

SCOUSE: THE URBAN DIALECT OF LIVERPOOL

SCOUSE: THE URBAN DIALECT OF LIVERPOOL

by

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✓

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Abstract

A brief consideration of field-work is followed by a general discussion of Scouse, and the main problem for description is found to be the phonology rather than the grammar or the vocabulary. In particular, the question is raised of the relation between Anglo-Irish and North-Western English in the formation of Scouse. Before the phonology proper, attention is paid to articulatory setting and voice quality. In the phonology, rhythm and the rhythmic framework are taken as basic, and essential for the identification of the peculiarities of Scouse. Intonation is closely related to rhythm, and vowels and consonants are described in the context of rhythmically defined syllables. Finally, a number of phonological variables are discussed, and the nature of the variation is identified by reference to the Scouse sound-patterns described in earlier chapters.

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Preface

The present work was begun early in October 1967 and finished at the end of September 1973. The first year was largely taken up with preliminary reading and field-work, and the second with a first analysis of the material collected. Although I had received a basic training in phonetics at Cambridge and Edinburgh, the fundamental problem of describing Scouse was quite beyond my capabilities. I am deeply indebted to Mr Roger L'Estrange, former lecturer in phonetics in the University of Leeds, who in the course of countless conversations improved my understanding of English phonetics, and provided me with a number of basic ideas which I have developed in the present thesis.

The work had to be postponed when I was given a temporary appointment at Hull in 1969, and then moved to Belfast in 1970. At Easter 1972 I was investigating English rhythm, and this provided an unexpectedly useful framework for Scouse phonology. My work on Scouse was then begun again, drafted and written in about a year.

My chief concern has been with phonology, and the identification of phonetic details which are characteristic of Liverpool speech. Chapters Four to Eight deal with articulatory setting and voice quality, rhythm and intonation, the syllable, and phonological variables. An unpublished article on English rhythm is also included as an appendix. The first ninety-one pages are taken up with introductory material. Chapter One on field-work and the questionnaire is taken almost verbatim from a progress report written in 1968 and accepted for the transfer of my candidature from M.Phil to Ph.D. Chapter Two deals with the origin of



Scouse, and with grammar and vocabulary, and justifies the concentration on phonology. Chapter Three is a theoretical, and perhaps negative, discussion of phonology; it defends my later description against possible charges of omission, and explains amongst other things my lack of mechanical measurements, my departure from traditional phonemic theory, and my reasons for not using a distinctive feature notation.

The unfortunate lack in Belfast of a suitable phonetic typewriter, and of a typist able to cope with phonetic symbols, has obliged me to purchase my own machine, have some symbols fitted, and to type the thesis out myself. I hope that I have not fallen too often or too far below a minimum acceptable standard of presentation and lay-out. I have avoided the problem of typing footnotes by not having any: all references and other notes have been included in the main text. This might sometimes result in slightly disjointed prose, but I trust not too often.

I wish to thank those who have kindly read and commented on various chapters: Professor J.Braidwood (1,2); E.C.Fudge (3,7); J.D.Laver (4); J.D.O'Connor (5,6); and J.C.Wells (8). The fact that the thesis has been written at all is due in no small measure to the encouragement and exhortations of J.Windsor-Lewis. I must also thank those who were responsible for awarding me the Joseph Wright Studentship 1967-69, for without it I would have been unable to do any research, or indeed to remain in academic life at all.

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1.1. Aims

The aim of the present work is to give a general description of English as it is spoken in Liverpool, to relate Liverpool speech where relevant to other varieties of contemporary English, and to discuss variation in the dialect.

There has been considerable interest in recent years in the sociology of urban speech, especially since the publication in 1966 of Labov's work on the stratification of English in New York. The original intention was to apply some of Labov's methods to Liverpool speech, identifying socially significant variables, and subjecting them to detailed analysis. However, it proved a major problem to identify the variables themselves, and to describe them in a simple and meaningful way. The most obvious can be identified easily enough by transcribing a corpus, and by applying a set of pre-determined procedures to the "data"; but when such methods were used in the early stages of research, they missed most of the important features which make a Liverpudlian sound like one immediately he opens his mouth. Basic problems of linguistic description, which were at first overlooked, became in time the focus of attention. Consequently, although it is hoped that this work will be of interest to socio-linguists, it is not intended to be a contribution to socio-linguistics as such.

1.2. The Selection of Informants

In order to obtain a corpus of suitable material, it was

decided to interview a hundred informants selected by a random sample. The first problem was to decide on the population to be sampled, since Liverpool is so vast that it would have taken far too long to contact informants spread throughout the city.

The Department of Social Science in the University of Liverpool had fortunately analyzed the 1966 Census data, and ascertained for each electoral ward the percentage of professional and managerial residents. Mrs K.G.Pickett of that department very kindly provided me with the list of percentages, and advised me that the wards with the lowest and highest percentages would give between them a fairly good cross-section of Liverpool society. These wards were respectively Vauxhall with 0.4 per cent, and Aigburth with 13.0 per cent.

Vauxhall is a working-class area just North of Pier Head and the Irish boat terminal, between the docks and Everton, and includes the notorious Scotland Road. The housing consists largely of council tenements, three to four storeys high, in fair to bad condition; in 1968, demolition gangs were clearing large areas of slums to make way for the new Mersey Tunnel. The men work as dockers, lorry-drivers, machine-minders etc., and many of the women work in factories or as office-cleaners. It was here that the bulk of the Irish immigrants settled after the potato famines of the 1840s. The community is still predominantly Irish and Roman Catholic, and was until recently fiercely opposed to the Protestant Orange community just up the road further inland.

Aigburth is a middle class suburb about three miles South of the city centre, between Dingle and Garston. The housing is largely

pre-war villas or Edwardian terracing maintained in good condition, and the men work as teachers, civil servants, electricians etc. The electoral ward also includes the more prosperous districts of Mossley Hill, Grassendale and Cressington Park. There are said to be many Welsh immigrants in this part of the city.

It was decided to take the sample directly from the lists of voters. This gave the lower age limit of twenty-one for the informants, which is as good as any other, and shifted the task of deciding who should or should not be included in the sample population on to those more in a position to do so than myself. It remained only to exclude Service voters who no longer had a fixed address in Liverpool, and who were listed separately at the end of the list for each district.

The number of voters in Aigburth was nearly double the number in Vauxhall. Given the total of a hundred informants, a sample of equal density in either ward would give, say, sixty-six in Aigburth and thirty-four in Vauxhall. On the other hand, to take fifty informants from each ward would make the density of sample in Vauxhall double that in Aigburth. After some consideration, the second alternative was chosen since it was more likely to yield a balanced corpus of material for linguistic purposes. However, it meant that samples were taken independently for each ward, so that no quantitative statements could be made about Liverpool speech in general. In fact, no-one with any local knowledge would attempt to do this anyway: no sample, however unbiased, would allow one to make inferences about the Chinese and coloured communities of Liverpool 8, or of the University people of Abercromby.

Informants were selected from the lists using a table of random numbers taken from R.A.Fisher and F.Yates (1957) Statistical Tables for Biological, Agricultural and Medical Research. Each voter was given a code number calculated from his number in the list, the different lists following on in series; thus if the last voter on the first list is coded 1234, the first voter on the second list is coded 1235.

Since the voters' lists were already several months old when they were published in February 1968, a number of intended informants had died or moved house before I called. In some cases the property concerned had been demolished. Together with a few medically unfit (blind or deaf), and some refusals, the success rate was kept down to not much above 50 per cent. A total of fifty-six people were interviewed, and this number included Scots, Yorkshiremen and a Russian émigrée who had to be excluded. After much consideration, it was decided that the Irish could be included for Vauxhall, and the Welsh for Aigburth: in so far as their speech was not typical of Liverpool, this emerges in the chapter dealing with phonological variables, but on the whole the decision was justified. The total number of useful interviews was forty-seven.

Considerable effort was made to interview the person selected, and no-one else: not the husband or wife or the woman next door. A few exceptions were made, and these are marked with the suffix A in the list of informants given in Appendix 2. While this policy is of course essential for any "scientific" social survey, it appears in

retrospect to have been unnecessary for this particular kind of linguistic survey. If the questions involved are very simple, e.g. "Are you going to vote Labour or Conservative?" or "Do you use armpit deodorant?" it is possible to predict from the responses of a small random sample the responses of the wider population. The responses to a phonological questionnaire are very much more complicated, and there is simply no question of predicting anything. It is enough if there is no obvious bias introduced into the sample, e.g. forty-seven Liverpoolian Methodists, or members of a local gardening club. It would have been a good idea to interview friends and relatives of the selected informants, particularly if they belonged to a different generation.

### 1.3. The Design of the Questionnaire

A questionnaire was used in order to obtain the maximum amount of reliable information in the shortest time.

Ideally, one should have an example of every speech-sound in every environment in which it occurs, together with at least one unambiguous example of every known or potential phonological contrast. On practical grounds, this is ruled out for one field-worker, up to a hundred informants, and a limited amount of time. The alternative is to take an example of every speech sound in those environments in which one can expect to obtain linguistically significant and interesting results, e.g. vowels finally and before different classes of consonants, and consonants initially, medially and finally and in various clusters. The more realistic approach was chosen instead of the impossible ideal. Inevitably there was the risk of losing

important information when environments had been omitted, and as the field-work progressed the questionnaire was extended slightly in order to obtain further information: it was considered preferable to have information on the additional points for some informants only, than for none at all. The added questions did not necessarily concern the phonological environment, for years was added when it became clear that some informants had a different vowel in this particular word than in the singular year. A list of words used in the questionnaire is given in Appendix 1, at the end of this chapter. Note that they are mostly uninflected words in citation form, and include a large number of monosyllables.

An important feature of the questionnaire is the abandonment of the minimal pair, on both theoretical and practical grounds. There is so much more in phonological analysis than making out a list of contrasting segments, and sets of minimal pairs can do no more than list these segments. Although in a minority of cases analysis is not so easy when sounds are compared in different environments, the approach adopted cuts down wastage enormously. Compare the questionnaire used by C.L.Houck (1967) in his survey in Leeds: by using commutation sets he repeated certain bits of information several times over. For example, pill - bill - kill - gill obtains only six bits of information (four initial consonants, one vowel, lateral /l/), whereas, say, pill - bug - can - goat would obtain twelve bits. Apart from increasing the interview time, commutation sets lead to the use of awkward questions to elicit obscure words, e.g. A man is earnest and full of...(zeal) (Houck, 910). Surely it is better to keep to words

and ideas which are more familiar to the informant, such as butty, Mersey or priest.

The information must also be reliable. If the responses are to be comparable from one question to another, or from one informant to another, they must be reasonably constant in style. If the style varies from formal to informal, any apparent case of variation due to social group could be partly or wholly due to the degree of formality. Apart from four words which were simply read out - and one of these, namely mask, varying from /mask/ to /mask/, presented the problem of style, especially in middle class responses - the questions were designed to make the informant think of the word rather than the way it should be pronounced. However, half an hour of silly questions of the kind Mary had a little..... can be taxing for both field-worker and informant. The required words were therefore obtained by means of groups of different types of question:

- (i) A table of numbers identified by the informant.
- (ii) Pictures of parts of the body (hair, eye, arm etc) cut out of magazines and pasted on to cards, and identified by the informant. Also pictures of grass, the sky, smoke etc.
- (iii) The informant gives the opposite of a word presented to him, e.g. good/bad; down/up. Also female correlates boy/girl; king/queen.
- (iv) A few objects (book, page) identified directly.
- (v) Four words (act, mask, pleasure, text) read off a card.
- (vi) A number of straight-forward questions of the kind: You might eat it in a butty....(jam).

In addition, a short piece of spontaneous speech was obtained,



of varying nature and length, depending on the mood and temperament of the informant. In some cases, Labov's method was used of asking the informant if he had ever been in danger of being killed; this frequently worked well.

The formal interview must be carried out as quickly as possible. Half an hour was considered a suitable maximum time, and experience proved this judgement correct in not a few cases. The informant might be busy and have little time to spare, or he may have agreed to help out of good will rather than interest, so that his enthusiasm flags once the novelty has worn off. The above method proved an effective and extremely rapid means of obtaining the required information, and fully utilized the interview time.

Again, in retrospect, a word of criticism is perhaps necessary. In order to design a questionnaire which will give the right kind of information, one must have beforehand a good idea what to expect, and what is likely to prove useful; any phonological questionnaire is also necessarily based on assumptions about the nature of phonology, which may or may not be made explicit. This questionnaire successfully elicited information on variables which were known about and understood in advance. But it effectively channelled the analysis for a long time into a mere consideration of "segments", and an over-narrow view of variation. The gradual emergence of an alternative approach - and with it the discovery of the important rhythmic features of Scouse - was the result of work in a different field, and was in spite of rather than due to the preliminary analyses of the questionnaire responses.

It was a matter of good fortune that the responses contained enough information for the final analysis, although gaps inevitably remained, and had to be filled from the analyst's casual observations and personal knowledge of the dialect. A related problem is found in making significant generalizations: the responses provide only an aggregate of examples, and the generalizations which are obviously required in a finished description can only come from the analyst's judgement and prior knowledge. A questionnaire is a useful starting-point, and at least gives the analyst something to work on. But it must not be assumed that it will provide a sufficiency of information, which, when duly processed, will of itself lead to an adequate description of the dialect.

#### 1.4. The Method of Interviewing

Informants were warned in advance by letter a few days before my arrival. Every informant was addressed as far as possible in his own vernacular, middle class people in the kind of modified RP heard on Merseyside, and working class people in Scouse. This involved selecting appropriate phonological features, and also a suitable "code", or way of expressing meanings and intentions. After all, one simply cannot expect a docker to take seriously someone he reckons to be putting it on 'all lah-de-dah'. The New Ferry accent I spoke at primary school was quickly modified to the Vauxhall equivalent, and this was very important not only for eliciting natural speech, but also in the subsequent analysis. As for the "code", in putting across what I wanted and what I was doing, experience gained in factories in past long vacations proved invaluable, and I quickly learned to confuse,

where necessary, the University of Leeds with the technical college by Tunnel Entrance, and to gloss a postgraduate thesis as a 'book on the way they talk in Liverpool', or even as an article for the Liverpool Echo.

The informants' responses were tape-recorded. It was decided not to record the whole of the interview, but to use the pause button on the recorder to cut out the interviewer's voice and other unwanted material. The effect of this has been wholly beneficial, since apart from the huge saving on tape, the responses come out rapidly in a series, which made transcription very much easier.

In Aigburth, there were no technical problems of recording: the microphone simply went on a convenient table or chair-arm and the interview was begun. But in Vauxhall, it was a very different matter: budgerigars, ice-cream vans with Greensleeves full blast, children playing in the street, children fencing with staves in the same room, doors slamming, and perhaps even next door's television set made the conditions far from ideal for recording. Sometimes there was nowhere suitable to put the microphone, and it had to go on the floor, with consequent serious loss of quality in the recordings.

Appendix 1:

A List of Words used in the Questionnaire

nine  
one  
thirteen  
ten  
eleven  
two  
three  
four  
twelve  
six  
half  
seven

black  
brown  
grey  
orange  
red  
white

hair  
eye  
nose  
mouth  
ear  
chin  
neck  
foot  
heel  
ankle  
leg  
toe  
arm  
hand  
hands

sky  
grass  
lawn  
smoke  
wasp  
flower  
square

first  
fresh  
good  
small  
little  
lose  
poor  
shrink  
that  
up  
worse  
old  
soft  
bald  
stale  
truth  
short  
off

queen  
girl  
daughter  
aunt

book  
page  
paper  
word  
rubber  
string

act  
mask  
pleasure  
text

month  
year  
years  
sprout  
dwarf  
spider  
zoo  
drum  
jam  
hurry  
kitten  
glove  
cream  
clock  
breathe  
scratch  
slice  
voice  
adopt  
sure  
shore  
Shaw  
arrow  
church  
priest  
pew  
mirror  
yawn  
Mersey  
ferry  
train  
pair  
cow  
snake  
tiger  
fire  
burn  
pear  
damp  
swear  
film  
tube  
bulb  
melt  
salt  
parents  
hoarse

Appendix 2:

A List of Informants

The important biographical factors for each informant are age-group, sex, place of birth (or the place where the informant learnt to speak), social class, and religion. For class, a rough distinction between working class Vauxhall and middle class Aigburth is sufficient for our present purposes, and this information can be inferred from the informants' code numbers. The hundred selected names were re-numbered 1-100, numbers 1-50 being given to Vauxhall, and 51-100 to Aigburth. For age, the informants were divided into six groups:

- (1) 21-30 in 1968
- (2) 31-40 " "
- (3) 41-50 " "
- (4) 51-60 " "
- (5) 61-70 " "
- (6) over 70 " "

Only one informant (73A) chanced to be under 21, and he is grouped with (1); he was the new tenant of the flat which the intended informant had already left. Others with suffixed A are the husband or wife of the selected informant. There are in addition one or two who made casual comments which were recorded and used as examples, but who were not listed here as they were not properly interviewed. There are just one or two who were related other than as spouse, e.g. (81A) is (81)'s sister, and (19A) (not listed) was a customer in (19)'s public bar.

Those marked (\*) were interviewed but later excluded.

<u>No</u>	<u>Sex</u>	<u>Born</u>	<u>Age-group</u>	<u>Religion</u>
7*	M	Walsall	4	RC
8	F	Local	5	RC
9	F	Local	5	RC
10	M	Local	4	RC
11	M	Local	1	RC
13	F	Dublin	2	RC
14	M	Local	5	C of E
15	F	Local	4	RC
17	M	Local	4	C of E
19	F	Local	?3	C of E
20	F	Local	6	RC
23	M	Local	2	RC
25	F	Local	1	RC
26	F	Local	4	RC
29	M	Local	2	RC
29A*	F	Kent	2	RC
34	M	Dublin	2	RC
35	F	Local <sup>8</sup>	?6	RC
36	F	Local	3	RC
38	M	Local	1	RC
39	M	Local	3	RC
40	F	Local	3	RC
42	F	Local	4	RC
48	M	Local	4	RC
50	F	Local	2	RC
51	F	Local	2	C of E
51A	M	Local	2	C of E
53	F	Local	3	Unitarian
56	F	Local	2	C of E
56A	M	Local	2	C of E
57	F	Local	1	Prot
59*	F	Edinburgh	4	Prot
59A	M	S.Caerns	5	Welsh non-conformist
60	F	Local	5	Baptist
61	F	Local	3	C of E
63*	M	Edinburgh	3	?
66*	F	Southampton	3	RC
69	M	Local	4	C of E
72	M	Local	5	C of E
73A	M	Local	1	none
77	M	Local	3	none
78*	F	Devon	3	C of E
80	M	Local	5	C of E
81	F	Local	5	C of E
81A	F	Local	5	C of E
84	M	Local	5	RC
86	M	Local	1	C of E
87	F	Local	5	non-conformist
88	M	Local	2	C of E
90	F	Local	5	RC
93	M	Ruabon	3	Prot
95	F	Local	3	C of E
96	F	Colwyn Bay	6	Prot
98*	M	Shipley	2	?
99*	M	Staffordshire	6	C of E
100*	F	Leningrad	4	Russian Orthodox

Chapter 2:

Scouse

2.1. The Geography of Scouse

The term "Scouse" can be used for the variety of English spoken in the city of Liverpool, and in the surrounding areas of Merseyside. In a narrower sense it refers to the transplanted Anglo-Irish of working-class areas near the city centre and overspill areas like Kirkby and Speke. More generally, it refers to Merseyside speech as opposed to Lancashire, North Midland or North Welsh speech. This use of the term "Scouse" corresponds to Sivertsen's use (1960:2) of "Cockney".

Scouse in the wider sense has influenced middle and working class speech throughout Merseyside, and is spreading beyond its former boundaries. It is spreading north to Southport, north-east to Maghull, Lydiate and Ormskirk, east to St. Helens and south-east beyond Halewood to Runcorn and Widnes. Over the water it has ousted the traditional dialect of Wirral, particularly on the Mersey bank down to Ellesmere Port and beyond. It is also having influence across Chester and Wrexham into North Wales.

In an introductory essay to a Scientific Survey of Merseyside published by the British Association in 1953, W. Smith discusses the "urban field" of Liverpool, which he describes (1953b:4) as the 'sphere of influence of the town'. In so far as this can be estimated from the circulation areas of Liverpool evening papers, and the delivery areas of the major Liverpool stores, it extends westwards over the North Welsh coast, but is limited to the east by the urban field of Manchester. There is a narrow band of overlap between the

two urban fields, running through Preston, Wigan and Warrington. It is likely that Scouse influence is restricted to this same urban field, and that the Lancashire speech to the east is protected by the influence of Greater Manchester.

In language, as in history and tradition, Liverpool and Merseyside are in the North of England but not of it. Whereas the great conurbations of Manchester-Salford or Leeds-Bradford have built up from conglomerations of small towns and villages, Merseyside has developed by continued expansion from the centre at the waterfront (Smith, 1953b:2). The urban speech of Manchester or Leeds is different from that of the surrounding countryside, but nevertheless it is speech of the same kind; although Scouse shares many features of North-Western English, it contrasts sharply with the surrounding dialects of Lancashire and Cheshire. On a trip from the East coast at Hull to the West at Liverpool, a gradual progression of varieties of North Midland English will be heard all the way, but an abrupt change will be heard shortly before Liverpool.

The alien nature of Scouse must be borne in mind when its history is traced. Liverpool has always had local trade and commercial links with Lancashire and Cheshire, but it has been connected through the port with the whole of Britain and the wider world. The important linguistic ties are not with TimmBobbin or the South Lancashire dialect described by Heywood (1862) or Picton (1864), but with Dublin and London and the whole of the English speaking world. It is more open to innovations, and closer to the standard of grammar, vocabulary and pronunciation than the dialects of many other Northern towns. Most of the non-standard features are



not peculiar to Liverpool, but can be heard in Dublin, London or New York. In order to trace the history of Scouse we must investigate the various influences entering through the port, and the influence of geographically neighbouring dialects is but one amongst many.

## 2.2. The History of Scouse

Interest in dialect was until comparatively recently almost entirely confined to rural dialect, and urban dialects have been neglected. There is no direct evidence for the development of Scouse, and the best that can be done is to draw a broad outline on the basis of the few scraps of circumstantial evidence available.

An incidental reference to early Liverpool speech is made by R. Syers in a History of Everton published in Liverpool in 1830. He refers (p119) to an argument which took place in about 1750 between Thomas o'th H\_\_\_\_'s and one William Ripley. In the exchange, Ripley - who is described as an "eminent grocer of Liverpool" - shouted "Thou liest!". William R., "a legitimate legislator of Everton", then asked, "Dus ta' ca' Tummus o'th H\_\_\_\_'s a liar?". When Ripley replied "Aye", R. exclaimed, "Then thou'rt a bear!".

The use of the thou form and its weak equivalent ta' can still be heard today in parts of Lancashire and Yorkshire, but certainly not in Liverpool. The spelling Tummus and the loss of /l/ in call are reminiscent of Tim Bobbin and the South Lancashire dialect. It is not really surprising that when the port of Liverpool was just a little town on the Lancashire coast, its inhabitants spoke with a Lancashire accent. The growth of Scouse follows the growth of the port.

Estimates of the size of the Liverpool population are given by R. Lawton (1953:120-122) as about a thousand in 1663-73; 6,435 in 1708; 34,407 in 1773; and 53,853 in 1790. The 1801 Census figure is 77,653, and this is followed by a rise to 223,003 in 1841. There were 269,742 in 1861, and 746,421 in 1911. The increase between 1801 and 1911 is almost tenfold, and it is in this period that one would expect to find the formative influences on the dialect..

Syers comments on the eighteenth century exchange:

"The English language was generally spoken at Everton in a plain and unadorned manner; contradiction had not then been taught politeness, negation was in a natural state, and difference in opinion was of a sturdy, knock-'em-down character."

Everton was a 'place of genteel residence', and the participants were not unimportant citizens. What strikes Syers is not what strikes the reader of today: he observes the lack of politeness of the earlier period, and not the oddity of the linguistic forms themselves. We have here, of course, only the slenderest shred of negative evidence, but it is just possible that as late as 1830, when the population of Liverpool was still under a quarter of a million, the speech of the city was still similar to that of surrounding districts of Lancashire.

A.J. Ellis, in Part V of his Early English Pronunciation (1889) includes Liverpool in the Western North Midland area (pp329-51), and presumably Variant (i) (p342). He defines the relevant part of the boundary of this area (D22), from the junction of the Irwell and the

Mersey:

"Go down the Mersey to the sea, and take the coast round to the mouth of the Ribble." (p329)

There is no hint that Liverpool should be excluded. However, if one checks the Western Mid Midland area (D25)(pp408-24), which includes the Wirral, one finds:

"The part of the nw horn of Cheshire which lies n of Bebington, Higher and Lower (3 s Birkenhead), is affected by Liverpool and Birkenhead influence, that is, it has no dialect proper." (p408)

Ellis takes for granted not only that Liverpool had its own distinctive accent, but that this accent had spread over the water and included Merseyside generally. Perhaps he considered it to be so obvious as to be not worth mentioning specially in D22; the spread of Scouse influence in Wirral was not obvious and so had to be mentioned in D25.

The rise of modern Scouse can thus be dated possibly after 1830 but certainly well before 1889. This corresponds with the period of massive immigration from Ireland, which reached its peak in the 1840s: the Anglo-Irish character of parts of Liverpool had been established a long time before 1889.

In 1878, A. Hume published an article on the Irish Dialect. He had collected 'Hibernic words' since his student days, he was a former principal teacher of English Language and Literature in the Liverpool College, he was a philologist, and he was Vicar of Vauxhall. If anyone was in a position to comment on the developing linguistic situation in Liverpool, this was the man. But he makes no comment whatever! Since the article was published locally, it was perhaps

unnecessary to make the obvious point that the Irish Dialect was spoken in Liverpool. A modern equivalent would be an article published in Bradford which dealt with varieties of English spoken in Pakistan, and which failed to mention recent immigration into Bradford.

Scouse is essentially the popular speech of Liverpool, and it would appear from R.J.Lloyd's Northern English (the author's preface dated 1899) that educated Liverpudlians spoke like other educated Northerners. Lloyd was Reader in Phonetics at the University College, Liverpool, and described the phonetics of his own speech; however, he infuriatingly omits to mention where he came from! He argues that the same kind of English is "employed by educated people, born and bred in Northern England, between the latitudes of Birmingham and Durham. He presents the "English of Gladstone and Bright", although Gladstone was a Liverpudlian, and Bright came from Rochdale. Lloyd mentions r-colouring as a feature of Northern speech (p16), and claims that words like master, plaster, path had /ɑ/ rather than /a/. The latter would appear to be a personal preference, and was corrected posthumously in the second edition by his daughter. Otherwise there are similarities between Lloyd's English and that of the older age-groups in Aigburth in 1968.

### 2.2.1 Communications

We have argued that Scouse as a distinctive variety of English can be dated to some time in the middle of the nineteenth century. What is not explained is why it should have spread to the whole of

Merseyside already by 1889, and why it should be so close to Standard English, and not constitute a "dialect proper". These are due to the much older influence of communications.

From the granting of the Charter in 1207, Liverpool was oriented towards the Wirral, Chester and the trade routes, rather than to the Lancashire hinterland and the rest of the North. For many centuries it was in competition with Chester for the position of the major port on the Dee and Mersey estuaries. Until the silting up of the Dee - which began to be a serious problem in the 1420s (Parkinson, 1952:18) - Chester was in the stronger position, as it was on the main route from London to Holyhead (Parkinson, p49); Chester and Holyhead were the main ports for the Irish trade. Right up to the opening of the M6 motorway in the 1960s the main road route to London was across the water and South via Chester and Watling Street. The trade route appears to have had a considerable influence on the dialect areas through which it passed (M.V. Barry, private communication) and the Liverpool-Chester link could explain the spread of the influence of the standard language.

Improved communications in the eighteenth century were at first local, but by the end of the century they were national. The improvements were largely a response to the demands of growing industry, in particular the Cheshire salt industry and the coal and manufacturing industries of Lancashire; canals were built to the Mersey, and this led to the growth of the Mersey port. The River Weaver was made navigable to Northwich in the 1720s to move the salt, and the Sankey Canal from St Helens to the Mersey at Widnes was opened in 1757 to move the coal. Later canals included the Bridgewater Canal

from Manchester to the Mersey at Runcorn (1773), the Grand Trunk Canal from the Bridgewater Canal to the Trent, and ultimately the Severn and the Humber (1777), and the Leeds and Liverpool Canal (as far as Wigan, 1774; to Liverpool, 1816). At the end of the eighteenth century, the Mersey at Ellesmere Port was linked via Chester to the Severn by the Shropshire Union Canal.

Improvements on land date from the turnpiking of the road from Liverpool to Prescott in 1726, and the construction of a 'cart causey' or causeway, also to Prescott. A regular coach service to Manchester was begun in 1760, and in the following year, there was a service to London taking two or three days. The railway to Manchester was opened in 1830, and within a few years rail links were established with the rest of the country.

The introduction of the steam boat in 1817 made it possible for the first time to cross the water quickly and easily. Ferries were established to New Brighton, Seacombe, Woodside, Rock Ferry, New Ferry and Eastham. The importance of the ferries is that they brought about the practice of commuting to work from over the water, and in this and other ways involved the Wirral in the expansion of Liverpool. The railway tunnel under the Mersey was completed in 1886. (These and other details concerning communications are taken from Bailey, 1953:238-40.)

Although Liverpool, being a port, had never been isolated from the rest of the country, long distance communications were good by contemporary standards at the beginning of the nineteenth century. The port was the centre of local communications, and dominated South West Lancashire and North West Cheshire, Particularly the Wirral.

These communications were established before Liverpool grew to any major size, and when the immigrants arrived, many of them were sent out again on the local network to various parts of Merseyside.

### 2.2.2. Ireland

Merseyside has always had strong links with Ireland. According to T.G.E.Powell (1953:212), there is some evidence for a trade-route through the Mersey to Derbyshire and East Yorkshire in the Bronze Age. The Norse settlement of the Wirral in the early tenth century was apparently due to the expulsion of King Ingemund from Ireland in 901 (Potter, 1953:223). The granting of the Charter to Liverpool in 1207 was probably due to the insufficiency of the port of Chester to cope with the embarkation of an army for an intended but unaccomplished invasion of Ireland by King John. The struggle with Chester was very much concerned with the Irish trade, and in the eighteenth century a large proportion of Liverpool's exports went to Ireland: half of the 500,000 bushels of salt exported annually by 1770, and 3,000 out of 8,500 tons of coal (Hyde, 1953:150). The trade was not just one way, for potatoes were eaten in Liverpool as early as 1680, when they were virtually unknown elsewhere in England (Bailey, 1953:237). Ireland had already begun to export its labour force by 1800 (Lawton, 1953:122), and the inhabitants of Liverpool were presumably already quite familiar with Anglo-Irish at that time.

Between 1811 and 1841 the population of Liverpool increased by 139,800, of whom 77,200 or 55per cent were immigrants. How many of them were Irish is not given in the Census data. But in 1841, when immigrants formed 44.9 per cent of the population, 17.3 per cent

were born in Ireland. In 1861, 49 per cent of the population were immigrants, and no fewer than 24.5 per cent from Ireland. Thus a quarter was born in Ireland, and this figure excludes second generation Irish born in Liverpool.

The numbers of Irish passing through Liverpool or staying only temporarily were very much higher, especially at the time of the potato famines of 1845 to 1847. In 1846 alone, 280,000 came to Liverpool, of whom nearly 106,000 later went elsewhere; in 1847 of 300,000 who arrived, 130,000 went on to the USA, and many others to the industrial towns of the North of England. Some of those who passed through Liverpool remained in Merseyside, for in 1861 14.5 per cent of the Birkenhead population of 61,420 were Irish, and there were several thousand others in West Derby and the Wirral. (These and other population statistics are taken from Lawton, 1953:122-131).

The Irish tended to settle in cheap lodging houses in the dock areas of Liverpool and Birkenhead, many of them in the streets off Scotland Road, where some of their descendents were interviewed for the present survey. The immigrants were Irish, they were poor, and they were Roman Catholic. The Protestant Ulster element settled further inland in Kirkdale and Everton, and Welsh non-conformists settled in various parts of the city, including Everton, Toxteth, Wavertree, and the southern areas of Aigburth and Garston. Differences of social class were reinforced by race and religion.

The social status of present-day Scouse is explained by this situation in nineteenth century Liverpool. Anglo-Irish became the non-prestige form, as opposed to the traditional North-Western



English - presumably modified by other immigrants - which became the local standard. The two varieties have mixed in the course of the last hundred years, and in a rather interesting way. Prestige grammar, vocabulary and phonological structure have percolated downwards, and have imposed a surprising degree of uniformity on working class speech. The grammatical plural yous (second person plural) is known passively throughout Merseyside, but it is not much used: when it is used, it might refer to a single person. Local phonological norms imposed include the pronunciation of /g/ in string, and the use of the same vowel in put and but; hers and hairs; and book and boot. Postvocalic /r/ is also lost, and the Irish immigrants who were selected as informants (13,34) were beginning to lose it after being in Liverpool for only a few years. On the other hand, with the exception of some Irish shibboleths like the initial consonants of thin and then, the phonetic forms of Anglo-Irish have spread upwards. The vowels and consonants used by the middle classes, together with suprasegmental features of rhythm and intonation, are largely Anglo-Irish in origin.

### 2.3. Scouse Grammar

The contention that Scousers keep close to the standard of English grammar raises the problem of grammaticality in several aspects. The attention of grammarians has been directed mainly to the structure of sentences of a formal and prosaic kind, composed according to standardized middle class norms; such an approach is entirely unsuitable for the analysis of the conversational grammar of different groups in society.

A person can be said to have internalized a set of rules which he uses in the formation of sentences. The rules are substantially the same from one person to another, but there might be slight differences of detail between classes, age-groups or geographical areas. An example of a class detail is the choice between them and those in the frame \_\_\_\_\_ books, or between me and him and he and I in \_\_\_\_\_ were lost; an example of a geographical detail is the choice between present and past participle in e.g. Do you want the door shut/shutting?. There are also cases where other languages have local influence, as in the Anglo-Irish construction I'm after eating my dinner. Social class and geographical differences overlap and are together important indicators of a speaker's social status; but linguistically they are mere details. There are relatively few details which can be picked out as indicators of Liverpool speech.

This approach to local grammar contrasts with the popular opinion that the working classes speak with "incorrect" or "bad" grammar, or perhaps with no grammar at all. Similar ideas, rationalized into the concept of "verbal deprivation", are dismissed by Labov (1969) as 'part of the modern mythology of educational psychology'. "Incorrect" grammar in Liverpool might include non-standard details, register differences, badly formed sentences, and looseness of syntactic organization.

The identification of Scouse grammar is thus not a simple matter of picking out examples of local usage: it is a complex of linguistic, sociological, psychological, educational and even literary problems. As a matter of procedure, we shall examine several aspects of the grammar used by Scousers, and exclude those which are irrelevant.

### 2.3.1. Organization

In prose, small constructions are made to fit the larger syntactic context, so that morphemes are related not only to a given word or phrase, but to an entire sentence or paragraph. In conversation, higher level organization may be relaxed to some extent, so that the relation between phrases or clauses may be implicit and semantic, rather than explicitly syntactic. A superficial study of the relaxed style might lead to the conclusion that those who use it suffer from linguistic deprivation and lack of fluency.

Take the following working class example:

- (35) "As long as it's a job for you, though, is it? It's a job for you, going around. Yes. But I can't do anything about it, can I? I got it to come, someone would come in a few days; I was glad to know what it was. So that's what it is, isn't it? Because there's nothing here...anybody's pocket, and they're nothing out of it, is it?"

Compare this example of middle class fluency and confidence:

- (72) "...habitually call a master a /maste/. My friends in the office were a rather pedantic type - well educated fellow, didn't speak I would say in Liverpudlian jargon - but he would insist on calling it /maste/. And in some ways I suppose he was just as right as I was. I'm sort of erm...pandering as you might say to the Southern soft a to some extent in saying /maste/. But to me it sounds better than /maste/."

However, (35) was elderly and confused, and unable to complete the questionnaire, while (72) was middle aged, and very interested in the interview. The extracts are not strictly comparable, since the speakers' situations were so different. Even so, (72)'s superiority does not amount to very much: apart from switching in mid-sentence from a group of friends to a single friend, he uses an enormous amount of words,

syntax and references to express and rationalize a simple preference for one vowel rather than another.

It is equally possible to give examples of poorly organized middle class speech:

- (61) "When I first was in er...first called up, we were erm... very cold, you know, it was in February, and we had to erm... I think I went to Morecambe at first, you know, very cold there... marching up and down the prom, you know, and sort of erm... and I had terrible neuralgia, because it was so cold. So I had to have tablets for that."

The reasoning attached to such words as because and so is more apparent than real. The speaker is an ordinary intelligent housewife.

. There is an important distinction between using language effectively to express oneself, and organizing it in socially determined ways. Take the following example:

- (14) "...and when I fell off the roof and broke my nose...there's the only thing I can think of as I...came to me as I'm falling was 'Oh, this is it!'. I only thought the same thing when the bomb fell outside the house in Anthony Street, about nine streets along on the left hand side - my sister's in Australia, you know, we'd been up all night - and d'you know, you've heard about an ammunition ship blowing up in Liverpool? Well, just before that blew up the sirens went, because it must have been like a reconnaissance aircraft over from Germany; and we were collecting all the soot and everything, and the glass from the windows, where they'd been blown out, you know. And my sister said, "George, can you hear a funny noise?". All of a sudden there was a big blue flash, you know, and my sister - I don't think she walked up the stairs, I think she got blown up the stairs with the blast, you know. And I said, 'Oh my God, May, this is it!', and she never answered me, you know. Next minute I just stood up, and I must have fell over to tell you the truth, with the blast, you know. That's the only thing as I can remember like that."

Superficially, the language is disjointed and badly organized. It is entirely irrelevant where the sister was at the time the story was told, and all that matters is that she took part in the story itself. However, the speaker - a retired docker - has been asked to recount some dangerous incident in his life. Thinking aloud, he quickly decides on an appropriate story, and gives the elements of the plot unedited as he recalls them. Having set the scene, he tells the story simply but effectively.

Compare a story told by a retired schoolmaster:

- (84) "I was going through er...Oxford, I was motoring. And I asked a young fellow, I asked him for the way to a place, not Liverpool or far away, but a place outside Oxford, because I knew once I got there, I'd be on the right road North, you see, so I asked him the way to there; so that he had no indication where I came from. However, I asked him and he told me very nicely; but before I left, he said, 'Oh, by the way, remember me to Liverpool, I'll be there next week'. Now we pride ourselves, and we think we have no local imprint at all on our talk. But we have, you know."

This man seems to be speaking, thinking and planning simultaneously, with the result that he repeats himself, and introduces irrelevant reasoning and detail. He pays particular attention to the completeness of syntactic form, and this overrides the content. The schoolmaster has all the linguistic machinery one expects to find in educated middle class speech, but it is open to question whether he is really superior to the docker in his use of language.

Another story from a schoolteacher is illuminating:

- (81) "...the evacuation one time there was a little boy, and erm... he used to go round Prestatyn going 'Bzzzz!', you know, he wasn't himself, he was a Spitfire or something...all the way

down the High Street, wouldn't he? Funny little chap. He came in one day - they brought their lunch with them, -you see, - and he had a piece of cake, and I said, 'By Jove, that's a good billet you're in' I said 'I don't get cake like that'. He said, 'Don't you?', I said, 'No'. So next day he brought a parcel, and he says, 'I've brought you a cob of cake'.

The purpose of the story is to illustrate the working class use of the word cob, as in cob of cake, as opposed to the teacher's piece of cake. But the linguistic organization is like that of the docker's story, and is perhaps not so good. She gives details as they are recalled, also without editing, so that e.g. the tag wouldn't he? is left syntactically dangling, with only an approximate semantic relation to used to go. She omits the essential information where the story took place, and who "they" are, so that the listener has to infer from personal knowledge of the speaker that it took place in a school, and that "they" are the pupils. She even uses the non-prestige he says in a past time narrative.

The number of examples could be multiplied, but that is unnecessary. The evidence does not show that social classes differ significantly in their knowledge of grammatical structure; middle class fluency and articulateness involve the manipulation of social symbols rather than a genuinely superior use of language. These symbols in turn involve the avoidance of working class details (in vocabulary and phonology as well as grammar) and the use of prestige details; a different kind of symbol is the completion of syntax and the maintenance of a constant flow of words, even at the expense of sense. The relaxed style can be more realistically be interpreted as evidence of a lack of linguistic inhibitions, than of deprivation or inferiority.

Unless this situation is peculiar to Liverpool, the problem of organization can be excluded entirely from our consideration of Scouse grammar. Working class and middle class speech are related in much the same way as anywhere else, and there is nothing particular about Scouse.

### 2.3.2. Syntactic Accidents

The structures which a speaker actually produces do not necessarily conform to the ideal rules of sentence formation. It is easier to find examples of badly formed sentences in working class than in middle class speech, especially when complex structures are attempted. Such examples could be listed as "errors" or "Scouse grammar", but a simpler and likelier explanation is that working class Scousers attach less importance to making their sentences conform to the idealized norm. The following examples are accidents rather than blunders.

A speaker might mix incompatible constructions, or fail to carry out transformations correctly:

(19) It all depends on the area, which you've been brought up, the way your twang, like.

The relatively clause has been introduced correctly by which, but the preposition in has been incorrectly deleted. Secondly, the subject it is incorrectly expanded: either your twang or the way you speak would be acceptable, but not both together. She has other instances:

(19) You can tell the difference between a Protestant and a Catholic, but I don't think, I don't agree.

She has put the embedded sentence (You can tell...Catholic) first,

and then discovers there is no means of completing the matrix sentence. What she means, of course, is that she does not agree that it is possible to tell the difference. (A middle class speaker might well pause in such a case, and then start again with a re-modelled sentence). The next example is rather simpler:

(19) it's a family pub, you know, that you don't really get trouble in it.

She has failed to delete it from the relative clause.

Not all accidents are transformational in origin, and they may be morphological:

(19) I've just can't understand a word they say

Here, she has selected can and the present perfect, although can has of course no perfect forms.

An incompatible choice of a different kind occurs in the speech of a middle class person:

(61) It hasn't have to be a proper story?

The confused forms are presumably hasn't got and doesn't have; perhaps there are socio-linguistic reasons for avoiding got.

Other awkward constructions might be avoided:

(19) Everybody that comes in here, they all speak the same.

Now everybody speaks the same is perfectly grammatical, but rather awkward, and the speaker shifts to the more natural collocation of same with all. Take another example:

(25A) The place between two houses, some people say a "backie".

He could have completed the sentence with the passive "...is called by some people...", but he prefers the simpler "some people say".

The next oddity is due to the situational context:

(36) She's cleverer than me, aren't you, Lily?



The first two words are addressed to the interviewer, the last three to the daughter, and those in the middle ambiguously to either.

Finally, there are a few examples on the boundaries of acceptability:

(23) I couldn't get over it was me.

The slight oddity of this example is not easy to explain, since both I couldn't get over the surprise and I didn't think it was me are perfectly acceptable. Perhaps that is required to introduce a noun clause following the particular verb to get over (cf also \*He never got over his wife had died etc.)

The second example is from Aigburth:

(61) That was more coffee we had to make.

A more acceptable form would be "...coffee for us to make". There are other cases where finite relative clauses cannot be added to the complement in a that + be + NP construction, e.g. That's John coming is acceptable, but not \*That's John who is coming.

### 2.3.3. Register Variation

A certain number of grammatical forms are acceptable in colloquial style and unacceptable in formal prose, e.g.

(80) Had I 've known what was in store for me,...

The had have forms are heard in many varieties of English.

The subject of a sentence can be postponed to the end, being replaced by a preposition:

(23) We were coming back home, me and these twowlads

(17) They appealed, the defendant.

In the former example, postponed I is replaced by me, and the first

person pronoun regularly comes first. In the second example, the defendant represents Authority, and is appropriately replaced by the pronoun they.

The subject of an embedded sentence can also be postponed:

- (60) They told her it was hind lipped (?), the piece of meat she wanted.

In some parts of the North, there is a variant of this construction, in which the auxiliary is also repeated, e.g. (as in Leeds) It were great, were that or He works hard, does John. Scouse has just the subject repeated, i.e. It was great, that or He works hard, John. However, in the special case of the verb to be, the subject and be can be postponed together in normal order until after the complement, i.e. Great, that was. E.g.:

- (15) Just about ready for coming down now, these are.

The reverse process of bringing information forward from its normal position, e.g. The man, he died, is not so common. One recorded example is:

- (60) The shop I went to, the chap he went through (to) the back. where the shop I went to has a number of possible relationships with the rest of the sentence.

Rules of concord of number tend to be relaxed in colloquial style. The commonest case is that of there is plus plural complement:

- (19) There's ladies in this bar.  
(25) There's these stitches to my head.  
(77) There's lots of chaps in the services...

Other examples are special cases:

(15) We're the only one in this block now.

(20) A good many does.

In both of these there is the problem of the collective unit composed of several individuals. We refers to a single family, so one is used rather than plural ones. In the second example, does agrees with the singular indefinite article, rather than plural many. Compare:

(50) One (of) the cleaners went down to the basement...when they opened the door....

where they refers back to a singular cleaner. Its use is unconnected with number, and merely avoids the choice between singular he and she. This would appear to be an extension of its regular use to refer back to impersonal pronouns like someone or anyone.

The phrase and that is used colloquially to abbreviate the syntax, covering any possible addition:

(23) when he goes on (i.e. on television) and that.

(40) the murderers and all that... all the drunks and that...  
and their shirts hanging out and all that...

(40)'s job is in fact "scrubbing and that" in a police station.

#### 2.3.4. Class Variation

Some details of grammar are found in many non-prestige varieties of grammar, and may be described as common non-standard.

Scouse shares the simplification of the strong verb from three forms to two, although recorded examples are rare:

(8) The train come out.

(20) Mother done a little bit of works.

(48) It done a lot of damage.

(14) I must have fell over.

Other non-standard past tense forms include I give and I seen, and perfects include I have ate, broke, chose, took, wrote. These forms are highly stigmatized, and would probably be avoided in the interview situation.

Some adverbs can be formally identical to adjectives, e.g. We done it easy or He ran dead quick. Not all adverbs can be so formed, cf \*I'll help you glad or \*He wolfed it greedy. No examples of this were recorded.

The archaic you was is occasionally heard:

(29) What was you saying?

In reported speech, I says and he says are used with past time reference:

(19) I says, 'Well I don't like it'.

(35) I says, 'I'll wait till the visitor comes'.

(19) 'Och' he says 'Aren't you strict!'

(81) And he says, 'I've brought you a cob of cake'.

Them can be used for those, e.g.:

(20) in them days

### 2.3.5. Geographical Variation

We have now excluded nearly all those features of grammar which were worth commenting on. All that is left is a few non-standard details which are geographically restricted, and which include Liverpool in their area. Nothing is peculiar to Scouse.

The Anglo-Irish yous, plural of you, which is supposed to be common in Liverpool, was not recorded at all. Informant (23)

suggested that he would call over to a single person as 'You!', but to a whole group as 'Yous lot!'.

The commonest relative pronouns are the standard which and that, although as and what are occasionally used:

(14) the only thing as I can remember like that

(20) there are some as take it.

(17) the scaffolding what was up

(17) the firm what was rending the gable end.

All three speakers are elderly and conservative in their speech; (14) and (17) are Protestants, and (20) does not speak at all like younger Catholics. Both pronouns are mentioned by Joseph Wright in his dialect grammar (1905:77), as being generally used in Lancashire and Cheshire, and what in the North Midlands. It is therefore likely that the three informants preserve an earlier usage: it was certainly a surprise to find it at all in Scouse.

