch
EN-	$nouns \rightarrow verbs$	enslave
۸-	verbs → predicative adjectives	afloat

Suffixation

I.13

Classification of suffixes

Unlike prefixes, suffixes frequently alter the word-class of the base; for example, the adjective kind, by the addition of the suffix -ness, is changed into an abstract noun kindness.

We shall group suffixes not only by the class of word they form (as noun suffixes, verb suffixes, etc) but also by the class of base they are typically added to (DENOMINAL, *ie* from nouns, DEADJECTIVAL, DEVERBAL suffixes, etc). More usefully, we may extend this latter terminology, where convenient, to the derived words themselves, and talk of *worker* as a DEVERBAL noun, *hopeful* as a DENOMINAL adjective, etc.

On stress with suffixation, see App II.2.

Note

- [a] Inflectional suffixes, if any, always follow derivational suffixes: workers.
- [b] Deverbal nouns do not include the 'gerund' class of nouns ending in -ing (waiting, etc) which are designated VERBAL NOUNS (13.23). Because of the complete productivity of the verbal noun category, the relation between verbal nouns and the corresponding verbs is considered to be purely grammatical rather than derivational. Another class of words having arguably the same status of full productivity is that of AGENTIAL NOUNS (App I.16): worker, etc. Notice that although not all verbs have a corresponding institutionalized (or 'permanent') agential noun (trick ~ *tricker. flout ~ *flouter), it is always possible to create an ad hoc or 'temporary' agential noun in a frame such as a (regular) ... -er of N:

John regularly flouts authority ~ * John is a flouter

.

John is a regular flouter of authority

1.14

Noun -> noun suffixes

	added to \rightarrow to form	meaning	examples
A] occupatio	nal		
-STER, -EER	nouns \rightarrow personal nouns	'person engaged in an occupation or activity'	gangster, engineer
-ек (<i>cf</i> Арр I.16)	nouns → nouns	varied meanings, eg 'inhabitant of X'	teenager, Londoner
B] diminutiv	e or feminine		1
-LET	count nouns \rightarrow count nouns	'small, unimportant'	booklet, piglet
- ^I ETTE	nouns \rightarrow nouns	(a) 'small, compact'	kitche ¹ nette statu ¹ ette
		(b) 'imitation' (material)	flannc ¹ lette
-		(c) 'female'	ushelrette
-ESS	animate nouns \rightarrow animate nouns	'female'	waitress
		and the second	1.11.

-Y, -IB nouns \rightarrow nouns . daddy, auntie

	added to \rightarrow to form	meaning	examples
[C] status, dor	nain		
-HOOD	nouns \rightarrow abstract nouns	'status'	boyhood
-SHIP	(as for -hood)	'status, condition'	friendship, dictatorship
-DOM	(as for -hood)	'domain, condition'	kingdom, stardom
-IOCRACY	(as for -hood)	'system of government'	de ¹ mocracy
-(E)RY	 chiefly nouns → (a) abstract nouns (b) concrete count nouns (c) non-count nour 	 (a) 'behaviour' (b) 'place of activity or abode' (c) 'collectivity' 	(a) slavery (b) refinery, nunnery (c) machinery
[D] Other			
-ING	count nouns \rightarrow non-count nouns	'the substance of which N is composed'	panelling
-FUL	count nouns \rightarrow count nouns	'the amount which N contains'	mouthful

Note

[a] The diminutive suffix -ling is added to various word-classes, usually with a mildly contemptuous flavour: princeling, underling.

[b] The suffix -y/-ie largely restricted to familiar contexts, indicates endearment or familiarity. It is frequently added to a clipped form of the base eg: movies (esp AmE: 'moving pictures').

1.15

Noun/adjective → noun/adjective suffixes

	added to \rightarrow to form	meaning	examples
-ITE	nouns (chiefly names) → personal nouns	'member of com- munity faction/type'	Israelite socialite
-(I)AN	nouns (chiefly proper) → personal nouns, non-gradable adjectives	'pertaining to'	Indo ¹ nesian, re ¹ publican
JESE	(as for -(i)an)	'nationality'	Chi'nese

	added to \rightarrow to form.	meaning	examples
-IST	nouns/adjectives → personal nouns/adjectives	'member of a party, occupation'	socialist violinist
-ISM	nouns/adjectives \rightarrow abstract nouns	'attitude, political movement'	idealism, communism

Note .

Many nouns in -ism correspond to a noun in -ist which denotes an adherent of the principle, etc involved: communist/communism.

I.16

Verb \rightarrow noun suffixes

	added to \rightarrow to form	meaning	examples
-ER, -OR	verbs (mainly dy- namic) → nouns (mainly personal)	agentive and instrumental	driver receiver actor
-ANT	verbs -> nouns	agentive and instrumental	inhabitant, disinfectant
-EE	verbs \rightarrow personal nouns	passive	employee
-ATION	verbs \rightarrow (a) abstract nouns	(a) 'state, action'	(a) explotration
	(b) collective nouns	(b) 'institution'	(b) organi ¹ zation
-MENT	verbs \rightarrow nouns (chiefly abstract)	'state, action'	amazement
-AL	verbs → nouns (chiefly count abstract)	'action'	refusal, dismissal
ING	verbs → (a) abstract nouns (b) concrete nouns	(a) 'activity' - (b) 'result of acti- vity'	(a) driving (b) building
AGE	verbs \rightarrow non-count abstract nouns	'activity, result of activity'	drainage

I.17

Adjective \rightarrow	noun sumxes
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added to \rightarrow to form	meaning	examples
adjectives → abstract nouns	'state, quality'	happiness
(as for -ness)	'state, quality'	sanity
	abstract nouns	adjectives → 'state, quality' abstract nouns

I.18 Verb suffixes

	added to \rightarrow to form	meaning	examples
-IFY	nouns, adjectives → verbs (chiefly transitive)	causative	simplify
-IZE (BrE: also -ise)	(as for - <i>ify</i>)	causative	popularize
-EN	adjectives → verbs (a) transitive (b) intransitive	(a) causative (b) 'become X'	(a) deafen (b) sadden

I.19

Noun \rightarrow adjective suffixes

added to \rightarrow to form	meaning	examples
nouns (chiefly ab- stract) → gradable adjectives	'having, giving'	useful helpful
$nouns \rightarrow adjectives$	'without'	childless
nouns (chiefly con- crete) \rightarrow gradable adjectives	'having the qualities of'	cowardly
(as for -ly)	'having the qualities of'	childlike
nouns (chiefly con- crete non-count) \rightarrow gradable adjectives	'like, covered with'	creamy, hairy
	stract) \rightarrow gradable adjectives nouns \rightarrow adjectives nouns (chiefly con- crete) \rightarrow gradable adjectives (as for -ly) nouns (chiefly con- crete non-count) \rightarrow	nouns (chiefly ab- stract) \rightarrow gradable adjectives'having, giving' giving'nouns \rightarrow adjectives'without'nouns (chiefly con- crete) \rightarrow gradable adjectives'having the qualities of'(as for -ly)'having the qualities of'nouns (chiefly con- crete non-count) \rightarrow 'like, covered with'

Apper

	added to \rightarrow to form	meaning	examples
-ISH	nouns (chiefly proper and count) → adjectives	1	
	(a) non-gradable (b) gradable	(a) 'belonging to'(b) 'having the character of'	(a) Turkish (b) foolish
IAN	nouns (chiefly proper) → adjectives	'in the tradition of'	Dar ¹ winian
.20			
Some ad	ljective suffixes common in	borrowed and neo-classi	cal words
uffix	used to form		
AL	primarily p	on-gradable criminal	adiltorial

-AL	primarily non-gradable	criminal, edi\torial,
(also - <i>ial</i> , - <i>ical</i>)	adjectives	musical
-IC	gradable or non- gradable adjectives	helroic
-IVE (also - <i>ative</i> , - <i>itive</i>)	gradable or non- gradable adjectives	attractive, affirmative, sensitive
-OUS	primarily gradable	virtuous, courteous.
(also <i>-eous</i> , <i>-ious</i>)	adjectives	vivacious

Note

[a] In some adjectives. -ic alternates with -ical, with a difference of meaning:

an economic miracle~ the car is economical to run

('in the economy') ('money-saving')

a historic building ~ historical research

('with a history') ('pertaining to history')

[b] There are several less common neo-classical affixes, among which -ary, -ate and -ory are particularly notable: revolutionary, affectionate, obligatory. Adjectives in -ory alternate (with or without stress shift) with nouns in -tion: o'bligatory~ oblig'ation, satis'factory~ satis'faction.

1.21

Other adjective suffixes

	added to \rightarrow to form	meaning	examples
-ABLE, -IBLE	verbs (chiefly transi- tive) \rightarrow adjectives	'able/worthy to be V-ed'	readable, forcible
-ISH	gradable adjectives → gradable adjective	'somewhat'	youngish
-ED	nouns or noun phrases → adjectives	'having', etc	balconied

I.22

Adverb suffixes

	added to \rightarrow to form	meaning	examples
-LY	adjectives → adverbs of manner, viewpoint, etc	'in a manner', etc	happily, strangely
-WARD(S)	adverbs, nouns → adverbs of manner/ direction	manner/direction	backward(s)
-WISE	nouns → (a) adverbs of manner (b) viewpoint adverbs	 (a) 'in the manner of' (b) 'as far as is concerned' 	(a) crabwise (b) weather-wise

Note

Also -STYLE and -FASHION ('in the manner/style of') are sometimes used as adverbial suffixes: They ate American-style (cf 8.20).

Conversion

I.23

Conversion and suffixation

Conversion is the derivational process whereby an item changes its wordclass without the addition of an affix. For example, the verb *release* (as in *They released him*) corresponds to a noun *release* (as in *They ordered his release*), and this relationship may be seen as parallel to that between the verb *acquit* and the noun *acquittal*.

I.24

$Verb \rightarrow noun$

[A] 'State' (from stative verbs to nouns): doubt, love

[B] 'Event/activity' (from dynamic verbs): laugh, walk

[C] 'Object of V': answer ('that which is answered'), catch

[D] 'Subject of V': bore ('someone who bores/is boring), cheat

[E] 'Instrument of V': cover ('something that covers things'), wrap

[F] 'Manner of V-ing': throw, walk

[G] 'Place of V': retreat, turn

I.25

Adjective \rightarrow noun

Miscellaneous examples are daily ('daily newspaper'), comic ('comic actor') (young) marrieds ('young married people'; informal). The

adjective \rightarrow noun conversion can usually be explained in terms of a wellestablished adjective+noun phrase from which the noun has been ellipted.