Another example has alternative interpretations:

(42) He shouldn't have said those things what he said.

Either what he said is subordinate to those things, in which case what is a non-standard relative pronoun, or the two phrases are in apposition, in which case the construction is standard.

The next example may or may not be standard:

(90) the farm where I go

The speaker means the farm I go to, so that the construction is not the same as in the farm where I work or the farm where I stay.

The word never is often used in place of not to form the negative

of past tense verbs, so that the distinction between e.g. I didn't speak and I never spoke is neutralized. The use of never avoids the periphrastic forms with did, but it is restricted to the simple past, and never contrasts with not in e.g. I never smoke, I have never smoked and I had never smoked. E.g.:

- (14) She never answered me, you know.
- (8) Pardon, I never heard you properly.
- (29) I never went to Mass on the Sunday.

There are a number of substitutes for the formal phrase on account of, including through and with:

- (14) I wasn't expected to live through the blood that I lost.
- (15) With being in the blackout, we just had a candle lit.

For certain verbs, the agent can be marked by off rather than the standard from, as in He got a bollocking off the chargehand, I bought it off some bloke, or She caught flu off her brother. No examples of this were recorded.

In some constructions with sit and stand, where some varieties of Northern English have the past participle as opposed to the standard present participle, Scouse can have either. The past participle might be more emphatic, e.g. He was just sat there not doing owt, or He was stood there like one of Lewis's. No examples were recorded.

#### 2.4. Scouse Vocabulary

Like grammar, vocabulary varies according to register and class

as well as geographical area, so that the identification of a "Scouse vocabulary" is a complex problem. It would of course be quite impossible to list all the technical terms and ephemeral slang used in Merseyside at any time, and a more practical objective is to give a selection of words used locally in uninhibited colloquial style, and which mark the speaker as a Merseysider. With very few exceptions - like binman, back-end, tin loaf, Scouse, pumps - these words are avoided by the middle classes, so that the description is largely of working class speech.

Very few recognizably local words occurred in the recordings. Many of those that did occur are rare words or unusual forms, and these are marked below with the number of the informant that used them. The bulk of the material has been obtained from casual observation, especially in factories, and from personal knowledge of the dialect. (For reasons which are given in Appendix 3 at the end of this chapter, it was unfortunately impossible to use information in recent popular works on Scouse.)

Many Scouse words are in fact phonological variants of standard words, and these will be considered first, before non-standard words, and standard words with non-standard senses.

#### 2.4.1. Phonological Variants

For an explanation of the phonetic symbols used, see Appendix 4.

ALWAYS /<sup>h</sup>ɔwɪz/ e.g. (14) He's always /ɔwɪz/ losing them.

ALL RIGHT /'ɔ ˈraɪt/ e.g. (25) it's all right /ɔ raɪt/ now.

ASK /aks/ e.g. (29) you can ask /aks/ anybody. The form /aks/ occurs in Lancashire, and also in Anglo-Irish.

CLOTHES /kloʊz/. There is also a jocular singular back-formation /kloʊ/ e.g. Where's my clo' /kloʊ/? The form /kleuz/ is described in Jones's English Pronouncing Dictionary as 'old-fashioned'.

DROWNING /ˈdraʊndɪŋ/ (rare) (29) ...when you're drowning /draʊndɪŋ/...

ELECTRICIAN /elɪkˈtrɪʃən/, and ELECTRICITY /elɪkˈtrɪsɪti/. Jones lists the latter with /z/ as a variant, but not the former with /z/.

GENERALLY /ˈdʒenrəli/ e.g. (9) I'm generally /dʒenrəli/ always in.

IGNORANT /ˈɪɡərənt/.

LAD /lɑ/. Vocative only, e.g. Hey, lad /ˈeɪ .lɑ/. A similar form with a glottal stop [ˈlɑʔ] is heard in the Wigan area, and this may be the origin of the Scouse form.

NOTHING /ˈnʌθɪŋ; ˈnoʊθɪŋ/ˈnɑθɪŋ/. Jones gives only /nɑθɪŋ/.

ONE /wʌn/, and ONCE /wʌns/. Both are North-Western forms.

OLD /aʊl/ and occasionally /aʊd/. Less common than /ɔʊl, ɔʊd/.

ONLY /ˈɔʊni/ e.g. (29) only /ɔʊni/ three of us.

WANT /wɒnt; wɒnt/waɪnt /. Jones gives only /wɒnt/ (=wɒnt/).

YES /jɪs, jɛ/.

The ending of the present participle is /ɪn/ or /ən/ rather than /ɪŋ/ or /ɪŋg/, although the latter do occur. Hypercorrections are rare, but pardon occurs occasionally in the facetious form /ˈpɑdɪŋg/. In compounds, the word thing /θɪŋ, θɪŋg/ has the alternative form /θɪŋk/, e.g. nothing /ˈnʌθɪŋk/ etc., something /sʌmθɪŋk, ˈsʌmθɪŋk/, anything /ˈeniθɪŋk/, and everything /ˈɛvrɪθɪŋk/. Picton (1864) gives beggink 'begging' and puddink 'pudding' for South Lancashire, but Scouse /ŋk/ for /ŋg/ is restricted to thing compounds.

A large number of Scouse words end in /i/. This can be added to



a monosyllable, but more commonly it replaces the ending of a longer word. The first vowel is usually short, and /i/ is added to the following consonant, giving the preferred structure (c)ʋci, where c is any consonant, and ʋ a short vowel. Thus the landing-stage is the /lani/, and not the \*/landi/. For some reason, /sp/ and /st/ become /z/, so that a hospital is an /vzi/, a chestnut a /tʃezi/, a custard cream is a /'kozi 'krim/, and the old East Iron Shore at Dingle was the /kazi/.

Here are some examples of /i/-forms:

/buni/ 'bonfire'; /'buni ,nart/ 'Bonfire Night'  
/bɔli/ 'ball-bearing used as a child's marble'  
/kɔzi/ 'bathing costume'; /krɪzi/ 'Christmas'; /prezi/ n. 'present'  
/fɔti/ 'football game' (i.e. not the ball itself); /gɔuli/ 'goal-keeper'  
/tʃui/ 'chewing-gum'; /bɔbli/ 'bubble-gum'  
/kuni/ or reduplicated /'kuni 'vni/ 'condensed milk'  
/bɪni/ 'binman'; /brɪki/ 'bricklayer'; /pɛki/ 'park-keeper'  
/bɔli/ 'bawlie, rag-and-bone man'; /ʃɔli/ 'shawlie, old woman in a shawl'  
/ɔvvi/ 'overcoat'; /wɛli/ 'Wellington boot'  
/ðe 'wɛli/ 'The Wellington (Inn/Hotel); /θrelɪz/ 'Threlfall's ales'  
/sɪgi/ 'cigarette'; /wɔdi/ 'Woodbine (cigarette); /wɔliz/ 'Woolworths'  
/sɒni/ 'sandwich'; /tʃɪpi/ 'fish and chip shop'  
/baki/ 'back entry'; /æri/ 'area in front of a house'  
/leki/ 'electricity'; /lagi/ or /'lagi 'band/ 'elastic band'  
/'skɒti 'rɔud/ 'Scotland Road'; /ðe 'raundi/ 'the Roundie, Rotunda Theatre'

Some of these words are of course common outside Merseyside, and the list is in no way complete. Suffixation with /i/ is a creative process, and new forms can be created at any time. There are a few additional words, like /mɔgi/ 'moggy, cat', /kafi/ 'café', and /dʒɔvi/ 'joey, threepenny bit', which conform to the same structure but which are not strictly /i/-forms.

Another, but less common, ending is /ou/. It is used in proper names, e.g. /robou/ 'Robinson' or /piou/ 'Peter', and in the isolated examples /ɔsfou/ 'definitely' and /'moy bark/ 'motor-bike'. Otherwise it tends to be derogatory or abusive, e.g.:

/kɪdou/ and /mi'ladou/ 'kid, my lad' (forms of abusive address)  
/nɪgbou/ 'nigger'  
/jubou/ 'yob'; /bokou/ 'buck, thug'.

Miladdo is also used in the third person, e.g. 'See Miladdo over there, picking his nose for spuds!'

#### 2.4.2. Non-standard Words

In the following list, words are grouped roughly according to their meaning, and synonyms are given together.

'ED /ɛd/ adv. 'ahead, onwards, on' (friendly, encouraging)

1. COME 'ED /'kɒm .ɛd/ 'come on; hurry up!'

2. GO 'ED /'gɒ .ɛd/ 'go ahead; go on; after you!'

DEAD /dɛd/ an intensifier for adjectives and adverbs, as in dead good, dead carefully or dead slow.

BLIND /blaɪnd/ an intensifier used positively in blind drunk, and negatively in I didn't hear a blind thing or I couldn't understand a blind word.

BACK /bæk/ adv. 'ago' e.g. (25) a few years back; (50) few months back.

AND ALL /p `ɔl/ colloq. 'also, in addition' e.g. he ate the core and all. The phrase can convey surprising information, e.g. it `did and .all.

OLD /aʊl, aʊd, ɔʊl, ɔʊld/ adj.

1. 'familiar, well-known' e.g. (19) the old blind box

2. epithet of familiarity, e.g. Are you right, my old son?  
In this sense the word is usually /aʊl/.

3. ANY OLD 'chosen at random' e.g. Any old bit of rag will do.

NOWT /naut/ pron. 'naught, nothing' e.g. He knows nowt about it.

OWT /aut/ pron. 'aught, anything' e.g. I'm skint - have you got owt?

NOT ON /nɒˈrʌn/ or /ˈnɒt ˈʌn/. To say you're not on is to refuse a suggestion, request or command. According to (29), it might be said by a chucker-out to an unsuccessful party gate-crasher.

COD ON /ˈkɒd ˈʌn/ v.i. 'to pretend'.

GIVE OVER /ˈgɪv ˈəʊvə/ v.i. or t. 'to stop, desist' e.g. Give over your shouting.

MUCK IN /mɒk ˈɪn/ v.i. 'to share, to help oneself' e.g. Come 'ed, Skin, muck in.

SCOW (OFF) /skəʊ, ˈskəʊ ˈɒf/ v.i. or t.

1. 'to play truant' e.g. to scow (off) school
2. 'to dodge any unpleasant activity' e.g. to scow (off) rugby; to scow (off) during rugby.
3. 'to scive', e.g. Back to work, Jim, stop scowing.

SPELL /spɛl/ 1. n. 'a short break from work'

2. v.t. 'to relieve someone for a short break from work' e.g. Go for a spell and then spell the others.

LEARN /lɜːn/ v.t. 'to teach' e.g. (20) We were learnt and taught very carefully.

LEND /lend/ 1. n. 'a loan' e.g. Give us a lend of your rubber.

2. v.t. 'to borrow' e.g. Can I lend your rubber?

BAGS<sup>1</sup> /bægz/ v.t. 'to claim first refusal on' e.g. I bags the biggest or Bags I the biggest. Synonymous with FOGSEY /ˈfɒɡzi/.

BAGS<sup>2</sup> /bægz/ n. in phrase BAGS OF 'lots of, piles of' e.g. bags of time.

ALLEY /ali/ n. 'a child's large glass marble'

BACK-END /ˈbæk ˈend/ n. 'autumn' e.g. (69) the back-end of 1942.

MOGGY /mɒgi/ n. 'cat'

COP SHOP /ˈkɒp ʃɒp/ n. 'police station'.

CORPY VILLA /'kopi 'vile/ n. 'a corporation house'

DANCERS /'dansez/ n. a rare word meaning 'stairs'

BLOWER /'bloue/ n. 'telephone'.

ELECTRIC /e'lektrik/ n. 'electricity' e.g. I've just paid the electric.

DRAIN BOARD /'drein ,bəd/ n. (15) 'draining-board'

BREAD TROUGH /'bred,trof/ n. (15) 'bread-bin'

TIN /tin/ n. 'a plain, straight-sided loaf' e.g. a small tin loaf;  
a large sliced tin.

ROUND /raund/ n. 'a slice of bread'

BUTTY /boti/ n. 'a smórbród, or open sandwich, topped with jam, sugar, condensed milk, potato crisps or chips etc., and usually folded over roughly before being eaten', e.g. a jam butty, a sugar butty, a chip butty etc.

COB<sup>1</sup> /kɒb/ n. 'piece or hunk of bread or cake' e.g. a cob of bread.

COB<sup>2</sup> /kɒb/ n. 'a loaf of irregular shape, a cob loaf'

COB<sup>3</sup> /kɒb/ n. in the phrase to sweat cobs 'to sweat profusely'

COB<sup>4</sup> /kɒb/ n. in the phrase to have a cob on 'to be in a bad mood', e.g. the boss has got a right cob on this morning. Related to COB<sup>4</sup> is the adjective COBBY 'irritable, moody', e.g. the boss is a bit cobby.

WET NELLIE /'wet 'neli/ n.

1. 'a Nelson cake, with a centre of stale bunloaf soaked in treacle'
2. 'a soft or cowardly person'.

BUNLOAF /'bɒnləʊf/ n.

1. a loaf very rich with currants and dried fruit like a cake, but sliced and spread with butter like bread.
2. 'a stupid person, one who lacks gumption'

SCOFF /skɒf/ n.

1. 'food' e.g. I haven't had any scoff yet.
2. any meal, e.g. Go and get your scoff, i.e. breakfast, dinner, tea, supper, or even a meal at 4.30 a.m. on the night shift.

Note: SCOFF is not a count noun, so that I've had my scoff three times today is well-formed, but \*I've had three scoffs today is a little odd.

LOOP THE LOOP /'lup de 'lup/ n. 'soup'. A rare example of imported rhyming slang.

ACKER /'ake/ n. 'apple' e.g. a couple of ackers.

SCRUMP /skromp/ v.i. or t. 'to steal from an orchard', e.g. to go scrumping, to go scrumping ackers.

CHAR /tʃa/ n. 'tea' e.g. a nice cup of char.

ALE /eɪl/ n. a current colloquial term for 'beer'

N.B. 1. ALEHOUSE 'pub', e.g. Let's go down the ale-house

2. ON THE ALE 'drinking', e.g. he was on the ale again today.

BEVVY /bevi/ n. 'a night out drinking' e.g. we're going on a bevvy.

BEVVY has a related adjective BEVVIED /'bevid/ 'drunk', synonymous with PISSED (possibly to the eyeballs) and CANNED. There is also a verb to bevvy 'to drink (hard)'.

GLIMMICKED /'glimɪkt/ adj. (29) 'physically exhausted, run down; suffering from a hangover'. Synonymous with CREASED /krist/, KNACKERED (29) /'naked/, SHATTERED /'ʃatəd/ etc.

SKINT /skɪnt/ adj. 1. 'penniless' e.g. I'm skint.

2. 'bankrupt' e.g. The Insurance Company went skint.

JIGGER /'dʒɪgə/ n. 'entry'

1. 'alley, (back) entry to house or street'

2. Formerly used by Martins Bank for an 'entry' in a hand-written ledger.

3. 'parchment slip used to mark a ledger entry' (also Martins Bank).

JOEY /dʒoɪ/ n. 'the old, many-sided threepenny bit'

MESSAGES /'mesɪdʒɪz/ n.pl. 'errands, shopping'. To do the messages is to do the shopping either for oneself or for someone else.

DRAG /drag/ n. 1. 'a puff at a cigarette' e.g. Give us a drag of your ciggy.

2. 'a smoke' e.g. We'll have a quick drag in the tea-break.

NOUS /naʊs/ n. 'intelligence, gumption, common-sense' e.g. Use your nous.  
In use as a colloquial every-day word; not a learned term.

IGNORANT /ˈɪɡnərənt, ˈɪɡerənt/ 'ill-mannered'

GET /ɡet, ɡɪt/ n. term of abuse for a soft or stupid person.

LAST /last/ adjective of intense disapproval, e.g. Arsenal is last;  
the ale you get down London is last.

GEAR /ɡiə/ 1. exclamation of approval, Gear! 'Great! Fab! Smashing!'  
2. Epithet of great approval, e.g. a gear bird, a gear time.  
3. It's the gear - broadcast in the 1960s as the Liverpool  
phrase par excellence, but probably even then obsolescent.  
According to the more reliable information obtained from  
contemporary graffiti scrawled on tenement walls, Sue is  
fab and Ringo is great were much commoner expressions.

SKINNY /skɪni/ adj. 'mean, tight-fisted, like a skinflint'

NESH /neʃ/ adj. 'unable to withstand the cold' e.g. it's not really  
cold, it's just you that's nesh.

LEFT FOOTER /ˈlef ˈfʊtə/ n. 'a Roman Catholic'; also a REDNECK /ˈrednɛk/

CACK-HANDED /ˈkækəndɪd/ adj. 'clumsy' e.g. Watch out, you cack-handed  
get! This word has a variable and uncertain relationship  
with GAMMY-HANDED /ˈɡæmi ˌ(h)ændɪd/ 'left-handed'

UNDER THE ARM /ˈʌndə di ˈɑ:m/ (lit. or fig.) 'stinking'; e.g. John is  
under the arm, '(lit.) John smells', Arsenal is under the  
arm, '(fig.) Arsenal stinks'.

YELLOW BELLY /ˈjɛlə ˌbeli/ n. 'a coward'.

HARD /hɑ:d/ adj. 'tough, fearless'; HARD-KNOCK /ˈhɑ:dɪnɪk/ n. 'a tough'

LUG /lʊɡ/ n. 'ear'; LUG-HOLE /ˈlʊɡəʊl/ n. 'ear-hole'

YOCK /jʊk/ 1. n. 'spit, phlegm' also GOLLY /gʊli/  
2. v.i. 'to spit, expectorate'

YOCKSIE /ˈjʊksɪ/ n. 'a very thick Liverpool accent, the speech of  
old Liverpool women'

SCOUSE /skaus/ n. 1. 'lobscouse', the local variant of Irish stew  
2. the Liverpool dialect.

also SCOUSER /skause/ 'a Liverpudlian, a person speaking  
with a Liverpudlian accent'

THE POOL /ðe `pul/ 'Liverpool'

THE ONE-EYED CITY /ðe `wɒnɪd `sɪti/ 'Birkenhead'

PUMPS /pɒmpz/ n.pl. 'plimsolls'

KECKS /kɛks/ n.pl. equivalent to 'pants':

1. 'trousers' e.g. I bought a new pair of kecks.
2. 'underpants, knickers'

GAFF /gaf/ n. 'headmaster' (presumably derived from gaffer).

BINMAN /`bɪnmən/ n. the normal local word for 'dustman'.

NIPPER /`nɪpe/ n. 'a small boy'

KID /kɪd/ n. 1. 'child'

2. OUR KID /`a `kɪd/ 'my brother' (younger or older);  
also used in the sense of 'my young friend' (Voc.)  
e.g. Hurry up, our kid.

FELLOW /fele, feləu/ 'man, chap, bloke'

1. MY FELLOW /mi `fele/ 'my boy-friend, man, husband'
2. THE OLD FELLOW /ði `aul ,fele/ 'my father'

GIRL /gɜ:l/ 1. MY GIRL /mi `gɜ:l/ 'my girl-friend'; also JUDY, BINT,  
TOTTY, BIRD, TART. (N.B. The last does not necessarily  
have the pejorative sense it tends to have elsewhere.)

2. THE GIRL /ðe `gɜ:l/ 'my fiancée, wife' (established  
relationship) cf. THE WIFE, THE MRS.

3. THE OLD GIRL /ði `aul ,gɜ:l/ 'my mother'

SKIN /skɪn/ 1. n. collocated with GOOD: 'fellow' e.g. He's a good  
skin, him.

2. Form of address used to inferior, e.g. Hello there,  
Skin, how are you doing?

MATE /meɪt/ 1. n. 'friend' e.g. Fred is one of my mates.

2. Form of address to a stranger. An older term is wack,  
and a friendlier one pal.

CHIEF /tʃif/ Form of address used to slight superior, e.g. shop porter to delivery-man, or passenger to bus-conductor.

LOVE /lov/ Form of address between the sexes, and among women; its use between men is very rare but not unknown (cf. its very common use between men in Leeds). Men in factories have a number of imaginative forms of address to women, including flower and honey-bunch.

TA /ta/ 'thank you'. Widespread in colloquial usage.

AY /aɪ/ 'yes', especially in the phrase oh, ay, yes /'ou aɪ 'je/

HIYA /aje/ A friendly greeting; presumably 'How are you?'

TERRAH-WELL, TERRAH /te`ra,wel, te`ra, tra/ 'Good-bye'. In widespread use; said to be of North Welsh origin.

WHAT-D'YOU-CALL-IT Scouse has a number of forms, including /θɪŋgɪmɪbʊb/ and /θɪŋgi/; /ʊdʒemeflɒp/ and /ʊdʒa/; /haʊzə,fəʃe/; /wɒtʃeme,kɒlɪt/ and /wɒme,kɒlɪt/. A factory-worker who overused this last type was appropriately nick-named /wɒme/.

ROAD /raʊd/ 'way' in Get out the road 'Get out of the way' and anyroad 'anyway, anyhow'.

### 2.4.3. Rhetoric

Related to the problem of vocabulary is that of the use of figures of speech, the commonest of which is hyperbole. At its simplest it involves single words, e.g. the use of claws for 'finger nails', fangs for 'teeth', boots for 'shoes', or even deck for 'floor'; there are phrases like Give us a shout meaning 'Give me a call', and hyperbolic sayings claiming of a very weak person that he 'could't knock a hole in a wet Echo' or 'couldn't knock the skin off a rice pudding'. A mechanical device for hyperbole is the use of the word dirty, usually collocated with great: e.g. 'a dirty great plate of chips', 'a dirty great Alsatian the size of a pony', or 'Keep your dirty great hooves off my clean floor!'



Some speakers will use extended hyperbole; e.g. a judo instructor explaining the distribution of body-weight in a particular throw:

"Don't worry about your left leg now - that leg can be getting on a bus for all you care..."

Hyperbole can be combined with metaphor or simile, as in the words scone-head /<sup>ˈ</sup>skɒnəd/ and pinhead /<sup>ˈ</sup>pɪnəd/ used of a stupid person. A person may also be said to be 'as thick as two short planks' or 'as thick as the wall'. In extreme cases, there is no obvious ground of comparison, as when someone is 'as daft as a brush' or 'goes around like a fart in a bottle'. Hyperbole combines with sarcasm, as in the charge-hand's exhortation to the soap-packers:

"Come on now - get your hands moving as fast as your jaws!"

Folk-anatomy comes into the expression for male urination 'to drain ones taters (i.e. potatoes)'; and whereas most Englishmen get beside themselves with rage, the Scouser apparently gets behind himself, as he 'sees his arse'.

## 2.5. Conclusion

The sections on vocabulary and grammar have been included in this general chapter on Scouse, because the very paucity of the material confirms the argument that Scouse is not a "dialect proper" but a variant of standard English. The grammatical peculiarities of Scouse amount to a few minor details, and local words number but a few dozen in a vocabulary of many thousand.

It may be objected that the material has been collected in an entirely haphazard fashion, and that it is hopelessly incomplete. This is true: but the addition of another odd detail or two, or a dozen or so more words, does not affect the argument at all. Indeed, many of the

words listed as "Scouse vocabulary" may be objected to. First, some words - e.g. skint, blower, bags<sup>2</sup> - may prove to be not localized at all, but to be in general use. Secondly, some words may be far too localized to be described as "Scouse", since they will be unknown to a large number of Scousers. This is inevitable, since any individual is entitled to make up new words, family groups have their own private vocabularies, and so do individual factories and separate groups in the urban community. Thus joey is likely to be restricted to people using money before decimalization, and spell could possibly be restricted to No.4 Soapery, Port Sunlight! Any list of words is bound to be a personal statement. (Note: I have included in 2.4. only words which I can vouch for personally: either I have used them myself, or I have heard them used in a natural and spontaneous way.) Thirdly, a number of words are nick-names or slang alternatives - e.g. a cop-shop is "really" a police-station, the old girl is "really" my mother - and function as code-words or signs of group-identity, rather than as genuine dialect words like binman or scoff for which a speaker may have no alternative. Fourthly, a list of words might give quite a false impression of Liverpool speech: it is built up over a period of time, taking examples from several different speakers in different situations, and a single speaker at a single time is likely to use very few indeed of these words.

The dialectologist is largely concerned with the differences between one variety and another. There is a great temptation to exaggerate these differences, and to forget the similarities, to give up describing languages in order to fish for goodies. It would be extremely naive to imagine that a list of Scouse goodies seriously

describes English as spoken in Liverpool, since for every occurrence of a non-standard word or construction, there occur thousands of standard forms. This is after all precisely what one would expect, since Liverpool has always been connected by a network of communications with the outside world: it is not surprising that the outside world has influenced the speech of Liverpool, and that no peculiar local dialect has developed. The place to look for really localized speech is in isolated hamlets five miles from the nearest road, not in a centre of world trade.

The peculiarities of Scouse are almost entirely phonological. When a Scouser speaks, he produces a constant stream of prosodic patterns and segmental features which mark him unmistakably as a Liverpudlian. Our main task will therefore be to compare Scouse phonologically with other varieties of standard English. An obvious approach might be to take R.P. as the standard of pronunciation, and to compare Scouse with it. However, Scouse has many standard features of phonology, just as it has standard grammar and vocabulary, and this must be due to outside influence: it would be quite unrealistic to suggest that the speech of public schoolboys from the South of England - no matter how prestigious it might be - has had any appreciable influence on the dockers, cleaners and machine-minders of Scotland Road. What is required is a much wider concept of standard phonology. Gimson (1970:85-89) discusses different kinds of R.P., and he describes a wide range of English vowels (99-146); and Windsor-Lewis (1972:xiv) adopts the term General British for the 'most general type of educated British pronunciation'. We shall investigate the standardizing influence of General British on Scouse, and if we refer to R.P. in

the narrower sense, this will be for comparison only. Exactly how to set about a comparative description of Scouse and General British phonology will be discussed in detail in the next chapter.

Despite the lack of unambiguous historical evidence, we have been able to build up a picture of the development of Scouse which is at least plausible. By the early nineteenth century, Liverpool was in contact with the rest of the English speaking world not only across the sea, but also through a system of inland communications; as a result it has kept abreast of linguistic innovations, and conforms to general linguistic norms. This situation already existed when the Irish immigrants came, and their speech conformed in time to the local standard; however they have had considerable influence on local phonology, and since they settled in the centre of the conurbation - in the centre of the local communications network - this influence has spread throughout Merseyside. The Irish influence is lacking in prestige, so that the middle classes have sought, not altogether successfully, to avoid it, and to retain the traditional standardized North-Western English.

Appendix 3:

Popular Work on Scouse

A considerable amount of good work has been done over the last century or so by amateur dialectologists, much of it in Lancashire, and some of it by Liverpool men. Virtually nothing has been written on Scouse. Cuttings from the local newspapers have been collected by the Liverpool library since the early 1930s, and the sort of topic discussed is whether Liverpool has an accent or a dialect, and the replacement of Dicky Sam by the term Scouser after the First World War. There are a few scattered observations about Scouse phonetics, e.g. J. Farrell (Liverpool Daily Post, 8/8/1950) gives the spelling dock wiike, correctly relating the vowel of work to that of wick, and representing the final fronted schwa. Another writer on the same day suggests that the tongue-tip is kept against the lower teeth in speech; on the following day it is suggested that Scousers use a narrow range of pitch. A letter in the Post (18/4/1955) reports the observation of Professor Kuno Meyer that Scouse /t/ undergoes a sound-shift like the High German on in words like tsoo, tsen, tswelf, and tswentsy (only the first two examples are accurate, however, the others being stage-Scouse imitations).

There are a few attempts to go beyond mere popular discussion, but with pseudo-expertise they succeed in being merely pretentious, e.g. R. Whittington Egan ('Is the Liverpool Dialect dying out?' in Liverpool Colonnade, 1955) writes:

"That the Liverpool vernacular, spoken as it is with adenoidal intonation and narrow epiglottal distribution of vowel sounds, is rather ugly, is undeniable."

Comment would be superfluous.

Frank Shaw gives some interesting examples in a series of three articles entitled 'Dialect of a Sea-port', published in the Journal of the Lancashire Dialect Society, 1958, 59, 60. But he betrays an elementary misunderstanding of his subject in an article in Liverpool and Merseyside Illustrated (January 1962) when he suggests that 'It is laziness which debases all standard language'. Increased understanding of dialect leads to greater pride in local speech, and a necessary release from the concept of dialect as an inferior and corrupt form of the standard language: it does not help matters when amateur dialectologists suffer from popular prejudice and misconceptions.

By far the best known works on Scouse are two popular phrase books which appeared in 1966 at the height of the Beatles craze: these are Lern Yerself Scouse (henceforth LYS) by Frank Shaw and Frits Spiegl, and The ABZ of Scouse (henceforth ABZ) by Fritz Spiegl. Much of the material of the first book is provided by Shaw, some of it having been published previously in the local press, and the editing and glosses are by Spiegl.

If one accepts the premise that a dialect is a barrel of laughs - and for this sort of thing, why not? - then these books are very good of their kind. Most people reading them will expect to be outrageously amused, and they are not disappointed; particularly noteworthy is the section 'At the football match' in LYS, e.g. 'Pull is leg off an it im wid de soggy end!' or 'Ee ad de lace out twice', two examples of hyperbole, the second referring to a case of hand-ball.

However, there are indications that they are intended to be taken seriously, and so they demand a half-serious review. In the introduction

to LYS, Spiegl traces the origin of the word Scouse from the sailors' dish of lobscouse, gives two interesting eighteenth century references to Liverpool speech, and ends - somewhat irrelevantly, perhaps - with Caxton's tale of eggis and eyren. The first reference is to the diary of Thomas Creevey, born in Liverpool in 1768, which gives early examples of /i/-forms, e.g. Fergy for 'Ferguson' and Sherry for 'Sheridan'. The second is to The Sailor's Farewell, a comedy printed in Liverpool in 1768, in which a clown speaks in dialect, using the word wacker. Spiegl also refers to his 'casual research' with 'a note book and occasionally a tape-recorder' 'usually at the places mentioned in the chapter headings'. The implied conclusion of the research is that the Liverpudlian is an inarticulate clown almost entirely ignorant of the structure of his own language. Apart from being rather silly, this is as offensive as it would be for a Liverpudlian to write a book on the solecisms of the Viennese.

The second book is also superficially very funny, but it treats the Scouser not only as inarticulate, but as a clown almost entirely concerned with his backside and genitals, and with prostitutes and general obscenity. It is easy to get a cheap laugh at the Scouser's expense by changing spellings, many of them representing the normal English pronunciation, e.g. ther for 'the' or 'im for unstressed 'him'. Some, like allus for 'always', are simply inaccurate, for the Scouser drops /l/ and retains /w/. The foreword explicitly argues that Scousers are descended from inferior stock, from

"a large residue of would-be workers who lacked the ability to acquire skills or, being shiftless, lacked the ambition. Some were too dull-witted to pass muster, others too mentally lazy to make the effort."

Such an attempt to pass off ignorant prejudice as "research" is both nasty and contemptible.

Both LYS and ABZ are of course nonsense, and the critic who is serious in condemning them invites the same sort of ridicule as followed the condemnation of Enid Blyton or Little Black Sambo. However, it is well known that humour is an excellent vehicle for propaganda, and it is a stock ingredient of advertising. For outsiders - since neither of the authors is a native Liverpudlian, and neither has a genuine Scouse accent - to make Liverpudlians laugh at their own alledged stupidity serves only to reinforce the pernicious myth that someone speaking with a Scouse accent is also defective in intelligence. It is quite impossible to have any pride in the degenerate galimatias presented in LYS and ABZ.

The confusion between recording Scouse and ridiculing Scousers makes LYS and ABZ entirely valueless for our present purposes. Shaw has collected local words and phrases for many years, and some like gippo for 'gravy' or to sag school for 'to play truant' are unknown to the present writer, but almost certainly genuine Scouse. But there is no means of distinguishing them from invented examples like \*guv for the past tense of give (the actual forms are give or gave), or \*gowfer, alledgedly used locally for 'golfer', but actually only heard from the mouth of the occasional itinerant Cockney. This is a great pity, since with a little more thought it would have been possible to combine the barrel of laughs with a body of information which could have been taken seriously.



Chapter 3:

Comparative Phonology

3.1. The Problem

What we need is a model of phonology which will reveal the peculiarities of Scouse in a natural and meaningful way, and show how it is related to other varieties of standard British English. Some of the gross peculiarities of Scouse can be dealt with by any kind of phonology, but others are so subtle that they require a model specially designed to compare varieties of the same language.

The best known comparative model is of course the historical one. Varieties are derived from some Ursprache - which may be a dialect of Middle English, Old English or Primitive Germanic - by sets of ordered rules, and relations among varieties are expressed in differences in the rules. But since Scouse - or any urban dialect - derives not from a single Ursprache, but from an unknown aggregate of Ursprachen, the historical model would appear to be inappropriate.

More recent models have been concerned with the distinctive function of sound in language, and with the identification of contrasting units. While such models are of central importance in general linguistic theory, they are not necessarily very useful for comparing varieties, and may be of only incidental interest to the dialectologist. For example, this work was begun with a modified version of the phoneme-and-allophone model, which after some initial success had to be abandoned. The simplest phonemic analysis gave Scouse almost the same phonological structure as RP, with just a few minor differences in allophones, and phonemic inventory and distribution. While this is an interesting corroboration of our

argument that Scouse is a variety of Standard English, it is one that would be made by any model: what is more important is that in a phonemic analysis syntagmatic sound patterns are distorted and classified irrelevantly and inadequately as part of the "allophonic", "non-distinctive", or "free" variation of "segments".

Language is so complex that it is impossible to set up a single monolithic model which is equally applicable in all circumstances. If a model designed for one purpose is then used for another, it might easily introduce irrelevant criteria which lead to an unnecessarily complicated analysis. The aim of analysis is to break down a complex pattern into its simpler components, and a complicated analysis disguises a failure to find the relevant patterns. It would be possible to elaborate the conventional kind of phonemic analysis into an n-dimensional model to handle the external relations of Scouse and its internal variation, with a system of systems and sub-systems varying according to such things as (a) speaker, and speakers varying in turn according to age, sex, class, religion etc., (b) environment, distinguishing phonological and lexical environments, and (c) repetition of the same sound, distinguishing repetitions in different styles. The construction of such a model would be possible but extremely laborious, and the resulting analysis would be extremely complicated. The complexity of the dialect would not really be analyzed, but merely expressed by the complications introduced by the model.

There are no easy answers to complex problems, but the complexity must be reflected in the design of the model and not in the analyses. (A similar idea is a commonplace in syntax, where the more complex

transformational model gives a more adequate and ultimately simpler account of syntax than the phrase structure type.) The peculiarities of Scouse include such things as the preferred position of speech organs, the way plosives and nasals are produced, and the distribution of prominence in diphthongs and pitch patterns. These are much harder to deal with than phonemes and allophones; but if a method can be found, the dialect can be described much more simply. How the method is arrived at is irrelevant: many of the sound patterns of Scouse were discovered by such means as studying RP, and teaching general phonetics to speakers of Anglo-Irish, rather than by the perusal of the recorded Scouse data.

### 3.2. Historical Dialectology

The historical model has been by far the most widely used and most successful model for dialect study. In phonology generally, it was supplanted for a time by phonemics, but more recently, many of the older ideas - and some of the shortcomings of the older model - have been revived in 'generative phonology'. In order to avoid confusing novelty of expression with novelty of thought, we shall discuss the older ideas using contemporary terminology where appropriate.

In the historical model, the forms of any dialect are generated from an *Ursprache* by the most economical set of ordered rules of the 're-write' type, which must satisfy certain stringent conditions. First, the rules must be consistent with all the available evidence, which includes extant phonetic forms and what can be inferred from earlier spellings, and perhaps the forms and rules of some genetically related dialect, (in the 'Comparative Method'), and also the evidence of morphological alternation (in the 'Internal Reconstruction' method).

Secondly, any rule must be phonetically plausible as a 'sound-change'.  
Thirdly, the set of forms generated at any stage of the derivation must be acceptable as the set of forms of a natural language.

This model also provides an interesting theory of dialect relationship. Related dialects have partially overlapping sets of rules, and these individual sets can be conflated in a larger body of rules or Stammbaum: closely related dialects differ only in the lower level rules, and more distantly related dialects differ also in high level rules.

There are a number of difficulties with the Stammbaum, in particular the assumption that dialects develop by divergence from a common source, when dialects in historical times have derived not from a common source but by the convergence of other dialects. The notion of isogloss movement as a factor in sound change also upsets the idea of individual development following divergence.

The rules depend on the evidence available, and if more evidence is produced it might be necessary to modify the rules. The rules do not therefore represent final truths, but merely form a device to generate the required forms. Now if the evidence can be extended, there is no reason why the linguist should not deliberately restrict it for some purpose, say, to the synchronic patterns of one dialect or group of dialects. If it is objected that this would obscure the pattern of sound-changes, such an objection is irrelevant, for one must distinguish the formulation of generative rules from the interpretation of the rules as historical sound-changes. Rules which generate synchronic forms are themselves synchronic, and they are

logically prior to any historical inferences. (Philologists reconstructing beyond the earliest evidence have traditionally inferred historical order from generative order, cf Halle (1962:347)). For the comparison of dialects the generative rules alone are sufficient, and the historical inferences can be omitted.

The immediate value of this proposed modification of the historical model is that the model can now be used for Scouse, since there is no need to derive it from 'Middle English' or any other *Ursprache*. We can select evidence as appropriate from Scouse, RP, Anglo-Irish or Northern English, and relate them by rule, without implying that they derive from any common source.

A second necessary modification concerns the status of the symbols used in a derivation. It is assumed that they represent phonetic forms, but this is unlikely. It is impossible to specify "the" phonetic forms of contemporary English, and symbols like /t/ or /e/ generated by the rules must still be related to various kinds of /t/ and /e/ found in different varieties. However, philologists talk with considerable confidence of the pronunciation of Chaucer, and with virtual certainty of Gothic. As one passes from Germanic to Indo-European, the symbols are not phonetic at all, but mere abstract formulae like dhe/dhō which have different forms according to dialect. Traditional rules are in fact a mixture of phonetic symbols and abstract phonological representations. Indeed, evidence of phonetic forms frequently complicates the rules, a familiar example being the rule that Germanic /a/ becomes Old English /æ/, Middle English /a/ and contemporary /e/. The lack of fit between abstract Germanic

symbols and early English spellings leads philologists to postulate a large number of "changes" which took place just before the earliest written records (e.g. Brook, 1957:8-16). Again, "changes" take place just before the observable contemporary forms, e.g. Brook (p28) ascribes the longer vowel of bead as opposed to beat to the eighteenth and nineteenth centuries.

Dialect comparison can be made much simpler if we remove this confusion of abstract and phonetic. Following Fudge (1967, 1969a), we can distinguish an ordered set of mutation rules from a set of realization rules. Mutation rules are concerned entirely with abstract symbols, whereas realization rules associate phonetic forms with abstract symbols. For example, the derivation of Scouse shut up /ʃe`rop/ contains the mutation rule t → r, and the realization rule stating that /r/ can be either a continuant or a flap.

In practice it is often difficult to decide whether a given case should be dealt with by realization rules alone, or whether mutation rules are involved. Between phonetics and abstract phonology there is an intermediate level which is aptly described by Chomsky's (1964:68) self-contradictory term 'systematic phonetics'. Briefly, if compared sounds are 'distinct' - e.g. Scouse [ʃrwe] and [ʃo] 'sure' - they are handled by mutation rules; otherwise - e.g. Scouse [ʃrwe] and older RP [ʃve] 'sure' - realization rules suffice.

The value of the distinction is illustrated by a comparison of the possible forms in Scouse, Anglo-Irish and RP for the series sure - shore/four - for - Shaw, or phonologically [ʃur - ʃor/for -

for = fo. The variation can be given in an unordered set of realization rules (using  $\dot{\_}$  as the realization sign):

- $\bar{u}r$  :  $\left[ \text{æer, rwe, ue, ue, oe, oe, o...} \right]$
- $\bar{o}r$  :  $\left[ \text{oer, oe, oe, o...} \right]$
- or :  $\left[ \text{or, o...} \right]$
- o :  $\left[ \text{o...} \right]$

Comparative statement is concerned with the differences among realizations, and with the assignment of different forms to different varieties. However, this approach would miss significant generalizations, both because the rules overlap considerably and because it does not show why any variety should choose one realization rather than another. The generalizations are expressed by mutation rules:

1.  $\bar{u}r \leftrightarrow \bar{o}r$
2.  $\bar{o}r \leftrightarrow or$
3.  $or \leftrightarrow o$
4.  $V_f r \leftrightarrow V_f er$  (where  $V_f$  is any vowel of "full" grade)
5.  $r \leftrightarrow \emptyset$  (except when a vowel follows immediately)

Anglo-Irish tends to have rule 4 only, conservative Scouse and RP have 3,4,5 only, while younger speakers have all five rules. There are more realization rules than before, but they are simpler:

- $\bar{u}er$  :  $\left[ \text{æer} \right]$
- $\bar{u}e$  :  $\left[ \text{rwe, ue, ue} \right]$
- $\bar{o}er$  :  $\left[ \text{oer} \right]$
- $\bar{o}e$  :  $\left[ \text{owe, oe, oe} \right]$
- or :  $\left[ \text{or} \right]$
- o :  $\left[ \text{o} \right]$

For each variety, only some of the rules are relevant according to preceding mutations, e.g. only the last rule is relevant for younger Scousers. Remaining differences among varieties are of a prosodic nature, or at least syntagmatic rather than paradigmatic.

The order of mutation rules does not necessarily agree with the order of sound-changes. Conservative Scouse, with the realizations  $\left[ \int ue - \int oe / foe - fo - \int o \right]$ , has sound-changes equivalent to rules 3,4,5. A less conservative type with  $\left[ \int ue - \int o / fo - fo - \int o \right]$  has the additional sound-change oe  $\rightarrow$  o, but this is handled by adding rule 2 before rule 3. Again, the advanced type with  $\left[ \int o - \int o / fo - fo - \int o \right]$  has the additional sound-change ue  $\rightarrow$  o, and this is handled by adding rule 1 before rule 2. Mutation rules provide a neat way of generating the required forms, but their order does not necessarily correspond to any linguistic reality. Informant (81), for example, gave  $\left[ \int o - \int o - \int o \right]$  for sure - shore - Shaw and then "corrected" herself to  $\left[ \int ue - \int o - \int o \right]$ ; one might say very neatly that she 'deletes rule 1', but what she is in fact doing is to reverse the sound-change and select the more conservative vowel more appropriate for her age-group. Informant (87) first gives  $\left[ \int oe - \int o - \int o \right]$  for the same series, and then changes it to  $\left[ \int ue - \int oe - \int o \right]$ . One might say that she has RP-type rather than Scouse-type realizations, in the first case with all five mutation rules either in the unusual linear order 21345 or with disjunctive ordering of rules 1 and 2, and in the second case with deletion of rules 1 and 2. She is in fact selecting more conservative pronunciations of the words sure and shore.

The abstract nature of mutation rules has its advantages. Given the form  $\left[ \int o \right]$  for sure, it is impossible to state its origin in terms of sound-changes, since it could derive from the RP  $\left[ \int ue, \int oe \right]$  or Scouse  $\left[ \int iwe, \int iwe, \int ue, \int ue \dots \right]$ . Secondly, it would be difficult to interpret sound-changes in real terms; a rule x  $\rightarrow$  y might



refer vaguely to long-term changes in the community as a whole, to differences between age-groups, to changes in the course of an individual's life-time, to an individual's changes of style, or inconsistently to any of these. At all events, there is no single sound  $x$  which in any sense 'becomes'  $y$ : there is rather a range of sounds  $(x_1, x_2 \dots x_n)$  related in some way to another range of sounds  $(y_1, y_2 \dots y_n)$ . In order to deal with language variation, one must make a clear distinction between abstract phonology and phonetics. Phonological mutations are in principle distinct from any particular phonetic realizations, and can handle different relationships among different sounds.

To summarize the argument so far, the traditional historical model requires considerable modification, but provides in broad outline a very interesting theory of dialect relations. The modifications concern the nature of the rules and the status of the symbols used in them. The model proves to be not necessarily 'historical' at all, and is of sufficient generality to deal with both sound-change and synchronic variation, and to express relationships between dialects and varieties of the same dialect.

### 3.3. Structural Dialectology

Structural dialectology is an attempt to apply the assumptions and methods of Bloomfieldian linguistics to dialect study. We are not concerned here with the reasons for linguists of this school to approach language as they did, nor with the later rejection of their approach. We are concerned only with the suitability of their theories for the analysis of dialect variation.

### 3.3.1. Phonemics

Sweet's 'broad transcription' (e.g. 1910:9) and Jones's view of the phoneme as a 'family of sounds' (e.g. 1950:10) both recognize that phonological sameness does not necessarily entail phonetic identity. This fact is of fundamental importance in phonology.

However, the way the phoneme idea has been elaborated is open to objection. Phonemes are assumed to enter into a system such that the sounds of a language can be grouped exhaustively into phonemes. Sounds are either variants of the same phoneme, or else they contrast as members of different phonemes; there is no possibility of a 'small difference of sound' (Bloomfield, 1926:28). While it is extremely useful to assume such a system for most linguistic purposes, this is quite impossible for dialectology: variation involves sounds in relations other than contrast or variation, and the terms of contrasts are not necessarily single phonemes.

Sounds can be, pace Bloomfield, merely different. Many middle class Liverpudlians will use different vowels in hers and hairs, or in put and but, but the vowels do not contrast in any real sense. Thus, if [ɛ-] of hairs is substituted for [ə+] of hers, this does not necessarily bring about a change in meaning. If the notion of contrast is imposed nevertheless, sounds are held to contrast even though a native speaker may be unable to distinguish them. That the "contrast" is unreal is shown by the frequency of such hypercorrections as [wɛ-m, wɛm] 'worm', [vɛ+ries] 'various', [puti] 'putty', [batʃɛ] 'butcher', in middle class speech.

Sounds may contrast on one occasion, and be merely different on

another, e.g. [a] of ant contrasts with [a] of aren't, but either vowel, or any intermediate vowel, can occur in aunt.

Contrast may be asymmetric, e.g. for most speakers, if [o] of for is replaced by [oe], the meaning is changed, but [oe] of four can be freely replaced by [o]. The asymmetry may be lexically restricted, so that [ue] and [o] contrast symmetrically in poor/paw and asymmetrically in sure/Shaw. Morph boundaries may be relevant, so that [oe] and [o] contrast symmetrically in lower/law and asymmetrically in four/for. A particularly common case of asymmetric contrast is in gradation, for the full-forms of or, are, her, of, a, I, have can all be replaced under certain conditions by [ə].

Complex situations arise when cases of asymmetry intersect. Book can be [buk] or [bok], and buck [bok] or [bak]; both [u] and [ʌ] can be replaced by [o] without change of meaning, but if [o] of buck is replaced by [u] the meaning is changed.

Finally, although a contrast may exist for a speaker, the hearer may not perceive it, or he may interpret it in some other way, e.g. a middle class person may contrast /u/ and /ʌ/, but a working class hearer may interpret [ʌ] as just a posh variant of [u] or his own [o].

Given such relationships, the dialectologist is not at liberty to make the assumptions implicit in the notion of phonemic system. Variation is not a matter of different static systems, but of phonological processes, which need to be handled by rules on the lines of mutation rules.

Phonemes are in principle established according to phonetic contrasts. In practice they are based on that arbitrary subset of contrasts which happens to give the right answer; other contrasts are explained in some other way. Thus in many varieties of English the contrast between the voiced [r] of drain and the voiceless one of train is explained as a phonemic contrast of /t/ and /d/. Chomsky (1964:83) cites the case of writer/rider, where in some American dialects the contrast in the first vowels is interpreted as a phonemic distinction in the following consonants, even though the latter are phonetically identical.