I.26

Noun \rightarrow verb

- [A] 'To put in/on N': bottle, corner
- [B] 'To give N, to provide with N': coat ('give a coat [of paint, etc] to'), mask
- [C] 'To deprive of N': peel ('remove the peel from'), skin
- [D] 'To ... with N as instrument': brake, knife ('stab with a knife')
- [E] 'To be/act as N with respect to ...': nurse, referee
- [F] 'To make/change ... into N': cash, cripple
- [G] 'To (a) send/(b) go by N': (a) mail, ship; (b) bicycle, motor

I.27

Adjective \rightarrow verb

[A] (transitive verbs) 'to make (more) adj': calm, dirty

[B] (intransitive verbs) 'to become adj' (generally adjectives in Type A can also have this function): dry, empty

Sometimes a phrasal verb is derived from an adjective by the addition of a particle: *calm down* ('to become calm').

This category of conversion competes with -en suffixation (App I.18), and sometimes both derivations are available for the same adjective:

He blacked/blackened his face with soot

I.28

Minor categories of conversion

[I] Conversion from closed-system words to nouns:

This book is a must for the student of aerodynamics

[II] Conversion from phrases to nouns:

Whenever I gamble, my horse is one of the also-rans (*ie* one of the horses which 'also ran' but was not among the winners)

[III] Conversion from phrases to adjectives:

an under-the-weather feeling ~ I feel very under-the-weather (ie indisposed)

[IV] Conversion from affixes to nouns:

Patriotism, and any other isms you'd like to name

I.29

Change of secondary word-class: nouns

- (a) Non-count \rightarrow count
 - (i) 'A unit of N': two coffees ('cups of coffee')
 - (ii) 'A kind of N': Some paints are more lasting than others
 - (iii) 'An instance of N' (with abstract nouns): a difficulty
- (b) Count → non-count

'N viewed in terms of a measurable extent' (normally only after expressions of amount): a few square feet of *floor*

- (c) Proper \rightarrow common (initial capital usually retained)
 - (i) 'A member of the class typified by N': a Jeremiah ('a gloomy prophet')
 - (ii) 'A person, place, etc called N': There are several Cambridges ('places called Cambridge') in the world
 - (iii) 'A product of N or a sample or collection of N's work': a Rolls Royce ('a car manufactured by Rolls Royce'), a Renoir, a (complete) Shakespeare
 - (iv) 'Something associated with N': wellingtons, a sandwich
- (d) Stative \rightarrow dynamic

He's being a fool ('He's behaving like a fool')

I.30

Change of secondary word-class: verbs

- (a) Intransitive → transitive
 'Cause to V': run the water
- (b) Transitive \rightarrow intransitive
 - (i) 'Can be V-ed' (often followed by an adverb such as well or badly): Your book reads well
 - (ii) 'To V oneself': Have you washed yet? ('washed yourself')
 - (iii) 'To V someone/something/etc': We have eaten already
 - (iv) 'To be V-ed': The door opened
- (c) Intransitive \rightarrow intensive
 - (i) Current meaning: He lay flat
 - (ii) Resulting meaning: He fell flat
- (d) Intensive \rightarrow intransitive

The milk turned (ie 'turned sour')

- (e) Monotransitive \rightarrow complex transitive
 - (i) Current meaning: We catch them young
 - (ii) Resulting meaning: I wiped it clean.

I.31

Change of secondary word-class: adjectives

(a) Non-gradable \rightarrow gradable

I have a very legal turn of mind

(b) Stative \rightarrow dynamic

He's just being *friendly* ('acting in a friendly manner')

I.32

Approximate conversion: voicing and stress shift

In some cases, conversion is approximate rather than complete: that is, a word, in the course of changing its grammatical function, may undergo a slight change of pronunciation or spelling. The most important kinds of alteration are (1) voicing of final consonants, and (2) shift of stress.

 Voicing of final consonants (noun → verb) advice → advise, thief → thieve, sheath → sheathe, and (not shown in spelling) house → house

(2) Shift of stress (see App II.2)

When verbs of two syllables are converted into nouns, the stress is sometimes shifted from the second to the first syllable:

conduct, conflict, contrast, convert, convict, export, extract, import, insult, permit, present, produce, rebel, record

Occasionally, a word of more than two syllables varies in this way: $over^{\dagger}flow$ (v) $\rightarrow ^{\dagger}overflow$ (n). There are many examples of disyllabic noun-verb pairs which do not differ in stress; for example, 'contact (v), 'contact (n), and de'bate (v), de'bate (n).

Compounds

I.33

A compound is a unit consisting of two or more bases (App I.1). There is no one formal criterion that can be used for a general definition of compounds in English (cf 13.34f); on stress cf App II.3.

We concentrate on the productive or creative types of compounding, and indicate the syntactic relations of the compounding elements by paraphrases. For example, the two compounds *playboy* and *call-girl* are superficially similar, consisting of verb + noun. Yet the relations of their elements are different:

playboy ~ the boy plays, ie verb + subject call-girl ~ X calls the girl, ie verb + object

1.36 Word-formation

Noun compounds I.34 SUBJECT AND VERB COMPOUNDS

SUNRISE ~ the sun rises noun + deverbal noun	bee-sting earthquake
Very productive type	headache
RATTLESNAKE ~ the snake rattles	flashlight
verb+noun	hangman
DANCING GIRL ~ the girl dances	firing squad
verbal noun + noun	washing machine

I.35

VERB AND OBJECT COMPOUNDS air-conditioning SIGHTSEEING ~ X sees sights (cf App I.39) noun + verbal noun brainwashing (Number is neutralized) dressmaking story-telling Very productive type TAXPAYER $\sim X$ pays taxes gamekeeper noun + agentive or instrumental noun record-player (Number is neutralized) songwriter Very productive type window-cleaner BLOODTEST ~ X tests blood count nouns non-count nouns noun+deverbal noun book review birth-control self-control haircut CALL-GIRL ~ X calls the girl knitwear verb+noun CHEWING GUM ~ X chews gum cooking apple spending money verbal noun + noun

I.36

VERB AND ADVERBIAL COMPOUNDS

SWIMMING POOL $\sim X$ swims in the pool verbal noun + noun Very productive type	typing paper adding machine walking stick
DAYDREAMING (cf App I.40)	sun-bathing
~ X dreams during the day	sleepwalking
noun+verbal noun	handwriting

4

BABY-SITTER $\sim X$ sits with the baby noun + agentive noun	factory-worker sun-bather daydreamer
HOMEWORK $\sim X$ works at home	boat-ride
noun+deverbal noun Most examples are count	daydream gunfight
SEARCHLIGHT ~ X searches with a light verb + noun	dance hall plaything

I.37

*

VERBLESS COMPOUNDS	
WINDMILL ~ the wind [powers] the mill	hydrogen bomb
noun + noun	motorcycle
TOY FACTORY ~ the factory [produces] toys	oil well
noun + noun	tear gas
BLOODSTAIN ~ the blood [produces] stains	hay fever
noun + noun	sawdust
DOORKNOB~ <i>the door</i> [<i>has</i>] <i>a knob</i>	shirt-sleeves
noun + noun	table leg
Very productive type	television screen
GIRL-FRIEND ~ the friend [is] a girl	oak tree
noun + noun	tape measure
DARKROOM \sim the room [is] dark	hardboard
adjective + noun	madman
FROGMAN ~ the man [is] like a frog	goldfish
noun + noun	kettledrum
Very productive type	tissue paper
SNOWFLAKE ~ the flake [consists] of snow	bread-crumb
noun + noun	sand dune
ASHTRAY ~ the tray [is] for ash	coffee time
noun + noun	facecloth
Very productive type	fire engine

Note

* difference between teacup (~ 'cup for tea') and cup of tea (~ 'cup containing tea') * paralleled with matchbox, winebottle, soup plate, etc.

I.38

BAHUVRIHI COMPOUNDS

PAPERBACK ~[the book has] a paper back A 'bahuvrihi compound' names an entire thing by specifying some feature	noun + noun blockhead hunchback pot-belly	adjective + noun fathead loudmouth paleface
--	--	--

Adjective compounds

VERB AND OBJECT COMPOUNDS MAN-EATING~X eats men (cf App I.35) noun +-ing participle	breath-taking heart-breaking
MAN-EATING ~ X eats men (cf App 1.35)	

1.40

VERB AND ADVERBIAL COMPOUNDS

UDOUNDÓ

OCEAN-GOING ~ X goes across oceans (cf F noun + -ing participle	App I.36) law-abiding mouth-watering
HEARTFELT ~ X feels it in the heart	handmade
noun + -ed participle	self-employed
HARD-WORKING $\sim X$ works hard	easy-going
adjective/adverb + -ing participle	good-looking
QUICK-FROZEN ~ X is frozen quickly	far-fetched
adjective/adverb + -ed participle	new-laid

I.41

CLASS-CONSCIOUS ~ X is conscious with respect to class	duty-free
noun + adjective	homesick
GRASS-GREEN ~ X is green like grass	brick red
noun + adjective	sea-green
BRITISH-AMERICAN (initiative) ~ the British and the Americans jointly (made an initiative) adjective + adjective (coordination compound)	bitter-sweet deaf-mute

Note

The first element of coordination compounds frequently ends in -o and is not itself an independent word, eg: psycholinguistics, Anglo-American.

I.42 Verb compounds

sIGHTSEE ~ X sees sights	house-hunt
noun + verb	lip-read
SPRING-CLEAN ~ X cleans in the spring noun + verb	baby-sit sleep-walk

Note

These examples are 'back-formations' from such nouns as sightseeing (App I.35) and spring cleaning (App I.36), and from a historical viewpoint cannot be described as noun+verb compounds.