The danger for dialect study is that a spurious analysis can be made by extending or restricting the arbitrary subset of contrasts on which the "system" is based. Suppose that in a given dialect /nj,lj/ occur simultaneously as palatal nasals and laterals in words like onion or million. It is easy enough to find minimal pairs like spanner/Spaniard or million/ (Mac)Millan and set up the palatals as independent phonemes. By similar means one can "discover" all sorts of exotic phonemes in Scouse. Thus informant (40) has [er laɪkt wɛn si] 'I like it when you see...' where /kɪ/ with simultaneous velar and alveolar closure is a separate phoneme since it contrasts with the alveolar closure in light, the velar closure in like and the sequential velar and alveolar closure of liked. Similarly, the palatal nasal of /wɛn/ is phonemic since it contrasts with the alveolar nasal of /wɛn/ 'when'. Some speakers have a "phonemic" contrast between rounded and spread velarized syllabic laterals, as in /<sup>w</sup>ɪ/ 'well, he...' as opposed to /ɪ/ 'will he...', both of these contrasting with /li/ 'Lee, Leigh'. Some Liverpudlians

distinguish [h≠u] 'who', [ç≠u] 'hue' and [j≠u], so that /h,ç,j/ must be set up as phonemes.

Clearly, phonetic contrasts distinguish phonological sequences rather than units as such: it just so happens that the majority of sequences thus distinguished contain a single unit. For dialectology, there is no guarantee that the traditional phonemic analyses are the best ones. Thus if [a\_] contrasts with [a] as in pack/park, this could be interpreted as a distinction between /a/ and /ar/: the representations /pak/ 'pack' and /park/ 'park' would relate the phonetic forms of rhotic and non-rhotic dialects, instead of obscuring the relationship. (The identity of the stressed vowels of park and khaki in many dialects could be handled by a mutation rule intermediate between the phonological representation and the realization rules.)

We argued above that the historical model, deriving extant forms from earlier forms by sound-changes, was in need of revision, and we distinguished mutation rules and realization rules. We also find the phonemic model in need of revision. What is emerging is a model with a totally abstract phonological level, and sets of mutation rules relating the abstract and 'systematic phonetic' levels for any dialect, and realization rules. Since the mutation rules can deal with differences among dialects at the same time, and also differences in the same dialect at different times, the distinction sometimes made between 'historical' and 'synchronic' dialectology proves to be unreal and illusory.

### 3.3.2. Diasystems

In his attempt to reconcile dialectology with structural linguistics, Weinreich (1954) makes the important point that different dialects may have similar phonetic forms which are nevertheless phonologically different. Moulton (1968) cites examples of this from Swiss dialects, and there are many examples in Scouse. The Scouse vowel in but [ˈbʊt] is very similar to the Dublin vowel [ˈo+] and different from the Northern English [ˈu]; however, Scouse agrees with Northern English and disagrees with Dublin in having the same vowel in put and but, so that [ˈo+] is phonologically the same as [ˈu] and different from [ˈo+]. Scouse tends to have a short central vowel in book [ˈbək] which is similar to the Ulster vowel in [ˈbək] and different from the long back North Midland vowel in [ˈbu:k]. However, Ulster English tends to have the same vowel in bush [ˈbʊʃ], while Scouse agrees with the North Midland type in having different vowels; even though the actual realizations may be quite different, Scouse [ˈbək, bʊʃ] and North Midland [ˈbu:k, buʃ], these two varieties are phonologically the same at this point. In general, Scouse conforms to the phonology of the North-West Midlands, but has phonetic realizations of Anglo-Irish origin.

Weinreich's notion of a diasystem is less successful, since it is based on contradictory assumptions. While 'linguistic systems in a strictly structural view can only be identical or different' and a language is merely 'an aggregate of systems' (p389), 'A 'diasystem' can be constructed by the linguistic analyst out of any two systems which have partial similarities (it is these similarities which make

it something different from the mere sum of two systems' (p390). The diasystem can only be typological, since phonemic theory cannot deal with genetic relationships: the five-term short vowel system of Scouse would have to be considered closer to, say, the system of Classical Latin, than to the six-term system of RP.

Weinreich (1954:394) confuses phonological analysis with the problem of selecting symbols. Suppose we were to construct a diasystem for the short vowels of middle class Liverpoolian and RP:

$$1,2 // \begin{matrix} \text{I} \\ \text{e} \\ \text{a} \\ \text{v} \end{matrix} \approx \begin{matrix} \text{e} \\ \text{o} \\ \text{a} \\ \text{u} \end{matrix} \approx \begin{matrix} \text{a} \\ \text{e} \\ \text{a} \\ \text{u} \end{matrix} //$$

where 1 refers to Liverpoolian forms and 2 to RP. This is not comparing partially similar systems, since the systems are identical: it is merely matching symbols.

Suppose now we construct a diasystem for the short vowels of Scouse (1) and RP (2), omitting the problem of symbols:

$$1,2 // \begin{matrix} \text{I} \\ \text{e} \\ \text{a} \\ \text{v} \end{matrix} \approx \begin{matrix} \text{e} \\ \text{o} \\ \text{a} \\ \text{u} \end{matrix} \approx \begin{matrix} \text{a} \\ \text{e} \\ \text{a} \\ \text{u} \end{matrix} //$$

Although members of a system are 'defined by opposition to each other' (p388), we have here - following Weinreich's Yiddish example - arbitrarily confined this opposition to part of the system. That is, RP also has oppositions of /i - A/, /e - A/, /a - A/ and /v - A/ which are not found in Scouse. The only possible diasystem is therefore

$$1,2 // \begin{matrix} \text{I} & \text{e} & \text{a} & \text{v} & \text{u} \\ \text{I} & \text{e} & \text{a} & \text{v} & \text{u} \end{matrix} //$$

As a theory of dialect relationship, this is utterly trivial.

In his discussion of 'structural isoglosses' (pp391-2), Weinreich discusses the hypothetical case of a phonetic form [man] which is common to two dialects, but which is phonemically different in either case, because length is significant in the first dialect and not in the second. This is reflected in the different symbols /ã/ and /a/. The first dialect has not just the one extra opposition, but a whole network of extra oppositions: every phoneme is 'defined' differently for each dialect. Now suppose that these dialects also share a common form [men]: since the phoneme to which [e] belongs is different in either case, we must choose different symbols, say /e/ and /E/. Similarly, all the phonemes of the two dialects must have different symbols. It follows that the diasystem is an impossibility, since the criterion of partial similarity can never be fulfilled. All that can be done is to match the symbols of variants of the same system.

A rather different approach to dialect phonemics is taken by Trager and Smith (1957). They set up nine simple vowel phonemes and twenty seven complex syllabic nuclei for English as a whole, such that any individual dialect has five or six simple vowels only, and only a dozen or so of the complex nuclei. This is not so much a theory of dialect relations as of broad transcription: it does not compare varieties, but merely provides a restricted set of symbols to label the phonemes of any particular variety. For example, /kat/ represents 'Southern British' cut and a common American type cot (p27) - and possibly Scouse cat? - which is acceptable as a transcription, but not as a comparative statement.



Kurath and McDavid (1961:6-7) go beyond broad transcription, and distinguish four systemic types in the Atlantic States, and a fifth type for Standard British English. In order to make a comparative statement, they indicate the lexical incidence of the phonemes of each type. They also recognize that 'though language is essentially systematic, it is never wholly without irregularities and oddities' (p3) which are due to social forces and historical processes. It is but a short step from here to taking 'cognate words' as the basis of comparison and to deriving different phonetic forms by rule. Certainly, the relations between the five systems can be expressed very simply by mutation rules.

The contradictions of dialect phonemics were clearly perceived at about the same time by W.G.Moulton. In his article on Northern Swiss dialects (1960) he recognizes the difficulty in using 'conventional phonemics, which deals with data assumed to be uniform' when dealing with 'data clearly not uniform' (p155). He later points out (p167):

"Synchronic phonemics assumes that phonemes are discrete, non-overlapping elements, and that the transitions from one phonemic system to another must therefore be completely sharp. Diachronic phonemics, on the other hand, assumes that during the course of time one phoneme can split into two, or two coalesce into one, and every such change implies a period of phonemic indeterminacy in part of the system. Dialect phonemics, it seems, must make both assumptions."

He relates vowel systems by deriving them from Middle High German (172-4), and for synchronic comparison (175-7) gives central importance to lexical correspondences. The inevitable consequence

of this is that Weinreich's kind of diasystem seems 'of questionable value in dialectology'. Moulton is ostensibly a 'structural' dialectologist, but the logic of his arguments cannot but lead eventually to the rejection of the assumptions upon which structural dialectology is based.

Structural dialectology has made no significant contribution to the theory of dialect relationship. Useful ideas like the distinction between phonological and phonetic sameness do not follow in any way from structuralist assumptions, and are compatible with - and indispensable to - any theory of dialect or phonology. In order to avoid the contradictions of dialect phonemics, and to make interesting comparative statements, we need a rule-based phonology. Thus we return to the historical model, or at least to a modified version of it.

#### 3.4. Generative Phonology

Generative phonology is in some respects a revival and extension of the historical model without the historical interpretations, and with the rules treated as synchronic. Diachrony and synchrony are still not properly separated: whereas the historical model has synchronic patterns interpreted as sound-changes, the generative model has sound-changes interpreted as synchronic patterns. For instance, Chomsky and Halle (1968:187), given abstract synchronic vowel alternations which result from the Vowel Shift, work out a pseudo-phonetic rule to account for them. This is known to philologists as the method of internal reconstruction.

Where the historical and generative models cover the same ground, the former often gives a preferable explanation. For example, the development of the vowel of make is traditionally explained as a fronting, raising and diphthongization of an originally open vowel, Middle English /a/. Halle (1962:349) first raises the vowel to a mid back unrounded position, and then fronts it, which is a singularly pointless exercise.

Whereas the historical model starts with all the available evidence and accounts for it, the generative model may be unable to deal with some of the phonetic facts. Chomsky and Halle (1968:260) discuss the vowels used by John Hart, and interpret his short o as [ɔ] rather than [o], 'since this assumption...leads to a somewhat simpler set of rules'. The assumption is based on an extremely unlikely reading of what Hart says, and gives him an equally unlikely short vowel system, and the rules are only simpler if one happens to be using the distinctive feature notation: the assumption does not solve a problem of phonology, but an artificial problem introduced by the notation. Later on (p266), faced with a vowel that Wallis calls 'e foemininum', they say 'We have been unable to determine what sound Wallis meant by 'e foemininum''. It would not be difficult to guess that it might be schwa - especially as a 'feminine rhyme' ends in schwa - but schwa will not fit into the rules at that point. If Chomsky-Halle phonology is so unsatisfactory where it can be tested, one might reasonably question the validity of those aspects which are entirely abstract and speculative.

Some remarkable claims are made for the superiority of the

generative model. Postal (1968:Part II) denounces the neo-grammarians, but the "neo-grammarians" he attacks do not include people like Brugmann or Paul, but Bloomfield, Hoenigswald, Gleason and Martinet. The object of his attacks is not really the neo-grammarian position at all, but diachronic phonemics.

Vasiliu (1966) simply misrepresents the historical model.

"The generative approach seems to be more powerful than the purely historical one...because it does not limit itself to establishing only WHEN a change occurred in relation to another, but its aim is the inference of all the STRUCTURAL consequences resulting from the different ordering in time of changes X and Y". (p96)

It is in fact standard practice - at least in English and Germanic philology, e.g. Wright (1925) - to make the structural consequences of change explicit. Vasiliu (p83) discovers that 'the Daco-Rumanian dialects can be described largely in terms of THE SAME RULES ordered differently'; traditional dialectologists could go further and give an explanation for the different ordering in terms of the movement of isoglosses. He suggests (p96) a revised chronology of sound-changes, but this could be done equally well in the historical model.

O'Neil (1963:395) gives generative rules to derive Northern Faroese from the dialect of Tórshavn. Thomas (1967) discussing similar problems in Northern Welsh, rejects O'Neil's approach. This should not have been necessary: if it is wrong to derive Greek from Sanskrit in the nineteenth century, it is difficult to see how it is right to generate one dialect from another in the twentieth.

Chomsky-Halle phonology is an "interpretive" component of a

generative grammar. While a comprehensive linguistic theory must account for the relationship between grammatical strings and phonetic forms, it does not follow that all phonological patterns must always be expressed in this way. For example, the structure of English phonological words can be expressed relatively simply in terms of syllable structure rules (cf Fudge, 1969b); there is little point for most purposes in working out the logical consequences of these rules and re-formulating them as 'morpheme structure rules' with redundancies (Halle, 1958) or in terms of 'markedness' (Postal, 1968, Chomsky and Halle 1968).

More importantly, interpretive phonology replaces a string of formatives by a string of (abstract) segments. Suprasegmental features of stress (Chomsky and Halle, 1968; Halle and Keyser, 1971) or of intonation (Stockwell) are treated as simultaneous elements with the segments, or even as 'formative elements with a position in the sequential string like other formative elements' (Stockwell, p364). A more realistic view is that suprasegmentals are of quite a different order, and provide the temporal context in which the segments occur. The description of this context - stress, rhythm, intonation, articulatory setting etc., - on its own terms for different dialects is a major concern of comparative phonology.

Although we have argued in favour of generative rules for expressing dialect relations, the particular generative model developed by Halle and his collaborators and followers is not very useful. The notation in which the rules of this model are expressed is also unsatisfactory.

### 3.4.1. Distinctive Features

The discovery that the sounds of a language are grouped into phonological classes is a commonplace of traditional philology. Since the time of Grimm it has been normal practice to express rules in terms of these classes - e.g. voiceless stops become spirants in Germanic - thereby conflating a number of individual rules and achieving considerable economy. (No-one would claim that all philologists maintained maximum economy all the time, so that Halle's obscure example taken from a Sanskrit grammar (1962:338) is entirely lacking in consequence.) There has been considerable confusion about the status of these classes; e.g. in the traditional account of Grimm's Law it is assumed they can be defined phonetically even though the Law demonstrates that they are in principle independent of their realizations.

A clear distinction between phonological classes and phonetic features is drawn by Budge (1967), but most linguists are content to use pseudo-phonetic labels, even though this may lead to apparently contradictory statements, e.g. that a Scouse voiced dental fricative may in fact be a devoiced post-dental stop. A phonological class is realized as a complex of phonetic features which vary according to (1) the intersection of the class with other classes, so that e.g. 'labiality' or 'voicelessness' are realized differently for 'stops' and 'fricatives', (2) environment, so that e.g. the distinction between /t/ and /d/ is made differently before and after vowels, and (3) dialect, so that although Scouse shares with RP and Leeds English the distinction between 'voiced' and 'voiceless' and between 'nasal' and 'oral' consonants, it makes

these distinctions in different ways. A comparative phonology must identify the various ways in which classes are realized.

It may well be the case that the features of realization are arranged in a hierarchy such that those at the top are more important for the recognition of the class than those at the bottom, and in addition (1) in situations where features at the top are missing, their function is taken over by features lower down, and (2) the order of features differs from one dialect to another, e.g. voicing of /b d g/ is less important in Scouse than in Leeds English, and the aspiration of /p t k/ is correspondingly more important. However, there is no justification for taking the feature at the top of the hierarchy and calling it the "distinctive" feature and using it to define the class which it realizes, and relegating all other features to the status of "redundant" features. This leads to remarkable examples of self-contradiction, e.g. "The auxiliary role of redundancies must not be underestimated. Circumstances may even cause them to substitute for distinctive features" (Jakobson and Halle, 1956:9). A feature can hardly be distinctive if it can be replaced by something else.

Distinctive-feature theory in its modern form has been developed largely from Preliminaries to Speech Analysis (Jakobson, Fant and Halle, 1952). In so far as this work uses new experimental techniques made possible through spectography to identify acoustic features of the speech wave which correlate with articulatory distinctions, it marks a significant advance in the study of speech perception. But there is no reason to take the acoustic categories

from this work and use them as a standard notation in phonology generally. If works using the feature-notation were based on careful research and psycho-acoustic experiments to identify the "distinctive" features, then this kind of phonology would have a firm scientific foundation: but in so far as writers uses terms like  $[+ \text{Flat}]$  when all they really mean is rounded they confuse scientific procedure with a terminological veneer. A purely practical objection is that the reader spends so much time following the pseudo-acoustic notation that it is easy to miss elementary faults of logic.

Halle (1962:336) introduces a rule of the form  $[+ \text{grave}] \rightarrow [- \text{grave}]$ . If we consider Halle's variant of this rule, namely  $/a/ \rightarrow /a/$ , it is clear that he has re-introduced the confusion of phonetic and abstract characteristic of the historical model. While  $[- \text{grave}]$  and  $/a/$  may have something to do with observable features, this cannot be the case for  $[+ \text{grave}]$  or  $/a/$ . The problem is in no way solved by the fact that the ambiguous status of features has always been recognized (Halle, 1958:332).

Many of what appear superficially to be the most significant aspects of distinctive feature theory are based on this confusion of phonetic and abstract. Thus according to the 'Naturalness Condition' (Postal, 1968:56), "the relation between phonological and phonetic structures is a natural one". Given the wide variation in the realization of abstract structures, it is impossible to give any meaning to the notion of 'naturalness'.

There is also the question of universals. The organs of speech are presumably universal, and it may be possible to define the



articulatory possibilities of man (Catford, 1968). Further, it may be possible to specify the ways in which these articulatory possibilities can be used to make phonetic contrasts (cf Ladefoged, 1971). But given the different ways a phonological difference can be realized in a single language, and given that similar phonetic contrasts can realize the entirely unconnected abstract categories of different languages, it is impossible to give any meaning to the notions of 'universal feature' or 'universal contrast'.

Postal (1968:173) suggests that Mohawk  $\left[ \underset{g}{\text{g}}, \underset{gw}{\text{gw}} \right]$  must be treated as some universally defined systematic labial: in so far as he goes beyond the method of internal reconstruction (i.e. the velars derive historically from labials) he is merely manipulating the feature notation to get the right answer. If we interpret Scouse  $\left[ \underset{a}{\text{a}} \right]$  as systematically /ar/, then /a/ and /r/ have nothing to do with universal /a/-ness or /r/-ness, but are merely abstract symbols used to handle a sound-pattern.

We argued above that the traditional historical model was in need of revision, and this would predispose us to accept the generative model. However, we cannot base our comparative phonology on a model which repeats with remarkable fidelity - and actually elaborates - the mistakes and confusions we are trying to avoid, and which makes assumptions inconsistent with the observable facts of variation, and actually prevents us describing and comparing sound patterns on their own terms.

### 3.5. Dialect Phonetics

Whichever phonological model is adopted, the first step in analysis

is to make some kind of impressionistic transcription of spoken material. It is worth investigating the relationship between the transcription and the original. One works on the assumption that one is converting the data from an auditory to a visual medium, in such a way that the symbols chosen uniquely specify the original sounds. In practice it is entirely subjective and depends on how good the transcriber's ear is, and what sound patterns he happens to know about, e.g. if he knows about 'dark' [ɜ̥] he is likely to mark it in Scouse texts - even though the Scouse 'dark-l' differs from the RP type - but unless he knows about 'consonant colour' in general he may fail to mark 'dark' [ɜ̥, ɜ̥, ɜ̥] etc. A true 'impressionistic' transcription is a disorganized, hit-and-miss affair, and quite unsuitable as the basis of phonological analysis.

Ladefoged (1967:104) distinguishes different kinds of information in the speech event: (1) linguistic information, (2) accentual information, and (3) personal information. A transcription is expected to mark all linguistic distinctions as a matter of course, and accentual information can be inferred from the details of the symbols. Personal information tends to be disregarded, apart from the haphazard recording of such things as nasalization, speech defects, or labio-dental or uvular /r/: one would not expect diacritics for the effects of large lips, loose dentures or even learned characteristics like a lowered larynx. A transcription is therefore a selection out of the total speech wave of those features which are relevant for a particular purpose.

Exactly how a person makes this selection - whether when transcribing or in normal language use - is extremely complicated (cf Ladefoged, 1967). The dialectologist has consequently little

use for machines, at least in the early stages of research. It is easy enough to find out what is in the total speech event, but not to pick out what is significant. A few dozen spectrograms of Scouse would prove precisely nothing to the purpose. Even if a significant feature were identified, it would still have to be related to other features in the perceptual hierarchy, e.g. if the duration of the final nasal of Scouse man were proved to be significantly less than the Leeds equivalent, it would be only one of several features of Scouse "nasality". In dialect work one has so many significant patterns to identify and interrelate that for practical reasons one has to make do with auditory transcriptions.

In the British tradition of ear-training, the phonetician is provided in advance with a set of sound types. Consonants are recognized in terms of their production, and vowels with reference to auditory Cardinal types. In the classroom, this works very well for clearly articulated sounds. But it is quite a different matter to identify the details of, say, a Scouse /t/ or /s/, and short of coating informants' palates with soot and chocolate it is impossible to be certain of the articulatory facts. The transcriber cannot assume that because he makes a sound in a particular way the informants do so too, nor are his judgements as to the "same" sound necessarily the same as theirs. The difficulty in transcribing vowels, and predicting the position of the tongue and lips, is discussed by Ladefoged (1960, 1967:132ff). The problem can be minimized if the analyst is himself a native speaker of the dialect and has the appropriate intuitive responses. (This does of course bring in other problems, e.g. a Merseysider will probably react to velarized speech as 'normal' and consequently have difficulty in

recognizing it in Scouse.)

The object of ear-training is to enable the phonetician to break the bounds of his own idiolect, and respond directly to phonetic categories like voiced, plosive, half-close etc. However, given a Scouse pronunciation of breathe or hairs, one might (consciously or unconsciously) reject breed or hers in the very act of perceiving, so that any transcription is based on the intuitive response to the contrast /ð-d/ or /ε(ə) - ə/, rather than to phonetic categories themselves. (That is, the reasoning is of the form 'x is /ð/, ∴ x is a dental fricative' rather than the ideal 'x is a dental fricative, ∴ x is [ð]'.) The difficulty attached to working with any pre-determined set of categories, is that they easily become mere recognition labels for abstract phonological classes.

We return to our previous argument that the articulatory possibilities of man may be universal, but phonetic contrasts cannot be. In dialect work, we must start very generally with such things as place and manner of articulation, the state of the velum and the glottis etc. (cf Abercrombie, 1967:42), since phonetic contrasts may not follow any of the traditional distinctions, e.g. Scouse /ə ð t d k g/ do not really fit any of the categories stop plosive affricate or fricative, so that the endings of let, let's, less do not conveniently contrast as stop vs affricate vs fricative.

In the case of vowels, the limitations of cardinal vowel theory have to be taken into account. Very different vowels may have to be plotted at the same position, e.g. a maximally close

front spread vowel with retracted tip is clearly different from one with the tip down by the lower teeth, but both would have to be plotted at Cardinal 1. Similarly, the Scouse vowel in book might be judged to be almost close, front of centre, and rounded; but if one then produces cardinal  $\left[ \text{y}^+ \right]$  it might sound disconcertingly different. The tenuous link between auditory quality and the articulatory terminology brings its own problems. The vowel /u/ of cod in Scouse may be judged "rounded" as opposed to the "neutral" /a/ of card, and yet the lip positions are indistinguishable. The vowel of tub may well sound "closer" than the vowel of but, although this impression is probably due to anticipatory rounding before /b/. Of the variant vowels in girl,  $\left[ \text{e} \right]$  sounds "closer" than  $\left[ \text{e} \right]$ , but they differ in the degree of lateral spreading of the tongue.

The above arguments cast considerable doubt on the amazing virtuosity sometimes found in dialect work. The dialectologist may be reacting to some difference of accentual information in the sound wave, he interprets it phonetically, and marks it in his transcriptions. To anyone else, unfamiliar with the original accentual differences, the transcription appears to be marking differences much finer than any phonetician can consistently discriminate. Any less detailed transcription would miss the essential accentual information, and accordingly be useless.

Phonology must be based on a 'systematic' rather than an 'impressionistic' transcription, (cf Abercrombie, 1954:110). The

symbols mark linguistic distinctions, and details of realization are given in a set of conventions. The latter are as precise as is possible with auditory analysis, and the possibility is left open of a rather different acoustic analysis, e.g. if we say of initial /d/ that voicing begins during its formation, we may in fact be responding to slight pitch movements or formant transitions as well as to glottal vibration. An extremely 'narrow' transcription, in which the information of the conventions is expressed instead by the symbols themselves, is the end product of analysis, rather than the starting-point.

Paradoxically, it is possible to arrive at these conventions after detailed study of the material, without necessarily being able to give a detailed impressionistic analysis of any particular case. For example, as the tongue flattens out for Scouse /r/ the raised tip passes near the alveolar ridge, or it may actually strike it: in any particular case it may be impossible to hear whether contact is made or not. Auditory analysis is not sufficiently precise for the general conventions to be arrived at by strictly inductive methods. One can only set up a rule as a hypothesis, test it against the material, and modify it if it is obviously wrong. Thus a rule stating that Scouse "voiced" consonants were phonetically voiced would have to be modified to something like 'the part of a "voiced" consonant adjacent to a voiced environment is phonetically voiced'. Similarly, 'Scouse alveolar consonants are apical' would have to be revised to 'apical or laminal', even though one can often not hear the difference, and one is unsure what one is responding to in those cases where one can hear a difference. For vowels, a

general hypothesis may be the only possible approach; e.g. Scouse /aɪ, aʊ/ may have more centralized first elements before voiceless consonants, but since these diphthongs usually begin away from the periphery of the vowel area anyway, it is impossible to say for any occurring vowel whether it is "more" centralized or not. The second elements of Scouse diphthongs tend to be more prominent than in RP, but to say of any case that an RP-speaker would have made it less prominent is to go far beyond what is normally thought of as transcription.

### 3.5.1. Phonetics in Socio-Linguistics

In urban dialectology we are concerned not only with variation in language, but also with its social distribution. The obvious way to go about it might seem to be to transcribe a body of material, identify the variants, and work out mathematically that a given group uses a given form n per cent of the time. Alternatively, phonetic forms can be given arithmetic values, and an average score can be calculated for a particular group. The socio-linguistic patterns can then be identified by plotting the percentages or scores on a graph.

One must not be misled by the apparent precision of the mathematics, into thinking that the socio-linguist has in any way solved the problem of impressionistic transcription. In fact, he has the problem twice over: his phonetic analyses are liable to be determined not only by his intuitive response to linguistic distinctions, but also to the very social variation he is studying. To return to our Scouse example breathe, he might claim to transcribe

/ð/ as a post-dental stop in Scouse, and then demonstrate that this is a non-prestige form: he cannot prove that he has not simply reacted intuitively to occurrences of non-prestige /ð/ and labelled them post-dental stops. He may only discover his mistake when he hears a clear example of a non-prestige fricative.

Difficulties of this kind are found in Labov's (1966) analysis of variables in New York speech. His work is particularly relevant, as some of his variables have their counterparts in Scouse.

Labov adopts a phonemic model, even though his variables cut right across the boundaries of what might be thought of as phonemes. He defines the phoneme (p520) as 'the minimal unit which is used to distinguish words or word sequences', even though this definition cannot deal with such familiar examples as train/drain or writer/ rider. It can be approached either through contrast or the distribution of speech sounds (p520). If the phoneme is a 'functional unit' one would expect both approaches to give the same result, but in fact they conflict (p523). Instead of tracing the difficulty to the assumptions implicit in the theory, he evolves an extremely complex model to reconcile the two approaches.

Phonemics treats the speech event as a sequence of segments, and Labov's variables are consequently segments. This is very convenient, as segments are readily computible, but it is essential that any units on which, the computation is based should be discovered and not invented by the analysis. In fact, it is doubtful whether any variables really represent a choice between segments; even in a case like Scouse sure the choice is not between a segment [ue] and a segment [ɔ], but rather the realization



set containing [ue] and the set containing [o]. (The "same" variable occurs for other people as a choice between [rwe] and [o], and for yet others between [ue] and [o].) Variables may also be rhythmical, or concerned with general patterns of realization, e.g. there is no Scouse segment [t<sub>1</sub>] corresponding to an RP segment [t<sub>2</sub>], but rather Scouse and RP differ in the place and manner of production of /t/. It is possible to compute variation between sets, but not within a set, because in the latter case it is not possible to transcribe with sufficient accuracy.

Labov avoids this problem because his "phonetic" categories are really intuitive response labels. For example, he claims to distinguish no fewer than eight degrees of retraction for open vowels (p386); it is certainly possible to find eight vowel types in different varieties of English, all of which would be described as 'open' - Labov defines six of the eight degrees with reference to such types - but they differ far more than in the auditory quality front-back. In his preliminary work in New York shops, he elicits the phrase fourth floor from assistants, with a repetition in a contrasting style; he then records the details of /ə/ and post-vocalic /r/. In such circumstances one can certainly distinguish prestige and non-prestige forms, but one cannot be sure of phonetic details.

The variants of /r/ involve the presence or absence of constriction (p59), and constriction is defined (p579) as 'narrowing of the space available for the passage of air in the articulation of speech sounds'. 'Narrowing' is of course a relative term, so that

'a definitely constricted [r̥]-like sound' is meaningful only in its social context, and a "constricted" /r/ is synonymous with a "prestige" /r/. A comparable example is found in parts of Ulster, where a weakly retroflexed /r/ has more prestige than a definitely retroflexed one: the only definitions of "weakly" and "definitely" in this context are the social ones.

Where there are several forms for one variable, Labov seeks to quantify them on a linear scale (p49). The vowel in bad, bag, ask (p52) is plotted on a scale of vowel height, although the variable in fact involves other features like length and diphthongization. However, in the computation, the vowels in the scale are treated as different segments, and the phonetic feature of height is of no consequence. It is only brought in to apparently justify the social grading of the vowels.

In phonology generally, it is reasonable for the analyst to restrict himself to phonological classes, and it is only for purposes like dialect comparison that he needs to probe into details of phonetic realization. It is equally legitimate for the socio-linguist to deal only with social contrasts, and to plot variant forms on a scale of social prestige. This scale can be justified on its own terms and there is no need to appeal to phonemics or phonetic terms. Labov's work on the speech of New York is rightly considered a major contribution to socio-linguistics, and our objections apply to the presentation, and not to the substance, of his conclusions. At the same time, Labov's methods are of only secondary interest to the urban dialectologist who is chiefly concerned with the phonetic realizations of phonological classes and variables.

Appendix 4:

Phonetic Symbols

IPA symbols are used as far as possible, although some modifications have been necessary, since only a few extra characters can be fitted on to the typewriter.

In the consonants, [ɢ] is used for [g], and [ʔ] for the glottal stop, and the comma serves for the cedilla of [ç] and the tail of palatal [ɲ]. The symbol [r] is used as far as possible, but where a distinction is necessary, [R] is used for the flap, and [r] for the continuant. Dentals are marked with capitals, [T D L N], following established practice in Irish studies. Velarized consonants have a hyphen through the symbol, e.g. [ɫ̠ ʔ̠ e]. Devoicing is marked by a small circle below or above the symbol, e.g. [v̱ ɢ̱], and syllabic consonants are marked by a raised or lowered vertical dash, [ŋ̣ ʔ̣ ɫ̣]

The vowel symbols draw on the primary and secondary cardinals as appropriate, and also on the central cardinals (Abercrombie, 1967:161). A vowel raised from cardinal is marked with a lowered dot [ė ȯ], and a vowel more open than cardinal has a lowered comma [ẹ ọ] in place of the conventional hook. Fronting from cardinal is marked by a plus sign after the vowel symbol [o+ u+], and retraction by a minus sign [e- a-]. The symbol [ʰ] marks a centralized vowel, i.e. one which is raised or lowered, fronted or retracted from cardinal in the direction of schwa, so that [ä̈] represents vowels in the range [ä̈-] to [ä̈+], and [ö̈] the

range [o+] to [e-]. (This is a departure from IPA convention, but is necessary to account for the process of vowel reduction.) The colon as a mark of length will be little used, as length is too easily confused with duration, and can be inferred anyway from the vowel symbol itself.

Systematic transcriptions are based on the symbols used by Gimson (1970), but without length marks. For Scouse, comparative symbols are used where appropriate - [ɛ a ɔ ɪ ʊ au] for RP [e ɜ u ɛɪ ɛʊ au] - but only one of the symbols is used where explicit comparison would be irrelevant and confusing. Other Scouse symbols are introduced ad hoc and are either explained in the text, or are self-explanatory. For comparison within Scouse, [ɜ] is replaced by one of the set [ɜ ɜ+ ɛ ɛ e]; a minor problem here is that in [ɜ+] the plus sign is added to the systematic, and not the cardinal, value of [ɜ] ([ɜ+] is aesthetically preferable to [ɜ'] or [ɜ<sup>2</sup>]). In addition to the usual non-cardinal [ɪ ɛ u], we shall use [ɛ] for a vowel roughly in the position of cardinal [ɛ] but more open.

The use of the tone-marks [ˈˈˈ] is explained in the chapter on intonation.

Phonological representations are enclosed in round brackets, e.g. (ɜr). Relatively broad transcriptions (there being no level which is strictly "phonemic") are given in slants, e.g. /ɜ/, and phonetic symbols in narrow systematic, or detailed impressionistic, transcriptions are enclosed in square brackets, e.g. [ɛ, e-].

4.1. Articulatory Setting and Voice Quality

In the conventional approach to dialect study, phonological categories of different kinds are set up and used to account for dialect differences. This can deal satisfactorily with dialect features concerned with the realization of phonology, but it does not go very far into analyzing the total undifferentiated characteristic sound which the layman responds to when he distinguishes one dialect from another, and which may not strictly be part of 'language' at all. It is frequently observed that people speaking different dialects actually look different, and appear to be using their speech organs in different ways. The investigation of this 'setting' of the organs is extremely subtle and difficult, but it is an essential part of a dialect description, for the 'setting' is sociolinguistically as important as phonology, if not actually more important. An actor who can imitate the Scouse setting successfully conveys the fact that he is playing a Liverpudlian, even though his attempt at the phonology may be poor: a dialectologist who reproduces the phonology correctly in terms of some generalized 'phonetic' quality may not sound like a Liverpudlian at all if he fails to imitate the setting.

For phonological realization, there are minimal articulatory or auditory requirements, beyond which there is considerable freedom. For example, English /t/ requires a closure - or near closure - between some part of the tongue and the roof of the mouth in the region of the top front teeth or the alveolar ridge: the details

are determined partly by the phonetic context - by the need to move smoothly and efficiently from one position to another - and partly socio-linguistically. For reasons of efficiency, one would not expect the under surface of the tongue to be used for /t/ - just as one would not expect the inner surfaces of the lips to be used for /b/, or the root of the tongue to be stretched up to meet the velum for /k/ - but where alternative positions are equally efficient the choice may be socially significant. In the case of vowels, a given 'phonetic' quality can be achieved in various ways; e.g. [i] can be made with the tongue tip retracted and pointing towards the alveolar ridge, or protruding between the teeth, or held down by the lower teeth. As the tongue shape changes, the total auditory effect of the vowel obviously changes with it: but that aspect of the quality which the phonetician extracts when he plots the vowel on the trapezium - and by implication what the native speaker responds to when he distinguishes one vowel from another - can be kept fairly constant. Articulatory setting is concerned with the way this phonetic freedom is exploited for socio-linguistic purposes by any accent or dialect.

In extreme cases, as in Scouse, the setting involves a distortion of the vocal tract. To some extent, of course, all speech production involves a distortion of the tract, in so far as the speech organs necessarily move away from the physiological state of rest (Strenger, 1968:337). We leave open the question whether some settings are more 'natural' than others, and to that extent undistorted. What is clear, however, is that there are no such things as "settingless" vowels and consonants. The cardinal

vowels and informal cardinal consonants used by phoneticians are assumed to be valid reference qualities for the wide variety of sounds produced in different settings; this may be because the cardinal setting somehow optimizes the phonetic quality (although it is not clear what phonetic quality means in this context, see Ladefoged, 1967:75-103). In the cardinal setting, for instance, there is a rough correlation between tongue height and the degree of rounding for the vowels a - o - u - y, and a further rough correlation between the size of the aperture and the degree of lip protrusion. In natural speech there is frequently no such correlation. Vowels may be overrounded or underrounded relative to cardinal, and consequently difficult to place, e.g. Scouse back vowels tend to sound "closer" in the environment of labial consonants, although there is unlikely to be any significant difference in the tongue position. The auditory effect of "rounding" can be achieved by movements of the cheeks, the tongue or the jaw as well as the lips, and a variety of lip movements are possible. A remarkable example is found in the West Riding vowel in no, for which some speakers produce "rounding" by pushing the lower jaw forwards so that the lower front teeth are vertically below the uppers or even a little more advanced, and simultaneously pushing the lips forwards. For the Ulster "close rounded" vowel of two [tʷ], or the second diphthongal element in town [tʷɛn, tɛn], the lips are characteristically pushed vigorously forward with an extremely wide, roughly circular, aperture exposing the front teeth. In a Southern Irish type - which is possibly the origin of the Scouse rounding - the lips are held more or less horizontal and parallel, with a narrow slit-shaped aperture; "rounding" is achieved by a

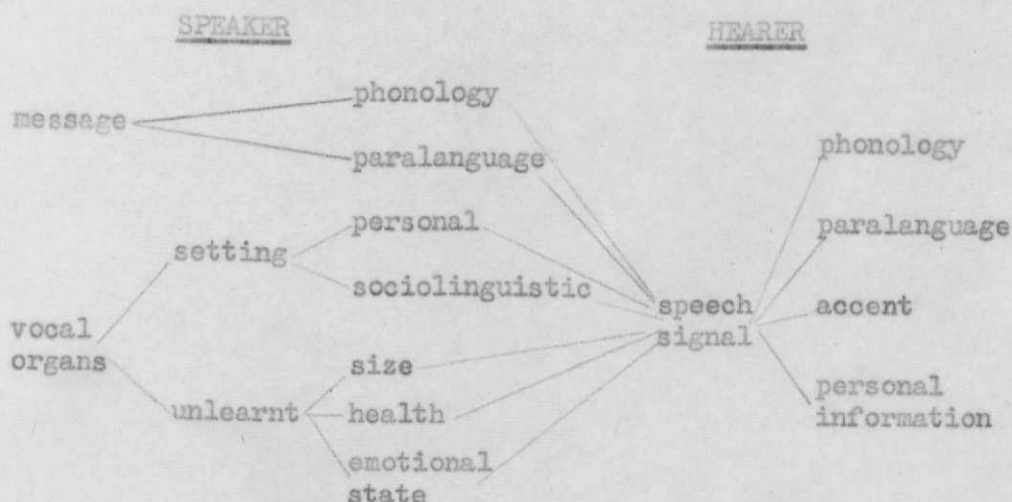
vertical movement with little protrusion, bringing the lips together and reducing the size of the slit. Similarly, there is no single "closed" position of the velum corresponding to cardinal "oral" sounds, or a single "closed" position for "nasal" or "nasalized" sounds; there are in fact a number of possible positions, and nasality is achieved by the velo-pharyngeal mechanism as a whole. Cardinal theory is accurate enough to deal with linguistic information, but not accentual information. Part of the object in describing the Scouse setting is to formulate a theory of specifically Scouse vowels and consonants.

In a signalling system, the total quality of the physical signal is determined partly by the message conveyed, and partly by the signalling mechanism itself. Thus traffic light signals have brightness and duration, although the 'message' is restricted to the colour; morse signals have timbre and loudness, or colour and brightness, although the 'message' is conveyed by duration alone. In these cases, it is relatively easy to separate the message from those irrelevant features which happen to occur with it. In speech, a person has a message to convey - he must realize phonological categories - but the actual signals he produces are partly determined by the setting of the speech organs: in this case it is very difficult to isolate the 'message' from other features of sound.

In the conversational situation, there are different kinds of message being conveyed simultaneously, using the same organs to some extent (see Abercrombie, 1968). The lips may be spread to achieve the appropriate quality for certain vowels, or they may be



spread for a grin; whisper might be used as part of the realization of certain consonants, or it might mark an utterance as confidential. (Although facial gestures like grins, smiles, or a pouting of the lips to express doubt, are primarily visual, they do have an appreciable auditory effect: this is intuitively ignored in impressionistic transcriptions.) The sounds a person can produce depend on the size and health of his vocal organs, and - for any utterance - on his emotional state. His articulatory setting is partly idiosyncratic, and partly determined by his socio-linguistic group. There are thus a large number of factors which combine in the speech signal. The hearer has somehow to unscramble different kinds of information: phonological, paralinguistic, accentual and personal.



These factors are not altogether discrete. Emotion can bring about changes in pitch range and tempo, which also occur in phonology under 'intonation' and 'rhythm' respectively. A temporary speech disorder - a congested nose, laryngitis, or even a pipe held between

the teeth - has a direct effect on phonological realizations. It is quite possible for the hearer to wrongly interpret part of the signal, or for a speech community to re-interpret a particular quality of sound. To take an extreme hypothetical example, suppose that a number of (possibly prestigious) persons in a community had cleft palates: 'cleft palate speech' could be adopted as a personal setting by individuals with normal palates, and could become in time the normal setting for the community with a permanent affect on realizations, e.g. a voiceless alveolar nasal would be the normal realization of /s/.

Some facts of speech production can be interpreted as 'setting' or 'realization' or both. As part of the Scouse setting, for example, alveolar consonants are typically produced with the blade of the tongue rather than the tip; the blade is subsequently specified in the realization rules as the active articulator. It might reasonably be asked whether it is really useful to isolate the setting in this way, if all the relevant information is repeated in the phonology anyway. There are two answers. First, realization rules are not concerned with the speech signal as a whole, for the effects of paralanguage and personal idiosyncrasies are deliberately ignored: the question is not therefore whether particular patterns should be isolated or not, but how far this process should be continued. Secondly, apparently random details of realization can be shown to be closely related in terms of the setting, so that the notion of setting leads to significant generalizations which would otherwise be lost. In Scouse, for example, the blade articulation of /t/ is

closely connected with the flapping of /r/ and the position of the jaw for /a/; the position of the back of the tongue for /t/ is connected with the behaviour of the velo-pharyngeal mechanism for nasal consonants.

An understanding of the setting and other non-phonological aspects of the speech signal is essential for any useful interpretation for descriptive purposes. I am indebted to a Danish phonetician, Mr Lars Sørensen, for a striking illustration of this. Occurrences of Scouse grey and zoo were transcribed [grɛɪ, zɪu] by me, and [græɔ̃, zɪv] by Mr Sørensen. As a native speaker, I intuitively interpreted the trailing off of voice in grey as socio-linguistic information, accounted for by a general rule of Scouse phonation; the Dane, lacking the native intuitions, necessarily interpreted it phonologically. In zoo, I interpreted the final labio-dental approximation as a compromise between a lip-spread setting and rounding for the vowel, whereas the Dane heard it as a variety of English /r/. I suggest that first, Mr Sørensen made two excellent impressionistic transcriptions, and secondly, following conventional procedure one could include voiceless palatal fricatives and (voiceless) labio-dental approximants as part of the realization of Scouse /ɛɪ/ and /u/ respectively. Such an analysis would only obscure the relationship between Scouse and other varieties of English: a description of the setting makes those relationships perfectly clear.

In the discussion of settings, it is useful in practice to distinguish features concerned with articulation from those concerned

with vocal resonance, and we shall accordingly distinguish articulatory setting from voice quality. Very roughly, the former is concerned with the front of the mouth, and the latter with the back of the tongue and beyond, although in practice articulatory setting and voice quality overlap. The term voice quality has been used in a variety of senses (Crystal, 1969:100-04), referring to personal characteristics, or what Crystal (p133) calls voice qualifiers - like whisper, breathy voice, or creaky voice - and voice qualifications, like laugh, giggle and sob. We are here using it in a rather different sense, for what Crystal (p123-4) calls voice stereotypes or 'the non-linguistic vocal basis which identifies regional or social groups'.

#### 4.1.1. Settings in the Literature

The investigation of settings and voice qualities is fairly well established as a branch of general phonetics (see, e.g. Laver, 1968), but it is certainly unconventional as part of the description of particular languages and dialects. Scattered observations are found in the literature since the time of Sweet, e.g. in The Sounds of English (2nd edition, 1910:57-8):

"Each national sound system shows certain general tendencies which control the formation of its sounds, constituting its organic basis (basis of articulation). The general tendencies of present English are to flatten and lower the tongue, and draw it back from the teeth, the lips being kept as much as possible in a neutral position. The flattening of the tongue makes our vowels wide, and favours the development of mixed vowels...The retraction of the tongue gets rid of point-teeth consonants. The neutrality of the lips has eliminated the front-round vowels."

Sweet thus sees the setting as a dynamic factor in speech production and sound-change. In describing Scouse, it is very tempting to argue that certain sound-changes are somehow due to the setting; but one can equally argue that the sound-changes have brought about the evolution of the setting. We have already pointed out that Scouse generally conforms to the phonology of North-Western English; for this dialect, the phonology is in a sense prior to the setting, rather than the other way round, as Sweet appears to argue for English as a whole. In fact, the relationships between setting and phonology are far too complex to be analyzed in simple terms of cause and effect.

In The Phonetics of English, Ida Ward makes general observations on American English:

"The quality of vowels and consonants is influenced by a tendency to draw back the whole of the tongue somewhat and to raise the back towards the hard palate; in many cases too, the back of the tongue appears to be hollowed, i.e. it has a furrow down the middle and the sides are raised a little. As a result of this tendency, consonants articulated at or near the alveolar ridge have a secondary articulation; they are velarised or "dark"."

Velarization is also found in some (Northern) Irish and Scottish varieties of English. One might object to the term 'secondary articulation' on the grounds that if velarization is secondary for phonology, it might still be of primary importance sociolinguistically (see also Laver, 1968:46).

An extremely clear description of the RP setting is given by Miss Honikman in her article entitled Articulatory Settings (1964):

"This noticeable lack or, rather, near-lack of activity of almost closed jaws together with relatively unvigorous lip-rounding are essential features of good, unaffected,

everyday English utterance:..." (p75)

"...the tongue is tethered laterally to the roof of the mouth by allowing the sides to rest along the inner surface of the upper lateral gums and teeth; the lateral rims of the tongue very seldom entirely leave this part of the roof of the mouth, whereas the tip constantly (or some other part of the dorsum, occasionally) moves up and down, periodically touching the central part of the roof, but generally not for very long at a time, before it comes away." (p76)

"...the pharynx...is generally relaxed....In consonants with median closure the pressure exerted by the 'articulator' upon its opposite number is firm..." (p79)

Miss Honikman actually refers to the "English" setting, but there is considerable difference from one variety of English to another, and we shall take her description to be restricted to RP.

In a description of Irish in Rathlin Island, N.M.Holmer (1942) reports that a man from the Glens of Antrim claimed that "you turn the tip of your tongue upward when you speak English and downward when you speak Irish". Holmer then observes:

"At rest, the organs of speech have a characteristic position in every language, and in the Gaelic dialect of Rathlin this position is about the following: The lips are slightly drawn apart sideways (they are never protruded), the jaw is relatively low, and the middle part of the tongue is low and rather much retracted, while the point seems to lie opposite the lower front teeth."

There is thus ample precedent for the description of settings, even if writers are not entirely agreed exactly what setting is. We are merely going beyond making just a few introductory remarks, and including it as an essential part of our description of Scouse, preparatory to the phonology proper.

#### 4.2. The Scouse Articulatory Setting

For convenience, we shall treat the visible external setting of the lips and the jaw separately from the internal setting of the tongue. We shall also separate the effect of the internal setting on the production of vowels and consonants.