1.43

Reduplicatives

Some compounds have two or more elements which are either identical or only slightly different; eg: goody-goody ('affectedly good', informal). The difference between the two elements may be in the initial consonants, as in walkie-talkie, or in the medial vowels, eg: criss-cross. Most of the reduplicatives are highly informal or familiar, and many derive from the nursery, eg: din-din ('dinner'). The most common uses of reduplicatives are

- (a) to imitate sounds, eg: tick-tock (of clock)
- (b) to suggest alternating movements, eg: seesaw
- (c) to disparage by suggesting instability, nonsense, insincerity, vacillation, etc, eg: higgledy-piggledy, wishy-washy
- (d) to intensify, eg: tip-top

I.44

Clipping

The term 'clipping' denotes the subtraction of one or more syllables from a word. The shortening may occur at

- (a) the beginning of the word: phone ~ telephone
- (b) the end of the word (more commonly): photo ~ photograph
- (c) at both ends of the word (rare): flu~influenza

The clipped form tends to be used especially in informal style.

I.45

Blends

In a blend at least one of the elements is fragmentary when compared with its corresponding uncompounded word form. For example brunch (esp AmE, 'a meal subsuming breakfast and lunch') is derived from br(eakfast) + (l)unch. Many blends have only a short life and are very

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6 Word-formation

informal, but some have become more or less fully accepted in the language, eg: motel from motor + hotel, smog from smoke + fog, transistor from transfer + resistor.

I.46

Acronyms

Acronyms are words formed from the initial letters (or larger parts) of words. New acronyms are freely produced, particularly for names of organizations.

- (1) Acronyms pronounced as sequences of letters can be called 'alphabetisms':
 - (a) The letters represent full words: C.O.D. \sim cash on delivery, UN \sim the United Nations
 - (b) The letters represent elements in a compound or just parts of a word: TV~ television, GHQ~General Headquarters
- (2) Many acronyms are pronounced as words, eg: radar (from 'radio detecting and ranging').

Bibliographical note

Marchand (1969) is the most comprehensive reference work on English word-formation, but *cf* also Adams (1973). For bibliography, see Stein (1973).

APPENDIX II STRESS, RHYTHM, AND INTONATION

П.1

Stress, rhythm, and intonation are all concerned with the perception of relative PROMINENCE. We speak of STRESS when we are considering the prominence with which one part of a word or of a longer utterance is distinguished from other parts. Thus we say that *indignant* has stress on the second syllable or that the word *like* is stressed in 'Does he like it?':

In¹dignant

Does he like it?

We speak of RHYTHM when we are considering the pattern formed by the stresses perceived as peaks of prominence or beats, occurring at somewhat regular intervals of time, the recurring beats being regarded as completing a cycle or 'measure'. Thus, as a language with a tendency for 'stress-timed' rhythm, English often shows an identity of rhythm in sentences like the following, provided that the number of syllables does not vary too widely:

John's at home to'night John's here now The pro'fessor's in London this 'evening

We speak of INTONATION when we associate relative prominence with PITCH, the aspect of sound which we perceive in terms of 'high' or 'low'; thus we can say that the 'intonation nucleus' in the following sentence has a 'falling tone' (App II.7):

The Iman has GONE.

П.2

Stress within the word

There is a binary opposition – stress versus no stress – though it is often relevant to distinguish an intermediate or secondary stress. We mark stress with a high vertical stroke before the syllable carrying the stress, II.2 Stress, rhythm, and intonation

leaving lack of stress unmarked. When a stronger stress needs to be indicated, a double vertical mark is used, and where it is desirable to indicate secondary stress, there is a low vertical stroke before the syllable concerned. For example:

¹several ¹pretty ¹women ₁contri¹bution

Native words and early French adoptions tend to have the main stress on the root syllable and to keep it there, regardless of the affixes that wordformation may add:

¹ kingly	Istand(ing)	passion
kingliness	under ¹ stand(ing)	passionately
un ¹ kingliness	misunder'stand(ing)	dis ¹ passionate

By contrast, with the more recent adoptions and coinages, especially those based on words from the classical languages, the place of the stress varies according to the affixation:

	antepenultimate	penultimate
Itelegraph	tellegraphy	tele'graphic
	tellepathy	tele ¹ pathic
photo(graph)	pho ¹ tography	photo'graphic
Itransport	trans ¹ portable	transportation
largument	argu ⁱ mentative	argumen'tation

The last two items exemplify an important generalization: all abstract nouns ending in *-ion* are stressed on the syllable preceding this ending.

Similar penultimate examples with adjectival -ic (App I.20):

'phoneme ~ pho'nemic	emblem ~ emble matic	
e'conomy~eco'nomic	sympathy~sympathetic	

and antepenultimate with nominal -ity and nominal-or adjectival -ian:

ulnanimous ~ unalnimity	curious~curiosity
'library~lib'rarian	u'tility~utili'tarian
'grammar ~ gram'marian	Cromwell ~ Crom'wellian

By contrast, -ite leaves the place of the accent unchanged:

'Trotsky~'Trotskyite 'Jefferson~'Jeffersonite

A fairly numerous set of words that can operate without affixal change as noun or adjective on the one hand, and as verb on the other, have an accentual difference in the two functions (App I.32); for example:

noun or adjective: 'conduct, 'contrast, 'attribute, 'present, etc verb: con'duct, con'trast, at'tribute, pre'sent, etc In one of these (contrast) and in several of the other examples that might have been cited (eg: export), there is a tendency to discontinue a separate verb form and to use in all functions the form as stressed for the noun.

II.3

Compounds

In contrast to noun phrases like $a_1 black \, bird$, corresponding compound nouns (App I.34 ff) are generally stressed on the first element but with a strong secondary stress on the second element:

black bird	¹ black ₁ board	^l green _l fly
learth,quake	waiting _l room	fire-ex ₁ tinguisher

When such a compound is made part of another compound, the stress and secondary stress are re-distributed to give the same rhythm: '*lighthouse* but '*lighthouse*-*keeper*.

A somewhat smaller number of compounds have phrasal stress pattern:

apple'sauce first'rate

Such compounds are often not nouns, but verbs $(_1back-^1fire)$, adverbs $(_1hence^1forth)$, and especially adjectives $(_1knee-^1deep, _1flat-^1footed)$. Some examples are variable:

ifield 'marshal or 'field imarshal; over'seas or 'overiseas

In any case, the stress often shifts from second component to first when the compound is being used attributively in a noun phrase:

The room is Idown'stairs but A 'downistairs 'room His work is I first'class but His 'first₁class 'work

Note

In AmE there is a strong tendency to give initial stress to compounds and in normal AmE use we have for example 'apple, sauce. 'lawn, tennis, 'back, fire. This stress distribution occurs quite often in BrE also.

11.4

Stress in phrases and other syntactic units Stress distribution provides a firm basis for distinguishing between different underlying relations:

A 'toy factory produces toys; a toy 'factory is a toy

A 'bull fight involves bulls; a bull 'calf is a young bull

A 'French teacher teaches French; a French 'teacher is French

A 'slate |quarry yields slate; a slate 'roof is made of slate

II.6 Stress, rhythm, and intonation

A heavier stress (though usually realized as an intonation nucleus: App II.7) marks the head of a lengthy premodified noun phrase, the final item of a heavily postmodified noun phrase, the last lexical item of a clause, and similar points of grammatical importance:

A reallistic little toy "factory The toy 'factory he 'got for his "birthday 'That's the ad'dress he 'sent the "letter to

II.5

Contrastive stress

We can interfere with normal accentuation to highlight any word we please by means of contrastive stress, again often realized by means of intonation. In this way, for example, the closed-system words like *and*, of, *have* (which normally have /2/ and often consonant loss as well) are pronounced with the vowel and consonant values that these words have in isolation:

A: 'John and 'Mary 'went /ən/ B: 'Really! 'John 'and 'Mary? /and/

Contrastive stress is not limited to sequences longer than the word: the normal accentuation within the word can also be distorted at the speaker's will if he wants to make a contrastive point. Thus instead of *un*'happy one might say '*unhappy* in a context such as

A: She was looking happy tonight

B: You thought so? She seemed 'unhappy to me

Note

Contrastive stress can also override the distinctions made in App II.4: in I 'said she was a "French teacher, not a "fresh teacher, we could be referring to nationality.

П.6

Rhythm

Broadly speaking, and in the absence of contrastive stress, English connected speech has stresses on the (stressed syllables of) open-class items, and absence of stress upon the closed-system words accompanying them:

He 'told his 'mother He 'sent it to his 'mother That's the ad'dress he 'sent the 'letter _ito She was 'looking 'happy to'night

The natural rhythm of English, when unaffected by other factors such as hesitation which may slow down the speaker or excitement which may speed him up, provides roughly equal intervals of time between the stresses (cf App II.1).

But absolute regularity of rhythm is the exception rather than the rule. When the intervals between stresses achieve something like equality, the stylistic effect is oppressive. One exception is in counting: when we have to count a fairly large number of items, we tend to adopt quite naturally a strictly regular rhythm:

lone Itwo Ithree four ... Iseventeen leighteen Inineteen ... seventy-'four seventy-'five seventy-'six . . . a hundred-and-'three a hundred-and-'four . . .

So too when we are compiling an inventory, giving a list of names, or the like. Insistent regularity may also be introduced in religious discourse, in reading poetry, or for emphasis. In ordinary discourse, it is common when one is implying repetition of something which ought to be accepted without argument, and especially again perhaps when the speaker is expressing irritation or sarcasm:

You should 'never 'move the 'papers 'on my "desk

Intonation II.7

Tone unit, nucleus, and the falling tone

Intonation is normally realized in tone units consisting of a sequence of stressed and unstressed syllables but on occasion the unit may consist of a single pitch-prominent syllable. The peak of greatest prominence is called the NUCLEUS of the tone unit and it is indicated in this book by being printed in small capitals. The first prominent syllable in a tone unit is the ONSET, and it is commonly preceded by one or more syllables with light stress and on a low pitch. Its position can be indicated by a preceding thin vertical () and the end of the tone unit by a thick vertical (). Some of the earlier examples are now given, with stresses reinterpreted where relevant:

- (a) He |told his mother|
- (b) That's the ad dress he 'sent the LETter to]
- (c) She was |looking HAPpy to'night|
- (d) You |THOUGHT Isol
- (e) She |seemed UNhappy to ME|