In view of the inherent difficulty of describing settings, the following account will be to some extent subjective: I shall describe what I do when I speak Scouse, and how I switch to my approximation to RP, keeping to those features which I judge from visual and auditory observation to be sociolinguistically significant, rather than idiosyncratic.

##### 4.2.1. The External Setting

It would seem intuitively correct to claim that Scousers speak with minimal movement of the lips and jaw, but this encounters two immediate difficulties. First, minimal movement is generally recognized as the external setting for English as a whole (see, e.g. Honikman, 1964:80-1), and yet Scousers look quite different from RP-speakers. Secondly, as a matter of observation, Scousers do in fact make considerable movements of lips and jaw in speech.

RP back vowels have less lip-rounding than would be usual in some other languages, but some RP consonants - /w r ʒ ʒ ʒ/ and possibly /l/ - sometimes have vigorous rounding; lip-rounded stretches, as in the second syllable of Cambridge, or all segments of children except the last, are distinctly prestigious. In Scouse, except for /w/, consonant rounding occurs only sporadically as an idiosyncratic feature. In RP, rounding is characteristically - but not exclusively - achieved by protruding the lips and bringing the

corners of the mouth closer together, thus making a ring-shaped aperture (see, e.g., Daniel Jones's photographs of lip-positions, 1960:77,79,82,83). Scouse rounding characteristically has a vertical approximation of spread lips reducing the size of the slit between them; Scousers vary in the degree of protrusion, but it is usually relatively slight.

The opening of the jaw differs only in degree. In my RP, I tend to keep the top of the lower front teeth at about the same level as the bottom of the uppers, closing the jaw slightly for close vowels, and opening it a little for open ones. In Scouse, I tend to keep the lower front teeth behind the uppers.

The settings thus described are paralinguistically neutral. In the conversational situation, facial gesture also involves the lips and jaws, and it is possible that dialects differ in the integration of setting and gesture. Impressionistically, RP-speakers tend to compromise between gesture and lip movements, whereas Scousers tend to give overriding importance to the gesture. The details of Scouse rounding thus depend on the gesture:

(1) The smile, with the lips spread and parted, and the corners of the mouth drawn back exposing the teeth. Rounding in e.g. [.'jru] 'You!' or [.'wen] 'When?' is achieved by a mere tensing of the upper lip, and a movement of the more mobile lower lip towards or into contact with the upper teeth.

(2) The grin, with the lips spread and parted as far as the corners of the mouth. Rounding involves raising the lower lip to decrease the width of the slit, possibly making contact with the upper lip at some point, not necessarily at the corners.



(3) Neutral, with the lips parted centrally, but meeting at the corners. Rounding involves increasing the area of contact towards the centre, and decreasing the aperture.

(4) The hostile look, as for (3) but with the lips tensed, and perhaps a little more spread, and used to express anger, as a 'tough guy' expression, or to give abuse, e.g. [ \ a je .wet ] 'Ah, you wet!'. For rounding, the lips as a whole move together and may touch, possibly accompanied by a general contraction and sudden relaxation of the sphincter muscle.

(5) The puzzled look, with the upper lip raised and exposing the upper teeth, indicating that the previous speaker has said something puzzling or inopportune, and possibly giving the unintended impression of stupidity. It is used to show disapproval or for queries like [ je ' .wd ] 'You what?'. For rounding, the lower lip cannot meet the upper lip, and moves towards the upper teeth.

(6) The look of disgust, as for (5) but with the lower lip vigorously pouted and the inner surface near or in contact with the upper teeth, e.g. [ 'y wɔr . 'iz it ] 'Ugh! What is it?'. Rounding involves raising the lower lip further towards the upper lip.

(7) The gawp or 'blank look', with the cheeks and lip muscles relaxed, and the lower lip hanging down leaving an elliptical aperture. For rounding the lower lip is drawn upwards and backwards.

(8) The shout, with the lips widely parted and with a roughly circular aperture; rounding tends to be labio-dental.

There are also, of course, bilabial movements for /p,b/ and /m/, and labio-dental movements for /f,v/, and possibly slight spreading sometimes for /i/ and /ɪ/.

The position of the jaw also varies according to gesture:

(1) Normal, with the lower front teeth behind the uppers, and the jaw almost shut for close vowels and slightly more open for open vowels.

(2) Relaxed for the gawp, with a slight gap between the lower and upper teeth, and not much difference for close and open vowels.

(3) Open for the shout, possibly even making the tongue visible in shouting open vowels.

A Scouser may thus use a large number of facial movements in speech, but these are largely paralinguistic. Apart from the labial consonants, linguistic movements involve only a slight modification of given positions. For our further discussion, we shall assume a paralinguistically 'neutral' lip position, and 'normal' jaw position. It is in these positions that the Scouser can be said to hardly use movements of the lips and jaw at all.

#### 4.2.2. Internal Setting

Scouse is typically velarized speech. That is the centre of gravity of the tongue is retracted and raised (Laver, 1968:46); unless it is incompatible with the articulation of a particular segment, the back of the tongue is kept raised towards the velum. The constriction at the back of the mouth increases the size of the cavity at the front, but the latter is decreased by the close jaw

position: perhaps there is some connection between the external setting and velarization.

The tongue tends to be somewhat contracted laterally, and the tip stays down by the lower front teeth. The front of the tongue may be flat, or it may be depressed or hollowed out; the latter shape contributes to the auditory effect of rounding, and often accompanies the appropriate lip movement.

#### 4.2.2.1. Consonants

Scouse alveolar consonants are "darker" than in RP. An exception is /l/, which is velarized rather than pharyngalized as in the South of England; since Scouse /l/ does not vary much according to syllable position, it may sound perversely "dark" initially and "light" after a vowel. (On 'pharyngalized /l/' see Abercrombie, 1967:63).

As a result of the close jaw position, the tongue moves in a very restricted space, and its own preferred positions hamper movement even further. In particular, the tip - the natural flexibility of which is fully exploited in RP - becomes relatively inflexible. Alveolar consonants, including /n l/ may be made by the tip and blade rather than the tip itself; /t d s z/ may use just the blade, with the tip down by the lower teeth, and the front of the tongue may be used for /ʃ ʒ ʒ ʒ/, instead of the tip and blade as in RP (Gimson, 1970:174,186). Tip-down articulation would appear to be commoner for younger people than older; this might be a case of sound-change brought about by the setting. (It is worth pointing out that the auditory effect of lowering the tip completely overrides for me the effect of velarization, although this is not true for non-Liverpudlians. In Merseyside, the laminals are "Scouse"

and "non-prestige" forms, and velarized apicals are "normal" "middle-class" and "prestige" forms. In the wider English context, velarized alveolar consonants are indicative of Merseyside speech.)

For /r/, the front of the tongue is hollowed out as for rounding, and the tip is raised slightly behind the alveolar ridge. When /r/ occurs between vowels, as in mirror, orange, or after a consonant in a syllabic onset, e.g. three, fresh, brown, the tip may strike the ridge in passing, either when moving to the raised position or when flattening out again. Hence Scouse /r/ is frequently technically a flap (see Abercrombie, 1967:49-50).

In the case of /θ ð/, the tip tends not to stretch between the teeth, but moves up behind the upper teeth; the Scouse consonants sound as a result not quite like RP interdental fricatives, and not quite like Anglo-Irish postdental stops. (Actually, postdental stops do occur in Scouse, but they sound more like fricatives or affricates, see next paragraph.)

Articulation is generally lax in Scouse - this applies to the lower lip as well as the tongue - and the active articulator exerts little pressure on the passive one. For stops, the pressure is often insufficient to make or maintain the closure, so that these consonants are often impressionistically fricatives or affricates (more precisely, the 'cardinal' categories of stop, fricative and affricate are inappropriate for the description of Scouse consonants). The approximation of the articulators for 'fricatives' tends to be less close in Scouse than is usual in RP. This laxness of articulation contrasts with the tension used in the Scouse voice quality (q.v. below).

#### 4.2.2.2. Vowels

The raising of the back of the tongue is of course incompatible with the production of most vowels, and this part of the tongue setting is temporarily lost. The effect of velarization is however to retract short front vowels, and to "fracture" long vowels, e.g. [b<sup>ə</sup>n, n<sup>ə</sup>-k] 'bin, neck' but [l<sup>ɛ</sup>g, a<sup>ɛ</sup>n, kwɪ<sup>ɛ</sup>n] 'leg, arm, queen'. (Diphthongal glides according to the "colour" of the following consonant are important in Anglo-Irish phonology; if the Scouse glides are in any way connected, they are a mere vestige. Fracture before /l/ as in field or felled is normal in RP.)

The use of tongue-rounding makes it difficult to round front or central vowels. The conservative rounded central vowel /e/ in girl, there is obsolescent, and commonly replaced by /ɛ, ɐ/ with a flat tongue surface. For the remaining close central rounded [ɘ] of school, cook, there may be some very slight protrusion and raising of the tip.

Lateral contraction and the low forward position of the tip are maintained where possible. The exact details of tongue shape - in particular the 'highest point of the tongue' - are extremely complex and not fully understood, but the behaviour of the front part of the tongue can be observed. In my Scouse /i/ in heap, the centre of gravity of the tongue is brought forward and up, but the tip is lower than for my corresponding RP vowel, and there is less pressure at the sides. For my Scouse /a/ in harp the tip is still forward, while for my RP vowel the tip is somewhat retracted and the tongue is slightly contracted lengthwise.

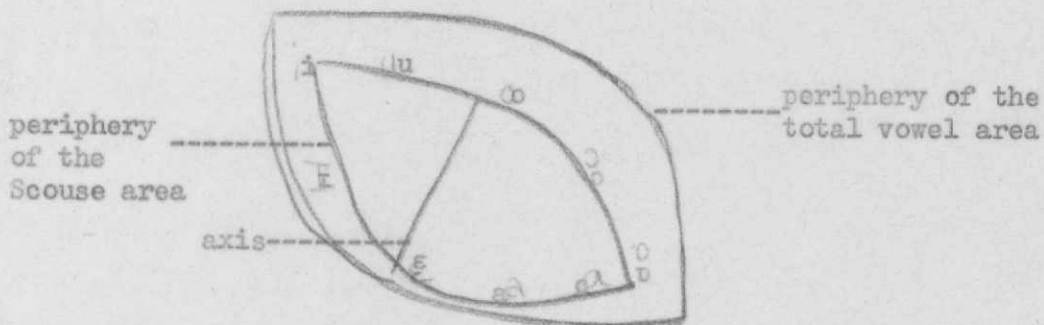
The peculiarities of Scouse vowel production raise the question

whether it is valid to plot Scouse vowels impressionistically on the cardinal vowel trapezium. The link between auditory quality relative to cardinal and any actual position of the tongue is rather tenuous; what one hears as a degree of 'raising', 'retraction' or 'rounding' may be due to something quite different. The distortion of Scouse vowels relative to cardinal must be accounted for by the Scouse setting, and not in terms of the conventional categories. That is, Scouse vowels must be related to "Scouse cardinals", or Daniel Jones's cardinals reproduced as closely as possible with a Scouse setting.

The cardinal trapezium represents in a very stylized and conventional way (Abercrombie, 1967:157-8) the total vowel area. Scouse vowels tend not to occur on the periphery of the area, and are to that extent centralized. The vowels nearest the periphery define what might be called the "Scouse vowel area". Vowel positions and movements which appear haphazard and unrelated when plotted on the trapezium, can be seen to belong to a pattern in the Scouse area. (Cockney vowels might also be profitably described in terms of the "Cockney vowel area", of the random positions on the trapezium plotted by Sivertsen, 1960:37).

The positions of Scouse vowels in the Scouse area possibly relate in some way to movements of the centre of gravity of the tongue away from its preferred position. It is not very useful when discussing vowels to talk of vertical or horizontal movements of the tongue, since e.g. the "vertical" "lowering" from [i] to [a] also involves retraction, and the "horizontal" "fronting" from [u] to [y] also involves raising. Tongue movements follow the

periphery of the vowel area relative to some axis, and this axis is dependent on the setting (it need not be parallel to the horizontal lines of the voweltrapezium). A clue to the axis is given by the neutral vowel, which in Scouse varies from fairly close and back, say [ɤ-] as in heaters, to almost half open and fairly front, say [ɛ-] in final position as in heater: what for Scouse is simply fronting without raising or lowering, would be plotted as fronting and lowering on the trapezium. The various vowels are raised or lowered in different degrees from this axis. By convention, vowels which are not fronted are rounded, and raising and lowering also involve a forward or backward movement of the tongue according to the position in the vowel area:



/u/ as in boot is raised, and /o o v/ as in but, bought, pot lowered from the axis; /i ɪ/ as in beat, bit are fronted on the axis and raised, and /ɛ a ʌ/ are fronted and lowered. The remaining monophthong is the long vowel of girl, there. Conservative /e/ is raised from the middle of the axis, and thus in addition to the question of rounding, fails to fit the general pattern; /e/ is unrounded and lowered to the axis,

i.e. [ɛ̄], and then fronted along the axis to [ɛ̄̆], so that the vowel of bared is longer than the vowel of bed but quite similar. In the final stage, the centre of gravity of the tongue appears to be brought even further forward, so that the tip is pressed against the lower front teeth and the bulk of the tongue spreads out laterally against the molars or between them; the surface of the tongue also rises so that the vowel appears to have been raised. On the trapezium, this new vowel [ɛ̄̆] would have to be plotted at about the same position as /ɪ/, although - leaving aside the difference of duration - the quality of the two vowels is rather different.

This description of Scouse vowels is admittedly speculative, and is put forward extremely tentatively. However, there is no doubt at all that there is far more to describe than can be done by plotting Scouse vowels on the trapezium and marking degrees of rounding. If the present theory proves untenable, some other means must be found of relating the auditory quality of Scouse vowels with general patterns of Scouse speech production.

#### 4.3. Scouse Voice Quality

Scouse is popularly said to be spoken with a "nasal twang" and at the same time to be "adenoidal". These labels may or may not be self-contradictory. One difficulty is that many dialects - Cockney, the dialects of Dublin and Belfast, American English in general - are said to be "nasal", but "nasality" is very different in each case.

The nose is used in several ways in normal speech. In a nasal consonant, the air-stream passes out of the nose, and the mouth acts



as a cul-de-sac resonator (Kaplan, 1960:179), varying in size for /m n ŋ/. For a nasalized vowel, the nose acts as a cul-de-sac, and the air-stream passes out of the nose: some air does normally pass through the nose, but if the flow is stopped - e.g. by pinching the nostrils - the quality of sound is relatively unaffected. If a speaker's nose is severely congested, e.g. with a heavy cold, the air cannot pass through, and he cannot produce normal nasal consonants. If the blockage is only partial, he can produce nasal and nasalized sounds but with impaired resonance: however, this impaired resonance affects his speech as a whole, including what are normally thought of as "oral" sounds.

It is likely that for most sounds - all English vowels and all voiced consonants except stops and nasals - there is some cul-de-sac nasal resonance. Velic closure is sufficient to stop air passing through the nose - the oral route offering much less resistance - but allows resonance in the naso-pharynx and nasal chambers. The position of the velum varies from one sound to another and from dialect to dialect. (Nasality is also idiosyncratic, some people's voices sounding more nasal than others, but this does not interest us here.) For Cardinal 1 I push the velum vigorously against the wall of the pharynx, but the closure is not so tight for Cardinal 5. For the RP vowels in peak and park, the velum is generally more relaxed, but there is tighter closure for peak; the corresponding Scouse vowels have the velum more relaxed again. Scouse /æ ɔ/ often sound nasalized, but this nasality is quite different from 'cardinal' nasalized vowels, or even those of French, where the velum makes the phonological distinction of nasal and oral. To say that Scouse is 'nasal' means that the balance between

oral and nasal resonance is made at a different point, with perhaps a greater proportion of nasal resonance than in normal in RP and some other varieties of English.

For the consonants, there is a phonological contrast between /b d g/ and /m n ŋ/; the velum must be close enough to prevent air escaping into the nose for the stops, and open enough for the nasals to allow air through. The efficiency of the nose as a resonator for the nasals depends on the degree of opening, and it is possible that it is habitually less open in Scouse than RP, and may be so close as to impede slightly the air-flow. Thus whereas Scouse oral vowels are more nasalized than in RP, nasal consonants are less so. There is no preferred setting of the velum for Scouse, but this dialect makes less distinction between nasal and oral sounds than is normal for RP.

Apart from the degree of nasality, Scouse differs also in the quality. The chambers of the nose and upper pharynx act as an extension of the lower pharynx, and congestion of the upper tract affects the quality of resonance of the whole extended tract. A similar effect can be obtained by constriction of the lower part of the tract: raising the back of the tongue in Scouse not only affects articulation, but also voice quality (see Kaplan, 1960:198). The close jaw position might also contribute to the effect (Kaplan, p262).

In addition, there might be some contraction of the posterior pillars of the fauces, with a consequent tightening of the pharynx. Alternatively, the whole of the fauces may be narrowed, with the uvula contracted lengthwise and pushed forward, and the pharynx and larynx pulled upward. In an extreme form, there is some extra friction

in the pharynx, possibly produced by the epiglottis or the false vocal cords, although it is difficult to observe it directly owing to the constriction of the fauces. The result is an aesthetically poor vocal tone, as the effectiveness of the pharynx in directing the sound waves into the mouth is reduced, and the displaced uvula loses its control over the air column above the larynx (see Kaplan, 1960). The exaggerated quality is used with the 'hostile look' and extremely wide pitch range as part of the 'tough guy' image, and might be used as a prelude or incitement to a fight.

A feature which contributes to the impression of adenoidal speech is the loss of nasal resonance in final nasal consonants. Thus one [wɒ<sup>n</sup>d̥] has a relatively long final consonant which begins nasal and ends in a very weak oral release. It is tempting to interpret this as avoiding the nose as an air-exit, but the nose is used in this way for initial nasals, and the long nasal of e.g. wand. Compare now wad, one and wand:

- |                |  |
|----------------|--|
| 1. <u>wad</u>  | /vvv/vvv/v /<br>w / v / d /                      |
| 2. <u>one</u>  | /vvv/vvv/ <sup>n</sup> v /<br>w / v / n /        |
| 3. <u>wand</u> | /vvv/vvv/ <sup>nm</sup> vvv /<br>w / v / n / d / |

where v marks voicing, and n nasal resonance. All three words have the voice trailing off before the end, and the loss of nasal resonance in one is the consequence of loss of voicing. We are concerned with a general rule of Scouse phonation: it is normal in RP to devoice final stops, and a similar rule in Scouse is extended to nasals.

As for the glottal tone itself, it is difficult to decide to what extent it is due to a state of the glottis, and how far it is distorted by the setting of the pharynx. Impressionistically, I use up the breath sooner when speaking Scouse than when speaking RP; perhaps Scouse has a 'whispery voice'. Some speakers use creak on low pitches, but this is idiosyncratic.

Voicing tends to start up slowly, and die away before a pause. The end of voicing is often accompanied by a considerable increase in breath flow, and this gives rise to a number of impressions, including (a) final vowels end in [h] or some voiceless approximant, (b) "voiced" consonants are devoiced and aspirated finally, and (c) final voiceless consonants are pre-aspirated.

Voicing continues through intervocalic "voiced" consonants, as in binman or shelving, but sequences of "voiced" plosives might prove an exception. Thus in breadbin voicing might temporarily cease between the closing of /d/ and the release of /b/; on the other hand, voicing is uninterrupted if the closure is incomplete, as is often the case in e.g. tiger. This might be connected with the lax articulation of stops, if the loss of voicing is due to decreased air-flow to avoid blowing the articulators apart prematurely.

#### 4.4. Conclusion

The sound patterns of Scouse are partly of North-West English origin, partly Anglo-Irish, and partly native developments. The phonological categories to be realized are largely English, and the setting would appear to be partly Anglo-Irish and partly native.

At a guess, those parts of the setting concerned with lip movements

and rounding, with lax articulation, and possibly the lax velum and possibly whispery voice, are Anglo-Irish; although it must be repeated that this is a guess, since it is of course impossible to know what setting was used by nineteenth century Irish immigrants to Liverpool. Features like the close jaw, velarization, and the constriction of the pharynx, which combine to give the impression of "adenoidal" speech, may be native.

The dialectologist will instinctively defend his dialect against charges of 'debasement', 'laziness' or 'ugliness', but Scouse has a voice quality - whether inherited or developed natively - which is undeniably poor and ugly, as these terms are normally understood. (It would be taking a 'non-prescriptive' attitude too far to deny that some people have aesthetically more pleasing voices than others.) The speaker adjusts the velo-pharyngeal mechanism so that his voice quality sounds right: there must be extremely powerful social forces which make sounding right in Scouse also sounding ugly.

The Scouse voice quality gives the impression that the speaker has some congestion in the upper respiratory tract, even though it may in fact be perfectly healthy. There might be a historical explanation for this. In nineteenth century Liverpool, sanitary conditions are known to have been appalling; if the first Medical Officer of Health in England was appointed in Liverpool in 1846, this was not so much due to enlightenment, as to the recognition of a pressing need. In the mid-1840s, Irish immigration reached its peak, with thousands of destitute refugees from the potato-famines, and many of the Irish who stayed settled in overcrowded courts and cellars, and in cheap lodging-houses off Scotland Road. The conditions were ideal

for the development of adenoids and respiratory disease.

However, we cannot argue that a Scouser's voice quality is due to the environment his ancestors lived in: adenoids and respiratory disease must have been prevalent in every town and city in Britain and Ireland last century, and we must explain why they should have had a permanent effect only in Liverpool. Other so-called 'climatic' theories - interpreting the English jaw position as the result of the foggy climate, or accounting for the Old High German sound shift as the result of climbing the Alps - are rightly discredited. Turner (1966:107) reports how in the past, 'bush life has been called on to account for the manly drawl of the outback Australian'. The objection to such theories is not that they are climatic theories, but that there is no logical connection between the effect in speech and its alleged cause, especially when the effect is described in such vague metaphorical terms as 'manly drawl'.

It is significant that Scouse voice quality is consistent with the effects of impaired nasal resonance as with catarrh or adenoids, and not total blockage of the nose as at the height of a severe cold. A speaker with a totally blocked nose might produce substitute nasal consonants by allowing the larynx to be pushed down as the air-pressure builds up behind the articulators and nasal blockage, or by deliberately lowering the larynx (possibly anticipating the lowering on a preceding vowel) thus using the extra resonance in the downwards extension of the pharynx to substitute for the loss of the nasal extension. A 'severe cold' voice can be imitated by speaking with a lowered larynx and extremely tight velic closure even for nasal consonants, and possibly other muscular adjustments that somehow

reduce nasal resonance; but the effect is quite different from the Scouse voice quality. (Laver, 1968:47 distinguishes two kinds of 'denasalised voice' on similar but not identical lines.)

If there is any connection between respiratory disease and Scouse quality, this is due to a re-interpretation of information in the speech signal. A sporadic lack of nasal resonance due to temporary nasal blockage in some individuals is clearly 'personal information' and likely to remain so. But if the environment is such that it can impair the nasal resonance of a large number of people either permanently or for a long period of time - especially in infancy when speech habits are being formed - the effect could be treated as socio-linguistic information and become the group norm. Individuals with normal vocal tracts would then have to find some substitute quality. Children learning Scouse would learn to produce the voice quality just as they learn the segments and prosodic patterns. Abercrombie (1967:95) suggests that 'the accent of Liverpool seems to have had its origin in such circumstances'.

The Irish immigrants formed a Catholic lower class in conflict with the Protestant lower class and below the middle class. It is possible that an Irish accent was at some stage a mark of this separate group identity. But the Irish came in at the centre of the growing conurbation, they spread out to various parts of Merseyside - West Derby, Birkenhead and other parts of the Wirral - and formed an essential part of the population. This would tend to make an Irish accent part of the developing Merseyside speech, and hence indicative of Merseyside as a whole rather than specifically of the Catholic lower class. (Alexander Ellis (1889:408) gives the impression that

there was a distinctive Merseyside speech at that time.) Since religious troubles continued in Liverpool at least until the last war, it is quite possible that the Scouse voice quality could be adopted by the Catholic lower class as a substitute for the original socio-linguistic symbols. (In my sample, a Protestant bricklayer and a docker both avoided [ɛ-] for /e/, and used [e] or [ɛ+] for /ɜ/ rather than [ɛ̃, ɛ̃̃], and avoided blade articulations: these features are all arguably connected with the Scouse voice quality. In present-day Belfast, differences of voice quality are used by lower class Protestant and Catholic communities, although it is difficult to say what these qualities are.) In Merseyside, features of Scouse voice quality have spread for the same reason as features of Anglo-Irish; but some of the more striking auditory qualities remain lower class and tend to be avoided by the middle classes, e.g. velarized apicals are more acceptable than velarized laminals. This explanation for the general use of adenoïdal quality is of course only a speculation, but it does suggest the link between the voice quality and its possible origin. Scousers do not use adenoïdal quality because they or anyone else have or have had respiratory trouble, but because it makes them sound like Scousers.



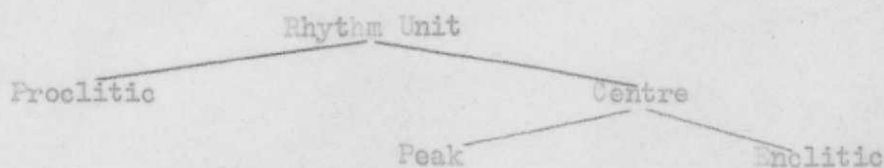
Chapter 5:

Rhythm

5.1. The Nature of Rhythm

There is no general agreement what the term rhythm means in the context of speech. At first, an attempt was made to analyze recorded sentences of Scouse according to the theory of isochronous stress, but it soon became clear that however the term stress was interpreted, there was no strict isochrony, and that there were many more phenomena to be accounted for which could only be described as rhythmical. These problems seemed to be extended to English as a whole and not restricted to Scouse, and so it was necessary to make a preliminary study of speech rhythm in English in general. This study is included at the end of this thesis as Appendix 5, and will be referred to as (Rhythm) rather than the full title The Rhythm of English Syllables. The general argument and conclusions of this study will be taken for granted in the present chapter.

Speech rhythm is concerned with the distribution of prominence among the parts of an utterance. Prominence is partly inherent in certain sounds, and partly realizes phonological patterns of stress and quantity (Rhythm:5-9). The relation between phonological units in sequence is hierarchical rather than strictly linear (Rhythm:13-15), and it is not very useful to analyze a sentence simply as a string of feet. Rhythm units are of the form:



Rhythm units occur at various levels and deal with the rhythm of the tone unit down to the details of complex vowel nuclei. A unit of any size is rhythmically subordinate to a more important unit, which is frequently a unit with a peak higher up on the stress scale (Rhythm:7), and is accordingly either proclitic or enclitic. In general, proclitics tend to be rushed over and shortened, while enclitics may be lingered on.

### 5.2. Sentence Rhythm

The rhythm of a sentence depends on the number and position of the accents and beats. Accents are concerned with highlighting important information - typically new as opposed to given information - and change the direction of pitch movement. Beats are based on quite a different principle, and break the sentence up into short stretches which take very roughly about the same time to produce.

Accent normally falls on a syllable with word-stress, but can fall on a grammatical word like a personal pronoun or verbal auxiliary which would otherwise be unstressed and reduced to a weak-form. (There are very rare cases where an unstressed affix is accented, e.g. "I said dialect`al not dialect,ic".) Beat necessarily falls on an accented syllables, and may fall on other syllables with word-stress, depending on the tempo, and also falls on unstressed syllables.

In Scouse, accent sometimes falls on a relatively unimportant syllable, possibly bearing given information, followed by beat or iotus only on the more important syllables. This is particularly common in the case of first person pronouns, and gives a false impression of contrast, e.g.:

- (25) 'I was .taken to the `Stanley un.conscious...  
(15) 'My .husband was `out.  
(23) 'I used to .work with a .fellow named 'Geordie `Darling. 'He  
lived in `Huyten.  
(29) 'I used to .work with a .fellow who .used to .erm...

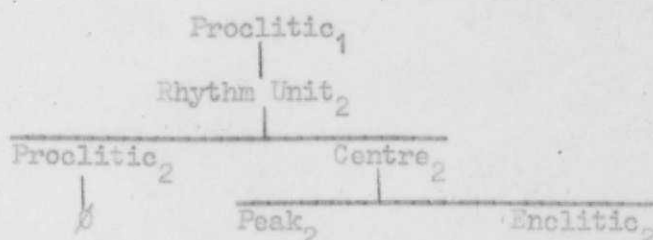
where accent is marked by combinations of (''), ictus only by a dot (.), and word-stress without accent or ictus by underlining.

The sentence can be divided up rhythmically into groups of syllables of different size. Rhythmic breaks parallel surface syntactic breaks to some extent, but there are important differences, e.g. /je/ 'you are' straddles the major syntactic break between subject and predicate, but is a single syllable, and /ɪ/ 'I am' is a single segment.

Some groups of syllables are subordinate to other groups as a whole, so that some of the syllables clustering round a given accent are more closely related to it than others. Thus in the phrase /ðe 'θɪŋ ðet e `wʌnt/ 'the thing that I want', /ðet/ and /e/ are both subordinate to /`wʌnt/, but /e/ is more closely related than /ðet/, and /ðet/ might be said to be proclitic to the whole group /e `wʌnt/ rather than to just the accented syllable /wʌnt/. There are a number of 'sentence proclitics' e.g. well, now, and 'sentence enclitics' e.g. like, then. Conjunctions are proclitic to a whole clause, and sentence adverbials - e.g. however, though - can be proclitic or enclitic when they do not form a separate tone-unit on their own.

In the following examples, we shall take a sentence and analyze it into its individual syllables, somewhat on the lines of an 'immediate constituent analysis' down to constituent morphemes.

A rhythm unit at any level can contain one or more complete units at the next level at any part of its structure. Suppose that a proclitic at Level 1 contains a unit with its own peak and enclitic at Level 2:

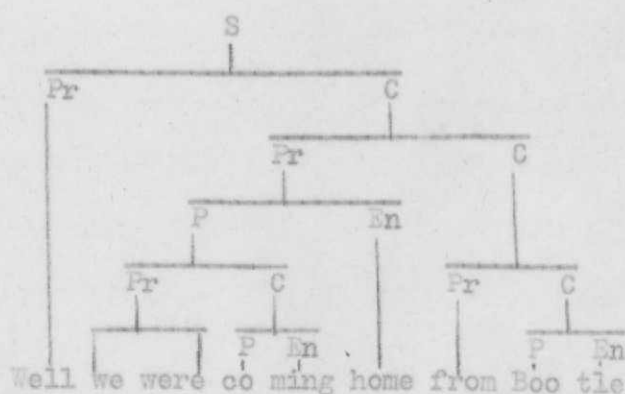


This lay-out is very wasteful of space, and if there is only one unit at level 2, and no proclitic at level 2, proclitic<sub>1</sub> can be divided immediately into Peak<sub>2</sub> and Enclitic<sub>2</sub> without ambiguity:



where Pr = proclitic, En = Enclitic, and P = Peak; 'rhythm unit' can be abbreviated where necessary to RU. C = Centre.

E.g.: (25) Well we were 'coming home from 'Boo tle, ...

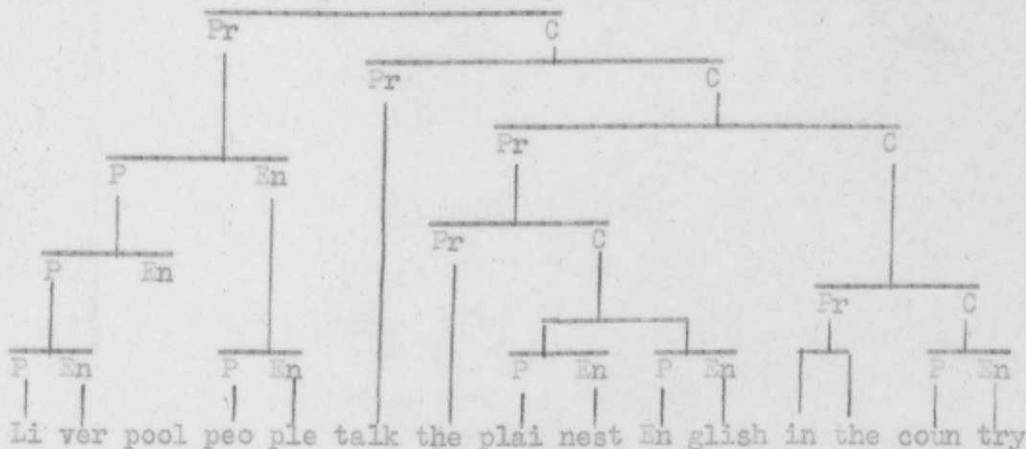


Well introduces the whole sentence, and we were 'coming home is subordinate to nuclear from 'Boo tle. Home, although it conveys essential new information, is not accented, and is enclitic to we were

coming. We were are together proclitic to coming, and -ing is enclitic to co-; finally, from is proclitic to Bootele, and -tle is enclitic to Boo-. The sentence has three beats, on co-, home and Boo-, but they are not equally spaced, home being subjectively closer to co- than to Boo-.

In more complex cases, it may be difficult to decide on the number and position of the beats, e.g.

(29) 'Liverpool people talk the 'plainest English in the 'country.

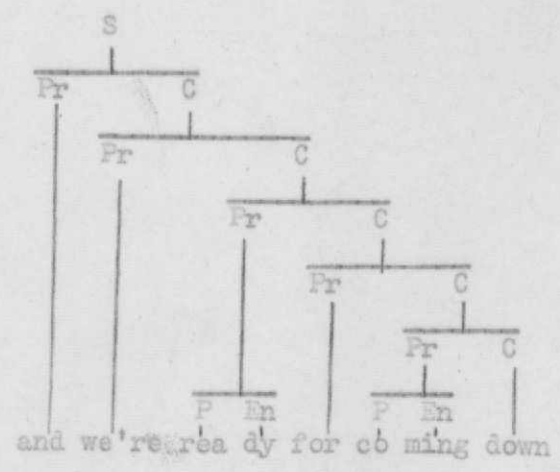
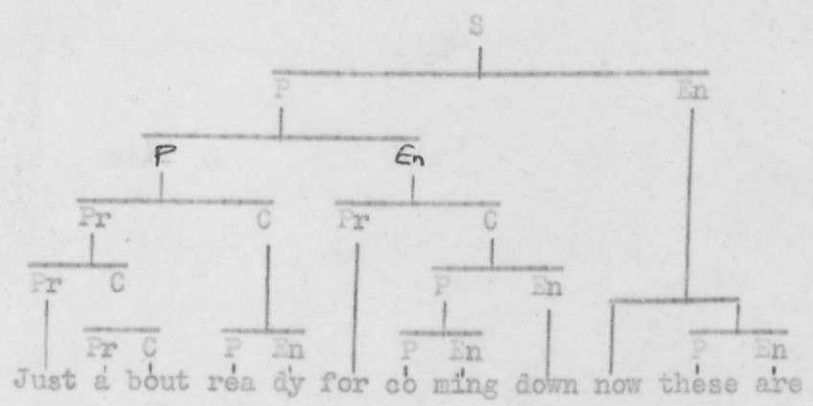


There are two stressed syllables, -pool and peo-, subordinate to Li-, and one stressed syllable talk subordinate to the plainest English. The enclitic section is considerably longer than the proclitic section, and enclitics tend to be lingered on more anyway: it just so happens that the stressed syllables are more or less equally spaced. It is not clear whether the "beats" fall on all the word-stresses, or just on the unequally spaced accents (see Rhythm:4,33).

Both rhythmical structure and beat may be relevant for the description of a sentence, e.g.:

- (15) .Just about 'ready for .coming .down now .these are.
- (15) and 'we re ready for coming ,'down.

In both sentences, the stresses of 'ready for coming down' are more or less equally spaced. The first sentence introduces the topic of slum clearance, but only the first stressed syllable bearing new information is accented, and the others have only ictus. The second sentence occurs later to reinforce what had already been said, and accent falls on the relatively unimportant we, and on final down to carry the nuclear tone. In terms of beat the two are very similar, but structurally they are rather different (Rhythm:14):



In the first, 'for coming down' follows nuclear ready, and in this

enclitic position the stressed syllables are well spaced and are given a clear beat. But in the second case, where all the syllables are rushing up to nuclear down, any beats are extremely weak, and rea- and co- might be said to have word-stress but no sentence stress.

A weakness of the present theory of sentence rhythm, which must be conceded at once, is that it is not clear how rhythm units on the various levels are to be identified. (It has been done above by an intuitive response to recorded examples; but I am not sure to what extent I have responded to something in the speech signal itself, and to what extent I have imposed the structure from my own knowledge of the language and the speaker's intentions. But this is a problem of auditory analysis of suprasegmental features in general). Rhythmic structure is related to syntax, but is certainly not determined by it, as seems to be implied by 'transformational' theories of stress (Chomsky and Halle, 1968; Halle and Keyser, 1971). The difficulty with theories of 'beat' is that the notion of beat is extremely vague, possibly referring to different things in different rhythmic contexts, and the spaces between beats depend on the rhythmic relations of intervening syllables, as well as on the number of intervening syllables and segments. At all events, the term rhythm refers to something rather different in the context of speech than in other areas of human activity like music or dancing, or regularly recurrent natural phenomena like the 'rhythm' of the seasons, the tides, or rain falling on a window-pane.

#### 5.2.1. Tempo

Tempo in speech is rather different from tempo in music (Rhythm: 9-10) in that it involves the placement of the beat on unaccented

syllables, as well as the interval between beats and the rate of delivery of syllables and segments. Scouse tends to approach accent timing, with iotus on relatively few unaccented syllables.

Only one example was recorded of spontaneous word-stress timing. This was produced by informant (80), a traffic manager approaching retirement: he would presumably be accustomed to dictating letters, and breaks his story up into short tone-units with a high head (O'Connor and Arnold, 1973:19) and a fall-rise nucleus:

" `rart eu / `vɪ wi `geu // aɪ 'lɪtl `θət / wɛn aɪ 'wɒnt tu  
 `wɛmbli / tɪ sɪ `svetən / .plɛɪ 'wɛst `brʊmɪʃ / ɪn ðe  
 `kɛp 'fɑːnl / .ðət wɪðɪn 'θɪ 'dɛɪz / aɪ wɛd bi ɛd`mɪtrɪd /  
 tɪ ðe 'sɪftən 'dʒɛnrəl `hɒspɪtəl / .ænd ɛm / bi ɪn`fɒmɪd /  
 .ðət aɪ 'hæt tɪ `hæv / e .rʊðe 'sɪerɪs `əpə'reɪʃn / aɪd  
 ɛn`dʒɔːd mɛɪ "vɪzɪt tu `wɛmbli / bɛt aɪm 'prɪtɪ `ʃo / .həd aɪ  
 ɛv 'nəʊn wɒt wɛz ɪn `stɔːfə 'mi / aɪ 'wʊdnt ɛv ɛn`dʒɔːd ɪt /  
 ɛz 'mɛʃ ɛz aɪ `dɪd // "

Iotus is placed on all syllables with word-stress, unless they are immediately next to an accented syllable. At this tempo, iotus is placed on an unstressed syllable if there is no suitable stressed syllable to take it, e.g. the conjunction that which may be given the full-form /ðət/ or remain reduced /ət/. This man spoke slowly and deliberately anyway, but in more relaxed style he did move towards accent timing, e.g.:

(80) .and i 'həd ðɪs əpə'reɪʃn wɪʃ `aɪ həd

where there is no beat on this o(peration) or had.

More typical of Scouse is this extract from the breadman (23):

" 'felez juː tɪ / ðe 'wɛɪ ju ɛr 'aɪ ɛd 'spɪk tu e .sɛɪ e 'fele  
 frəm e.raʊnd / `ækɪŋtən ɛn nɔː`kɒmbelænd `je nɔv / 'prɒbli  
 wɒdn bi .sɪbl tu ɒnde`stænd ɛm at .fɛst / wɛl 'ðætɪs wɛɪ `sɛɪ



wē / wɪ 'ɔ̃s 'dʒɒdi 'dalen / ʃi keɪ 'ɒndestænd 'mi / ɪ 'ɔ̃s  
 fele nɛɪm 'brus / 'i juːs te liv .ɒp bɑː .ə .lɪvɛpʊlz 'fɒtbɒl /  
 bɛt 'dalen / ʒe .nevɪr ʌd ə 'klu wɜː i weɪ .sɛɪ // "

The tone-units are rather longer than in the previous extract, and the speaker tends to put an accent on the first important syllable, and then rushes on to the nuclear accent. There may be a beat somewhere in the middle of the unit, but it does not necessarily fall on an important syllable, and more important syllables will have no sentence-stress at all. Nor is there any isochrony in the timing of the beats.

Accent timing is recognizably a faster tempo than word-stress timing, but does not give the impression of 'hurried' speech. This is because unimportant stretches can be reduced both in duration and quality to preserve the prominence of important syllables. The following extract is taken from a police-station cleaner (40):

'nʌtɪ 'rɪli ɛk 'sɑːtɪ / 'aɪ laɪk wɛn .si sɒm ə ʃe 'mɛdɪz  
 ɪ əl 'ʃe // ɡɒʊp 'daʊn // aɪ əl ə 'drɒŋk / ʒe 'nɒv ɛm  
 'mɛθe 'lɛtɪd 'spɪrɪt .kɑːndz 'je nɒv //

(nothing really exciting...I like it when you see some of the murderers and all that...going down...ah, you get all the drunks...you know, erm, methylated spirit kinds, you know)

The impression of hurrying may be conveyed when a speaker's actual timing appears to be at variance with his intentions, e.g. (29), a fitter's mate discussing a thick form of Scouse known as 'Yocksie':

ʒe 'ɡæd əː .lɜː ɛv / ə 'lɜː ɛv əʊl 'wɪmɪn əː .ʒuksɪː  
 'je nɒv /  
 ʒe .nɒv de wɛɪ di 'tɒk .laɪk //

(you get a lot of...a lot of old women are yocksie, you know... you know the way they talk, like)

Two cases of /ə/ immediately before an ictus are rather longer than

expected (marked with a colon), and so is old immediately before women, and /i/ is fairly long in /juksi/. It is as though the speaker shortens the syllables with sentence-stress in preparation for a number of subordinate unstressed syllables, and then has to draw out the syllables that actually occur. Both (40) and (29) are rapid speakers, but they achieve rapidity in different ways.

The questions raised here are not peculiar to Scouse, and involve speech rhythm generally. The speaker must be intuitively aware of some general rules which govern the distribution of prominence, but the prominence pattern which he actually produces depends on the efficiency of his speech production. For the general rules, we have proposed rhythm units of simple form at various levels, (or, in other terminology, the speaker has internalized the two rules (1) RU → (Pr) C and (2) C → P (En) which apply in that order and recursively), so that the complexity of sentence rhythm derives from the subordination of low level units to those on a higher level. Except perhaps at a slow tempo, the rhythm produced may deviate from some ideal norm, or the speaker may slur over unimportant stretches to keep close to the norm. The nature of beat is still a mystery: it seems to be independent of rhythmic structure proper, but in view of its interaction with rhythm units it cannot be dismissed as an irrelevant feature accidentally introduced by the working of the human speech apparatus.

### 5.3. Gradation

The grade of a vowel determines - or at least influences - the total duration of the syllable in which it occurs, and to that

extent contributes to sentence rhythm. At a lower level, grade governs the relation between a vowel and a following syllable coda. Grade is thus concerned with the intermediate levels of rhythm between the gross patterns of accent and ictus and the minute details of segment duration, and it is at these same levels that most of the rhythmical differences between varieties of English are to be located.

There are four vowel grades in English. The names of the first two - full and normal - are admittedly rather awkward, but the more familiar terms 'long vowel' and 'short vowel' confuse phonological length and phonetic duration, and lead to such statements as 'the long vowel in Scouse book is short' and 'the short vowel in Scouse bed may be long'. It is preferable to distinguish grade and quantity explicitly:

(1) Full grade: Vowels of this grade are diphthongs and triphthongs, and /i a o u/ and varieties of /ə/.

(2) Normal Grade: Scouse has five normal grade vowels /i e a u o / corresponding to the RP six /i e ə u a u /.

(3) Reduced Grade: RP full and normal grade vowels are replaced by reduced /ɪ/, /e/ and occasionally /ʊ/ under certain conditions in unstressed position. In Scouse, vowel reduction is a process rather than a substitution, so that in e.g. exam, adopt, observe /ɛg`zɑm ə`dɒpt fə`zɔv / the vowel can be progressively centralized to [e] but there is no specifiable point at which /e a u/ suddenly become /e/.

In Scouse, reduced /i u/ are merely shortened, instead of being replaced by /ɪ ʊ/ as in RP; thus where RP has /ɔɪ `end, tʊ `it/,

Scouse has /ɛi ˈænd, tu ˈit/ 'the end, to eat'. At the end of a tone-unit, /i u/ may not even be shortened, and are sometimes diphthongized, e.g. /e ˈwʌnt təʊ, ðe ˈmɜːzɪ/ 'I want to, the Mersey'.

In other positions, e.g. plural /ɪz/ or past tense /ɪd/, /ɪ/ occurs as the reduced vowel; /ʊ/ is not used in Scouse as a reduced vowel. This /ɪ/ contrasts with reduced /i/ and /e/, as in /ˈstɒdɪd/ 'studied' vs /ˈstɒdɪd/ 'studded' vs /ˈstɒdɪd/ '(My) stud had (broken)'. The contrast of /ɪ/ and /e/ is asymmetric, for /ɪ/ can frequently be replaced by /e/ in Scouse as in many other varieties of English, without a change of meaning. There is also some evidence that /ɪ/ is more conservative and more prestigious than /e/, as in the first syllable of eleven, or the second syllable of orange. There is no point at which /ɪ/ becomes /e/, for the more central variants of /ɪ/ overlap considerably with closer variants of /e/.

Where there is a choice between /ɪ/ and /e/, the latter might be considered "more" reduced than the other. Schwa coalesces with /l/ or a nasal following in the same syllable to form a syllabic /l/ or nasal.

(4) Zero Grade: In this grade, the unstressed vowel disappears altogether, e.g. /ˈbɑːnə/ 'banana', /θɜːnʌθɪŋk/ 'there is nothing'. Syllabic /l/ or nasal loses its syllabicity, compare /ˈaɪl kʌm/ 'I will come' with zero-grade, as opposed to /ˈvaɪl kʌm/ 'Vi will come' with reduced grade.

The grade of vowels in lexical items is partly dependent on the word-stress pattern, and partly conventional. Some differences between Scouse and RP follow from differences of stress, as in the occasional

/sai`rin/ 'siren' with full grade stressed /i/ as opposed to the unstressed and reduced /e/ of RP. Similarly, the grade differences of occasional Scouse /ste`tʃuteri/ 'statutory' and the RP /`statʃutri/ follow from differences of stress.

A single clitic syllable is unreduced in some words in Scouse, as in /`aksent/ 'accent' as opposed to RP /`aksent/. Proclitic /ε/ tends to be only partly reduced, instead of being replaced by /r/ or /e/ as in RP, e.g.:

- (40) nothing really exciting /'nʌtɪŋ `rɪli ek`sɪtɪŋ /  
 (36) she passed her exams /ʃi `pɑst er εg.`zɑmz /  
 (34) the greatest experience /ðe `grɛtɪst ek`spɪəriəns /  
 (8) how I escaped /'əʊ aɪ ε'skæpt /  
 (20) I was extremely rich /aɪ wəz ek`stri:mli `rɪʃ /  
 (20) how to express it /'əʊ tu ek`sprɛs ɪt /

Examples with other vowels are not quite so common. (23) has /dai`rɛkʃən/ 'direction', but both /dɪ`rɛkʃən/ and /dai`rɛkʃən/ are standard. For advantages, (20) varies from /əd`vɑntɪdʒɪz/ to /əd`vɑntɪdʒɪz/ with a hypercorrect /ə/.