Pitch prominence is usually associated with pitch change, and the commonest change is a FALL. We would expect a fall on the nuclear syllable in (a) and (b) above, as in most sentences of English. We expect a fall also in questions beginning with a wh-word, as in (f) and (h), on one-word answers to questions, and on words or names or even letters uttered in isolation, as in (g) and (i):

- (f) |What's his NAME|
- (g) Phy|LAKtis|
- (h) |What's the first LETter]
- (i) |P|

П.8

The rising tone

The next commonest tone is the RISE, used when we wish to indicate that our utterance is non-final or that we are leaving it open and inconclusive. This may be because we are counting or listing and have not come to the last item; or because another clause is going to follow; or because we seek a response from someone (but not by means of a *wh*-question):

... [TWÉLVE] [THÍRteen] [FÓURteen] [FÌFteen] There are [fifTÈEN] [When he CÁME] I [GRÈETEd him] I [saw him this MÓRNING] and in [vited him to DÌNNEr] You're [going alréADy] [MÚST you]

Some of the examples in App II.7 might well have a rising nucleus, especially (c) perhaps, not so much in order to make it a question as to suggest politely that a (confirmatory) comment would be welcome. Alternatively, one might add a tag question (7.48 f), with a falling nucleus:

She was |looking HAPpy to'night| |wAsn't she|

Since a rise lacks dogmatic finality, it enables us to make an imperative gentle and persuasive:

Don't be unPLÉASant

Other nuclear tones II.9

There are no nuclear tones anything like so common as the fall and the rise, but four other tone contours are nevertheless important. The FALL-RISE occurs in many 'contingency' environments (for example as the nucleus of a conditional clause), but it is perhaps especially common with initial adverbials (8.3):

I'll |see him if he COMES| |FINally| we de|cided not to GO|

The converse of this, the RISE-FALL, must be sharply distinguished from it since it is really a rather persuasive variant of the falling tone, used to express a genuine or sarcastic warmth or on the other hand a feeling of surprise or shock:

|That's wonderful| He's a com|plete FOOL|

Rarest of all is the LEVEL tone. This is perhaps a variant of the rise, and it is used to suggest (often somewhat pompously) the exact predictability of what is to follow:

He |DRĂNK| he |STÔLE| he was |soon despised|

II.10

The remaining tone pattern, FALL-PLUS-RISE, is probably used more often than any other except fall and rise, but we have left it till the end because, unlike the others, this pattern has two nuclei. Especially in BrE, it would be expected in example (e) of App II.7:

She |seemed Unhappy to ME|

The nucleus is always a peak of 'information' content in the tone unit; with the fall-plus-rise we have two such peaks of information interest, and they are related, the first being superordinate. When we first introduced this example (App II.5), it was in order to illustrate 'contrastive stress'. Now contrastive stress often involves moving a tonal nucleus from its normal, unmarked position onto the contrasted item. But this need not entail removing all nuclear prominence from elsewhere in the sentence. The fall-plus-rise allows the speaker to express a double contrast, and in the present example he in effect says (a) 'She seems unhappy rather than happy', and (b) 'This is my view as opposed to yours'.

The fall-plus-rise is commonly used with marked focus (cf 14.2 ff), with the fall placed on the displaced and focused item, the rise on the final lexical item in the tone unit. For example:

It's his |wlfe that I don't LfKE| = The |one that I don't LfKE| is his |wlfe|

It's his | wife that's always NAsty |

beside the unmarked

I |don't like his wiFE|

His |wife is always NAsty|

II.11

Prosodic marking compared with punctuation

In so brief a sketch we must ignore other features of oral English such as *pitch height, pitch range, tempo.* Even so, we now have a system of conventions capable of expressing on paper for spoken English what the sys-

tem of punctuation marks does for written English. There are numerous respects in which conventional punctuation is inadequate, but we need mention here only one or two such points to show how our prosodic notation both explains and transcends the difficulty.

For example, although in rather informal punctuation we can indicate emphasis (usually by means of italics), we cannot distinguish emphases of radically different sound and value:

- (a) You shouldn't give her any flowers
 - (=You must give her no flowers at all)
- (b) You shouldn't give her any flowers
 - (=You must give her only certain flowers)

But prosodic notation adequately represents the difference we hear:

- (a) You |shouldn't give her ANV flowers]
- (b) You |shouldn't give her XNy flowers|

Consider now the prosodic realizations which give sharply different meanings to the various members within each of the following sets of sentences; in each case we begin with the 'unmarked' and most neutral form the sentence might have:

- (1) I should Go
 - I should |GO| (Is that your advice?)

 - |Ì should go| (Not you!) I |should go| (And I defy you to deny it)
 - I SHOULD go | (But I don't think I will)
- (2) Somebody must have Taken it] [Somebody MUST have 'taken it] (It's no use your arguing) SOMEbody must have 'taken it! (Even if you didn't)
- (3) You said he would come

You said he would come	(I was personally doubtful)
You said HE would come	(You didn't say that his wife was coming as well)
You sXID he would come	(But that doesn't mean he really will)
You SAID he would COME	(And, my goodness, there he is!)