In some words with a number of enclitic syllables, Scouse often has an extra secondary stress and hence no vowel reduction on the stressed syllable, as in /`ɪntɪ.rɛst/ 'interest' as opposed to the commoner RP /`ɪntrest/. In other cases, Scouse has zero-grade where reduced grade is more likely in RP, e.g. (8) /`prɒpli/ 'properly', (23) /`prɒbli/ 'probably', (19) /`prɒsɛnt, kəθlɪk/ 'Protestant, Catholic' or the extremely common /`sɑtɪ/ 'Saturday'. A few words have alternative forms in Scouse with secondary stress or zero-grade, e.g. ordinary can be /`ɔdɪn.ɛrɪ/ or /`ɔdɪrɪ/. Some older speakers use less reduced forms than younger groups, e.g. (20) has /r`vɛntʃuəli/ 'eventually' rather than /ε`vɛntʃɛli/ and /faktəri/

'factory' rather than /'faktri/.

An interesting kind of variation in grade is found in proper names. Reduction may depend not on dialect but according to the familiarity of the name. For example, Australians normally reduce the first syllable of Australia, but the Scousers (14) and (34) gave it normal grade /v'stræɪljə/, and some RP speakers give it full grade /ɔ/. (34) was born in Dublin and reduced the second syllable of Ireland /'aɪrələnd/, but had normal grade in Iceland /'aɪslənd/; as a seaman he had visited the United States which he pronounced /ðe jə'nɑɪtɪd 'steɪts/ with a reduced first syllable of United. The ending -land is sometimes given secondary stress and unreduced where reduction is normal in RP, e.g. (23) /nɔ'θʌmbə.lənd/ 'Northumberland'.

Scouse shares with a number of other dialects the variation between full grade /ɔv/ and /e/ in a few words like tomato, potato or arrow. The reduced forms are considered extremely vulgar and were avoided in arrow by all informants except (29); on the other hand, the word mirror was frequently produced with a final vowel which was difficult to interpret, and which may have been a compromise between /e/ and a hypercorrect /ɔv/. Words like tomato, potato, banana often have zero-grade in the first syllable, giving /'tməte, 'ptɜ:te, 'bnəne/ with final reduced vowel; the initial consonant is frequently omitted in such cases, giving /'məte, 'tɜ:te, 'nəne/, and indeed /'nəne/ is used (or was at one time used) as a word in its own right for a 'stupid person'. (I have also known /'nəncɔz/ to be used jocularly for 'bananas', with hypercorrect /ɔv/.)

Important as this variation might be in lexical items, it is much more frequent in grammatical clitics reduced to weak-forms (Rhythm:16).

These words normally occur in the same rhythm unit as a lexical item, and are proclitic or enclitic just like the unstressed syllables of the lexical item itself. They fall into fairly well defined classes: (1) articles, (2) prepositions, (3) conjunctions and relative pronouns, (4) personal pronouns and the locative pronoun there, (5) verbal auxiliaries, including be before its complement, and the past infinitive marker have ('ve). A significant omission from this list are titles like Sir and Saint, which tend to have the full form in Scouse; thus two informants ((39) and (42)) refer to /sɛɪnt 'brɪdʒɪts 'tʃɛtʃ/ 'St Bridget's Church', and (8) refers to 'St Alban's Church' as /sɛɪnt 'ɔlbənz/.

Weak-forms are produced by reducing the vowel to /i/ or /e/, coalescing /e/ with a following /l/ or nasal, or further reducing the vowel to zero. There are also a few details concerning consonants. First, Scouse does not follow the RP rule retaining /h/ in absolute initial position, since /h/ can be dropped anyway, even from a syllable with a nuclear accent. Intrusive /r/ occurs where it would be avoided in RP, e.g. in I saw him /aɪ 'sɔr ɪm/ after loss of /h/ in him, or in drawing /'drɔrɪŋ/; /r/ sometimes intrudes in Scouse weak-forms after /e/ in totally unexpected places. The contrast of /θ/ and /d/ is often lost in Scouse, and this is particularly common in weak-forms; after /l/ or /n/, /θ/ can be dropped altogether with a shift of the preceding consonant to syllable initial position, so that e.g. all the becomes /ɔ le/ and in the /ɪ ne/.

Some words have special pre-vocalic forms. Words like to, you /tu, ju/ are normally reduced to /te, je/ but have merely shortened full-forms before vowels. An alternative explanation is that they

are reduced, but retain the /w/-like glide to the vowel; the resulting auditory effect is heard as a variety of Scouse /u/ rather than any other vowel. The latter explanation is more satisfactory, since the /w/ glide is sometimes replaced by intrusive /r/, in which case the vowel is /e/. The Anglo-Irish prevocalic forms /tɪ jɪ/ e.g. /tɪ ˈit, jɪ ˈe/ 'to eat, you are' possibly occur sporadically, but they are certainly not the normal forms. In final position in the tone-unit, /i/ is sometimes diphthongized [ɪ̯ɪ], /u/ [ɪ̯u], and /e/ sometimes has its front realization [ɛ̯].

### 5.3.1. Articles

A/AN /ə, ən/

The Scouse pattern is as RP; the full-form /ɛɪ/ is extremely rare, and occurs as /ə/ normally and /ən/ before a vowel, with /ən/ further reduced to /ŋ/. E.g.:

- (25) a lady /ə ˈleɪdi/
- (14) an ammunition ship /ən ˈamjəˈnɪʃɪp .ʃɪp/
- (29) an old tannery /ŋ əʊl ˈtænəri/

Intrusive /r/ is sometimes used rather than the /ən/ form before the pause-fillers er and erm:

- (29) I was working on a erm... /'ɪ wəz .wɜːkɪŋ ən ər ɛm/

THE /ði, ðe/

The full-form /ði/ is rare, and is shortened before a vowel and replaced otherwise by /ðe/:

- (14) the only thing /ði ˈoʊni ˈθɪŋg/
- (19) the area /ði ˈɛəriə/
- (39) I get the bus /e ˈɡet ðə ˈbɒs/
- (42) across the top /e ˈkrɒs ðe ˈtɒp/
- (14) all the soot /'ɔːlə ˈsɒt/
- (39) in the blitz /'ɪnə ˈblɪts/



Shortened /ði/ tends to occur before a pause:

(15) a candle lit in the...back kitchen

/e `kandl .lɪt ɪn ði...bak `kɪtʃn /

(15) on the...drain(ing) board /'ɒn ði...`drem .bɔ:d/

An interesting example is given by (39), who stumbles as he avoids the colloquial pub and substitutes public house:

(39) well, I go (to) the...public house

/wel əz 'gəʊ di...`pɒblɪk `hɑ:ʊs /

Informant (29) referred to a character who used an intrusive /r/ before a vowel:

(29) He'd say "I was in the r 'ouse" /ɪd .sɪ e wez 'ɪn ðer `ɑ:ʊs /

(This is clearly the house and not their house, for (29) continues: "He wouldn't say /ðe `hɑ:ʊs / or...he wouldn't even say the.../di `ɑ:ʊs /... he'd say /ðer `ɑ:ʊs /...you know, he'd put an /r/ on it, you know...")

This intrusive /r/ is extremely rare, but is sometimes used by middle class people attempting to imitate a Scouse accent, e.g. /ðer `ekɔ: / 'the Echo'.

SOME /sɒm, səm/

Some is reduced to /səm, sɜ:/ as in RP when it means 'an indefinite quantity or number of'. The full-form /sɒm/ is used when it is a pronoun, e.g.:

(17) some of the big boys /'sɒm e ðe `bɪg .bɔɪz /

or when some means '(a) certain', as in some bloke or some kids, or 'a variety of' as in some fish, or even 'a large quantity of' as in We got through some ale last night!.

Full /sɒm/ can be given ictus, and even accent:

(25A) Some people say "a backie" /'sɒm pipl seɪ e `bækɪ /

Here, people is semantically redundant, and it is not possible to

accent it, since \*/sɒm 'pi:pl sɜ:...' would imply that saying could be carried out other than by people.

### 5.3.2. Prepositions

The weak-forms of Scouse prepositions correspond fairly well to those of RP: at /at/ is reduced to /ət/; for /fɔ:(r)/ is reduced to /fə:(r)/; from /frɒm/ to /frem, frɒ/; of /ɒv/ to /əv/ or further to /v, ə/, and to /tu/ is reduced to /tə/ except before vowels.

Other weak-forms are occasionally heard, e.g. /ɹ/ for in:

(36) get in this place /'gɛdɹ ðɪs .plɛɪs/

Weak-forms of on and by may also occur sporadically, but they are not common.

Prepositions are proclitics, i.e. they come before a word or phrase with sentence-stress. They also occur before personal pronouns, which are themselves characteristically weak enclitics: if a preposition comes before a weak pronoun, two clitics come together, neither of them having anything to be clitic to. In such cases, ictus can be placed on the preposition, especially at slow tempo, and especially at the end of a tone-unit, e.g.:

(40) you feel sorry for them /jə 'fi:l 'sɔ:ri .fə ðɛm/

(61) ten of them /'ten .ɒv ðɛm/

The preposition with ictus is normally given the full form. (Varieties of English vary whether they stress the preposition or the pronoun; Ulster speakers tend to stress the pronoun, RP speakers can stress either.) At a faster tempo, both clitics have weak-forms:

(40) so ashamed of them /səʊ ə'ʃeɪmd ə ðɛm/

(40) wait for them to come out /'weɪt fə ðɛm tə kʌm 'aʊt/

(35) it's a job for you though /ɪts ə 'dʒɒb fə jə 'ðəʊ/

- (15) my sister said to me "yes" /mi 'sɪstə .səd tə mi 'jes/
- (34) experience to you like /ɪk'spɪəriəns tə ju 'laɪk/
- (77) it comes to you /ɪt 'kʌmz tə ju /

The full form is regularly used in Scouse as in RP, when the preposition is separated syntactically from the word or phrase it qualifies: in such cases it is of course no longer proclitic:

- (14) the only thing I can think of /ði 'əʊni 'θɪŋ əz kən 'θɪŋk əv /
- (34) What is it actually for? /'wɜː ɪz ɪt .əktʃʊəli 'fɔː /

Unless these full-forms are given sentence-stress for some other reason, they do not necessarily take ictus.

Where the preposition is separated from its word or phrase by another clitic like a definite article, it is sometimes given ictus. It is possible in RP to put ictus on the weak-form, e.g. /ə 'penɪ 'fe ðe 'gʌɪ / 'a penny for the guy', but the full-form is preferred in Scouse:

- (20) the 'roughness that s a.ttached .to /tu/ the .life.

In the case of compound prepositions like down to, out of etc., the first element readily attracts sentence-stress, and the second element is frequently elided:

- (36) down (at) the bottom of the street /.daʊn ðe .bʌtəm ə ðe .'strɪt /
- (29) down (in) London? /daʊn 'lɒndən /
- (42) down (in) Bevington Bush /daʊn .bevɪŋtən .'bʊʃ /
- (61) they were going down (to) the prom /ðe we .gəʊɪŋ .daʊn ðe 'prɒm /
- (60) he went through (to) the back /ɪ .wɛnt 'θruː ðe .bæk /

Elision of to and avoidance of down gives rise to the unusual construction used by (39):

- (39) I go the...public house /aɪ 'gəʊ ðɪ... 'pʌblɪk 'haʊs /

Out of occurs as out, e.g. out the window. That this is a phonological and rhythmical phenomenon, rather than grammatical, is shown by the

fact that of is obligatory before a vowel, cf out of every window. Of is also used if there is a possibility of confusion:

(39) I got taken out of there /ə gʌt 'tærkɪŋ aʊd ə 'dð /  
where there is a difference in meaning between out of there and out there.

Scouse sometimes has a full-form where RP would have the weak-form. For example, when knocking at a house for an informant I was several times given the reply:

No, he's at work /.nɔ: ɪz 'at .wɜ:k /

where at is usually accented, but need not be. There is potentially a difference of meaning between /ɪz 'at .wɜ:k / and /ɪz et .wɜ:k /; in the first case he is merely at his place of work, and may be busy or idle, while in the second case he is actually working. It is possible that prepositions are made more prominent when they have a concrete rather than an abstract meaning. Compare:

(a) She 'drove him 'up the 'hill.

(b) She 'drove him 'up the 'wall.

In (a), up has meaning since it contrasts potentially with down, and it can be accented as a bearer of new information; in (b) it is predictable in the context of the idiom. It is certainly possible to accent up in (b), but in that case accent has quite a different function: that of emphasizing or drawing attention to the whole phrase in which it occurs, rather than the preposition itself. Compare:

(19A) 'In the 'club we've 'got a 'couple of 'Orange 'members.  
where club is likely to have sentence-stress anyway, and the accent on in draws attention to the whole phrase in the club.

The emphasis on the phrase can assist in making a contrast:

(25) 'At the 'time it was very .painful.

In the context, at the time is contrasted with the present situation:

(25) it s 'all right 'now it s 'healed 'now like

In a more subtle example, the prominent preposition restricts the scope of the negative:

(23) 'Probably wouldn t be .able to under'stand them at /at/ .first.

By the use of the full-form /at/, not is restricted to the phrase at first; i.e. by contrast there is a possibility of understanding them later on. If at were reduced, not would negate the whole sentence, so that at first would be a secondary information point subordinate to understand.

### 5.3.3. Conjunctions

Conjunctions are sentence proclitics, in that they introduce a whole sentence or clause, rather than a word or phrase. In this section we shall include other sentence proclitics like relative pronouns and the word well.

#### AND

And has a number of weak-forms, or more precisely, there is a cline from the full-form /and/ to the weakest forms:

- (a) final /d/ is dropped before both vowels and consonants
- (b) the vowel is progressively centralized from /a/ to /ɛ/ to /ə/.
- (c) /e/ and /n/ coalesce as syllabic /ɳ/.
- (d) Very occasionally, the vowel is reduced further to zero; non-syllabic /n/ is produced simultaneously with the following consonant, rather than sequentially before it. E.g.:

(19) and er... /and ə /      of (39) and er... /ən ə /

- (17) and I heard no more /ən aɪ 'ɛd nou 'mo /
- (8) and I was going along it /ən ə wɪz 'gouɪŋ ə'lonɪt /
- (20) and if my mother... /ən ɪf 'maɪ 'moðə /
- (8) and that is the truth /ən 'ðæt ɪz ðə 'truθ /
- (39) and pay my money /ən 'peɪ mi 'meni /
- (42) and he was discharged /ən ɪ wɪz dɪs'tʃɑ:dʒd /
- (15) and we're ready /ən 'wiː rɛdi /

All these examples are in initial position in the phrase; where and occurs in the middle, the weakest forms are commonest, and there is some assimilation to a following labial or velar place of articulation:

- (36) upstairs and downstairs /'ʌpstəɪz ə 'daʊnstəɪz /
- (36) men and women and girls /'men ən 'wɪmɪn ən 'gɜːlz /

BUT /bʊt, bet /

Scouse /o/ tends to be centralized, between half open and half close, and has little rounding: there is consequently little perceptible difference between the full and weak forms of but :

- (19) but they're pretty good /bʊt ðe 'prɪti 'ɡʊd /
- (20) but they weren't cheeky /bet ðeɪ ,wɛnt 'tʃiːki /
- (39) but I was in hospital /bed ə wɪz 'ɪn 'hɒspɪtəl /

Note that (39) has the weak-form /bed/; but is one of a class of words in which final /t/ can be replaced by /d/ and finally by /r/, cf:

- (35) but I can't do anything /ber 'aɪ kɑːnt du 'eniθɪŋ /

THAN

The full-form is very rare, the normal form being /ðən, ðə /:

- (25) You're cleverer than me, Angela /'juː klɛvərə ðən 'mi .ændʒələ /
- (36) She's cleverer than me /'ʃiːz klɛvərə ðən 'mi /

AS

In absolute initial position, as varies from /az/ to /ez/; elsewhere, /ez/ is usual:

(15) as you go from here /əz jə 'gou frem 'hi: /

(19) the same as these other people /ðe 'seɪm əz ði:z 'oðə .pipl /

As might take sentence-stress when followed by another proclitic:

(25) as we came round the corner /'az wi 'keɪm raʊnd ðe 'kɔ:nə /

(34) and as you say /ən 'az 'ju 'seɪ /

OR /ɔ(r), e(r) /

(56A) eight or nine /eɪt e .naɪn /

(56A) ten years or so /ten 'jɜ:z e .səʊ /

(23) you or I /ju ɔr 'aɪ /

BECAUSE

As in RP, this word has the occasional weak-form /kəz/:

(34) because I only vote by proxy /kəz 'aɪ ɒnli 'vəʊt baɪ .prɒksi /

(35) because there's nothing /kəz ðeə 'nʌθɪŋ /

WHO

(34) the people who make /ðe 'pipl hu 'meɪk /

(29) now anybody who erm... /naʊ 'enɪbədɪ u ɛm /

THAT

As in RP, the commonest form is /ðæt/:

(19) everybody that comes in here /'evrɪbədɪ ðæt 'kɔ:mz ɪn 'hi: /

(19) a family pub...that you don't really get trouble in it

/ə 'fæmli .peb...ðæt jə 'daʊnt .rɪli ɡet 'trɒbl ɪn ɪt /

The full-form occurs, possibly with ictus, before another proclitic:

(20) maybe it's that I'm too quiet /'meɪbi ɪts .ðæt aɪm tu 'kwaɪət /

(29) ...that I never went to Mass /ðæt ə 'neve wen te 'mæs /

(34) I thought myself that it was er... /'aɪ θɔ:t mi 'self ðæt ɪt wəz ɛ /

More rarely, the full-form occurs before a lexical item without sentence stress:

- (23) the bridge that goes over to Warrington  
/ðe 'brɪdʒ ðæt gəʊz 'əʊve tə 'wɒrɪŋtən/.

As can be seen from some of the examples, the final /t/ of that can be replaced by /r/.

### WELL

Introductory well /wel/ can be reduced to /wɫ/ or just /ɹ/ with slight rounding:

- (34) Well, O.K. /wel əv 'keɪ/
- (15) well, one incident... /wɫ 'wʌn ɪn'sɪdɪnt /
- (8) well, to tell you the truth /wɫ tə 'tɛl jə ðe 'tru:θ /
- (25) well, we were coming home /ɹ wi we 'kʌmɪŋ əʊm /

There are other weak-forms used in Scouse, e.g. /se/ for so, /ne/ for nor, and also /ne/ for introductory now. Until or till are occasionally reduced to /tɪ/ e.g.

- (20) till I was seventy years of age /tɪ aɪ wez 'sevənti 'jɜ:z əv 'eɪdʒ /

But these are not very common, and are relatively unimportant.

### 5.3.4. Personal Pronouns

Pronouns are proclitic or enclitic according to syntax. With the exception of I, the weak-forms of all pronouns can occur in final position; the case of final possessives does not of course arise.

#### I

I /aɪ/ is weakened progressively to /ɪ/ and /e/, although some individuals tend to avoid weakening the first person singular pronoun.

I appears to retain the full-form before vowels: what is in fact



retained is the /j/-type glide, and even if the first element is considerably centralized, the result is still heard as a variety of /aɪ/:

- (8) how I escaped I do not know /'au aɪ e'skæpt aɪ 'du nɒt 'nəʊ /
- (34) then I was er... /Den ð wez ɛ /
- (8) I lived with my aunt /ɪ 'lɪvd wɪð maɪ 'aʊnt /
- (8) pardon, I never heard you /.pɑdʒən e 'nevə 'hɜd ju /
- (34) the country that I lived in /ðe 'kɒntri ðæt e 'lɪvd ɪn /
- (39) I was hurt /e wez 'hɜt /
- (40) I did see one man /e 'dɪd si 'wʌn mæn /

Compare the final full-form:

- (35) can I? haven't I? /'kæn aɪ, 'hævnt aɪ /

It is rare to stress a weak-form, but note:

- (29) I was working on a erm... /'ɪ wez ,wɜkɪŋ ən er ɛm /

ME

Reduction is a matter of duration only:

- (23) they could understand me / ði kəd 'ɒndə'stænd 'mi /
- (29) you can't understand me! /ju 'kæn ɒndə'stænd 'mi /
- (8) Let me have a look /'let mi 'æv ə lʊk /
- (14) She never answered me /ʃi 'nevə 'ɑnsəd mi /

MY

Some speakers avoid the weak-forms, which are /mi/ and /me/. The latter is more prestigious, and is used more by the middle class and the protestant docker (14):

- (8) was from my niece /wez 'frɒm maɪ 'ni:s /
- (20) my mother repeated that /maɪ 'mʌðə ri'pi:tɪd ðæt /
- (8) all my hair fell out /'ɔl mi 'hɛ feɪ .aʊt /
- (40) I haven't got my glasses /aɪ 'hævnt gɒt mi 'glɑ:sɪz /
- (80) all my life /'ɔl mi 'laɪf /
- (61) my husband and I /me 'hɜzbənd ənd .aɪ /
- (14) and broke my nose /ən 'brəʊk mi 'nəʊz /

YOU

You has the weak-form /je/:

(40) you can see the men /je kən 'si ðə 'men /

(36) didn't you? /'dɪdn̩ je/

(8) what you said first /'wɒt je sɛd 'fɜːst/

(35) a job for you /ə 'dʒɒb fə je /

In final position /je/ can occur as [je-]; a surprising example of non-final [je-] is given by (40):

(40) they tell you little tales /di 'tel je [je-] 'lɪtl̩ 'teɪlz /

The distinction between the full and weak forms is neutralized before a following /w/:

(8) you wear it on your hand /je 'wɛr ɪt ɒn je 'hænd /

Very occasionally, intrusive /r/ is used after /je/:

(29) have you ever heard... /ev jər 'evər 'ɛd /

But this is more often used by middle class people imitating Scouse, e.g. the teacher (81) repeating the words of a pupil:

(81) He says, 'I've brought you a cob of cake'

/i .sɛz ev 'brɒt jər ə .kɒb ə 'keɪk /

YOUR

The weak-form is again /je/, this time with a regular /r/ glide to a following vowel:

(36) play your games /.pleɪ jər 'ɡeɪmz /

(35) What's your time? /'wɒts jər 'taɪm /

(19) put your money in that /'pʊt jər 'meni ɪn 'ðæt /

(86) builds your character /'bɪldz jər .kærəkte /

HE, HIM, HIS

The /h/ is dropped, but otherwise the weak-forms are merely shorter:

(23) he wasn't er... /i 'wɒznt̩ ɛ /

- (40) he had one half the arm off /i ad 'wɒn əf di 'ɑ:m ɒf /
- (25) and he had bruised ribs /ə 'i ad 'bruz 'ri:bz /
- (25) it's his living to drive /ɪts 'ɪz 'lɪvɪŋ tə 'draɪv /
- (23) I was in the army with him /e wɪz 'ɪn ði 'ɑ:mɪ wɪð ɪm /
- (25) me and him /'mi ən ɪm /

SHE

Proclitic she is merely shortened from the full-form:

- (20) she held back on that /ʃi 'held 'bæk ɒn ðæt /
- (25) what she wants? /'wɒt ʃi 'wɒnts/

HER

In RP, the /h/ is dropped and the vowel is merely shortened to /e/; in Scouse, the vowel quality is also changed from /ɛ, ɛ̃, e/ to /e/:

- (36) her brother goes to college /e 'brʌðə .gəʊz tə .kɒlədʒ /
- (36) she passed her exams /ʃi 'pɑ:st ɜr ɛg.'zɑ:mz /

IT

It is virtually always a clitic in Scouse; stressed it is certainly unusual, the stressed equivalent being that. In the weak-form, it drops the final /t/, especially at the end of a tone-unit, or /t/ is replaced by /d/ or less commonly /r/:

- (36) two bars in it /'tu .bɑ:z ɪn ɪ /
- (29) it was only a matter of... /ɪ wɪz 'əʊni e .mætə ɜv /
- (29) they say it happens /ði 'seɪ ɪd .əpəz /

The vowel /ɪ/ is sometimes further reduced to /e/:

- (25) me and him in it /'mi ən ɪm .ɪn ɪt /
- (8) my two hands on it /mi 'tu 'hɑ:nz ɒn e /

WE

Again, the weak-form is merely a shortening:

(40) and then we clean it /ə .ðən wi .kli:n it /

(15) we got this smell /wi 'gɒt ðɪs 'smel /

(23) we were coming back /wi we 'kɒmɪŋ bæk /

US

/os; es, ez; s, z /

In the first place the vowel is reduced to /ə/:

(20) she gave us a smack /ʃi 'gæv əs ə 'smæk /

Final /ə/ is occasionally replaced by /z/:

(29) only three of us went through /'əʊni 'θri ev ez wɛn 'tru /

(29) falling round us, you know /.fɒlɪŋ 'raʊnd ez 'jə nəʊ

In Scouse, us can be used for the first person singular, e.g.

/'lənd əz r / 'lend it me'; in this case /z/-forms are more likely than /s/-forms.

Scouse also has the zero-grade forms /s,z/, but these are used only in special cases. Thus /s/ is used for the first person plural imperative let's, contrasting with /es/ for the second person imperative let us (= allow us ); and /z/ as in /'gi z ə .gɒv / 'give me a go' is necessarily singular.

OUR

The weak-form is /ə/ as in RP, e.g.

(77) in the early days of our marriage /ɪn ði 'ɜ:li .deɪz ev ə .mæriɪdʒ /

However, RP /ə/ follows the regular pattern of reducing triphthongs, and stressed /əwe/ as in tower can be simplified to a monophthong similar to /ə/ in tar. There is no such simplification of Scouse /əwe, əwe/, so that the weak-form /ə/ is irregular and has presumably been introduced as a unit from General British English.

YOUS

In so far as yous /juz/ is still used in Scouse, it has the weak-form /jez/.

THEY

The commonest weak-form is /ði/ :

(40) then they go to Risley /'ðen ði .gəʊ te .ˈrɪzli/

(35) did they all get them /dɪd ði ˈɔːl .gɛt ðem /

(36) they have /ði 'æv/

Occasionally /ðe/ is used:

(25) they went bankrupt /ðe wɛnt ˈbæŋkrɒpt /

but /ðe/ is unlikely in absolute final position.

THEM

The vowel of /ðem/ is first reduced to schwa, and then coalesces with following /m/ to form syllabic /ɱ/. There is also the 'em type, deriving from Middle English hem with /h/ regularly dropped:

(34) send them through to keep them /'sɛnd ɱ .tru te .kɪp ðem /

(19) out of them /ˈaʊt ə ðem/

(25) I sued them /'aɪ .suɪ ðem/

(40) you feel sorry for them /je 'fɪl `sɔːrɪ .fɔ ðɱ /

THEIR

The full-form of this word can have the equivalents of RP /eə/ in addition to the local forms with /e, ə, ɛ, ɐ /, but the only weak-form is with /ə/:

(40) ...and their shirts hanging out /ɱ ðe `ʃɜːts ənɪn .aʊt /

(57) their clothes are far too long /ðe 'kleʊðz ə `fɑ .tu .lɒŋ /

THERE

The forms of locative there are identical to those of their,

with reduced /ðe/ identical to the definite article. Scouse shares with other varieties of English the use of there's before a plural noun phrase:

- (34) ...and there were the other... /ɹ ðe we di 'oDe/  
 (19) there's ladies in this bar /ðez 'leɪdiz in ðɪs .bɑ/  
 (20) there are some as take it /ðer ə 'sɒm əz 'teɪk ɪt/  
 (20) there was an awful lot /ðe wez ən 'ɔfɹ 'lɒt /  
 (19) there's nothing in language /'eʃnəθɪŋk ɪn .ˈlæŋgwɪdʒ/

### 5.3.5. Verbal Auxiliaries

The verbal forms correspond fairly well to those of RP:

<u>VERB</u>	<u>FULL</u>	<u>WEAK</u>	<u>VERB</u>	<u>FULL</u>	<u>WEAK</u>
am	am	(ə)m	do	du	d(ə)
is	ɪz	z, s	does	doz	d(ə)z
are	ɑ(r)	e(r)	did	dɪd	d
was	wɒz	w(e)z	can	kən	k(ə)n
were	wɜ(r)	we(r)	could	kəd	k(ə)d
have	hæv	(ə)v	will	wɪl	(ə)l
has	hæz	(ə)z, s	would	wəd	(ə)d
had	həd	(ə)d	shall	ʃəl	ʃ(ə)l
must	mɒst	m(ə)s	should	ʃəd	ʃ(ə)d

Notes: (1) The zero-grade forms /d/ for do and did occur only immediately before we and you, e.g. /d 'ju get wən/ 'Did you get one?'. The contrast of do and did is neutralized in the zero-grade.

(2) Reduced grade /də/ occurs for do in e.g. do they /də 'ðer/. The same form /də/ occurs for do not in the special phrase I don't know e.g. (13) /'aɪ də .nəv/; this is presumably the common non-standard form written dunno.

(3) Before we, shall has a zero-grade form /ʃ/, e.g. /'wē ʃ wi 'gev ə.səvi/ 'Where shall we go this afternoon?'

Otherwise the weak-forms are used according to rule:

(1) The initial /w/ of will, would, is dropped; as in the case of /h/, Scouse does not follow the rule retaining the consonant in absolute initial position. Linking /r/ is used as usual before a following vowel.

(2) The vowel is reduced to /ə/ or combines with a following /l/ or nasal to form a syllabic consonant.

(3) The vowel is further reduced to zero-grade when it immediately follows the vowel of a pronoun subject. Thus compare /jud/ 'you had, you would' with zero-grade, and /əd 'ju/ 'had you, would you' with reduced grade when the verb precedes the pronoun subject.

After a noun subject, the reduced grade is more normal except in rapid speech, e.g. /li əd/ 'Lee had, would' as opposed to /hid / 'he had, would'. Reduced grade is also used after me, as in /'ɪm ən 'mi əd/ 'him and me had, would'.

(4) The weak-forms of is, has are an exception to rule 3. The form /ɪz/ 'is' and /əz/ for 'has' are used before a subject - e.g. /ɪz 'pɪtə/ 'is Peter' as opposed to /əz 'pɪtə/ 'has Peter' - and after /s z ʃ ʒ ʒ ʒ /, as in /'bʊtʃ ɪz/ 'Butch is' as opposed to /'bʊtʃ əz/ 'Butch has'. Otherwise zero-grade is normal after any subject, noun or pronoun, the distinction between is and has is neutralized, and /z/ is replaced by /s/ after a voiceless consonant, e.g. /fred z/ 'Fred is, has' as opposed to /dɪk s/ 'Dick is, has'.

Here are some examples of weak auxiliaries:

- (19) I should imagine /'aɪ ʃd ɪ.mədʒɪn/
- (20) She'd say, 'Now wait!' /ʃɪd .sɛɪ naʊ 'weɪt /
- (20) Mother would say 'Yes'. /'mʌðər əd .sɛɪ 'jes /
- (20) I think I'll get such a thing /ə .ɪŋk ɪl ɡet 'sʊtʃ ə .ɪŋ /

- (35) I'll wait /əl 'weɪt /
- (29) it was only a matter of... /ɪ wəz 'əʊni ə 'mætə əv /
- (19) you can tell the difference /ju kən 'tel ðə .dɪfrəns /
- (25) he's a lorry driver /ɪz ə 'lɒri 'draɪvə /
- (14) we were collecting /wi wə kə'lektɪŋ /
- (23) I was in the army with him /ə wəz 'ɪn ði 'ɑːmi wɪð ɪm /

### 5.3.6. Compound Weak-Forms

When two or more weak-forms occur together, or when weak-forms occur next to full-forms, they follow each other in the normal way in most cases. However, a particularly common collocation of two given weak-forms, or a weak-form and a full-form, can give rise to a "compound" weak-form which differs from the sequence of its constituents. For example, some kinds of Northern English (but not Scouse) have developed compounds for the sequence of weak preposition plus weak definite article, e.g. the West Riding /tət̩ / 'to the'. All kinds of English have compounds like can't, won't for full auxiliary plus weak not. Nearly all Scouse compounds are concerned with verbs.

Consider the following paradigms of weak pronouns and weak present tense of be, have and will:

	<u>BE</u>	<u>HAVE</u>	<u>WILL</u>
I	(ə)m	əv	(ə)l
you	ju	jev	jel
he, she, it	ɪz, ʃɪz, ɪts	ɪz, ʃɪz, ɪts	ɪl, ʃɪl, ɪt̩
we	wə	wɪv	wɪl, wəl, w̩
they	ðə	ðəv, ðɪv	ðəl, ð̩

Some of these - like /ɪz, jev, wɪl / - are regularly formed, but



others - like /ðe, wɪ / - are reduced further from the regular sequence. E.g.:

- (36) I'm interested in bingo /ɪ 'ɪntɪrɪstɪd ɪn .ˈbɪŋɡoʊ /
- (25) I'm frightened of cars /ɪ ˈfraɪtnd əv .kɑːz /
- (35) and when you're not well /ən 'wen jə nɒt .wel /
- (15) they're nearly all down /ðe 'niːli ˈɔːl daʊn /
- (19A) they're the best in the world /ðe ðe .best ɪn ðe .ˈwɜːld /
- (19) they're pretty good /ðe 'prɪti ˈɡʊd /
- (39) when they're coming out /wen ðe .kɒmɪŋ .aʊt /
- (36) we'll have to get him /wɪ .af tə .ɡet ɪm /
- (86) the things you're taught /ðe 'θɪŋz jə ˈtɔːt /

Note that zero-grade /d/ assimilates with /jə/ to form /dʒə/:

- (19) d'you remember erm... /dʒə rɪ'membə ɜm /
- (19) and d'you know /ən dʒə ˈnoʊ /
- (39) how d'you mean? /'haʊ dʒə ˈmiːn /

Otherwise, when the auxiliary precedes the pronoun, the two follow in regular sequence in all cases, and there are no special compound forms. This applies whether both forms are weak, or one of them is a full-form.

There are a few special forms for a stressed pronoun followed by a weak auxiliary, including we're, you're and they're. You're conforms to the development of /ue/ to /o/, and often occurs as /jə/:

- (25) you're cleverer than me /'jə ˈkleɪvə ɜən 'mi/
- (15) you're inside /'jɔː ˈɪnsaɪd /

They're has the forms /ðe, ðe, ðɛ, ðɛ /, identical to the full-forms of there, their. Scouse they're corresponds in form to the RP /ðe/ which is similar, if not strictly identical, to the /ðee/ of there and their. In RP, /ee/ is a regular simplification of the triphthong

/ere/ as for example in /plee/ 'player'. In Scouse, there is no such pattern of simplification, and the stressed forms of they're - like the weak-form of our /ə/ - are irregular. The forms of we're have the same vowels as they're:

(15) we're the only one /'wɛ ʔi .əuni wɛn/

(15) we're in flats now /'wɛr ɪn flɑts `nəʊ /

There is no regular pattern either in Scouse or RP relating /ie, iə / to /ɛ e ɛ ɛ e / - apart from the isolated example of year which is a problem in itself - and so no satisfactory explanation can be offered for /wɛr/. There is nothing very surprising, incidentally, in the occurrence of irregular weak formations. One can assume that they originate according to general rhythmical patterns, but can then spread to other varieties with different rhythms; they can also survive long after the basic forms have become obsolete. For example, medieval hem is obsolete, but survives in weak 'em; wol is obsolete, except as part of the compound won't. The weak formations have spread to Scouse, even though the full-forms cannot be said to have been used in Scouse at any time in its history.

There are a number of negative weak formations. The auxiliary is followed by not, and as in RP, either the verb is weak before full not /nɒt/, or weak not /nt, n̩t/ follows a full auxiliary. It is this second type that produces the compounds. In addition to regular formations, Scouse has /məʊn̩t, dəʊnt, kɛnt, wɔʊnt, ʃɛnt / of the standard type; /ɛnt aɪ/ is used for 'am I not', but for the positive I am not only the /aɪm nɒt, əm nɒt, ɹ nɒt/ type can be used, apart from the highly stigmatized ain't /ɛɪnt/ which is used occasionally, and can also be used for the other persons.

The Scouse forms are occasionally and sporadically reduced even further according to two rules, ordered so that rule (2) can apply only if rule (1) has already applied:

- (1) Final /t/ is dropped,
- (2) Inflectional third person /z/ is dropped when not is followed by he or it.

The loss of /t/ from di-syllables is found in Cockney (e.g. Sivertsen, 1960, gives /dɪdɪ / 'diɪn't' and /wɒzən / 'wɒzn't' (pp234, 236)), it is acceptable in RP, and more common in Scouse:

- (19) isn't it, Dan? /'ɪzɪt ɪt .dæn/      (35) isn't it? /'ɪzɪt ɪt /
- (29) he wouldn't even say /i 'wɒdɪ ɪvən .seɪ/
- (19A) it doesn't happen now /ɪt 'dɒzɪ ɒpə 'nəʊ /
- (23) he wasn't er... /i 'wɒzɪ ɛ /
- (35) haven't I? /'hævɪ ɑɪ /
- (40) I haven't got my glasses /ɑɪ 'hævɪ ɡɒt mi 'glɑ:sɪz /
- (23) probably wouldn't be able /'prɒblɪ wɒdɪ bi .eɪbəl /
- (23) this fellow doesn't /.'ðɪs fələ 'dɒzɪ /

Scouse can also drop /t/ from monosyllabic forms:

- (29) you weren't invited /je 'wɛn ɪn'vɑ:tɪd /
- (19) I can't stand that language /ɑɪ 'kæn 'stænd ðæt 'læŋwɪdʒ /
- (29) you can't understand me? /je 'kæn ɒndə'stænd 'mi /

Final /t/ is also dropped incidentally from one or two other monosyllables like went, e.g. /i wen 'həʊm / 'he went home'.

Other possible negative forms include /ən ɑɪ / 'aren't I', /dəʊn ɑɪ / 'don't I', /wəʊn ɑɪ / 'won't I', and /ʃən ɑɪ / 'shan't I'.

The loss of /z/ is widespread over the North of England - of /ɑnt/ 'hasn't' or /ɪnt / 'isn't' - but it is not usually combined with the loss of /t/; Cockney has forms with neither /z/ nor /t/, e.g. /ɪnɪt / 'isn't it' (Sivertsen, 1960:234). Similar forms in

Scouse are possibly restricted to the following set:

- |                       |                       |
|-----------------------|-----------------------|
| /ðon ɪ / 'doesn't it' | /ðon i / 'doesn't he' |
| /ən ɪ / 'hasn't it'   | /ən i / 'hasn't he'   |
| /ɪn ɪ / 'isn't it'    | /ɪn i / 'isn't he'    |
| /wʌn ɪ / 'wasn't it'  | /wʌn i / 'wasn't he'  |

An isolated compound form is /wə/ for where are:

(35) Where are you going next? /'wə je .gəʊnɪŋ ˈneks t /

instead of the expected /wɛr e/.

It is significant that all the compounds arise when the weak-form follows the full-form, that is, when the weak-form is in the enclitic position. This confirms our contention that enclitics are more closely related to the peak of the rhythm unit than are proclitics, and with the peak form the 'centre' of the unit.

### 5.3.7. Miscellaneous

Sort of is reduced to /set əv/, and /set/ can take ictus:

(61) we sort of all coasted then /wi .set əv əl ˈkəʊstɪd ˌðən /

Of is sometimes elided from contexts other than out of:

(50) one (of) the cleaners /'wʌn ə ðə .kliːnəz /

where of is redundant in the context.

There are a number of cases of variation in grade which are on the border of grammar and lexis. Thus many has the form /mni/ in a few phrases like 'how many' /'haʊ mni/; penny and pence occur as

/pni, pps/ is e.g. fourpenny, fourpence /'fɒpni, 'fɒpps /; and man occurs in some compounds as /man/ rather than /men/, e.g. milkman, binman /'mɪlkman, 'bɪnman /. Present participle -ing ends in /ɪŋ, ɪŋg/ or more commonly /ɪn/; /ɪn/ can be reduced to /ən, ɪ /:

(25) we were coming home /wi we 'kɒmɪŋ ʊm /

(34) gutting it /.gɒtɪŋ ɪt /

(29) sea-faring /'si:fəɪŋ /

The gerund -ing is more likely to have the /ɪŋ, ɪŋg/ form, e.g.

/ɪz 'peɪntɪŋ ði .'aʊs / 'he's painting the house' but /i 'dɪd sɪ

'peɪntɪŋ /, and certainly /i 'bɒt ə .peɪntɪŋ / 'he bought a

painting'. However, the two types of -ing are not consistently

kept apart, and e.g. the meeting could occur as /ðe 'mɪtɪŋ /.

We have already observed that -thing compounds - but not the

word thing /θɪŋ, θɪŋg/ itself, have optional forms in /θɪŋk/,

e.g. nothing /'nʌθɪŋk/. These same -thing compounds have pseudo-

weak-forms ending in /θɪn/, and this can be weakened further to

/θən, θɪ/, e.g. /'ɛvrɪθən/ 'everything'. In nothing, /θ/ can be

replaced by alveolar /t/ to give /'nʌtɪ/. Something has the

alternative form /somet/, which is presumably the common non-standard

summat deriving from somewhat.

All the forms we have considered so far, with a few exceptions and apart from a few details, derive from the interaction of

sentence rhythm and vowel grade. They are conventional in the sense that are recognizably forms used by Scousers either commonly or occasionally, and can be learnt as part of the dialect. In rapid speech, there occur zero-grade forms which are not conventional, and which appear to have been accidentally over-reduced just on that one particular occasion:

(19) he's never been back since /z 'nɛvə bin bak . 'sɪns /

(29) see, I was on like... /'sɛjə wɛz .ən laɪk /

(40) I like it when you see /'aɪ laɪkɪt wɛn sɪ /

(86) so you can look after yourself /s jə kən 'lʊk aftə jə .self /

(95) but it's one of these cruises /bət s 'wʌn ə ðɪz . 'kruːzɪz /

In the example from (29), the vowel of see is not reduced to zero, but becomes a mere /j/ glide to the following /aɪ/.

#### 5.4. Syllable Length

Syllable length is discussed fully in Appendix 5 (Rhythm:15-31) and the argument need not be repeated here. Scouse syllables follow the same basic pattern as RP, and most of the differences are due to differences of grade.

Scouse differs slightly from RP in the treatment of final /e/. In a di-syllabic word like never or butter, where the first syllable ends in a normal grade vowel, /e/ is long in RP when the word is produced in isolation or at the end of a tone-unit; in the middle of

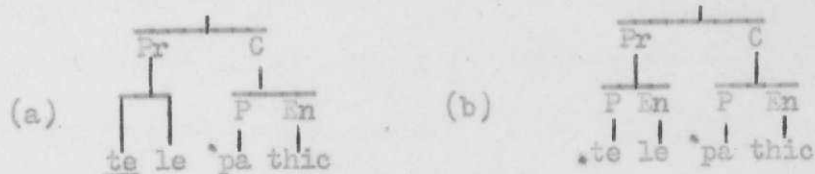
a tone-unit it is likely to be shorter, cf /'neve 'maɪnd/ 'never mind'. Scouse /e/ is often fronted finally to [ɛ-], but it is not significantly lengthened, and it is certainly not long in the middle of a tone-unit. On the other hand, Scouse /i/ like RP /ɪ/ can be lengthened finally, as in ferry /'fɛɪ, 'fɛɪ/, but the lengthening is optional in Scouse. Scouse /i/ is unlikely to be lengthened in the middle of a tone-unit, as in /'mɛɪ 'krɪsmɛs/ 'Merry Christmas'. Where two tone-units come together without a break, as in /'lɒtɪ wez eɪtɪ 'fɔ/ 'Lottie was eighty-four', the second vowel of Lottie may be lengthened in RP to take the rise in pitch, but in Scouse the rise is extremely rapid in this position and the vowel remains short.

The syllable quantities discussed in Rhythm (15-31) are restricted to very simple rhythmic structures. Relations of quantity are much more complex in the context of the sentence. Compare for example the quantities of tele- in the following examples:

- (i) 'Jeans tele'pathic.
- (ii) 'Jennifer s 'tele'pathic.
- (iii) 'Jeans a 'Tele.graph re.porter.
- (iv) 'Jeans a 'telephone .operator.

Assume that all four are produced slowly at what is subjectively the same tempo. In (i), te- has no sentence stress immediately after accented Jeans, and the two proclitic syllables tele- are very short. But in (ii), where te- with secondary word-stress takes ictus, the unstressed -le- can be lengthened, making tele- short-long as in /'tɛɪ, 'tɛɪ/ 'television'. This pattern is possibly clearer when te- has the nuclear accent as in (iii), although it is obscured by

an additional enclitic syllable as in (iv). The effect of ictus on secondary stress is to make the syllable the peak of a subordinate rhythm unit:



In (a), te-, le- are simply short proclitics to -`pathic, whereas in (b) the quantities of te- and le- are determined relative to each other. (The short-long patterns are restricted to RP; Scouse tele- tends to be /tɛle/, and /e/ cannot really be lengthened anyway. What is important here is that a group of clitic syllables are treated as a subordinate unit: this applies to Scouse as much as to RP.)

A frequent source of subordinate proclitic units is in stressed prepositions, discussed above in 5.3.2.; e.g.

- (40) for them /.fɔ ʒɪp /                      (61) of them /ɔv ʒɪp /  
 (20) to the life /.tu ʒe .laɪf /  
 (64) from the youth-club, /.frɛm ʒe .juθklɒb /

Apart from of in of them, the prepositions are all long. Superficially it might appear that prepositions just happen to be long in this context, and separated rhythmically from the following syllables, so that to the in to + the life are long-short for the same reason as e.g. catch the in catch + the thief. An alternative explanation is that for them, to the and from the are long-short for the same reason as say, northern, Hoover, Brenda (see Rhythm:26-7), and that of them is equal-equal like say, Hobson or Thomson. The

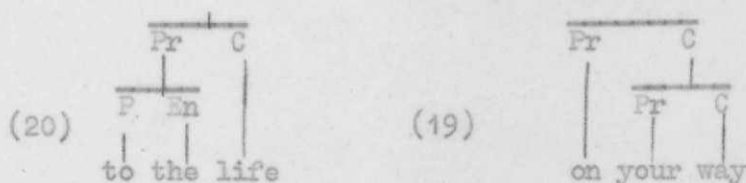


second explanation is more satisfactory and covers more examples, and suggests that these subordinate units are subject to the same rules as the major unit. (This is also true for subordinate tele-  
in telepathic.)

A case can be made for 'long prepositions' in certain special contexts, e.g.:

- (15) 'we re the only one 'in this block .now
- (15) we were 'in the back-'kitchen
- (23) I was 'in the 'army .with him
- (19) now 'on your 'way (i.e. "be off with you!")

In all these cases, the preposition is accented, and some potential redundant verb (e.g. living, sitting, servng and go respectively) is omitted. Had the verb occurred, it would not be in the same low-level unit as this, the, your: the preposition is similarly separated off from the following syllables. Thus compare:



In either case, to the and on your happen to be phonetically long-short. Consider now She's 'at the 'shops or 'Whos been 'at the .'meat?; at is fully long relative to the. In comparison, at is shorter in \*She's 'shopping .at the 'shops, or 'Whos been 'picking .at the .'meat?. In the former case, at is separated off from the, and its extra length is placed mainly on the closure phase of /t/.

Subordinate units are also found in enclitic position. In a word

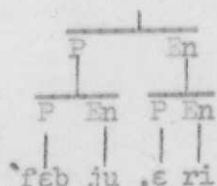
or phrase with a number of enclitics, the last enclitic tends to be more prominent than the others, possibly being longer, attracting ictus or completing a tonic pitch movement. Non-final enclitics are correspondingly shorter, and more reduced, possibly to zero-grade. Thus in (34) gutting it /ˌgʊtɪŋ ɪt/, -ing is much shorter and more reduced than it. In (40) so ashamed of them /səʊ ə ʃæmənd əv ðəm/, of is shorter than them; in (40) scrubbing and that /ˌskrʊbɪŋ ə ˈnɑː/ -ing is very short, and final that attracts ictus.

RP tolerates long strings of enclitics. It is fairly common to have three, e.g. /ˈdʒʌnjuəri, ˈsekreteri, ˈnesesəri, ˈkɒntrevesɪ/ 'January, secretary, necessary, controversy', and possible to have four, e.g. /ˈneseserɪli, ˈtempererɪli/ 'necessarily, temporarily'. However, these are usually simplified by vowel reduction or elision, cf /ˈdʒʌnjʊəri, ˈsekretəri, nesəsəri; ˈtemprɪli/.

There are other ways of simplifying the long strings, some of the results being "educated" and RP, and others "uneducated" and found only in non-prestige varieties of English like Scouse. The primary word-stress is sometimes shifted to the second syllable, as in /kənˈtrovesɪ, keˈpɪtəlɪst/ 'controversy, capitalist' which are heard in RP, and /steˈtjʊtəri, ɪnˈtrɪkesɪz/ 'statutory, intricacies' which are occasionally heard in Scouse. Alternatively, a secondary stress can be put on one of the enclitics, cf /ˈkɒntre.vɜːsɪ/ 'controversy' in RP.

In some words, the vowel of the syllable with secondary stress is not what might be called the 'original' vowel, but /e/. Thus (42) has /ˈdʒʌnju.əri, ˈfebju.əri/ 'January, February', and /ˈnɛsɛ.səri, ˈsɛkre.təri, ˈɔːdɪ.nəri, ˈɪnte.rɛstɪd/ 'necessary, secretary, ordinary, interested' are common in Scouse; one or two /e/-forms like

/.nesɪˈserɪlɪ/ with a shift of the main stress are found in RP. The irregular status of /ɛ/ is demonstrated by such forms as /.sekreˈtɛəriəl, .sekreˈtəriəl / 'secretarial', for there is no grade relation between Scouse /ɛ/ and /ə/. The syllable with secondary stress is the peak of a subordinate rhythm unit, and as such requires a vowel of at least normal grade, e.g.:



where the quantities of /.ɛ ri/ are related as the syllables of e.g. /ˈfɛri/ 'ferry'. It is not clear exactly why /ə/ should become /ɛ/, but this problem is not confined to Scouse, as /ɛ/-forms occur in other varieties, including American English. It should be pointed out, however, that Scouse does not use /o/-forms like the American /ˈtranzɪ.tɔri, ˈləbɔre.tɔri/ 'transitory, laboratory'; such words are more likely to have shifted stress.

We have already discussed (5.3.2. p137) that in cases of mutually clitic preposition and pronoun, varieties of English differ in stressing one word or the other. Scouse tends to stress the preposition, and RP either. Stressing the preposition creates a subordinate unit with "secondary" stress, as in (61) /ˈtɛn .ɔv ðɪm / 'ten of them', while stressing the pronoun is to give extra prominence to the last enclitic in the string.

### 5.5. Syllable Rhythm

The syllable is a complete rhythm-unit with the rhyme at the centre, the onset in proclitic position, and the enclitic coda (see

Rhythm:33-40).

The onset, like proclitics at other levels, tends to be rushed over on the way to the peak of the unit. The more segments there are, the longer the total length of the proclitic section, but each individual segment is progressively shortened. For instance, in rye-pry-spy the length of /r/ is progressively decreased as the length of the onset is increased.

An occasional but remarkable feature of complex onsets in Scouse is the introduction of an epenthetic /e/. In English generally, articulatory movements tend to be anticipated during the formation of preceding segments, so that e.g. in pry the tongue is taking up the position for /r/ during the labial closure for /p/, and in twelve rounding for /w/ begins during the production of /t/. The degree of overlap is markedly less for some Scouse speakers than is normal in RP syllable onsets, and this is particularly noticeable for /r/, which tends to be flapped in this case. In some cases, the preceding consonant is actually released before the tongue begins to produce the phonetic qualities associated with /r/, and it is this brief interval that gives the impression of a very short /e/. Thus brown, shrink sound di-syllabic /b<sup>ə</sup> 'raun, ʃ<sup>ə</sup> 'rɪŋk/; this impression is reinforced by intonation when such words are accented, for /<sup>ə</sup>/ may contrast in pitch with the tonic movement, or even be making a preliminary glide in the opposite direction. This separating off of the beginning of the coda is strangely similar to the formation of subordinate units at higher levels. Epenthetic /e/ tends to be used by young men, possibly as a sign of bravado and defiance; for example a young factory-hand referred to the lower middle class people of a local Wimpey estate as /b<sup>ə</sup> 'roukə daun 'tu:fs/ 'broken-down toffs'

with an exaggerated separation of /b/ and /r/.

In the rhyme, the relative lengths of peak and coda depend on a number of factors, including the grade and degree of openness of the vowel, the type of coda, and the number of segments in the coda. In a 'Northern English' type (Rhythm:39), grade is the most important factor, and coda-type has little effect. In RP, coda type and the openness of the vowel are both important. Scouse is partly similar to both types, and differs from both. All types are influenced by the number of segments - the coda is progressively longer in coal - cold - colds - but having been mentioned, this factor can now be left out of account.

The quantities of vowel and coda can be predicted very roughly for RP using two conventions and three rules. The first convention is of three morae or degrees of length: (1) short (unmarked), (2) intermediate (marked \*), and (3) long (marked :). The second is to distinguish a strong coda, or one with a "voiceless" consonant in it, from a weak coda, or one containing only "voiced" consonants. The three rules are:

- (1) Full-grade vowels are long, and normal grade vowels are short. The coda is long after a short vowel, and short after a long one.
- (2) If possible, adjust for type of coda by transferring one mora from the vowel to a strong coda, and one mora from a weak coda to the vowel.
- (3) Transfer one mora if possible from the coda to an open vowel.

Take for example the series    bit        bid        beat        bead

1.	brt:	brd:	bi:t	bi:d
2.	brt:	br*d*	bi*t*	bi:d

Compare the open series	<u>cot</u>	<u>cod</u>	<u>cart</u>	<u>card</u>
1.	kat:	kod:	ka:t	ka:d
2.	kat:	ko*d*	ka*t*	ka:d
3.	ko*t*	ko:d	ka:t	ka:d.

The predicted quantities must in practice be adjusted more finely.

Vowel and coda do not in fact vary in strict inverse proportion, and the difference between /t/ and /d/ in bit/bid is rather less than the difference in the vowel. Secondly, voiceless fricatives and some other codas have a lengthening effect on the vowel, and this has proved important in the past, for in words like class, path, off, cross original normal grade /æ, ɒ/ has been recategorized as full grade /ɑ, ɔ/.

The 'Northern English' type has rule (1) only. Final consonants are somewhat longer than in RP after normal grade short vowels, and this is particularly noticeable in words like cod where the vowel is open. The vowel is also fully long in words like beat and boot. It is conceivable that 'Northern English' is rhythmically more conservative than RP, and that the ordering of rules (1-3) has some historical significance. Rule (3) is possibly a relatively recent development in RP (see e.g. Gimson, 1970:105, on the lengthening of /æ/). 'Northern English' also retains short vowels before voiceless fricatives in class and off etc.

Of the Scouse monophthongs, /a a ʊ ɔ ɜ/ follow rule (1) only, and this results in short vowels in words like bad, jam, nod, one /bad ɟam nʊd wʊn/, with only a few exceptions like the lengthened /ɜ:/ of the proper name God. The coda is relatively long in such words, although in the case of nasals the final trailing off of the voice leads to loss of nasal resonance: this gives the impression

in words like jam, one that both vowel and coda are maximally short. Short /a v/ are retained in class and off and comparable examples. There is not much difference in the full grade vowels before strong and weak codas, so that the distinction must be made in the coda in such pairs as cart/card; caught/cord; curt/curd. If insufficient distinction is made in the coda, the contrast of coda-types is lost, e.g. in dwarves, which can be analyzed as either /dwɔfs/ or /dwɔvz/, the trailing off of voice in /vz/ is insufficiently different from the voiceless /fs/ to maintain the distinction.

The remaining monophthongs /i r e o u/ follow rules (1,2). The shortening of /i u/ before a strong coda is often more marked than in RP, so that they are fully short in priest, beak, book /prɪst, bɪk, buk/ and fully long in lees, lose /li:z lu:z/. Lengthening of /r o/ before a weak coda is as for RP /r u/, but /e/ can become fully long, as in leg /le:g/.

This mixture of rhythmic types in Scouse appears entirely haphazard at first. It can be explained if the ordering of rules (1-3) is historically significant. Anglo-Irish - apart from the Northern dialects of Ulster - tends to determine vowel length by rule (1) only, and is thus similar to 'Northern English'. The two main historical sources of Scouse agree in this respect, and it is not unreasonable to postulate a 'basic' Scouse rhythm according to rule (1), which is then subject to rule (2) for certain vowels under General British influence, and inhibited for other vowels.

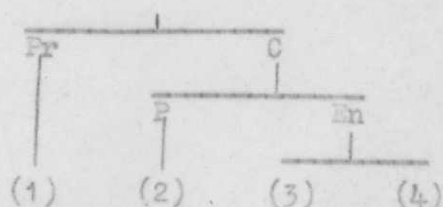
The inhibition of rule (2) is probably due to the similarity of phonetic quality of some vowels. Open /a e v o/ are all centralized, away from the periphery of the vowel area in the direction of /e/,

and the quality of /ɔ/ can overlap with that of /a/, and /ʊ/ is sometimes very like /ɔ/; the distinction of vowel duration is therefore essential to keep these vowels apart. Rule (2) does not apply because it would obliterate the distinction, or at least obscure it. The closer /i r e o u/ are better spaced out, and quality differences are enough to keep them apart, and rule (2) can apply without any problem. The remaining vowel is /ɜ/ which has a number of variants, some like /e/, others like /ɛ/ and others like /ɪ/; /ɜ/ is kept apart by its full length. The only exception is that if a speaker uses /ɛ/ for /ɜ/ and lengthens /ɛ/ before a weak coda, there are a few cases where the distinction is not very clear, e.g. /bɛd/ 'bird, bared' and /bɜ:d/ 'bed'. But the total number of such cases must in practice be extremely small.

There is another adjustment to rule (2) which must be mentioned, and which applies in Scouse as in RP. If the coda begins with /l/ or a nasal, it is this consonant rather than the vowel which attracts the extra length before a voiced consonant, e.g. compare bend with long /n/ and bent with short /n/, or cold with long /l/ and colt with short /l/.

### 5.6. The Rhythm of Complex Vowels

A vowel is the smallest rhythm unit (with some exceptions) and its parts are the smallest elements of rhythm. It has up to four places:





A monophthong is a simple vowel at place (2), "rising" diphthongs fill (1) and (2), and "falling" diphthongs (2) and (3). Triphthongs are usually falling at (2), (3) and (4), but occasionally they occur at (1), (2), (3), (Rhythm: 41).

We have noted above that in a word like necessary, RP tends to concentrate the prominence on the first syllable, and to reduce non-final enclitics severely, while Scouse tends to distribute some of the prominence to the enclitic position, creating a subordinate group with secondary stress. A similar phenomenon is found at the level of the vowel. RP tends to concentrate prominence on place (2) (Rhythm:41-43), and places (3),(4) are much weaker. In triphthongs, (3) may not be reached at all, of /tae, tee, plee/ 'tire, tower, player'. In Scouse, on the other hand, some prominence is distributed to the enclitics at (3) and (4) (Rhythm:43-45), and this prominence might be called focus. Place (2) usually has greater inherent sonority, and features associated with stress like the peak of loudness and the centre of pitch prominence, while the focused element has prominence of quality and quantity. For purposes of transcription, we can use the acute accent for the 'stressed' element (v́), and the grave for the 'focused' element (v̀), and the circumflex when both occur together as in RP (v̂).

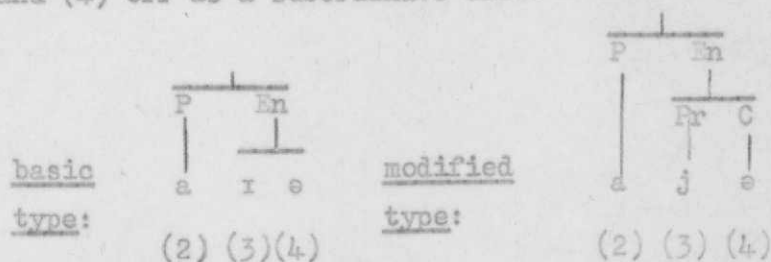
Scouse diphthongs tend to be end-focused, i.e. /áú, óú, éí, áí/ although centring diphthongs like /ie/ tend to have initial focus. A feature of an end-focused diphthong is that its elements appear to belong to separate phonetic syllables, and this impression is often given by pitch patterns. Thus in /'nóúz/ 'nose', /é/ takes the fall and /ú/ the rise rather like the separate syllables of say, /'sóməz/

'summers', and the elements of /.'əʊ/ contrast in pitch rather like the syllables of say, /.'dʌke/ 'docker'. The transition to the focused element from the stressed one is rapid, and the quality of the focused element is clearly reached. Before a weak coda, it is the focused element rather than the stressed one that attracts the extra length, e.g. in /nəʊ:z/ 'nose' as opposed to RP /ne:uz/. When the diphthong is short before a strong coda, the stressed element is short, and often obscured and centralized, e.g. /wārf, hāus/ 'wife, house'; this pattern is even found in accented open syllables, e.g. /'bɛɪ, 'bɛɪ, 'bɛɪ / 'bay, buy, boy'. An extreme case is provided by (50), whose pronunciation of throat is impressionistically [er<sup>o</sup>ut], and which can be analysed /er<sup>o</sup>ut/, with the stress shifted to place (3) to form a kind of rising diphthong.

In certain circumstances (the details of which will be discussed later and do not concern us here), focus is shifted to the stressed element. This tends to occur before /l/ and nasals, and for some speakers before weak codas in general. In an initial focused diphthong, length is concentrated on the first element; the starting quality may also be affected, e.g. it tends to be closer in /stɛɪl/ 'stale' than in /stɛɪd/, and more open and further back in /māɪl/ 'mile' than in /hāɪd/ 'hide'. The transition to the second element is slow, and the finishing quality may not be properly reached, or more precisely, the finishing quality is obscure and somewhere in the middle of the vowel area. The ending of /eɪ, aɪ/ in stale, mile might be transcribed [ɛ], somewhere between /ɪ/ and /e/. Diphthongs in /u/ have more resistance to focus-shift and the obscuring of the second element, but (81) produces an exceptional form which sounds

like /'dɒntʃe/ 'don't you?'. This is presumably a case of /'ɔu/ with very little movement away from the starting-point; the vowel is also shortened and sounds like a variety of /o/ rather than /ɔu/.

There are three main types of triphthong in Scouse: (1) the basic end-focused type, (2) the modified end-focused type, and (3) the type with initial focus. In a word like fire /faɪə/ or flower /flaʊə/ the first element /a/ is stressed, but focus on the second and third elements preserves the triphthongal movement and prevents it being simplified to a diphthong; this type sounds phonetically di-syllabic owing to the pitch pattern which gives a contrast to the first element as opposed to the second and third. For example, (77) has portrayal /pe'ɪtʃɪəl/ with the fall on /ɛ/ and the rise on /ɪə/. The element /ɪ/ or /ʊ/ is at the syllable boundary, and it also forms a trough of prominence on account of its lesser inherent sonority: the last two elements of vowels like /aɪə, aʊə, ɪə/ form a kind of rising diphthong, and a common development in Scouse is to increase the trough effect by reducing /ɪ ʊ/ to glides, and separating places (3) and (4) off as a subordinate unit:



The modified type is more obviously di-syllabic than the basic one. In either type the stressed element can be centralized, e.g. /fɪʃe/ 'fire':

In triphthongs with initial focus, the quality of /ɪ ʊ/ at (3) is unlikely to be reached in the slow transition away from (2), so

that the triphthongs are effectively reduced to diphthongs. Vowels of the RP type are not unknown in Scouse, e.g. (20) has /fl<sup>h</sup>ɔ:z/ 'flowers', but they are rare. Triphthongs with initial focus are more common in certain special environments such as before /l/ or a nasal.

In RP, try it and trying are likely to have the same vowel, but Scouse tends to use different vowels. Try it has end-focus /traɪt/, and while one would hesitate to deny the possibility of end-focused /traɪn/, trying is more likely to have initial focus before /n/ and occur as /trâ in/. An actual example is:

(23) ... what he was saying / wɔ: i wez.sâ in/

A problem with these forms is whether they are one or two phonetic syllables. They are probably two, since saying is not identical to sane with initial focus, and the vowel of trying is not that of tine. There is just a trace of a /j/ glide forming a trough between the prominent element at (2) and /r/ of -ing at (4); similarly, a slight /w/ glide remains in going /g<sup>w</sup> in/. In the pitch pattern, on the other hand, they are more like mono-syllables in that the tonic movement tends to be carried out on the element at (2) instead of contrasting the pitch of (2) with that of succeeding elements.

### 5.7. Conclusion

A difficulty in describing rhythm is the lack of rhythmical contrasts. In segmental phonology, one can start with a contrast of say, /p/ and /b/ - and the general agreement that /p/ and /b/ do exist in the language - and proceed to the details of how the contrast is made. In rhythm one has only a number of phonetic details

which one claims as rhythmical, and one looks for the general patterns in the variety of particular cases. We have here suggested the very simple patterns of rhythm units at various levels, and the variations of grade.

In segmental phonology, one can talk very crudely of "voiced consonants" or "oral vowels", but the phonetic realizations are in fact very complex; however, even if "voiced" is in fact voiceless, or "oral" in fact nasalized, these terms are still useful labels for phonological categories. In rhythm, one can talk very crudely of "stress", "syllable" or "segment", but these terms refer to what are phonetically a number of different things. But in this case there are no simple phonological categories for these terms to label. Whereas there is just one /p/ or /b/, there are different kinds of stress and syllable. It is possible to make spurious generalizations by oversimplifying such terms (see, e.g., Chomsky and Halle, 1968), and although we have attempted to define terms like stress and syllable, it is quite possible that we have made spurious generalizations at a later stage.

Rules inevitably take the form that a is longer or otherwise more prominent than b. What is important, however, is not the objective measurement or mathematical ratio on any particular occasion, but the possibilities of variation. Our rules for syllable length are not refuted if the second syllable of poppy is sometimes shorter than the first: the important fact is that the second syllable can vary to fully long whereas the first cannot. The importance of our rule for /are/ is that it can be simplified in the direction of [a] in RP, and developed in the direction of [eja] in Scouse:

any particular case may or may not fit the general pattern.

The rhythms which a speaker actually produces are determined partly by the phonology of his language, and partly by the working of his speech apparatus. Our rules and generalizations are concerned with the phonology, and only incidentally with the time necessarily taken to produce syllables and segments. As a general phonetic problem, objective measurements must be reconciled at some stage with phonological rules and the working of the apparatus. This is an interesting topic for future work, but it goes far beyond our present purpose, which is to give a description of Scouse.

Chapter 6:

Intonation

6.1. Intonation and Rhythm

The rhythm of an utterance provides it with a structural framework governing the relative prominence and duration of its segments. Intonation is connected to this same framework, and in particular to the accented syllables, or those which obtain their prominence by means of pitch movements. The fact that a given syllable is accented is a matter of rhythm, but the tone by which it is made accented is a matter of intonation.

Rhythm units of different size are all relevant to intonation, and we shall have to investigate how pitch movements are spread over the parts of a complex vowel, over a syllabic peak and coda, or over a stressed syllable and its enclitics. These low level elements carry pitch movements, and they can affect the details of those movements; but they cannot themselves bring a pitch movement about. The study of intonation must therefore start with higher level units dominated by accented syllables. The American 'pitch contour' (as in e.g. Pike, 1945, or Trager and Smith, 1957) is based on the tones of individual accents, and the British 'tone group' or 'tone-unit' - which might be better described as a 'nuclear tone unit' - deals with the pattern of tones in the complete unit dominated by a nuclear accent. We shall adopt here the 'tone-unit' kind of analysis. There may be units of higher levels still, but relations within the tone-unit are much closer than those between units, and intonation can be described much more easily by starting at the tone-unit level than below or

above it. This is parallel to the standard practice in grammar of taking the sentence as the unit of syntax, while not denying the existence of higher level units in discourse.

## 6.2. Tones and Tonetics

The purpose of describing Scouse intonation is to identify some of the features which mark the speaker as a Scouser, or which are at least restricted geographically or socially. The first difficulty is that it is by no means clear what are the limits of 'Received' intonation, what patterns an RP-speaker would or would not use, or in what circumstances he uses a given pattern. Secondly there are other sources of variation in intonation - style, tempo and personality - and it is not easy to disentangle the strictly dialectal. For instance, a person might use a very narrow pitch range either because he is a Scouser, or because he is personally shy and retiring; or he may use a lot of ascending-descending patterns when speaking to children, either because that is how he speaks to children, or because that is how he speaks anyway. We shall mention stylistic and personal features where appropriate, but our chief concern is to show how Scouse differs from the kind of intonation described by Kingdon (1958), O'Connor and Arnold (1961, 1973) and Crystal (1969).

In order to describe the variation, we must first decide what is varying; that is, we need abstract phonological units, or tones, which vary in their phonetic realizations. Tones are of a general prosodic nature, but we cannot assume in advance that any given



feature will in itself be sufficient to distinguish them. We can be reasonably certain that the pitch levels used will be very important, but other features may also be involved. We shall use the term tonetics for those phonetic features involved in the realization of phonological tones. Just as dialects differ in the realization of corresponding phonemes, so they may differ for corresponding tones; and it is possible that correspondences of tone cut right across tonetic similarities, e.g. an ascending-descending pitch movement described as a 'rise-fall' in RP might be a simple 'fall' in Scouse, with the Scouse contrast of 'fall' and 'rise-fall' corresponding to minor variants of the RP 'rise-fall'. This sort of possibility is not really allowed for in conventional treatments of intonation, which are essentially taxonomic, in that tones are classified on a strictly tonetic basis.

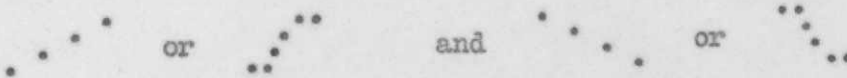
Dialect differences are partly a matter of frequency, e.g. the simple rising tone is commoner in RP than in Scouse, while ascending-descending pitch patterns are commoner in Scouse than in RP. Crude frequency is almost certainly linked to distribution, e.g. there are environments where an RP-speaker would use a simple rise, and a Scouser would prefer a fall-rise. More interesting are differences in inventory: Scouse has a tone which we shall call the "step", which is characteristic of Anglo-Irish intonation, but which has no discernable counterpart in RP. There are also of course tonetic differences.

The tonetic features of Scouse tones include: (1) pitch direction, (2) pitch gradient, (3) peak and bounce, (4) the centre of prominence, (5) linear spread, (6) pitch range, (7) completeness,

and possibly (8) voice quality.

(1) Pitch Direction: Pitch basically moves either up or down, or it can remain relatively level. As a matter of terminology, we shall refer to "ascending" and "descending" pitch movements, reserving "rise" and "fall" for tones.

(2) Pitch Gradient: The pitch may glide up or down, fast or slow but relatively evenly; or it may suddenly skip from one pitch level to another:



The effect of the skip is to make the beginning and end of the movement very prominent and to contrast them; there is a "trough" of prominence in the middle, when the rapid movement is being made. The "trough" may be reinforced by a rapid falling-off and building up again of loudness. If the skip does not already coincide with a syllable boundary, the trough creates (a phonetic) one, possibly in the middle of a long vowel, or between a vowel and coda, or between the elements of a complex vowel.

(3) Peak and Bounce As the pitch moves up and down, it ascends and turns at a "peak", descends, and "bounces" at the bottom of the pitch range. The changes of direction at peak and bounce are extremely prominent, and may be a significant part of the movement for a tone. Compare the phrase the man in RP and Scouse:



In RP, the descent is most important, and there is a characteristic smart skip at the beginning of the stressed syllable from the previous - or "reference" - pitch, to the starting level for the tone: there is no appreciable difference in pitch between the onset /m/ and the vowel /e/. But for Scouse, the peak is more important, and it is reinforced by a slow glide up from the reference pitch which reaches the starting level for the tone only at or even during the accented vowel. It is this initial glide that makes it easy to confuse the Scouse fall and rise-fall (and similarly the rise and fall-rise). The relation between initial and tonic movements is superficially similar to that between some homosyllabic preheads and nuclei (see Kingdon, 1958:53-55).

(4) Centre of Prominence: The centre of prominence can be identified segmentally as the peak of the accented syllable, and the "stressed" element of a complex vowel. It is subjectively the most "stressed" and perhaps the loudest part of the tone, but pitch patterns are a more reliable guide. Consider the following:



The centre of prominence in each case coincides with the first change of direction after the pitch has moved away from the reference level:



The tones realized are (a) fall, (b) rise-fall, (c) rise, and (d) fall-rise.

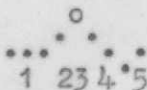
Where a tone has a skipping movement, the change in gradient may be sufficient to mark the centre of prominence. There may be no initial movement and the centre coincides with the first contrasting pitch level, e.g.



(5) Linear Spread: The pitch movement following the centre of prominence may be carried out almost immediately, or it may be spread out over following segments or syllables. In the RP fall, for instance, the pitch descent is virtually completed on the nuclear syllable, leaving any following syllables on a low pitch, as in 'argument or 'welding; if the nuclear syllable is too short for the movement to be completed, as in 'horribly, the low pitch begins on the second syllable. In the Scouse type, the descent frequently only begins on the nuclear syllable, and is completed on following syllables. Whereas the nucleus is marked by the descent in RP, it is marked in Scouse by the change of direction at the peak.

In the simple fall or rise, the pitch movement has two functions: first it marks the accented syllable, and secondly it gives it a tone. These two functions are separated in the complex rise-fall and fall-rise tones, the first movement marking the accent and the second identifying the tone. Scouse and RP differ for some environments in the linear spread of the accenting and tonic movements.

At this point it might be useful to label the parts of a tone:



From the reference pitch (1), the pitch makes an initial movement (2) to the centre of prominence (3); it then turns to make the accenting movement (4) and finally the tonic movement (5). In the simple tones, (4) and (5) combine in a single movement.

(6) Pitch Range: Pitch range varies in a number of ways. First, "low", "mid" and "high" pitch are determined for a particular tone-unit by the total range between the highest peak and the lowest bounce. This is partly determined by the speaker's emotional state - excitement, agitation or lack of it - partly by personality, and partly socio-linguistically. Scouse tends to use a narrow total range, and pitch movements can be so narrow that they are very difficult to hear: perhaps this is why peak and bounce are so important.

Secondly, the prominence of an accented syllable can be increased by widening the initial movement, and perhaps slowing down and exaggerating the glide.

In a complex tone, the tonic movement can be narrowed, but the effect of this is to change the variety of tone. In a complex tone with two changes of direction, the centre of prominence is located at the first change. The second change, even if it falls on a syllable coda or a completely unstressed syllable, is also very prominent, and at slow tempo can even attract a rhythmic beat, e.g.: You <sup>1</sup>say you <sup>2</sup>'counted <sup>3</sup>.,twenty? or I'm <sup>4</sup>.sure I <sup>5</sup>.counted <sup>6</sup>.,<sup>7</sup>twenty, where beat can fall on -ty. Now the first change of gradient in a skipping movement is prominent enough to take the centre of prominence, and the second change of gradient is also prominent. The important fact about complex tones and skipping movements is that they both have two areas of prominence with a

trough in the middle: the minor fact is that this prominence is made by the pitch movement in slightly different ways. Skipping movements, where they do not realize complex tones of the ordinary type, can be interpreted as realizing complex tones with completely narrowed tonic movements. Thus in Scouse,  $\overset{\circ}{\underset{\circ}{\cdot}} \overset{\circ}{\underset{\circ}{\cdot}} \overset{\circ}{\underset{\circ}{\cdot}}$  is closely related to  $\overset{\circ}{\underset{\circ}{\cdot}} \overset{\circ}{\underset{\circ}{\cdot}} \overset{\circ}{\underset{\circ}{\cdot}}$  and quite different from  $\overset{\circ}{\underset{\circ}{\cdot}} \overset{\circ}{\underset{\circ}{\cdot}}$ , and  $\overset{\circ}{\underset{\circ}{\cdot}} \overset{\circ}{\underset{\circ}{\cdot}}$  is closely related to  $\overset{\circ}{\underset{\circ}{\cdot}} \overset{\circ}{\underset{\circ}{\cdot}}$  and quite different from  $\overset{\circ}{\underset{\circ}{\cdot}} \overset{\circ}{\underset{\circ}{\cdot}}$ . If the tonic movement is narrowed right down to zero, then a tone of the 'falling' type is realized by a pitch movement that only ascends, while a 'rising' kind of tone has only descending pitch.

Paradoxes of this kind are acceptable if we keep a clear distinction between phonology and phonetics. Comparable paradoxes are found in segmental phonology, e.g. that a "voiced" consonant can be produced without vibration of the vocal cords, or that a Scouse "stop" can be made with only partial blockage of the air-flow. The paradox also explains a most disconcerting problem in my early attempts to transcribe Scouse: having been trained to respond to the pitch movements of RP, I found a number of Scouse tones which appeared to change direction from one hearing to the next, or even to move simultaneously in opposite directions! The difficulty was that the audible pitch movement was in conflict with my intuitive response to a tone as of the 'rising' or 'falling' type.

(7) Completeness: A narrowed tone is not the same as an incomplete one, which occurs when a pitch movement is cut short or interrupted by a voiceless consonant. Many Scousers make little or no compensation, so that in 'ðis or ðis 'this' there is only

just enough movement to show whether it is descending from a peak or bouncing. Another effect of voiceless consonants is to turn glides into skips, so that in e.g. Exeter the pitch skips from a low to a high to a low pitch, even though the final tonic movement would normally be a glide.

(8) Voice Quality: Low pitches can be accompanied in Scouse - sporadically or idiosyncratically - by creaky voice. The change of quality from voice to creaky voice, or from creaky voice to voice, provides an occasional extra means of recognizing descending and ascending pitches respectively. High pitches are often accompanied by straining: these pitches are not intrinsically high for the human larynx, and the strain is more likely due to the difficulty of producing them with the setting for the Scouse voice quality.

### 6.3. Nuclear Tones

The major distinction is between falling and rising tones. In the falling type are the simple fall, the complex rise-fall, and the narrowed rise-fall or step. The rising type includes the simple rise, the complex fall-rise, and the narrowed fall-rise or drop; the true fall-rise must be further distinguished from the compound fall-plus-rise, and the drop must be subdivided into the high drop and the low drop.

While most pitch patterns can be ascribed to one or other of the tones, there remain some level pitches of uncertain phonological status. These are presented simply as level tones.

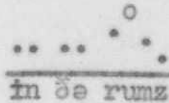
#### 6.3.1. Fall



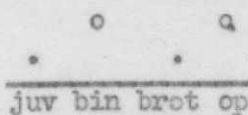
The pitch rises from the reference level, turns at the centre

of prominence, and then glides down to the bottom of the pitch range.

On a final fully "voiced" syllable, the fall is spread over the vowel and following segments, e.g.

(29) in the 'rooms 

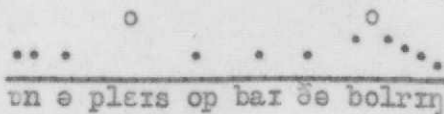
and similarly (42) we were 'bombed /wi we 'bʊmd/. The initial movement is interrupted by voiceless /s/ in examples such as (15) we 'got this 'smell /wi 'gɒt ðis 'smel/, or (29) .after I left 'school /.after e lef 'skul/. A final voiceless consonant cuts the pitch descent off short, e.g.

(19) you've 'been brought 'up 

- also (29) you 'know the .way they 'talk /je 'nou ðe .wei ði 'tɒk/
- (29) I slip .up with it my'self /'aɪ slɪp .ʊp wɪð ɪt mi'self/
- (36) the .first .time I .ever 'went /ðe .fɜːst .taɪm aɪ .evə 'went/
- (36) and I've 'been going 'since /ən ev 'biːn ɡoʊɪŋ 'sɪns/

Actually, since voicing in Scouse tends to trail off before the end of an utterance - even before or on final /l/, nasal or a vowel - falls are generally incomplete on final syllables.

If the stressed syllable is followed by an enclitic, the fall tends to be spread over both syllables, e.g.

(29) on a 'place up by the 'Bullring 

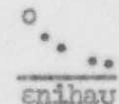
- also (29) 'kanləd /'kanləd/
- (29) I 'never went to 'mass on the 'Sunday /e 'nevə wen te 'mas ɒn ðe 'sʌndi/



(42) in Sep'tember /in sep'tembe/

(15) Well that's the Rotunda /wel 'ðats ðe re'tonde/

Where there are several enclitics, bottom pitch may not be reached until the end of the final syllable, e.g.

(60) 'anyhow  


(29) the 'place we were demolishing /ðe 'pleis wi we di'moliʃɪn/

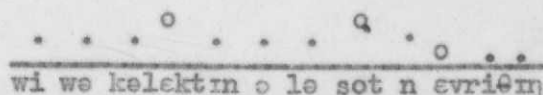
(19) 'Scottie Roaders /'skoti roudez/

(39) I was 'hurt in the 'Blitz on 'Liverpool

/e wəz 'ɛt ɪ ne 'blɪts ɒn 'lɪvəpʊl/

But if there are any stressed syllables after the nucleus, bottom pitch is reached on the first stressed syllable - and possibly on any syllables proclitic to it - and this pitch is retained until the end of the tail, e.g.

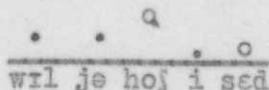
(14) we were co'lecting all the 'soot and .everything



(14) 'Anthony Street /'antəni .strɪt/

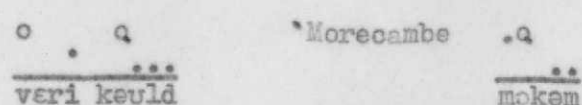
or when the stressed syllable has a proclitic:

(15) "Will you 'hush!" he said.



(29) and the 'floor co.l.lapsed /ən ðe 'flo ke.ləpst/

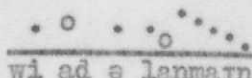
Falls of the Scouse type are heard in middle class speech, but some speakers approach the RP type by suppressing the initial movement and completing the descending pitch as soon as possible:

(61) 'very 'cold      o      q      'Morecambe      .q  


6.3.2. Rise-Fall (,') ...<sup>o</sup>...<sup>o</sup>...<sup>o</sup>...

The pitch moves to the centre of prominence, and then skips up to a peak as soon as possible, finally gliding as for the fall down to the bottom of the pitch range. Since the accenting movement is a skip, there may be little or no initial movement down from the reference pitch.

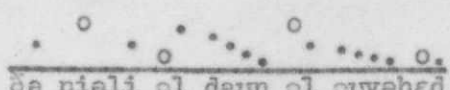
If the vowel of the nuclear syllable is followed by /l/ or a nasal, then the skip takes place between vowel and coda:

(42) we had a ,`landmine  
  
 wi ad ə lanmin

where /n/ is phonetically syllabic on account of its separation from the vowel /ə/. Similar examples include:

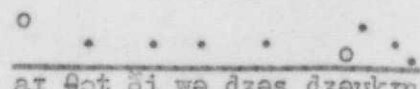
- (42) with the ma,`chine gun /wið ðe me,`ʃin gon/
- (36) the ,`girl took me /ðe ,`gɜ:l tok mi/
- (19) they ,`all ,speak the ,same /ðeɪ ,`ɔ:l ,spik ðe ,sem/

The prominence on the coda is important for recognizing the rise-fall as opposed to the fall:

(15) they're 'nearly ,`all down, `all over.head  
  
 ðe niəli ɔl daʊn ɔl əvəhed

In ,`all, /l/ contrasts in pitch with the vowel, whereas in `all it merely continues the downwards path started by the vowel.

The skip similarly takes place between the parts of an end-focused diphthong, thus adding to the prominence of the second element, and making it a separate phonetic syllable:

(61) 'I thought they were just ,`joking.  
  
 aɪ θɔt ði we dʒes dʒeʊkɪŋ

Another example is:

(60) to .see what , "roded".meant /te .si wɒt ,ˈreʊdɪd .mənt/

This tone has an unusual effect on the phonetic syllables of a word like bowel:

(42) ,ˈbɒwəl .təken ə .weɪ

$\frac{\overset{\circ}{\underset{\circ}{\text{b}}}\overset{\circ}{\text{a}}\overset{\circ}{\text{u}}\overset{\circ}{\text{l}}\overset{\circ}{\text{t}}\overset{\circ}{\text{e}}\overset{\circ}{\text{r}}\overset{\circ}{\text{k}}\overset{\circ}{\text{n}}\overset{\circ}{\text{e}}\overset{\circ}{\text{w}}\overset{\circ}{\text{e}}\overset{\circ}{\text{i}}}{\text{bawl tərkn eweɪ}}$

This word has phonologically two syllables - /baw + l/ - but the phonetic syllable division comes at a different place. The trough between /a/ and /u/ separates them, and the gradual fall in prominence from /u/ to /l/ unites them, giving the phonetic syllables [ˈba + ul].

If the nuclear syllable has a long vowel, and no suitable ending to contrast in pitch, the skip takes place on the vowel:

(42) ˈʌpə ,ˈpɑːliəmənt .stri:t

$\frac{\overset{\circ}{\text{a}}\overset{\circ}{\text{p}}\overset{\circ}{\text{e}}\overset{\circ}{\text{p}}\overset{\circ}{\text{a}}\overset{\circ}{\text{l}}\overset{\circ}{\text{e}}\overset{\circ}{\text{m}}\overset{\circ}{\text{e}}\overset{\circ}{\text{n}}\overset{\circ}{\text{t}}\overset{\circ}{\text{s}}\overset{\circ}{\text{t}}\overset{\circ}{\text{r}}\overset{\circ}{\text{i}}\overset{\circ}{\text{t}}}{\text{'oʊpə pɑːləmənt strɪt}}$

(19A) ˈðæt wəz ,ˈjiːz ə .ɡəʊ/

(25) ˈjuːrə ,ˌkleɪvərə than ,ˈmiː ,ˌæŋdʒələ /'jo .kleɪvərə ðən  
 ,ˈmiː .ændʒələ/

(40) ənd ðeɪr ,ˈʃɪrts .hæŋɡɪŋ .aʊt /n ðe ,ˈʃɪts .aʊt/

(40) nə ,ˈʃuːz ɒn /nə ,ˈʃuːz ɒn/

In this environment, there may be little or no perceptible difference between the rise-fall and the simple fall. If there is an initial descending movement, the tone is a rise-fall; if the tonic movement is begun actually on the vowel, it is probably a simple fall. But otherwise a skip on a monophthong ...<sup>o</sup> - where the pitch contrast is not reinforced by a phonetic contrast - is very like an initial glide up on the vowel itself ...<sup>o</sup>. The maximum of "stress" or loudness is of no help in practice in deciding whether the centre of prominence is high or low.

In similar circumstances, when the nuclear vowel is short, the skip up coincides with the existing syllable boundary:

(40) I'm ,interested in ,quite a ,lot of ,things

• o • o • • o • o • • •  
 em interɛstɪd ɪn kwɔt ə lʊt ev θɪŋz

(15) 'Just about ,ready for ,coming down /'dʒʌst əbaʊt ,redi  
 fə ,kɒmɪŋ ,daʊn/

(60) ə ,jammi pi:se /ə ,dʒami pi:s/

Middle class speakers sometimes use a skip up on the syllable boundary where normal Scouse would have it on the nuclear syllable:

(60) we've ,always

• o • • •  
 wɪv əlweɪz

(60) ,underground

• • • • •  
 ɒndəgraʊnd

The pitch of this last example begins like RP, but ends slightly differently, for an RP speaker would return to bottom pitch sooner on the last syllable.

In Scouse, this characteristic postponement of bottom pitch can sometimes disregard stressed syllables in the tail, e.g.:

(42) He be ,longs to ,Liver.pool, ,Bamber ,Gascoigne

• • • • •  
 i bilɒnz tə livɪpʊl bəmbe gɑsgɔɪn

This may in fact be not a true rise-fall, but a compound rise-plus-fall; this is an unusual tone which is intuitively equivalent to a compound rise-fall-plus-rise:

He be ,longs to ,Liver.pool ,Bamber ,Gascoigne

The rise-plus-fall is common in Anglo-Irish intonation, and is

used by the Dubliner (34):

(34) .mostly .on the ,fishing \*trawlers \*mostly  
 /,mɔsli .ɒn ðə ,frɪʃɪŋ \*trɔ:ləz \*mɔsli/

(34) a. \*nɔðə \*gʊd ɛk\*spəriəns /ə,nɔðə \*gɒd ɛk\*spəriəns/

Both of these might be expected to have a rise-fall-plus-rise in Scouse, with the final rise at the same place as the Irishman has the final fall.

6.3.3. Step            (,')            ...σ<sup>•••</sup>

The step begins with a skip up from the centre of prominence in the same place as for the rise-fall. But the pitch, having reached a peak, remains fairly level or makes a very slight descent. The pitch of the centre of prominence relative to the reference level is not very important: it is usually lower or about the same, but is sometimes slightly higher.

The pitch contrast on either side of the skip is much milder than for the rise-fall. The contrast achieved by a change of gradient is not so sharp as a change of direction, and the omission of an initial descent to the centre of prominence narrows the contrast of high and low pitch. A long vowel in the nuclear syllable tends to begin the upward movement, thus reducing the pitch contrast with following segments or syllables:

(36) it's , 'all \*kinds of \*people \*go to it

•    σ<sup>•</sup>    •    •    •    •    •  
 —————  
 its əl kaɪndz ə pipl gəʊ tu ɪt

and similarly (50) one (of) the machines /'wʌn ðə me,'ʃɪnz/ .

The skip begins on the vowel in:

(42) on the , 'thirtieth /ɒn ðə , 'θɜ:tiəθ/

(42) on a , 'Tuesday /ʌn ə , 'tʃuzdi/

(25) 'I , 'sued them /'aɪ , 'suɪd ðəm/

The long vowel in a final nuclear syllable takes the whole tone:

(42) I was 'in St 'Bridget's , 'church.

. .                    .                    .                    ɔ̃  
 \_\_\_\_\_  
 e weɪ ɪn seɪnt brɪdʒɪts tʃɜːtʃ

Where the nuclear syllable has a short vowel followed by /l/ or a nasal, these are separated by the skip:

(36) I'm 'interested in , 'bingo

.                    .                    .                    .                    .                    ɔ̃\*\*\*\*  
 \_\_\_\_\_  
 ɪ ɪnterestɪd ɪn bɪŋɡoʊ

(36A) 'she's a , 'dunce /'ʃiz ə , 'dʌns/

(40) 'I clean the , 'cells /'aɪ kli ne , 'selz/

(42) with , 'them /wɪð , 'ðɛm/

(60) oh, you , 'can /əv ju , 'kæn/.

The parts of an end-focused diphthong are similarly separated:

(42) 'Princes , 'Road

ɔ̃                    .                    ɔ̃\*\*  
 \_\_\_\_\_  
 prɪnsɪz roʊd

(50) it was 'in the , 'paper /ɪ weɪ 'ɪn ðə , 'peɪpə/ ( ɔ̃\*\*)

(42) .couldn't , 'say /.kɒdn , 'seɪ/

(19) you 'never .hear bad .language , 'out of them

/ju 'never .ɪə bəd .læŋwɪdʒ , 'aʊt ə ðɛm/

And similarly an end-focused triphthong:

(50) .caught , 'fire /.kɒt , 'fɪə/

where the skip coincides with the middle element, clearly separating the first and third.

On the other hand, a diphthong with initial focus patterns like a long vowel:

(36) What , 'time is it 'please?

.                    ɔ̃                    .                    .                    .                    ɔ̃  
 \_\_\_\_\_  
 wɒt tə ɪm ɪz ɪt plɪz

(42A) You'd 'be sur,'prised /jəd 'bi se,'praizd/

The two types of diphthong are conveniently contrasted by (25):

(25) it turned , 'over three , 'times  
 . . . o<sup>\*\*\*</sup> . o<sup>\*\*\*\*</sup>  
 it tænd ouve θri taɪmz

When the nuclear syllable ends in a short vowel, the skip coincides with the syllable boundary:

(50) I'm a , 'cleaner  
 . . . o<sup>\*\*</sup>  
 ɪ e kli nɜ

(50) I 'can't , 'see it /e 'kɑnt , 'si it/

(42) it's 'been de,'molished /ɪts 'bɪn di,'mɒlɪʃt/

In this particular environment, the step is tonetically similar to one kind of RP rise, but it is different from the Scouse rise.

If the step occurs on a final syllable with a short vowel, the tonetic result is almost level pitch. We shall postpone discussion of these to the section on level pitches.

The step is occasionally followed by a long tail. In this case the pitch drifts gradually downwards, the descent being more marked on the stressed than on the unstressed syllables:

(42) , 'doctors' 'houses they 'used to 'be  
 . . . o . . . o . . . o  
 o  
 dɒktəz haʊzɪz ðe juz tu bi

(42) my 'mother's two , 'sisters were 'there /mi 'mɒðəz tu , 'sɪstəz  
 we 'ðe/

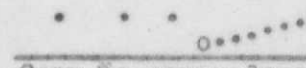
(42) I 'don't think the , 'atmosphere's the 'same  
 /e 'daʊnt θɪŋk ði , 'ætmesfɪəz ðe 'seɪm/

(25) 'this was .just a night , 'out we'd 'had and...  
 /'ðɪs wez .dʒɒst e naɪt , 'aʊt wɪd 'hæd ʌnd.../

(25) he's a , 'lorry 'driver but 'er...  
 /ɪz e , 'lɒri 'draɪvə bʌt 'ɜ.../


6.3.4. Rise (.) ...o°

The pitch descends from the reference level to the centre of prominence at the bottom of the range, and then glides up towards, but not much above, the first pitch. This tone differs from the step in having a glide rather than a skip, and the end point is rather lower in pitch. Whereas the RP (low) rise tends to move up from the reference pitch, i.e. ...o°, the Scouse tone has the initial descent. Like the RP tone, the Scouse rise has the glide spread over all syllables in the tail following the nucleus.

(15) from the su,rroundings   
 from ðe seraundinz

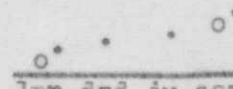
(15) .been too ,long in it / .bin tu ,long in it/

The tail can include stressed syllables on the same pattern:

(17) 'coming ,home from ,Sunday 'school  
  
 komrn ðum frəm sɔndi skul

(17) with 'two ,littæ ,boy :friends /wɪð 'tu ,lɪtl ,bɔɪ 'frɛnz/

It is very rare to get a wide pitch movement up to high level:

(20) ".Long" did you 'say?  
  
 lɒŋ dɪd ju seɪ

The use of the simple rise is much more restricted in Scouse than in RP. The first four examples above are used on incidental information, background detail that is not essential for the logical development of the story. Similarly (23), having made the point 'we were coming back home...in a hired car...' remarks

(23) well we were 'in er... a 'Morris əleven ,hundred  
 /wɛl wi wɛr 'ɪn ɛ... ə 'mɔrɪs ə.lɛvən ,ɒnred/



although the make of car proves quite irrelevant. Had the make been relevant, the pre-pausal low drop would have been more appropriate.