Bibliographical note

A detailed account of all prosodic systems is given in Crystal (1969), especially Chapters 4 ff, and these are related to style in Crystal and Davy (1969). On stress, see Gimson (1970), especially Part III; Halle and Keyser (1971), Chapter 1. On rhythm, see Abercrombie (1967), Chapter 6; Leech (1969b), Chapter 7. On AmE intonation, see Pike (1945).

APPENDIX III PUNCTUATION

Ш.1

Punctuation serves two main functions:

- (1) SEPARATION of
 - (a) successive units (such as sentences by periods, or items in a list by commas)
 - (b) included units (as when parentheses mark off an interpolated phrase or clause)
- (2) SPECIFICATION of language function (as when an apostrophe indicates that an inflection is genitive).

Successive units III.2

Successive units form a hierarchy as follows:

- (a) the individual letters within a word;
- (b) the parts of a word independent enough to be separated by a hyphen;
- (c) the individual words separated by a space;
- (d) the dependent units in sentence structure (usually phrases or clauses) separated by a comma;
- (e) the non-parenthetic appositive units (cf 9.47) separated by a colon;
- (f) the independent units (usually clauses) separated by a semicolon;
- (g) the sentences separated by a period and a following capital;
- (h) the paragraphs separated by switching to a new line of writing, often indented.

There are of course still larger units in the hierarchy, such as chapters, but in this brief sketch we must ignore all points except (b) and (d) above.

Ш.3

The hyphen

There are two principal uses of the hyphen:

III.5 Punctuation

- Word division at the end of a line. Natural breaks (orthographic, syllabic, morphological) are observed; thus establish-ment not *establis-hment. BrE practice tends to favour morphological breaks (struct-ure), AmE syllabic (struc-ture).
- (2) The division, especially in BrE, of words not regarded as wholly established units (anti-war, flower-power) and the junction of phrasal units used as premodifiers (a vase of the fourth century but a fourth-century vase: cf 13.38 f).

III.4

The comma

The comma separates items in lists; coordinate clauses (especially those with *but*); adverbial clauses and phrases, especially initial ones, from superordinate clauses; a vocative from the rest of the sentence. To illustrate each in turn:

The farmer owned sheep, cattle, pigs(,) and poultry. The lecture was good, but few people were present. When she saw him, she burst out laughing. John, do you know Mary's address?

A comma cannot separate subject from predicate or verb from object:

*A man of his great abilities, would always be successful.

*John thought, that the weather would improve.

Note

- [a] With initial conjuncts and disjuncts, a comma is virtually obligatory, but it is often optional after adjuncts: Incidentally, he sings ...; Frankly, he cheated ...; Frequently (,) he works ...; cf 8.2.
- [b] A restrictive relative clause cannot be separated by a comma from its antecedent in the noun phrase, while a non-restrictive clause is regularly so separated (13.3):

You should have asked the man who left yesterday. You should have asked Mary, who left yesterday.

Ш.5

Included units

The two commonest types of included unit are (1) parenthetic or subordinate matter, and (2) quotation or other reference to a different linguistic sphere. The punctuation marking such included units must be correlative, one occurrence indicating the beginning of the inclusion, a second occurrence indicating its completion.

(1) Parenthetic matter may be adverbial, appositive, or structurally unrelated. The punctuation marks are commas, parentheses ('brackets', BrE), or dashes: The other man, David Johnson, refused to leave. John (or perhaps his wife) will collect the parcel. David Johnson – I don't know why – refused to leave.

As the above examples suggest, parentheses subordinate more definitely than commas, and dashes are particularly suitable for informal 'asides'.

(2) Direct speech is enclosed in single or double quotation marks (in BrE called also 'inverted commas'; they are usually single, especially in print); quotation within quotation uses both to mark the distinction:

'I heard "Keep out" being shouted,' he explained.

Reference outside the variety of English being used is similarly marked:

A carafe of 'plonk' accompanied the meal.

Ш.6

Specification

The functions most commonly specified by punctuation signs are questions, exclamations, genitives, contractions, and abbreviations.

John has gone already? Isn't she beautiful!

In these examples, the specification signs are especially relevant since the grammatical form would otherwise suggest that the first is a statement and the second a question. The exclamation mark is, however, sparingly used in English and it does not occur with epistolary formulae or (normally) with vocatives or imperatives.

The apostrophe is used in writing the genitive singular and plural (thus marking the difference between dogs, dog's, and dogs') and the informal contractions, especially of the negative particle and of auxiliaries with pronoun subjects: John didn't; he'll; I've.

Abbreviations by initials are indicated by capitals with or without periods (P.T.O., PTO), or by lower case letters where the absence of periods is less common (*i.e.*, *e.g.*). Shortened forms of words normally have a period (*Prof.*), though this need not be so if the abbreviation ends with the last letter (Dr).

Note

[a] After the initial greeting in a letter, there is either a comma (BrE, informal AmE) or a colon (AmE), the first sentence then beginning on the next line with a capital:

Dear Mr Johnson,

Several weeks have passed since

III.6 Punctuation

[b] Italics are sometimes used to specify an emphasized word:

It was not so much anger as self-reproach that made him agitated

Italics are also used (with initial capitals for open-class words) in quoting titles of books, etc:

His next play was Peace in the Dark.