Another use is for unordered open lists of items:

(40) ,lawn-tennis ,table 'tennis ,football...  
/,ləntənɪs ,teɪbl'tenɪs ,fɒpbɒl/

(13) You just ,sweep the ,floor, ,empty the ,bins, and ,sweep  
/je dʒes ,swɪp ðe ,floʊ ,ɛmti ðe ,bɪnz n ,swɪp  
the ,floʊz, and ,dʌst the ,teɪblz, ,wɒʃ the ,floʊz,  
ðe ,floʊz n ,dɒst ðe ,teɪblz ,wɒʃ ðe ,floʊz  
and come 'out.  
n kʌm 'aʊt/

(36) with the ,cards...and play your ,games...shout ,numbers out  
/wɪð di ,kɑ:dz... n plɛɪ jə ,ɡeɪmz...ʃaʊt ,nʌmbəz aʊt  
and you ,pʊt jə ,swɪzl ɒn...  
n jə ,pʊt jə ,swɪzl ɒn.../

If these lists were giving the order in which things were done, or if they were closed - e.g. there was an ,!Englishman, and ,!Irishman, and a 'Scotsman - the low drop or a level tone would have been more appropriate.

A list can be made interrogative by using the upper half of the pitch range instead of the lower half, e.g. 'What would you 'like to 'play- 'lawn-tennis, 'table'tennis, 'football...? A closed list is more likely to have levels and a final fall, e.g. 'Which d'you 'want - 'BBC '1, 'BBC '2, or 'IT'V?

6.3.5. Fall-Rise ('.)      ...<sup>o</sup>.....'

This tone is an inversion of the rise-fall. The pitch first climbs to the peak of prominence, and then skips down as soon as

possible to bottom pitch, and finally returns to the reference pitch. The last movement is normally postponed to the last syllable with sufficient prominence: it is far too narrow to spread over several syllables. If there is no suitable syllable to carry the rise, the word like is often added as a pitch-carrier. The descent of the fall-rise differs from that of the fall both in gradient and linear spread, and is thus minimally distinct from it even if there is no audible final rise.

The skip separates a vowel from /l/ or a nasal:

- (19) I 'don't use it my<sup>o</sup>, self like  
 $\overset{\cdot}{\text{e}} \text{ } \overset{\cdot}{\text{d}}\text{aunt} \text{ } \overset{\cdot}{\text{j}}\text{uz} \text{ } \overset{\cdot}{\text{r}}\text{t} \text{ } \overset{\cdot}{\text{m}}\text{is} \text{ } \overset{\cdot}{\text{s}}\text{el} \text{ } \overset{\cdot}{\text{f}} \text{ } \overset{\cdot}{\text{l}}\text{a} \text{ } \overset{\cdot}{\text{i}}\text{k}$

and similarly the parts of an end-focused diphthong:

- (36) 'not every<sup>o</sup>, night like  
 $\overset{\cdot}{\text{n}}\text{ot} \text{ } \overset{\cdot}{\text{e}}\text{v} \text{ } \overset{\cdot}{\text{r}}\text{i} \text{ } \overset{\cdot}{\text{n}}\text{a} \text{ } \overset{\cdot}{\text{i}}\text{t} \text{ } \overset{\cdot}{\text{l}}\text{a} \text{ } \overset{\cdot}{\text{i}}\text{k}$

- (40) 'nothing 'really ex<sup>o</sup>, citing  
 $\overset{\cdot}{\text{n}}\text{ot} \text{ } \overset{\cdot}{\text{h}}\text{i} \text{ } \overset{\cdot}{\text{r}}\text{i} \text{ } \overset{\cdot}{\text{e}}\text{l} \text{ } \overset{\cdot}{\text{i}} \text{ } \overset{\cdot}{\text{e}}\text{k} \text{ } \overset{\cdot}{\text{s}}\text{a} \text{ } \overset{\cdot}{\text{i}}\text{t} \text{ } \overset{\cdot}{\text{i}}\text{ng}$

In the second example, there is no audible rise, but the tone simply does not sound like a fall, and this is due to the prominence of /r/ after the skip down.

The skip comes in the middle of a long vowel:

- (14) I 'don't think she<sup>o</sup>, walked up the stairs  
 $\overset{\cdot}{\text{e}} \text{ } \overset{\cdot}{\text{d}}\text{aunt} \text{ } \overset{\cdot}{\text{θ}}\text{ɪ} \text{ } \overset{\cdot}{\text{n}}\text{k} \text{ } \overset{\cdot}{\text{ʃ}}\text{i} \text{ } \overset{\cdot}{\text{w}}\text{ɔ} \text{ } \overset{\cdot}{\text{k}}\text{t} \text{ } \overset{\cdot}{\text{ɒ}}\text{p} \text{ } \overset{\cdot}{\text{ð}}\text{e} \text{ } \overset{\cdot}{\text{s}}\text{t} \text{ } \overset{\cdot}{\text{e}}\text{z}$

- (23) to 'me like /te<sup>o</sup>, mi lark/  
 $\overset{\cdot}{\text{t}}\text{u} \text{ } \overset{\cdot}{\text{m}}\text{i} \text{ } \overset{\cdot}{\text{l}}\text{a} \text{ } \overset{\cdot}{\text{k}}$

And where the nuclear syllable ends in a short vowel, the skip coincides with the syllable boundary:

(42) I 'wouldn't like to 'live down there though

ə wɒdn laɪk tə lɪv daʊn ðə ðəʊ

(23) but 'this fellow .doesn't /bet 'ðɪs felə .dozn/

(61) well it 'wasn't 'yesterday /wel ɪt 'wɒznt 'jɛstədəɪ/

The rise in (23)'s example takes place on the last two syllables, since /n/ is insufficiently prominent on its own; it is on the syllable -day in the last example.

As in RP, the fall-rise can take a preliminary rise, even though it is itself a complex tone. The rise-fall-rise has two skips - first up and almost immediately down again - before the rise.

A nasal or /l/ at the end of a nuclear syllable contrasts with the segments on both sides:

(19) there's 'nothing in 'language

ɜsnʊθɪŋk ɪn lɑŋwɪdʒ

(60) I 'don't know 'what .colour you'd 'call that

/aɪ 'dɒnəv 'wɒt .keɪlə jəd 'kɔl ðə/

(60) I 'don't know 'how you 'spell it

/aɪ 'dɒnt nəv 'haʊ ju 'spɛl ɪt/

The second element of an end-focused diphthong is similarly isolated in pitch, but with initial focus the skip up takes place on the first element, and the skip down follows at the end of the syllable:

(25) 'at the 'time it was .very .painful

ət ðə taɪm ɪt wəz vɛrɪ paɪnfʊl

In the case of a long vowel, the skip up is on the vowel, and

bottom pitch is reached at the beginning of the next syllable:

(50) 'nobody was *ˌ* hurt or *ˌ* anything *◦*    . . . . / *◦* / . *◦* . . .  
 nou'bo'di wez h'ɛt or ə'nɪθɪŋ

(19) when I *ˌ* first came *ˌ* here /wen əz *ˌ* fɜːst keɪm *ˌ* hɪə/

This particular (rise-)fall-rise - there are other fall-rises to be dealt with later - has a number of related functions which restrict the meaning of a sentence. Take such examples as:

A       'Mary won't go round with 'anybody.  
          I 'haven't 'written all the 'letters.

which are compatible with:

B       'Mary will go round with 'nobody.  
          I've 'written 'none of the 'letters.

Compare these with:

C       'Mary won't go round with *ˌ* anybody.  
          I 'haven't written *ˌ* all the *ˌ* letters.

which quite definitely entail:

D       'Mary will go round with 'somebody.  
          I've 'written 'some of the *ˌ* letters.

Examples A are simply negative propositions denying D, whereas C are essentially positive propositions containing a negated element. The scope of the word not in C is restricted to the logical quantifier any or all. The denial of one quantifier implies the validity of another member of the same set.

Similarly, in 'John isn't coming, the fall-rise restricts not to the word or phrase with the nuclear accent, and implies that somebody else might be coming. John is thus contrasted with other members of the same set. In the Scouse examples, contrasts of this

kind are often implied, and sometimes made explicit:

(14) I 'don't think she ^,walked up the .stairs, I 'think she got ^blown up the .stairs with the ^blast.

(61) well it 'wasn't ^,yesterday, it was ^Saturday.

To take the argument asstage further, a positive meaning can be restricted in the same way as a negative one. Thus ^,John's coming restricts is coming to John, implying there is at least one person who is not coming. Similarly, he's ^,coming implies there is something he is not going to do, e.g. ...but he's 'not ^staying. The implied negative is often a related word, and possibly in the same semantic field, e.g. she's ^,big like, but she's 'not ^fat. More subtly, the contrast can be stated in entirely positive terms, giving the innuendo of e.g. he's a ^,Southerner, but he's 'all ^right. This would appear to warn the hearer not to jump to the obvious conclusion; the fall-rise has a similar function in an example like It's a 'soft ^,job like, but they 'pay you in ^washers.

Now making contrasts, implications, innuendo, and warnings to the hearer, might all appear different uses of the same tone. These uses derive from the same basic restricting function by its interaction with the grammatical and semantic structure of the language.

6.3.6. Fall-plus-Rise ( ^ + . ) ... ^ ^ ... ^ .

As in RP, the fall-plus-rise is similar in form to the fall-rise, both tones having a descending pitch followed by an ascent near the end of the tone-unit. The pitch of the compound

tone rises to the centre of prominence, glides down with a linear spread like that of the fall, but not quite to the bottom of the pitch range; it then bounces down and up to about the reference level on some stressed syllable in the tail.

The syllable taking the rise is stressed in its own right, whereas any syllable can be made prominent by the final ascending pitch of the fall-rise. This leads to some minimal pairs: e.g.

I <sup>ˈ</sup>know them

˙                    ˙  
 .                    .                    .  
 —————  
 e nou ðem

versus I <sup>ˈ</sup>know ,them

˙                    ˙                    ˙  
 .                    .                    .  
 —————  
 e nou ðem

Apart from the difference of weak and full pronouns, the former has a contrast in pitch between the elements of /ou/ absent in the latter, and the latter has a bounce on the pronoun them.

Difficult cases can sometimes be solved according to whether weak-forms can be used or not. For example, I <sup>ˈ</sup>like chocolate (O'Connor and Arnold's example, 1973:28-29) can be replaced by I <sup>ˈ</sup>,like it, whereas I <sup>ˈ</sup>like ,chocolate would have to be replaced by something stressable like I <sup>ˈ</sup>like ,this. In Scouse, (That result) is <sup>ˈ</sup>good for ,you may be very similar to (That medicine) is <sup>ˈ</sup>good for you; but whereas the former must be segmentally /gɒd fe ju/, the latter can vary /gɒd fo ju, gɒd fo je, gɒd fe je, gɒd fe ju/.

The compound tone is quite different in function from the fall-rise, and is used colloquially to mark 'given' information placed syntactically after the important 'new' information. Compare the formal 'That is the 'end of the 'news with the colloquial Well 'that's the 'end of the ,news, ('now for the



rather different purposes:

(19) they ,`all ,speak the ,`same as these ,`other ,people  
 /ðɛɪ ,`ɔl ,spik ðe ,`sɛɪm ez ðɪz ,`oðe ,pipl /

(25) 'I was ,taken to the ,`Stanley un,conscious  
 /'aɪ wɛz ,teɪkɪn tə ðe ,`stænli ʊn,kɒnʃəs /

(60) and to this `day we `laugh a,bout it  
 /ən tə ðɪs `deɪ wi `laf ə,baut ɪt /

In the first example, the rise-falls and rise-fall-plus-rise are used to contradict the suggestion that there exist social differences in speech. The second is syntactically deviant, and may also be intonationally deviant. The third is a quite normal use of the fall-plus-rise, but it is not clear how this is related to other uses of the tone.

6.3.7. Drop (.,) ...<sup>o</sup>~

This tone is an inversion of the step. The pitch makes a narrow ascent to the centre of prominence, and then skips down to a contrasting low pitch not quite at the bottom of the range.

If there is a stressed syllable in the tail, the skip is delayed and comes immediately before it:

(50) com.,puter .room  
 .            o            e  
 -----  
 kɒmpjuteɪ rʊm

(23) the 'car towing the ,.cara.van /ðe 'kɑ tɔwɪŋ ðe ,.kɑrə.vən/  
 It coincides with the syllable boundary if there is a single unstressed syllable:

(25) few ,.years back  
 .            :o  
 -----  
 fju jɛz bæk



(25) my 'husband'swerved to a.,void her /mi 'hozben 'swëv tu  
e.,void e/

(50) 'one (of) the .cleaners went 'down to the .,basement  
/'wun ðe .klinez went 'daun te ðe .,berisment/

(50) .,library /.,larbri/

(42) 'past the 'High .,Altar /'pas ðe 'har .,płte/

If the word like is used, it patterns as a stressed syllable:

(29) to the .,others like  
te ði oðez laik

If there is no enclitic syllable, the vowel can be separated by the skip from a long /l/ or nasal in the coda:

(29) 'one fellow got .,killed  
wun fele got kilð

and similarly the second element of an end-focused diphthong:

(25) Co'mmercial .,Road  
kemëʃel rouð

But an initial focused diphthong has the skip on the first element; the two types are contrasted by (14):

(14) we'd been 'up all .,night /wid bin 'op ol .,nart/

(14) on the 'left hand .,side /on ðe 'left an .,saið/

nart

sa id

The pitch contrast gives /r/ a prominence in night which it lacks in side.

The vowel itself takes the skip, failing anything else:

(50) when they 'opened the .,door  
wen ðeɪ opnd ðe do

- (29) 'only 'three of us went ,,through /'əʊni 'Tri əv əz wen ,,Tru/  
 (50) ,,labs /labz/  
 (19A) 'in the ,,club /'ɪn ðe ,,klob/

The drop is realized by descending pitch, but it does not sound like the fall, on account of its different gradient and linear spread. It sounds much more like the fall-rise: whereas the fall-rise skips down early and finally rises to the terminal pitch, the drop simplifies the movement to a late skip down to the terminal pitch. Fall-rise and skip may well contrast, e.g.

I 'don't do the com,puter .room

°  
 . . . .  
 -----  
 kempjute rum

Well I 'do the com,puter .room,

° °  
 . °  
 -----  
 kempjute rum

But this is possibly restricted to working class speech.

The commonest use of the drop is immediately before a pause, to mark what has just been said as logically incomplete. It might be used all the way through a story until the actual punch line:

- (25) Well we were 'coming home from ,,Bootle...'social ,,club... few ,,years back...and "as we "came round the "corner of Co"mmercial ,,Road...a 'lady stepped off the 'side in front of the ,,van...and my 'husband 'swerved to a,,void her... well the 'car went 'into a ,,skid...it turned , 'over three , 'times with .me and him , 'in it.

In similar circumstances, a middle class speaker is likely to use a (low) fall-rise, as in the passage already quoted (p127):

- (80) I'd en"joyed my "visit to ,,Wembley, but I'm 'pretty ,,sure, had I 've 'known what was in ,,store for .me, I 'wouldn't've en,,joyed it, as 'much as I 'did.

Instead of contrasting pitch levels, this tone has a descending-

ascending pattern with a comparable linear spread; that is, the rise comes at about the same place as the skip. The drop might be said to simplify the fall-rise <sup>o</sup>. . . . . pattern by moving directly from the centre of prominence to the terminal pitch <sup>o</sup>--.

The drop is also used in lists:

(50) ., labs, com., puter .room, ., classrooms, ., library

This list is incomplete, but it is part of the well defined list of rooms that (50) cleans. Compare this with the open list of things (13) might do at work, or (36) does playing bingo (6.3.4. p192). The middle class equivalent could be either a low fall-rise or a level tone.

It is also used for postponed subjects whose identity is 'new' information. In a sentence like

I .think she's rather 'pretty ,Mary

the fall-plus-rise is appropriate if the reference of she is already known. Otherwise Mary would have a drop. Compare

(17) they a'ppealed the de., fendant /ðeɪ ə'piəld ði di., fendant/

(23) we were 'coming back 'home from Sou., thampton, 'me and

wi we 'komin bak 'əʊm frem sau., θamptən 'mi ən

.these two 'lads from the E. ., A., ...

.ðiz tu 'lɑdz frem ðe ti ., eɪ.../

where the identity of they and we is at first unknown. The subject is given a separate tone-unit, and the nuclear drop marks it as incomplete in itself, and in this case belonging to the preceding clause.

We have so far been considering only the low drop, skipping down from a fairly mid pitch, not much above the reference level.

There is also a high drop (^, ) skipping down from a pitch at the top of the range. The relation of the high pitch to the reference pitch and other pitches in the head is rather complicated, and we shall discuss this separately.

A stressed syllable in the tail contrasts in pitch with the nuclear syllable:

(14) you've 'heard about an ammu',nition .ship .blowing .up?

O--  
 .      O      .      .      .      .      .      O-      O      .      O  
 -----  
 jɛv ɛd əbaʊt ən amju'nɪʃən ʃɪp blɔʊɪŋ əp

The stressed syllable takes a proclitic with it: Compare

(61) you 'live over the ^,water .do you?

O--  
 .      O      .      .      .      .      O-      .  
 -----  
 jɛ lɪv əʊvə ðə wɔ:tə du jɛ

where enclitic /te/ is on the same level as nuclear /wɔ:/, and

(29) you 'can't understand ^,me? he.said

O-  
 .      O      .      .      .      .      .      O-  
 -----  
 jɛ kən ɒndɛstænd mi i seɪd

where proclitic /i/ is on the same level as /seɪ/. In the case of

(15) Can 'you ^,smell .something? /kən 'ju ^,smel .sɒmθɪŋk/

there are no intervening unstressed syllables, and the drop comes between nuclear smell and stressed some-.

If there are no stressed syllables in the tail, the drop comes between nuclear syllable and enclitic:

(29) You 'know West ^,Ham's ground?

O-  
 .      O      .      .      .      .      .      .      .      .  
 -----  
 jɛ nəʊ wɛst əmz graʊnd

(29) have you 'ever thrown a 'plate in the ^,water?

/ɛv jɛ 'ɛvə θrəʊn ə 'plɛtɪn ðə 'wɔ:tə/

(29) you 'know they 'say it 'happens when you're 'drowning?  
 /je 'nou di 'sai rd 'apnz wen je ' ,draundɪn/

Or if there is no enclitic syllable, it can separate the vowel from a long /l/ or nasal in the coda, or the parts of an end-focused diphthong:

(8) are you ' ,right?  

$$\begin{array}{ccccccc} & & & & & & \circ \\ & & & & & & \\ \cdot & \cdot & & & & & \\ \hline e & j & e & r & a & i & t \end{array}$$

Otherwise the skip takes place on the vowel itself:

(40) is 'that the whole ' ,lot?  

$$\begin{array}{ccccccc} & & & & & & \circ \\ & & & & & & \\ \cdot & & & & \cdot & \cdot & \cdot \\ \hline i & z & \delta & a & t & \delta & e \end{array}$$
  
 iz \delta at \delta e houl lɒt

(29) what? /' ,wɒ/

The high drop is the tone commonly used in the expression You what?  
 /je ' ,wɒ/.

The tone is used for questions and requests expecting a yes/no answer; wh questions are more likely to have the step or the fall. Scope-restricted questions are a special case, and have the fall-rise:

(35) Did they ' ,all get them a .round .here?  
 /dɪd di ' ,ɔ:l get dem e .raʊn .iə/

That some of them had got them around there was not in doubt: the scope of the question was restricted to the logical quantifier all.

The middle class equivalent of a high drop is a high fall-rise:

(81) is #this...to #do with erm...the #Liverpool ' ,talk you .mean?  
 /ɪz #ðɪs...tə #du wɪð ɜm... ðe #lɪvəpʊl ' ,tɔ:k jə .mi:n/

but the same person repeats the words of a working class schoolboy with the high drop:

(81) ' ,don't you? /' ,dɒntʃə/

6.3.8. Level Tones

It is necessary to recognize at least three level tones: mid (\*), raised (♯) and high (♮).

The mid level has level pitch sustained over any following syllables:

(17) and 'living in a 'poor lo'cality

•    °    •    •    •    °    •    °--•  
 \_\_\_\_\_  
 n lrvin in e po loukalrti

(17) with me 'just being a 'bricklayer

This tone occurs before a pause, it marks the unit as non-final, and frequently leads up to a climax, e.g.

(17) and I 'ended up ,paying the 'Law So'ciety, and 'legal fees 'after.

/an ar 'endrd op ,pejrn ðe 'lo s'sareti / an 'ligl fiz 'afte/

(14)...came to 'me as I'm 'falling was, 'Oh, 'this is 'it!"

/...karm te 'mi ez em 'folin wez / ov 'ðis iz 'it/

(8) to 'save my.self from the 'buffer, before I was 'struck there.

/te 'sɜrv mi.self frɔm ðe 'bofe / bife ar wez 'strok ðe/

The tone is also used by a middle class student:

(73A) I .do three ,years at the 'college, 'then I've .got to

/e .du ɜri .jɛz et ðe 'kɔlɪdʒ / 'ðɛn ev .gɔt te

.do 'two years in a pro'fessional 'office, and then I've

.du 'tu jɛz in e pre'feʃənəl 'ɔfɪs / an ðɛn ev

ɪ'kwɒlɪfaɪd I 'gɛt an 'rɪk's.

ɪ'kwɒlɪfaɪd e 'gɛt n 'ɔr ar si 'ɛs/

The mid level is clearly related in some way to the rising tones, either to the low drop and fall-rise, or to the simple rise. It is not easy to generalize, on account of apparently inconsistent usage.

A young middle class ~~gives a list of the sort of activities going~~ scoutmaster gives a list of the sort of ~~activities going~~ activities going on at camp, and uses the mid level:

- (86) 'giving them 'badges, 'bit of ca'noing, 'swimming...  
 /'givɪŋ ðəm 'bædʒɪz/ 'bɪt ev ke'nɔɪŋ/ 'swɪmɪŋ/

This is clearly a haphazard, unordered list. The same speaker uses the simple rise for an explicitly ordered list:

- (86) 'over your left ,shoulder, 'round your ,back, 'under  
 /'oʊvə jə lɛf ,ʃəʊldə / 'raʊnd jə ,bæk / 'ɛndə  
 your ,crotch... 'two 'ropes.  
 jə ,kretʃ... 'tu 'rəʊps/

The raised level tends to occur where one would expect a tone of the falling type:

- (48A) and 'we're getting <sup>2</sup>left here     .   o   . .   o- .  
 n wē gɛtɪn lɛft iə

(42) down 'Bevington <sup>2</sup>Bush     /daʊn 'bɛvɪŋtɪn <sup>2</sup>bɒʃ/

(50A) what <sup>2</sup>in?     /wɒt <sup>2</sup>ɪn/

(60) I've for<sup>2</sup>gotten     /aɪv fɔː<sup>2</sup>ɡʊtɪn/

The centre of prominence of the step may be below the reference level, but need not be; the skip up is quite narrow, and is narrowed even further by a raised centre of prominence. These examples all have short vowels in the nuclear syllable, and it is (to me) intuitively acceptable to suggest that they have stepping tones narrowed to the point where they become level.

The difficulty here is of course that the step has itself been interpreted as a narrowed rise-fall: this would make the raised level a narrowed rise-fall of the second degree! By a similar argument, one could interpret the mid level as a narrowed low drop, and a narrowed fall-rise of the second degree.

8 Another kind of raised level occurs in the following:

(61) they went <sup>o</sup>down the <sup>o</sup>prom  
 . . . . .  
 o- . . . o-  
 -----  
 ðe went daun ðe prɒm

(29) have you <sup>o</sup>ever heard the <sup>o</sup>word <sup>o</sup>glimmicked?  
 /ev jɜr <sup>o</sup>evər ɛd ðə <sup>o</sup>wɜd <sup>o</sup>glimɪkt/

Perhaps to this category belongs an unusual tone-unit containing a rhetorical question, in which the stressed syllables of the tail 'step down' like in the RP stepping head:

(60) Was it <sup>o</sup>Yorkshire <sup>o</sup>Hilda <sup>o</sup>went to  
 . . . . .  
 o- : o- . o- .  
 -----  
 wɜz ɪt jɔkʃɪ hɪldə wɛnt tu

This tail movement is rather different from the downward drift following a nuclear step up. Now suppose that (61)'s example had a tail, e.g. for an hour: (I intuitively predict that) for an would sustain the pitch of prom, and the pitch would then skip down slightly to hour. Although this raised level is phonetically similar to the narrowed step, it is phonologically different. Although I hear these nuclear tones as level in pitch I respond to them as falls. The first two examples have a special kind of head with raised reference pitch, which keeps the unstressed syllables at the level of the accented syllables. This also impedes the pitch descent on the nuclear fall. In the last example, even though it has no head, raised reference pitch brings about the behaviour of the tail: if a head were inserted, e.g. somewhere in, (I predict that) the unstressed syllables would sustain the pitch of accented some- slightly below that of Yorkshire with the nuclear syllable.



The high level is essentially a questioning tone and is pitched at the top of the pitch range:

(50) d'you #want them along #that way?

o . . . o-

dywunt ðem əlɒŋ ðaw weɪ

(50) #didn't you \*see it in the #paper? /#dɪdn̩ jə \*si it ɪn ðə #peɪpə/

(50) is #that #black? /z#ðæt #blæk/

(29) #that all #right? /#ðæt ə #raɪt/

(60) a #mixture of \*black and #white? /ə #mɪkstʃər ev \*blæk n #waɪt/

(19) you #know what I #mean? /jə #nəʊ wɒt e #mi:n/

A stressed syllable in the tail is forced even higher:

(50) #here you \*mean? o- . o

hɪə jə mi:n

Mean is clearly in the tail, and not nuclear, because proclitic you is on the same pitch; had mean been nuclear, the proclitic would have been on the contrasting pitch, as is indeed the case in (19)'s example.

If the other level tones can be analysed as variants of other tones, then the high level is a narrowed high drop. It is preceded by a raised reference pitch which prevents the skip down to bottom pitch.

#### 6.4. The Head

Accented syllables before the nucleus contrast in pitch with the reference level of the unaccented syllables. Accented syllables vary in their relation to the reference level and to each other, and the reference level can vary independently.

6.4.1. The Reference Pitch

The reference pitch of a tone-unit provides it with a norm against which pitch prominence can be measured. Unaccented syllables do not vary much from it, non-nuclear accented syllables contrast with it, and nuclear tones move away from it.

It is normally in the bottom half of the pitch range, from mid to low, but above the bottom. It can be raised to the upper half of the range, and if this raising is exaggerated, the reference pitch can affect the final pitch of the nuclear tone and prevent it reaching the lower pitches.

The raised pitch begins at the first accented syllable, or if there is a prehead either at the beginning of the unit or the beginning of the head. It will be marked here (-). It is used mainly for requests and yes/no questions, and as a result frequently precedes the high drop. High and low drop (and the middle class high and low fall-rises) might be analyzed as environmental variants of a drop tone, such that the high drop follows a high reference pitch, and the low drop the low reference pitch.

However, other tones can follow the high pitch. A "question" might query the truth of a proposition, e.g.

(19) -D'you re'member ` ,Peter?	. . ° . °- _____ dʒe rimembe pite
---------------------------------	---

'is it the case that you remember Peter?'; this normally has the nuclear drop. Alternatively, it may query the form of the proposition:

(8) -you `wear it?	. . ° . _____ ju wër it
--------------------	-------------------------------

'is it the case that you said you wear it?'. A person might use raised reference pitch plus nuclear fall to check that he has understood what has been said, or that he has got the point of a question or request:

- (29) -'What was I 'thinking like? /-'wut wez e 'Tɪŋkɪŋ laɪk/
- (25) -'What about their 'ages like? /-'wɒt əbaʊt ðeɪr 'eɪdʒɪz laɪk/
- (19) -now I 'tell you the 'colours of these .do I?  
/-nəʊ e 'tɛl jɪ ðe 'kɒləz e ðɪz .du aɪ/

A similar pattern can be used for a polite command:

- (15) -Can you 'come in .please /-kən jɪ 'kɒm ɪn .plɪz/

where raised pitch accompanies the interrogative form.

There may also be a lowered reference pitch (^); this does not start low, but the pitch comes down from a mid level on the first syllable, the word ah sometimes being introduced to carry the moving pitch. It is used for exclamations, especially if they are unpleasant or nasty:

You 'fool!      ^ Ah, you 'fool!      'Isn't it 'marvellous!

$\frac{\cdot \cdot \quad \circ \cdot}{jɪ \quad fʊl}$      
 $\frac{\cdot \cdot \quad \cdot \quad \circ \cdot}{a \quad jɪ \quad fʊl}$      
 $\frac{\cdot \cdot \quad \cdot \quad \circ \cdot}{ɪz n \quad ɪ t \quad mɑː v ə l ə s}$

The bottom pitches here may be accompanied by creaky voice. In many cases, (^) may seem no more than a kinetic prehead; but it can bring about bottom pitch right through a tone-unit. Compare

~~The 'blasted thing's got 'lost a.gain.~~      the 'blasted thing's got 'lost a.gain.

$\frac{\cdot \quad \circ \quad \cdot \quad \circ \quad \cdot \quad q \quad \cdot \quad \circ}{ðe \quad blæstɪd \quad θɪŋz \quad gɒt \quad lɒst \quad eɪ ɡeɪ n}$

and: ^ Ah, the .blasted .thing's got 'lost a.gain

$\frac{\cdot \cdot \quad \circ \quad \cdot \quad \circ \quad \cdot \quad q \quad \cdot \quad \circ}{a \quad ðe \quad blæstɪd \quad θɪŋz \quad gɒt \quad lɒst \quad eɪ ɡeɪ n}$

#### 6.4.2. Emphasis

One of the important functions of the head of a tone-unit is to control emphasis. The term "emphasis" can be used in several different senses, and some of these must be excluded:

(i) "Speaking emphatically". If a person says There is 'no 'truth in the 'rumour wha'tever, he makes an 'emphatic' denial, but emphasis is achieved by words and phrasing rather than by prosodic features themselves.

(ii) Intensification. In it's ,`very good or it's ,`wonderful very and wonderful are emphasized: more precisely, their meaning is intensified, and this is the function here of the rise-fall.

(iii) Restriction. In ,Ann's not ,married the speaker emphasizes the fact that it is 'Ann who is not ,married: more precisely, the scope of not is restricted to Ann, and this is the function of the fall-rise.

The kind of emphasis we are concerned with here involves the prominence of the accented syllables. Kingdon (1958:39-40) includes the position of the nuclear accent as emphasis, and O'Connor and Arnold's emphatic heads (1973:37-38) are heads with a number of accented syllables in them. For our present discussion we shall take the rhythmical framework for granted; the question is not which syllables are given pitch prominence, but how much they are given.

There are three independently variable ways of putting emphasis into a tone-unit: (1) the prominence of the nucleus, (2) the prominence of the head relative to the nucleus, and (3) the prominence of unaccented syllables relative to accented.

A nuclear tone beginning with a move up to the centre of

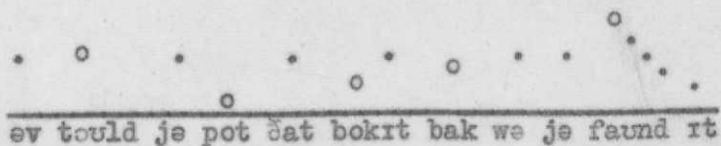
prominence is more or less emphasized according to the height of the peak above the reference level. For example, a high fall, in which the nuclear peak rises above the level of preceding accented syllables - i.e.  $\overset{\circ}{\cdot} \overset{\circ}{\cdot} \cdot$  - is more emphatic than a low fall with the peak below preceding accented syllables,  $\overset{\circ}{\cdot} \overset{\circ}{\cdot} \cdot$ . On the other hand, the high drop is not more emphatic than the low drop, since the different peak heights depend on the different reference levels, and not accent peaks. For nuclear tones moving down to the centre of prominence, emphasis depends on the depth of the bounce, if any; e.g.  $\dots \overset{\circ}{\cdot} \cdot$  is more emphatic than  $\dots \overset{\circ}{\cdot} \cdot$  :

In the commonest kind of head, the accent peaks form a gradually descending series:  $\overset{\circ}{\cdot} \overset{\circ}{\cdot} \overset{\circ}{\cdot}$ . In the emphatic head, where the head as a whole is made prominent, the series gradually ascends:  $\overset{\circ}{\cdot} \overset{\circ}{\cdot} \overset{\circ}{\cdot}$ .

The reference pitch is normally below that of accented syllables, giving the pattern:  $\overset{\circ}{\cdot} \cdot$ . The accent can be emphasized by pitching it below the reference level:  $\overset{\circ}{\cdot} \cdot$ .

Although these kinds of emphasis are independent, they frequently occur together:

e.g. I've told you "put that "bucket "back where you "found it

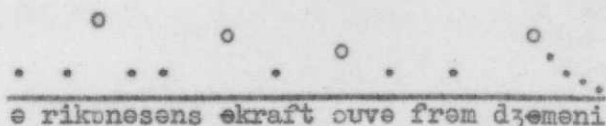


On its own, such a tune might be 'persuading' or 'ordering'; combined with a more tensed voice quality and a widened total pitch range, it might express irritation or anger.

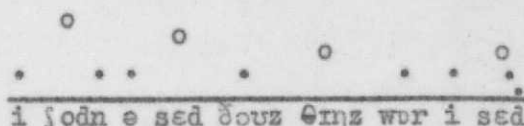
6.4.3. The Falling Head (')      ° ° °

This is the commonest, normal, straight-forward Scouse head. Although it is tonetically different from the RP head where the accents are marked ('), we have used the same symbol because it would seem to be functionally equivalent. The accented syllable is higher in pitch than the reference level, each accent peak being slightly lower than the preceding one. E.g.:

- (14) a re'connais'sance 'aircraft 'over from 'Germany

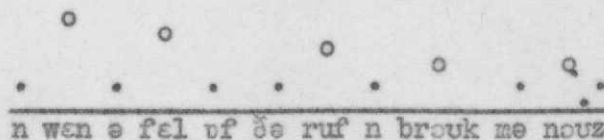


- (42A) he 'shoul'dn't've 'said those 'things what he 'said



The accented syllable obtains its prominence by reaching a peak above the reference level coinciding with the vowel, or the "stressed" element of a complex vowel. Now if there is a peak, the pitch must obviously ascend and then descend, which makes the non-nuclear high tone similar to other ascending-descending tones like the fall, the rise-fall and the drop. Indeed it is not always easy to tell the difference:

- (14) and 'when I 'fell off the 'roof and 'broke my nose



In 'when and 'fell, /n, l/ are past the peak, which makes these tones like 'when, 'fell; and 'roof with no pitch movement is not unlike 'roof with an incomplete fall before the voiceless /f/.

These accents are recognized as non-nuclear partly by rhythm, for there is a rapid movement from the accent to the next syllable, and not the slowing down which would follow the nucleus.

The first accent sometimes has a marked initial movement to the peak, especially if the vowel is long or an initial focused diphthong:

(60) well then 'my .husband  
 . . . ° . . .  
 \_\_\_\_\_  
 wel ðen mar hezbend

(15) the " 'Roundie" was the Ro'tunda 'Theatre  
 . . ° . . . ° . . ° . .  
 \_\_\_\_\_  
 ðe raundi wez ðe retunde θi:te

Another feature of this first accent is that when it introduces a new topic or 'paragraph', it can have extra high pitch:

(50) 'only .one time there was er..'bit of a 'fire like  
 ° . . . ° . . . ° . . . ° . . .  
 \_\_\_\_\_  
 əni wɒn taɪm ðe wez ə bɪt əv ə faɪə laɪk

Unaccented syllables - and this includes syllables with ictus but not accent - keep on or near the reference level:

(42) 'I su.ppose they wouldn't .like to .live up ,'here  
 ° . . ° . . . ° . . . ° . . . ° . . .  
 \_\_\_\_\_  
 aɪ sə'pəʊz ðeɪ wəd n lʌk tə lɪv ʌp 'hɪə

(48) 'Usua.lly you could .get a .bottle of .lemo.nade .round .here  
 /'ju:zə.li je kəd .gər ə .bʌtl ə .ləm.e.nəɪd .raʊnd .hɪə  
 ʌp tə ə.bəʊt .eɪt ət .naɪn ə .klɒk ət 'naɪt.  
 ʌp tə ə.bəʊt .ɛɪt ɛɪt .nɑɪn ə .klɒk ət 'naɪt/

The remarkable word-stress timing of this example is possibly due to the absence of accents to organize stressed syllables into higher rhythm units.

A fairly common pattern is for accent to alternate with ictus only:

(25) a 'lady .stepped off the 'side in .front of the .,van...

. ° . ° . . ° . ° . . °  
 e leɪdi stept ɒf ðe saɪd ɪn frʌnt ɒv ðe vən

However, accents do follow in immediate sequence. If there is no unaccented syllable to return to the reference pitch, the pitch moves directly from one accent level to the next:

(23) (we) 'just 'got 'back            ° ° °  
 dʒʌs ɡɒt bæk

(14) a 'big 'blue 'flash            ° ° °  
 e bɪɡ blu flæʃ

In this case, the Scouse head just happens to be similar to the RP stepping head.

This pattern of the falling head is normally found with the low reference pitch. It can be traced less clearly in the raised pitch for questions, but there is less difference between accent and ictus only. In the lowered or extra high type, there is not sufficient pitch movement to make any syllables after the beginning of the head prominent, and as a result the distinction of ictus and accent is lost.

6.4.4. The Emphatic Falling Head (") °°°°

In this head the reference level is slightly higher than in the previous one, and accented syllables bounce below it, each bounce being slightly lower than the previous one.



The bounce coincides with the vowel or the stressed element of a complex vowel. The pitch movements from the reference level to the bounce and back are much more noticeable than in the unemphatic head: this is possibly because the normal situation in which the higher pitch is more prominent than the lower is reversed. E.g:

(15) I'm "out"side "here and "you're "inside

•    °        °        °        °        °  
 em aut saɪd iə r en jor ɪnsaɪd

(20) We "diɪn't "get the ad"vantages /wi "dɪɪnt "gɛt ði ɛd"vɛntɪdʒɪz/

(60) ..."roʊdɪd "beɪkən..wel "daʊn ðɛr ðeɪ "deʊnt "hæv ɪt/  
 /"reʊdɪd "beɪkən..wel "daʊn ðɛr ðeɪ "deʊnt "hæv ɪt/

Syllables with ictus but not accent retain the reference pitch above the level of the accents:

(20) and "I often "θɪŋk "nəʊ  
 •        °        °        °        °  
 en ɪr ɒftən θɪŋk nəʊ

This head is often followed by a nuclear rise, which also rises from a bounce at the centre of prominence:

(61) "that wɜz "vɛrɪ "naɪs  
 °        °        °        °  
 ðæt wɜz vɛrɪ naɪs

(61) we wɜr "bɪzɪ "ɔl "deɪ /wi we "bɪzɪ "ɔl "deɪ/

(20) we wɜr "lɜrnt ɛn "tɔt "vɛrɪ "keɪflɪ  
 /wi we "lɜrnt ɛn "tɔt "vɛrɪ "keɪflɪ/

(20) ðe wɜr 'dʒɛst 'ɔdnɪrɪ "lɪvɪŋ "pipl̩ dʒɛst "wɜkɪŋ  
 /ðe wɜr 'dʒɛst 'ɔdnɪrɪ "lɪvɪŋ "pipl̩ dʒɛst "wɜkɪŋ  
 ,peɪpl̩ "nɒt wɛl .ɒf ɔr ,ɛnɪθɪŋ ,dʒɛst "naɪsli  
 ,pipl̩ "nɒt wɛl .ɒf ɔr ,ɛnɪθɪŋ dʒɛst "naɪsli

,managing, and just "living ,quietly...  
 ,manɪdʒɪŋ en dʒəs "lɪvɪŋ ,kwɑɪətli/

As this last example shows, the accents in a head can begin unemphatic and then become emphatic. Compare:

(29) I 'can't under.stand a "word you \*say.

•    °    •    •    °    •    °    •    •    °  
 -----  
 e kan ʊndə'stænd ə wɜ:d ju seɪ

Less commonly a head may change from emphatic to unemphatic:

(20) I "wouldn't've "worked 'quite so \*hard

•    °    •    •    •    °    •    •    °  
 -----  
 aɪ wədnt ev wɜ:kt kwɑ:t sɔ:hɑ:d

#### 6.4.5. Rising Heads

Rising heads, in which each accented syllable is higher in pitch than the preceding one, do occur in Scouse, but are much rarer than the falling heads. An example of an emphatic rising head is produced by (25), in which the accents rise, and the unaccented syllables have a higher pitch than the accents:

(25) and „as we „came round the „corner of Co„mmercial „Road

•    •    •    •    •    •    •    •    °  
 °    °    °    °    °    °    °    °    °  
 -----  
 ən əz wi kæm raʊnd ðə kɔ:nə(r) əv kəmɜ:ʃjəl rəʊd

The speaker here is clearly very excited; as becomes clear in the tone-units immediately following, what in fact happened in Commercial Road was a motor accident.

#### 6.4.6. The Stepping Head (1)    °-••c-••o-••

This is the familiar RP-type head, with the unaccented syllables

sustaining the pitch level of the accented syllables, each accent being pitched slightly lower than the preceding one. To show its similarity to the falling head we mark it with the vertical dash (') but with the horizontal bar (-) underneath to symbolize sustained pitch, resulting in (1).

This head is not very common in Scouse, and some examples which appear to have it are in fact falling heads with adjacent accents, e.g.

(15) it's 'one 'two 'three 'four 'streets a.long

o- o- o- o- a  
 . . . . .  
 \_\_\_\_\_  
 is wɒn tu θri fo stri:ts ə'lonɡ

The reason the reference pitch is not reached again after the first syllable is that there are no unaccented syllables between the accents.

Genuine stepping heads include the following:

(19) I 'can't 'stand that 'language 'any 'longer.

o- o- . . . . .  
 . . . . .  
 \_\_\_\_\_  
 aɪ kən stænd ðæt læŋwɪdʒ əni lɒŋɡə

(15) I 'think he's 'dropping 'gas /e 'θɪŋk ɪz 'drɒpɪŋ 'ɡæs/

(20) 'if she could 'make a 'penny go as 'far as 'twopence.

/'ɪf ʃi kəd 'meɪk ə 'pɛni ɡəʊ əz 'fɑː əz 'tʌpəns/

The Scouse stepping head sometimes sounds rather different from the RP one on account of a preliminary movement up from the reference pitch to the level of the first accent:

(20) from 'round where I 'live

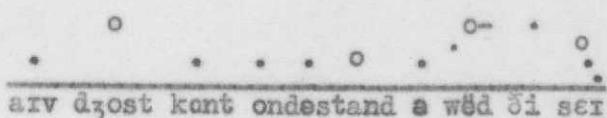
o- . . o  
 . . . . .  
 \_\_\_\_\_  
 frəm raʊnd weər aɪ lɪv

and similarly:

- (15) I <sup>1</sup>never <sup>2</sup>did! /e <sup>1</sup>neve <sup>2</sup>dɪd/
- (19) don't <sup>1</sup>ever come <sup>2</sup>back /dəʊnt <sup>1</sup>eve kom <sup>2</sup>bak/
- (20) that <sup>1</sup>we never <sup>2</sup>got /ðæt <sup>1</sup>wɪ neve <sup>2</sup>gɒt/

Occasionally, a head can change in the middle from the falling to the stepping type, e.g.:

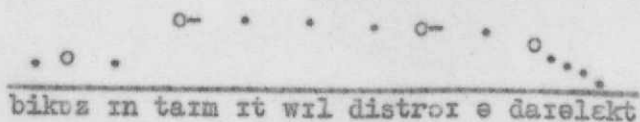
- (19) I've <sup>1</sup>just can't under<sup>2</sup>stand a <sup>1</sup>word they <sup>2</sup>say



The stepping head gives considerable prominence to the accents in it, but its precise function and relation to the other heads is not clear. However, a three-way contrast does occur for the phrase I never did, given by (15): I <sup>1</sup>never <sup>2</sup>did is an exclamation of surprise (= Well I <sup>1</sup>never), while I <sup>1</sup>never <sup>2</sup>did is a simple negative (= I <sup>1</sup>didn't), and I <sup>1</sup>never <sup>2</sup>did is an emphatic denial (= I most <sup>1</sup>certainly did <sup>2</sup>not).

Both falling and stepping heads are heard in middle class usage, but the latter is possibly used for dogmatic assertions and considered opinions:

- (77) be<sup>1</sup>cause in <sup>1</sup>time it will de<sup>2</sup>stroy a <sup>1</sup>dialect



- (72) in its <sup>1</sup>abso<sup>2</sup>lutely co<sup>2</sup>rrect <sup>1</sup>way /ɪn ɪts <sup>1</sup>abse<sup>2</sup>lutli  
kə'rekt <sup>1</sup>weɪ/

The dogmatic nature of (77)'s example is reinforced by the use of the unstressed full-form /wɪl/ for will.

A head somewhat similar to the stepping head occurs with the extra-high reference pitch. Since the distinction of accent and ictus is neutralized, and the pitch sustains the high level of the accent, the head is like the stepping head with a single accented syllable with extra high pitch. This is the head marked (#) (pp207-8).

#### 6.4.7. Preheads

The prehead in Scouse establishes the reference pitch before the first accent, and would seem to have a different function than in RP (cf Kingdon, 1958:50-56, O'Connor and Arnold, 1973: 22-28). In Scouse, if I'm 'not is given a mid to high pitch on I'm, this could have one of two effects, neither of them like the RP high prehead: (a) if the peak of 'not rises above I'm it is probably a question -I'm 'not? (= You say I'm not?), and (b) if the peak of 'not is lower than I'm, it is probably an exclamation 'I'm 'not (= Ah, I'm not). In other cases, there might be some movement in the prehead in anticipation of the initial movement for a tone.

One idiomatic prehead must be mentioned, that for the phrase you know, which has a nuclear tone on know: -you ,know /-je ,nou/. The raised reference pitch marks it as a kind of question, and the rise marks it as an incidental tone-unit adding nothing of logical significance. Instead of having level pitch, /je/ often skips from mid on /j/ to high on /e/, while /nou/ might not climb much from the bottom of the pitch range:

$$\begin{array}{c} \cdot \quad \cdot \\ \hline \text{je nou} \end{array}$$

### 6.5. Form and Function

The intonation of Liverpool speech differs markedly in some respects from that in England as a whole. Exactly how much they differ is not easy to assess. To begin with, relationships are obscured by the manner of presentation; for example, Pike's account (1945) of American intonation is easy enough to follow on its own terms, and so is Kingdon's account (1958) of 'Received' intonation, but if one compares the two it is not always easy to distinguish differences of fact from differences of description. By the same token, some of our differences between Scouse and RP may be unintentionally exaggerated by the presentation. Secondly, "differences" depend on the adequacy of published accounts of intonation used as models: if Scouse were compared with the intonation described by Armstrong and Ward (1931) it would appear to be totally different, but it has much more in common with the accounts of Crystal (1969) or O'Connor and Arnold (1973).

Liverpudlian peculiarities are undoubtedly Celtic in origin. In the mid nineteenth century, when Liverpool - and presumably its dialect - were developing rapidly, about half the population were immigrants, and almost two thirds of the immigrants were Celts.

According to popular opinion, this Celtic influence is specifically Welsh. Liverpool is after all not far from the Welsh border, and it would not be surprising if neighbouring dialects shared certain features. Such a suggestion probably holds for the North-Western speech of South Lancashire and

Cheshire generally, but it is unlikely to be true for the urban dialect of Liverpool itself. In 1861, only 2.3 per cent of the population was Welsh, as against 4.1 per cent Scots and 24.5 per cent Irish: Irish influence is much more likely than Welsh. Besides, whereas the Welsh were distributed throughout Merseyside, the Irish were concentrated in areas near the waterfront at the heart of the growing conurbation. It is the Irish influence which has spread through the local communications to the conurbation as a whole, and beyond Merseyside. Indeed, as the urban field of Liverpool has spread into North Wales, it is more likely that Scouse has influenced North Welsh intonation than the other way round.

A number of tonetic features confirm Irish influence. Irish intonation, for example, has a reference level which is raised for questions, and tones typically begin with an initial movement to the centre of prominence. Accents in the head are given prominence in a similar way to Scouse. The falling tones, including the step, correspond almost exactly in Scouse and Anglo-Irish. Kingdon (1958:264) gives I 'never forget them as an example of Irish intonation: the 'fall' on never is possibly a peak above the reference level for a non-nuclear accent, while the 'level' in forget is possibly a variant of the step, so that using the symbols as for Scouse the example could be transcribed I 'never for.'get them. The main differences between Scouse and Irish intonation is in the use of the rising tones.

If Scouse is Irish, the origin of middle class Merseyside

intonation is more obscure. RP influence might account for the more frequent stepping head, for the shorter linear spread of the fall, or for the tonetic form of the fall-rises used for the drop (but not of course for the use of these fall-rises). But there is much more which is not RP.

In order to sort out the relations between Irish, Scouse, middle class speech, and RP, we must use a form of the comparative method. We take as axiomatic that phonological sameness does not entail phonetic identity, and that conversely phonetic similarity does not entail phonological sameness. (These are of course the traditional axioms of segmental comparison; e.g. RP /eu/ is phonetically different from the corresponding "same" vowel /ou/ in Scouse, and conversely, the vowels of RP path, palm, part are phonetically similar but clearly different in English phonology as a whole.) Having classified the forms of each variety, one can compare them by tracing correspondences of form and function among varieties. As a starting point, take the following passage:

- A. I think 'Bill's ,won.
- B. You say 'Bill's won?
- A. Yes 'Bill's won.
- C. ,Bill hasn't 'won, 'nowhere 'near.
- B. 'Come to ,think of it, ^,Bill hasn't won, ^I have.
- A. hmm if you ,have, you've 'only ^,just.

The intonation marked is intended to be that of RP. From the fall-plus-rise it can be inferred that the situation involves somebody winning something, and what is new is that Bill has done it: the same tone would be used in Scouse. B's query with the high rise would have a high drop in Scouse, or a middle class high fall-rise, if the information itself is being queried, or a raised reference



pitch plus fall if the words are being echoed and queried. C's comment with the low rise contradicts A's statement without contrasting Bill with anyone else or implying that C knows the identity of the real winner; the contrast and implication are made by B's fall-rise. A similar difference is made in Scouse by using the fall-plus-rise and fall-rise respectively. The low rise on B's parenthetic 'Come to ,think of it would correspond to a rise in Scouse, but A's non-final low rise on if you ,have would more likely have a low drop in Scouse, and a middle class low fall-rise. These correspondences can be summarized in the following table:

<u>Use</u>	<u>Scouse</u>	<u>Middle Class</u>	<u>RP</u>
'new' information in 'given' context	`+,	`+,	`+,
contradiction	`+,	`+,	.
parenthesis	.	.	.
non-final prepausal	`,	`,	.
question yes/no	`,	`,	.
scope-restriction	`,	`,	`,

Such a table is of course extremely crude, and it is easy enough to think up RP examples with the fall-rise on a contradiction, a non-final phrase, or a question. All that is implied is that in certain situations where an RP-speaker would use a simple rise, a Merseysider would use a complex or compound rising tone.

Some phonetic details of middle class tones may be subject to RP influence, but which tone is used in which situation is much more resistant to change. The middle class tones are like the Scouse ones with a few modifications on the drops.

Middle class speech is generally influenced by Scouse, so let us assume that Scouse is the dominant innovating type, and that middle class speech follows. The Scouse forms derive from those of immigrants of last century, in particular the Irish. But it is precisely in this part of the system that the similarity of Scouse and Irish intonation breaks down. Rising tones are common enough in the heavily anglicized speech of Irish radio announcers and perhaps educated Irishmen in general; but colloquial speech is marked by a wide variety of falling tones. (In Belfast speech, for example, I suspect that all the rises in the passage on page 223 would have one or other of the falling tones, many of them having ascending pitch as the preliminary to an actual or narrowed tonic fall.)

An alternative explanation is that the middle classes preserve an older, pre-Scouse, North-Western intonation. This type has added the Anglo-Irish step to its system of falling tones, but has preserved its system of rising tones. The newcomers have adopted the latter system with some tonetic changes like narrowing fall-rises to form the drops. In the course of time, middle class speech has been subject to considerable tonetic influence from Scouse on the one hand, and from RP on the other.

According to this second explanation, Scouse intonation - apart from the step - is phonologically North-Western English, but largely phonetically Anglo-Irish. This is offered as a suggestion rather than a definite conclusion, since so little is known about regional variation that it is difficult to test it.

If comparative intonation could be developed on the lines suggested here, it would have considerable consequences for studies of the meaning of intonation. The basic 'messages' conveyed by intonation are likely to be of a very simple nature, but by the time they have combined with lexical items and syntactic structures in a particular contextual situation, they appear extremely subtle and complicated. In addition, a single tone might have several distinct uses (e.g. the questioning fall-rise and the scope-restricting fall-rise of Merseyside speech) but it is difficult to distinguish 'distinct' uses from the 'same' use in different contexts, i.e. to distinguish tonic homonymy from tonic polysemy. Now if the symbols in the table on page 224 were vowels or consonants, it would be reasonable to set up six abstract - or 'historical' or 'original' - units which had coalesced in different ways for each variety. There is no reason in principle why this should not be done too for tones. The difficulty of describing the meaning of the RP rise, is that there is not one of them but several.

If an abstract comparative level were recognized, dialect relations could be expressed in much the same way as for segments (see 3.2. pp61-62). A set of mutation rules would handle the relation between the set of units for English as a whole and the tonic contrasts of any particular dialect such as Scouse; tonetic details would be specified by realization rules.

Chapter 7:

The Syllable

7.1. Phonological Syllables

The syllable is of central significance in phonology, for it is the meeting place of structure and system. We have so far considered the syllable as a unit in the rhythmic framework of a sentence, how its parts affect intonation, and how Scouse differs from British English generally at these lower levels of rhythm and intonation. The parts of the syllable also provide syntagmatic 'slots' which are filled by vowels or consonants taken from the set of sounds which could occur there.

For descriptive purposes, it is convenient to take vowels and consonants together as the 'paradigmatic' aspect of phonology; realization rules are most easily given if segments are taken entirely out of context and described individually, with a few necessary notes dealing with the influence of the context. Phonetically, of course, there is no such neat distinction of paradigmatic and syntagmatic. A 'segment' is realized by a set of articulatory movements which may overlap or coincide with the movements for other segments, or two or more segments may be realized by a single set of movements; in the stream of speech, 'segments' are recognized according to what movements are made, while the rhythmic framework is in the perceived prominence of those movements.

Segments and syllables are not to be identified by a mere perusal of the sounds of the stream of speech: it requires a

study of the phonology as a whole. This might include dialect differences, historical developments, morphological alternations, rules governing what sound can occur with what, and even the spelling where appropriate.

The phonological syllable is very different from the stretch of speech bounded on either side by a trough of prominence, which is sometimes called the phonetic syllable (see, e.g. Jones, 1960:55). There are several kinds of prominence, and consequently different kinds of trough which are responded to intuitively as syllable boundaries. The least interesting kind is a matter of inherent sonority; e.g. in the word streets /tr.t./ form troughs between the more prominent /s..i.s/ so that the word is phonetically trisyllabic. More interesting is the case of complex vowels like /aje, awe/ which are disyllabic on account of the less prominent middle element; these prominence patterns are related to more general patterns of rhythm. Rhythmic beat can also cause a trough, e.g. if \*twelve is spoken slowly enough the beat on /twe/ is followed by a second on /lv/, and this effect is reinforced in Scouse by intonation, with the pitch peak on the vowel followed by a bounce on the coda. 'Skipping' pitch movements tend to create troughs, so that e.g. ..right has two phonetic syllables in Scouse, and \*landmine has three. In comparing Scouse and RP - or any varieties of English - there are a number of differences which might loosely be termed 'syllabic': very few of these are strictly phonological, and it is not sufficient just to refer to phonetic syllables. We shall wherever possible describe the nature of the trough of prominence. For example, shrink and

film are sometimes disyllabic [ʃ<sup>ə</sup>ˈrɪŋk, ˈfɪl<sup>ə</sup>m] in Scouse; this is because the epenthetic /<sup>ə</sup>/ is inherently more prominent than the consonants on either side.

In Scouse, as in Scots and Anglo-Irish, a syllable beginning with a vowel - particularly if it is accented or stressed - will take a final consonant from the preceding syllable. In other words, a phonological structure ...V(C)C + V... will be heard phonetically as ...V(C) + CV..., e.g. Ulster [ˈnɔrðər ˈnaɪərlənd] 'Northern Ireland' or [ði ˈaɪə ˈreɪ] 'the IRA'. This would not seem to be the case in RP or the dialects of England generally, so that there is some difference between, say, a node and an ode. (This difference is by no means made consistently, as is shown by such examples as newt, nickname, adder and apron.) In the phrase an ode /n/ forms a trough of inherent sonority between the vowels, and this is equally true for the Scouse and RP types; so exactly what it is that gives the impression in Scouse that /n/ has shifted its syllable is rather elusive. (It is not enough to say that the onset of increased loudness is on the /n/ in Scouse and the vowel in RP, for loudness is too easily confused with other features. Nor is the notion of 'juncture' of any help here, since it would merely present the same problem in another way.)

It is possible that syllable shift is not a measurable phonetic feature, but the intuitive response of an RP speaker. In RP, an ode can be kept distinct (apart from the possibility of pauses) by giving /n/ the pitch of /e/ rather than /eu/, as opposed to /n/ pitched at the initial level of the fall in a node. In Scouse node, the /n/ is likely to make the initial movement up to

the centre of prominence, and this movement might also begin on /n/ in an <sup>ˈ</sup>ode. The difference is much less in Scouse than in RP, both of the Scouse types being what the RP speaker hears as the <sup>ˈ</sup>node type. We are here concerned of course with minute phonetic differences which might be sociolinguistically significant, but not with linguistic distinctions as such. RP speakers and Scousers can certainly distinguish an <sup>ˈ</sup>ode and a <sup>ˈ</sup>node if they intend to, but in the stream of colloquial speech they do not contrast in any real sense.

Pitch levels may contribute to syllable shift in the head, e.g. he <sup>ˈ</sup>went up the <sup>ˈ</sup>stairs [i <sup>ˈ</sup>wenop ðe <sup>ˈ</sup>stɛz], where /n/ following the pitch peak of /ε/ has already reached the reference pitch of unaccented syllables, and appears to belong to the same syllable as up. Duration may also be relevant, so that in 'coming <sup>ˈ</sup>out [ˈkɒmɪ <sup>ˈ</sup>naut] the /r/ is longer than one would expect in coming, so that /n/ appears to begin the last syllable [ˈnaut]. In bend the nasal is longer than in bent, but this distinction might be lost in bend over and bent over, so that /t, d/ appear to begin the second syllables [ben dɔuve, ben tɔuve]. The shifted consonant might take on some of the features of syllable initial position, such as greater aspiration of voiceless plosives. Syllable structure rules appear to be broken, e.g. one hears initial /ŋ/ as in 'Throw the thing <sup>ˈ</sup>out [...θɪ <sup>ˈ</sup>ŋaut]. The rages and their ages can both occur as [ðe <sup>ˈ</sup>rɛɪdʒɪz], and /r/ in their ages can be flapped, even though the flap does not otherwise begin an accented syllable.

A particular case of syllable shift concerns the elision of

initial /ð/, e.g. all the time [ɔ le taɪm], work and that [wɜk ə na]. Starting with /ɔl ðe/ 'all the' and /ən ða/ 'and that' (final /d/ having been regularly elided from the weak-form of and), (i) /l,n/ assimilate to the dental position [L,N], (ii) they are lengthened before the voiced consonant, (iii) [ð] is elided, and /l,n/ shift to the following syllable, (iv) in the absence of /ð/, its assimilating influence is also lost, and /l,n/ revert to the alveolar position:

	ɔl ðe	ən ða
(i)	ɔL ðe	əN ða
(ii)	ɔL:ðe	əN:ða
(iii)	ɔ le	ə Na
(iv)	ɔ le	ə na

Any stage of the derivation can occur as an actual phonetic form in speech. The final stage leads to some possible confusions, e.g. it's 'in the 'box [ɪts 'ɪ ne 'bɒks] is only minimally different from it's 'in a 'box [ɪts 'ɪn ə 'bɒks]; there is no contrast here, because syllable shift can also operate in the phrase in a.

Syllable shift occurs when the first syllable ends in a consonant, and the following syllable begins with a vowel. If the first syllable ends in a vowel, a syllable link is introduced to avoid the hiatus. The three main links in Scouse are /j w r/. The glottal stop is used occasionally, especially on an initial accented syllable, when there is no preceding syllable to determine any of the main links; /h/ is sometimes heard, e.g. (17) has /e 'hɔrɪŋz/ for 'a orange' (sic), but this is rare.



Where the final vowel segment of the preceding syllable is /i,r/, it continues as an open [j] glide to the following vowel quality, and similarly /o,u,u/ continues as an open [w] glide. Elsewhere [r,R] (i.e. open approximant or flapped r) is used; this is normally after /e,a,o/ and varieties of /ɜ/, but also after any vowel when the final consonant is elided, as in [jɛ<sup>r</sup>e,'nou] 'yes I know'. The r-glide is used 'intrusively' as in other varieties of English, but its use inside a word, e.g. [dɹo<sup>r</sup>ɪŋg] 'drawing', or between a verb and its pronoun object, e.g. [e.'sɔ<sup>r</sup>ɪm] 'I . 'saw him', is considered extremely vulgar.

The initial quality of /i,u/ can be considerably centralized when they are continued as glides; e.g. you are /ju ə/ and they are /ði ə/:

ju ə	ði ə
ju <sup>w</sup> ə	ði <sup>j</sup> ə
ju <sup>w</sup> ə	ðr <sup>j</sup> ə
je <sup>w</sup> ə	ðe <sup>j</sup> ə

It is only when the first element is completely centralized that it could possibly be confused with any other vowel, e.g. [e<sup>j</sup>] could be /ar/ with a centralized first element, as in I haven't [e<sup>j</sup>avnt]. It is this glide, incidentally, that gives the impression that some words like I, my, you, to, do have no weak-forms in Scouse immediately before a vowel. (Also in connection with weak-forms we might observe that the rare and freakish [je<sup>r</sup>eve, ðe<sup>r</sup>aus] 'you ever, the house' substitute an r-glide after a completely centralized first element [e].)

Syllable links belong phonologically to the first syllable, but are phonetically subject to shifting. This raises the question whether three ears is really different from three years, two eights from two weights, or 'china 'axe from 'china 'racks, the relation in each case being similar to an ode and a node. Consonantal /j,w,r/ are perhaps of longer duration - consonantal /r/ for instance is not a glide in this position, but the link frequently is - they more clearly take the initial glide to the centre of prominence of a tone, and in the case of /j,w/ they have closer approximation in corresponding environments. But again, these slight differences do not amount to a real contrast.

We have implied that links are not true consonants. That is because they are normally conditioned by their environment; and lack the potential contrast with other members of the same set which is characteristic of consonants. There are phonetic contrasts located in the link - e.g. [je<sup>w</sup>ie] 'you here' as opposed to [je<sup>r</sup>ie] 'you're here' - but these are interpreted phonologically as a difference in the preceding segments (just as in train vs drain the phonetic contrast of voiceless and voiced /r/ makes the distinction of /t/ and /d/).

Links derive historically from consonants in the case of r. Originally occurring after /a, o, e, e/, /r/ was restricted to the environment before another vowel, and then spread as a link to other cases of /a, o, e, e/, and in Scouse became a link after other vowels too like /e, a, u/.

There is a small class of words including get, got, bit, what, that, it, not in which the final /t/ is pronounced before another

consonant, but can be elided in absolute final position, and replaced by an r-glide before a vowel. There is a further set of words, including let, but, put, lot, in which /t/ can be replaced by an r-glide before a vowel, but cannot be elided finally.

Joseph Wright (1905:63) suggests that forms like ger em 'get them', ler it bi 'let it be' and wor iz it? 'what is it?' occur 'sporadically in most parts of England', but he mentions specifically Lancashire and Yorkshire; he also mentions (page 2) forms like ged, wod 'get, what' for Lancashire, Cheshire and Shropshire. Forms with /d/ are occasionally found in Scouse:

- (19) but I don't think /bed ai daunt θɪŋk/
- (39) but I was /bed ə wez/
- (29) but it was heavy stuff /bed it wez evi stof/
- (34) a bit of a joke /ə brɪt əv ə dʒɔuk/
- (29) it happens /ɪd əpənz/
- (29) get a few cases /gɛd ə fju keɪsɪz/
- (29) get in like /gɛd ɪn laɪk/
- (86) get him off /gɛd ɪm ɒf/

But an r-link is commoner:

- (15) but it's on that side /ber ɪts ɒn ðæt saɪd/
- (15) we'll put up with that /wɪl pʊr ɒp wɪð dæt/
- (36) get him over here /gɛr ɪm ɔvər ɪə/
- (36) whatever number /wɛrəvə nʊmbə/
- (25) what about their ages /wɒt əbaʊt ðeə ɛɪdʒɪz/
- (25) but er... /bɒr ɜ/
- (23) a bit of a shaking up /ə bɪt əv ə ʃeɪkɪŋ ʊp/
- (29) he'd put an /r/ on it /ɪd pʊr ən ɛr ɒn ɪt/
- (29) but I fell clear /ber ai fɛl klɪə/
- (29) what I was thinking /wɒt ai wez ɪŋkɪŋ/
- (29) that I never /ðæt ə nəvə/
- (29) a lot of them /ə lʌt əv ðəm/

- (23) what he was saying /wɔr i wez se<sup>j</sup>ɪŋ/  
 (23) get over /gɛr ɔvə/  
 (23) like that I threw the wheel /laɪk ðæt aɪ truː ðə wɪl/  
 (23) got into the middle lane /gɔt ɪntə ðə mɪdl leɪn/  
 (35) but I can't /bət aɪ kɑnt/  
 (35) I got it /ə gɔt ɪt/  
 (35) what it was /wɔt ɪt wəz/  
 (17) what I mean /wɔt aɪ miːn/  
 (17) he got awarded /i gɔt əwɔdɪd/  
 (50A) what in? /wɔt ɪn/

Unless the North-Western development of /t/ to [d̥] is quite unconnected with the general development to [r], we are justified in deriving them from a single set of rules. First /t/ would be voiced to [d] and then the plosive articulation would be speeded up to a flap, i.e. [R]; but [R] is also a realization of /r/ which can also be an open approximant in this position, so that /t/ is likewise realized as an open approximant. This variation of flap and approximant is identical to that of link r, and /t/ is now confused with the link; the link does not occur in final position, and so /t/ is elided. (Incidentally, there is no evidence in Scouse for forms with glottal stops, such as [ \*gɛɫ, \*wɔɫ ] for get or what, and this is why we associate the elision of /t/ with the syllable link r. Glottal reinforcement of /t/ occurs before /w, j/ as in [ wɔtɫje, wɔtɫwi ] 'what you, what we', occasionally before /l/ as in [ bʊtɫl ] 'Bootle', and rarely and idiosyncratically between vowels as in [ bʊtɫe ] 'butter', but this is a different process.)

Exactly why this development of /t/ should take place is not quite clear. As Wright (1905) points out, all the words affected

are monosyllables with a short stem vowel, and since /t/ is a strong coda, the rhythm is regularly short vowel plus long coda. The syllable boundary regularly falls before /t/ in certain cases like get him /ge+tɪm/, and more generally as the result of syllable shift; /t/ would regularly be shortened in the new syllabic onset. This explanation could account for the speeding up of articulation to a flap, but not the introduction of voicing.

## 7.2. Syllable Margins

The following consonants can occur in the syllable onset: /p b sp f v m sm t d st θ ð n sn ŋ ʤ j k g sk s z h j w l r /. The last three /w l r/ can combine with several of the others to form a complex onset, and /s/ occurs in many combinations peculiar to itself. The combinations /sw, sl/ can be treated as complex just like /kw/ or /bl/, but /sp st sk sm sn/ which have no parallels can be treated as single units. The absence of phonetic [sr], and the combination of [ʃ] only with [r], suggests that [sr] can be interpreted at the level of the syllable as /sr/; some Scousers do indeed use an [s]-like form of [ʃ] in this position. (This analysis derives partly from Fudge, 1969b).

If R is the subclass of consonants occurring before /r/, W the subclass before /w/, and L the subclass before /l/:

R = /p b sp f t d st θ k g sk s/

W = /t d θ k g sk s/

L = /p b sp f k g sk s/.

These are not synchronically 'natural' classes, e.g. /θ/ patterns

and some of those that do occur might seem somewhat far-fetched out of context. For example, (8) incorrectly replies /gta/ 'guitar' to the cue 'Ringo plays the...'; the first consonant is entirely voiceless before /t/ so that the word sounds like catarrh /kta/. Informant (50) has the onset /dʒw/ in /dʒwɒnt ðəm/ 'd'you want them'.

Syllable codas are made up from the following set:

/p b sp f v m t d θ ð n tʃ ʒ ʒ k ɡ sk s z l r/.

The basic combinations involve /r l n/ before another consonant. In Scouse as in RP, /r/ is realized together with the preceding vowel, and /n/ assimilates to the place of articulation of the following consonant. If R' is the subclass following /r/, L' the subclass following /l/, and N' the subclass following /n/:

R' = /p b f v m t d θ ð n tʃ ʒ ʒ k s z/

L' = /p b f v m t d θ n tʃ ʒ k s z/

N' = /p t d tʃ ʒ k ɡ s/

There are a large number of derived codas resulting from the coalescence of an originally enclitic syllable with the stressed syllable. They are formed by adding one or more of the set /t,d;s,z;θ;st/ to the basic coda. They are mostly used morphologically, but do occur in single morphs; compare walked, jammed; cats, dogs; warmth; worst on the one hand with act, apse, adze etc. Very long codas are formed by recursive application of the derivation rule: e.g. sixths selects /s+θ+s/, texts /s+t+s/ and lapsed /s+t/.

Very long codas are sometimes simplified on account of the difficulty in pronouncing them. When asked to read out the word text off a card, (9) and (36) missed off the final /t/ and said

/taks/ and (39) reversed the order of these consonants and said /tesk/, substituting basic /sk/ for derived /ks/. In context, a final derived /t,d/ is often elided, e.g. walked back /wɒk bæk/, slammed shut /slam ʃɒt/, in order to avoid the cluster of consonants at both coda and following onset. Even in a basic coda, /t,d/ tend to be unstable, e.g. /ɔl mæn/ 'old man', /ænbæg, æmbæg/ 'handbag', /sænkəsl, sɑŋkəsl/ 'sandcastle' and perhaps /kəʊlz/ 'colds'.

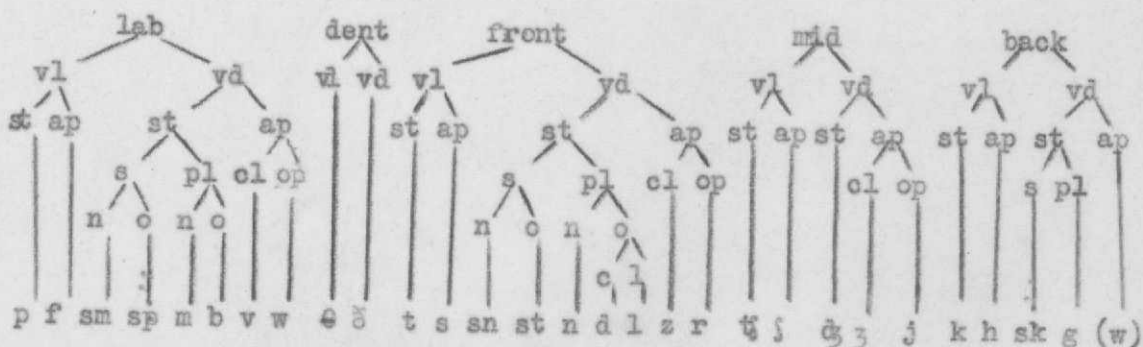
#### 7.2.1. The Consonant System

The rules for basic combinations in onset and coda apply to English as a whole, and are not specific to Scouse or any other dialect. Consonants organize themselves into categories of a different kind for realization, and these categories are also found in English as a whole, or at least in the standard group of varieties which includes Scouse. Varieties differ in the phonetic forms realizing the categories. The category is abstract and must not be confused with a phonetic feature; nor is there anything universal about these categories.

Some categories are more general than others in that the details of their realization depends on more specific categories, e.g. a labial consonant differs according to whether it is a stop or an approximant. Specific categories may be restricted to certain more general ones, so that e.g. no approximants are nasal.

(1) The most general category is place of articulation. Of these there are five: labial (lab); dental (dent); front; mid; back. (2) At each place, consonants are divided into voiceless and voiced, (vl,vd).

(3) Next is the distinction of stop (st) and approximant (ap). In the category stop we include consonants produced with a complete blockage of the air-flow (or something like it) at the primary place of articulation. This includes nasals and the lateral, which would not normally be thought of as "stops". There are other ways of interpreting their realizations, e.g. nasals might be resonants with a cul-de-sac oral chamber of varying size, and laterals might be vowels with alveolar contact; we are interpreting them as stops with an air-exit through the nose and the sides of the tongue respectively. (4) Stops are divided into those preceded by [s] (s), and those which are plain (pl). (5) Approximants are divided into the close (cl) and open (op) types. (6) Labial and front stops are further subdivided into nasal (n) and oral (o). (7) Plain oral voiced front stops are further subdivided into the central (c) and lateral (l) types. Or diagrammatically:



Some categories might be described as "marked", as long as markedness is understood as peculiar to the English system, and not part of some general theory. If a marked category is not specified, then a consonant belongs to the unmarked type. For example, stop and nasal



are marked, and since dental consonants are specified for neither they are approximants and oral.

### 7.2.2. Consonant Realizations

Consonant realizations are not 'states' or bundles of simultaneous features, but auditory effects brought about by complex movements of the speech organs. One consonant or another may be recognized according to the relative timing of movements, or to the degree a particular movement is carried out. The details of movements are influenced by the positions they are previously in, and more important by the positions they are moving to next. The distortion of the articulatory setting also contributes, but this has already been discussed, and need not be repeated here.

#### 7.2.2.1. Place of Articulation

Labial: The lower lip is the active articulator, but its movement differs according to other categories. For labials involving a stop, the lip is raised to make contact with the upper lip, but for the close approximants /f v/, the lower lip is pulled backwards so that its upper surface is near or in contact with the upper teeth. For the open approximant /w/ the lips are "rounded", possibly accompanied by tongue-rounding; the degree of pouting tends to be greater than for close back vowels, but the details of lip shapes depend on facial expression (see pp103-105). The nature of the following sound has little influence on labials; in my peel, feel, meal the lips part to the corners of the mouth on the release of the consonant, and the corners remain touching

in pool, fool, mood, but this is a property of the vowels rather than the labial consonant.

Dental In the RP-type fricative, the tongue tip is held between the upper and lower front teeth. These also occur in Scouse, but Scouse /θ, ð/ are more characteristically developments of the Anglo-Irish stops [T, D] made by the tip of the tongue against any point between the bottom of the back surface of the upper teeth and the alveolar ridge.

Scouse /θ ð/ overlap with /t d/: the former pair can be dental fricatives or stops or apico-alveolar stops (but not lamino-alveolar stops), and the latter can be apical or laminal alveolar stops. Thus breathe and breed:

<u>breathe</u>	brið	brɪD	brɪd	
<u>breed</u>			brɪd	brɪd'

where [d'] is introduced ad hoc for the laminal. Before another dental consonant, all four /θ ð t d/ are dental, e.g. loathe them and load them (taking the /ðem/ weak-form of them):

<u>loathe them</u>	louððem		louDDem
<u>load them</u>		louDðem	louDDem

The area of overlap thus varies according to environment. The pairs /θ ð/ and /t d/ are clearly phonologically 'different', but this relation is too complex to allow a "phonemic" solution; it is a case where asymmetric contrasts intersect (see p66).

Front Out of context, Scouse front consonants are velarized alveolars, but as in English generally the context determines the actual place of articulation.

Some front stops readily assimilate to the place of articulation of the following consonant. This is obligatory for /n/ in the coda, e.g. /lamp/ : [ˈlɑmp] 'lamp', /sɒŋ/ : [ˈsɒŋŋ] 'song', or /lɒŋtʃ/ : [ˈlɒŋ-tʃ] 'lunch', where [n-] is a postalveolar nasal. Before /ə/ in the coda, /t d n l/ are dental, e.g. /wɪðə/ : [ˈwɪðə, wɪðɪ] 'width', /eɪtə/ : [ˈeɪtə, eɪtɪ] 'eighth', /tɛnə/ : [ˈtɛnə, tɛnɪ] 'tenth', and /hɛlə/ : [ˈhɛlə, hɛlɪ] 'health'.

In the onset, /t d/ tend to be retracted slightly before /r/, as in /tri/ : [ˈt-ri] 'tree', or /drɒm/ : [ˈd-rom] 'drum'. This is as in RP. However, the Anglo-Irish type is occasionally heard, with dental /t d/ before a post-dental flapped /r/, i.e. [ˈTRɪ] 'tree', and [ˈDRɒm] 'drum'.

Between syllables, assimilation is optional, and may be partial - involving co-articulation - or complete, e.g.:

/hɒt paɪ/	hɒt paɪ	/gɒd gɜːl/	gɒd gɜːl	/tɛn kɒps/	tɛn kɒps
'hot pie'	hɒt <sup>h</sup> paɪ	'good girl'	gɒd <sup>g</sup> gɜːl	'ten cups'	tɛn <sup>h</sup> kɒps
	hɒp paɪ		gɒg gɜːl		tɛŋ kɒps

Similarly, /t/ might be retracted slightly in /waɪt tʃɜːtʃ/ : [ˈwaɪt-tʃɜːtʃ] 'white church'. The only assimilation of /l/ is completely to the dental position, e.g. /eɪl ɒɪŋk/ : [ˈeɪl ɒɪŋk, eɪl tɪŋk]; and /st/ does not so much assimilate as drop its final segment, e.g. [ˈfɜːs ɒɪŋg, fɜːs gɒ] 'first thing, first go'.

Where front consonants are alveolar or dental before another consonant, the active articulator is the tip of the tongue. Before vowels, the blade is often used; it is also often used for the close approximants /s z/. Very roughly, the tip is used before the more back, more open vowels, and the blade before the more front,

more close vowels. The blade is used before /j/ and may attract closer approximation in it, resulting in [tʃ] as in Tuesday [tʃuzdi]. The degree of fronting and opening at which tip articulation gives way to the blade varies from speaker to speaker, but not many go as far as (29) in using it before all vowels, and even before /w/ in twelve [t'welv]. (Owing to its similarity to close but back vowels, /w/ generally has the tip articulation.) The use of the blade would appear to be on the increase, and this is most noticeable for /t s/, and rather less so for the voiced /d z/.

The open approximant /r/ is produced with the centre of gravity of the tongue held a little further back than for /z/, and with the front hollowed out and the tip raised to the back of the alveolar ridge without much retroflexion. Its position does not vary much, but after a dental it tends to tap the under surface of the alveolar ridge in passing. The dental can be /θ/ or the Anglo-Irish /t/ :

<u>three</u>	/θri/	θri	TRi	tri
<u>tree</u>	/tri/		TRi	tri

Of these, [tri] is unusual for three, and [TRi] is unusual for tree, but either can occur according to the rule. This is a case of asymmetric contrast, three having the form [θri] to keep it distinct from tree, but tree having no form which would not also be possible for three.

Mid The mid consonants are made a little further back than the

front ones for both active and passive articulators. The stops and close approximants /t̪ ʃ ʒ ʒ/ are made at the back of the alveolar ridge, at about the same place as /r/, and with the tip and blade of the tongue as in RP, or else with the front of the tongue, thus allowing the tip to return to its preferred position down by the lower front teeth. The latter type is possibly on the increase, and used more before close and front vowels than before back and open ones.

The open approximant /j/ is like the latter kind of /ʒ/ but with the tongue held slightly further back at a greater distance from the roof of the mouth.

Back The stops /k g sk/ are produced with the back of the tongue against the velum. The middle of the velum is used before consonants, and before close back and open front vowels. An advanced variety (fronter on both velum and tongue) is used before close front vowels, e.g. [k+i] 'key', and a retracted variety (further back on both velum and tongue) before open back vowels e.g. [g-ut] 'got'. An example of the Anglo-Irish use of the advanced type before open front vowels is given by the Dubliner (13) - [g+a:da] 'garden'- but this is unlikely in the speech of native Scousers. A final back consonant is determined by the preceding vowel, e.g. [duk-], but a following vowel always takes precedence, compare [duke] 'docker' with the mid variety of /k/ before [ε].

The voiceless approximant /h/ is made in the glottis; /w/ is included as a back consonant because it requires the raising of the

back of the tongue towards the velum quite independently of the articulatory setting.

#### 7.2.2.2. Voice

Voiced and voiceless consonants are distinguished in a number of different ways, and in many environments are recognized according to their influence on the lower levels of rhythm and details of intonation. We are now concerned with their effect on the phonation and voice-quality of an utterance.

Voicing in Scouse is relatively slow to start up at the beginning of an utterance, and tends to die away just before the end; as the vocal cords finally move apart there is often a perceptible increase in the breath flow. A "voiced" consonant fits in to this general pattern - and so, incidentally, do vowels - but a "voiceless" consonant has the property of interrupting the pattern either for itself alone or for some neighbouring segments as well. It follows that "voiced" and "voiceless" are not to be distinguished according to whether or not the vocal cords are vibrating. In this phonation pattern, Scouse differs markedly from the rest of North Midland English, it is not quite the same as RP, and is more like Southern Anglo-Irish.

At the very beginning of an utterance, there is a slight delay between the approximation of the articulators and the flow of breath, and the onset of voicing for a "voiced" consonant, while for the "voiceless" type, voicing does not begin until the beginning of the vowel:

van                  -vv/vvv/vv-                  fan                  ---/vvv/vv-  
v / a / n                                  f / a / n

where (-) marks breath or voicelessness, and (v) voicing. This diagram suggests that at some point breath gives way neatly to voicing: this may not be the case for the "voiceless" type, for there sometimes appears to be an overlap period of whispery voice (see Catford, 1968:319). It is not clear whether whispery voice is part of the realization of a voiceless consonant, or whether it is part of the Scouse voice quality generally (cf p115 and the discussion of voice quality).

In the case of plosives, voicing begins at the release stage for "voiced" and after a short gap, or period of aspiration, for "voiceless":

two                  -h/vvv                  do                  --v/vvv  
t / u                                  d / u

although the aspiration might overlap with the voicing for the vowel. The difference in glottal timing here is of course minimal, but distinctive since it covers the period of transition from the consonant to the vowel.

The aspiration occurs when there is nothing between the voiceless plosive and the vowel. A corresponding gap occurs when the release of the plosive is separated from the vowel, e.g. by the affricated release of /tʃ/:

chew                  ---/vvv                  cf.                  jew                  --v/vvv  
tʃ / u                                  dʒ / u

where the voicelessness of [tʃ] corresponds to [h] in two. The first element [d] of /dʒ/ is voiceless, and voicing begins of the release [ʒ].

In a complex onset, the delay of voicing extends beyond an initial voiceless consonant into a following /r w l/; /r/ is most affected and may be completely devoiced, and /l/ is least affected. Voiced plosives are normally released into the second segment, so that the plosive itself appears to be devoiced, followed immediately by voicing:

<u>true</u>	---/---/vvv t / r / u	<u>drew</u>	---/vvv/vvv d / r / u
<u>quin</u>	---/--v/vvv/vv- k / w / r / n	<u>Gwyn</u>	---/vvv/vvv/vv- g / w / r / n
<u>played</u>	---/-vv/vvv/v-- p / l / r / d	<u>blade</u>	---/vvv/vvv/v-- b / l / r / d

Voicelessness similarly extends beyond an initial voiceless approximant, as in friend, thwart or sling.

In intervocalic position, voicing carries on through a "voiced" segment; but is interrupted for a voiceless one:

<u>offer</u>	vvv/---/vvv v / f / e	<u>of her</u>	vvv/vvv/vvv v / v / e
<u>the two</u>	-vv/vvv/-- <sup>h</sup> /vvv ð / e / t / u	<u>they 'do</u>	-vv/vvv/vvv/vvv ðe / e / d / u

Voicing carries on through consonant clusters in this way, provided the air can flow out, or is checked only for a short period:

<u>business</u>	--v/vvv/vvv/vv/vvv/--- b / r / z / n / e / s	<u>handle</u>	---/vvv/vvv/vvv/vv- h / a / n / d / l
-----------------	---	---------------	--

On the other hand, the lax articulation of Scouse plosives is unable to withstand the continued pressure of air where two of them



come together. In the voiceless type, as in ropetrick, the checking of the air-stream presumably prevents air passing through the glottis; in the voiced type, voicing trails off in the middle of the cluster, as e.g. in breadboard:

ropetrick /vvv/vvv/---/---/---/vvv/---  
r / oʊ / p / t / r / ɪ / k

breadboard /--v/vvv/vvv/vv--/--vv/vvv/v--  
b / r / ɛ / d / b / o / d

The relatively long /g/ of a word like dog-licence may be devoiced; alternatively it may be voiced but with incomplete velar closure.

"Voiced" consonants are also slightly devoiced in the neighbourhood of voiceless consonants in medial clusters, e.g.

blackbird /---/vvv/vvv/---/--vv/vvv/v--  
b / l / a / k / b / ɜ̥ / d

egg-cup /vvv/vv--/---/vvv/---  
ɛ / g / k / o / p

At the end of the utterance a number of effects are related to the trailing off of voice and the increase in breath flow. (The latter can be symbolized ad hoc by doubling the voicelessness sign to (=) ). Plosives appear to be aspirated, and a voiceless one can even be pre-aspirated inso far as the breath increases during the closure phase:

hat                ---/vvv/===                had                ---/vvv/v--  
h / a / t                               h / a / d

In words like took or keep, where short vowels are bounded by voiceless plosives, voicing may not get properly established at

all, for the aspiration is followed by whispery voice, and then the breath flow increases finally:

took       $\text{---/vvv/---}$   
 $t / o / k$       keep       $\text{---/vvv/---}$   
 $k / i / p$

Similar phonation patterns are characteristic of Southern Anglo-Irish.

Final close approximants tend to be rather 'breathy' if they are voiceless, and aspirated if they are voiced:

bus       $\text{---v/vvv/---}$       buzz       $\text{---v/vvv/v---}$   
 $b / o / s$        $b / o / z$

Nasals and /l/ also tend to end devoiced:

born       $\text{---v/vvv/vv=}$       ball       $\text{---v/vvv/vv=}$   
 $b / o / n$        $b / o / l$

The devoicing of nasals necessarily brings about the end of nasal resonance, and the breath flow makes audible the release of the oral stricture (cf p 114).

Vowels, too, are subject to devoicing, and this gives the impression that close vowels end in a weak approximant, and that open ones end in  $\text{[h]}$  (cf p 115).

Complex codas of voiced consonants may be almost entirely devoiced:

dogs       $\text{---v/vvv/v---/---}$       closed       $\text{---/vv/vvv/v---/---}$   
 $d / o / g / z$        $k / l / oʊ / z / d$

The distinction of voiced and voiceless here depends heavily on the duration of preceding segments. Even this fails in dogs which differs from docks possibly only in the voicing of the transition from the vowel to /g/.

When a final voiced plosive is preceded by /l/ or a nasal, its closure is simultaneous or homorganic with the preceding segment, and devoicing follows the closure:

<u>bulb</u>	$\begin{array}{c} \text{--v/vvv/vvv/} \\ \text{b/ o / l b /} \end{array}$	<u>and</u>	$\begin{array}{c} \text{vvv/vvv/} \\ \text{a/ n d/} \end{array}$
-------------	---	------------	--

It is difficult to hear anything beyond the duration of the /l/ or nasal which keeps the voiced consonant apart from the voiceless one in such cases.

7.2.2.3. Stops and Approximants

A stop involves complete closure at the primary place of articulation, while for an approximant the active articulator merely comes close to the passive one, and usually close enough to cause friction. Where a "stop" has some alternative exit for the air, the closure is maintained for the duration of the consonant.

Corresponding to the RP plosives /p b t d k g/, Scouse has an apparent confusion of stops, plosives, affricates, fricatives plus a number of sounds which fit into none of the 'cardinal' categories at all. In fact, Scouse makes the distinction of stop and approximant for these consonants at a different place than RP, in that the phases of a "plosive" are controlled in a different way. The Scouse consonants are related to the 'cardinal' types in exactly the same way as actual vowels to the Cardinal vowels; in neither case do phonological distinctions neatly follow boundaries set up in advance for theoretical convenience.

The 'cardinal' plosive has three phases: (1) the articulators close off the air passage, (2) the closure is held momentarily, and pressure builds up behind it, (3) the closure is released smartly. In the Scouse type, owing to the lax articulation, air is allowed to escape very soon in phase (2) before the release proper: this gives the impression that /b d g/ are affricates, e.g. [d<sup>z</sup>oe] 'door', and /p t k/ aspirated affricates, e.g. [t<sup>sh</sup>en, k<sup>xh</sup>at] 'ten, cat'. In many environments the closure in phase (1) is frequently incomplete, so that at no time is the air passage perfectly blocked: these consonants do not sound like fricatives, because the articulators are constantly moving as though into and out of closure, and changing the degree of approximation. True fricatives do occur in the velar position, where there is no possibility of confusion with any other consonant, e.g. [sneix+, bux+, nex, klux-]. The retracted fricative [x-] is often accompanied by 'uvular scrape'.

Closure in phase (1) is normal in the onset of a syllable with word-stress and in the onsets of its proclitics, as in to Tom [te tum], to tomorrow [te tempre] or to tattoos [te tetuz], and similarly for /p b d k g/. Closure is also normal in the environment of another consonant, especially one involving homorganic contact, as in [anti, weld, mk] 'auntie, weld, ink'; but clusters with incomplete closure are certainly heard, especially with /k/, e.g. [skɪn, wɔkt] 'skin, walked'. Closure is optional in the environment of vowels either in the coda or in enclitic syllables, as in tartan [tɑ<sup>s</sup>en], up [ɒp] or sugar [sɔgɛ].

The Anglo-Irish stops [T,D] pattern in a similar way and

overlap with the prestige [θ, ð] :

<u>thin</u>	Tɪn	T <sup>h</sup> ɪn		//	θɪn
<u>bath</u>	bɑt		bɑθ	//	bɑθ
<u>then</u>	Dɛn	D <sup>h</sup> ɛn		//	ðɛn
<u>with</u>	wɪD		wɪð	//	wɪð

But when /θ ð/ are retracted to the alveolar position, as in [dθ] 'the', they would appear to be regularly unaffricated apical plosives of the standard type.

There remain the true affricates /tʃ, dʒ/. These regularly have a controlled closure and holding phase (1,2) followed by a slow fricative release. The effect of affrication here is not the same as for /t/ or /k/. Indeed, the use of a 'cardinal' affricate -especially in the wrong environments - is a hallmark of imitation Scouse accents, e.g. such pronunciations as [tʃɛn, lɑkʃə, lɑdʒə] 'ten, lacquer, ladder'.

#### 7.2.2.4. Stops with [s]

The clusters /sp st sk sm sn/ were analyzed above as units on the phonological level. Phonetically, they involve a close approximant [s] followed by some kind of stop. This sequential realization makes them rather different from other categories of consonant, but they are unusual in other respects too.

The voicelessness of [s] extends into a following /p t k/ but not into a nasal or /r l w/:

<u>spore</u>	----/----/vvv s / p / ɔ	<u>store</u>	----/----/vvv s / t / ɔ
<u>score</u>	----/----/vvv s / k / ɔ	<u>spray</u>	----/----/vvv/vvv s / p / r / ɛɪ

<u>square</u>	---/---/vvv/vvv s / k / w / ə	<u>straw</u>	---/---/vvv/vvv s / t / r / ɔ
<u>small</u>	---/vvv/vvv/vv- s / m / ɔ / l	<u>snore</u>	---/vvv/vvv s / n / ɔ

The devoicing effect of [s̥] is sometimes heard to extend beyond the /p t k/, e.g. [st<sup>h</sup>ɛz̥] 'stairs', but this is not very common.

#### 7.2.2.5. Close and Open Approximation

A close approximation is made when the active articulator moves close enough to the passive one to cause friction as the air passes through the narrow gap. An open approximant is essentially vowel-like in character, in that it offers no real obstruction to the air-stream.

The details of /f v/ and fricative /θ ð/ are idiosyncratic and depend on such things as the state of the upper front teeth. If there are sufficient gaps between the teeth, the active articulator can make actual contact, or otherwise a slit must be left between the articulators.

The details of /s z ʃ ʒ/ vary socio-linguistically and depend on articulatory setting and what part of the tongue is used as the active articulator. Since both can be made with the tongue-tip by the lower front teeth, the pairs cannot be distinguished as 'slit' versus 'grooved' fricatives. Nor can the tiny difference of alveolar versus post-alveolar be taken as seriously distinctive: indeed, it is possible to make alveolar [s̥] and post-alveolar [s̥]. It would appear that for [s̥] and [z̥]

the air is expelled in a strong noisy jet, but flows more smoothly and diffusely for [ʃ ʒ]. The latter pair may also require slightly less close approximation.

The open approximants /w j/ are related to close back and close front vowels respectively. The degree of closeness depends on the following vowel, /j/ being closer in yeast than in yacht, and /w/ closer in woo than in west. The /h/ is a voiceless vowel, providing an 'empty' onset in which the articulators move to the positions for the following vowel. Finally, /r/ is a vowel with a raised tongue-tip, the position of the body of the tongue depending on the following vowel. Immediately after /t/ as in train, the tip is still close enough to the alveolar ridge to produce friction; friction might also be produced after /k/ as in crane. In shrink, as the tongue retracts and changes shape from [ɹ] to [r] it sometimes makes [ʃ] rather [s]-like, and produces some friction on [r]. In complex onsets like /br, fr/, the tongue can be moving into the position for /r/ during the first consonant; when this is not done, /r/ is performed very rapidly and sometimes strikes the alveolar ridge. It is also often flapped between vowels, when the tongue is making a rapid change from one shape to another.

#### 7.2.2.6. Nasal and Oral

For all oral sounds, the velum takes up a range of positions which balance oral resonance and cul-de-sac nasal resonance in such a way that the resulting voice-quality is not considered "nasalized" for a particular dialect or a particular speaker. That is, although

/a/ or /v/ might be produced with some resonance in the nasal chambers, the hearer still perceives it as "oral".

For the stops, a shift in this balance brings about the distinction of [m n ŋ] and [b d g]. The balance is made at a different point in Scouse than for other varieties of English including RP, and Scouse [m n ŋ] may be produced with rather less velic opening, and consequently less nasal resonance, than the RP sounds. This gives the impression of a congested nose, and is reinforced in final position by the trailing off of voice and the increased breath flow. (For further discussion, see the section on Scouse voice quality, pp111-15).

#### 7.2.2.7. Central and Lateral

In the production of /d/, if the closure is complete, the tongue seals off the air-stream at the front and at the sides. If air is allowed to escape, it does so centrally over the front of the tongue. But for /l/, the tongue tip or blade makes contact with the alveolar ridge, and the air escapes laterally over the sides of the tongue. Since there is no build up of pressure, the tip or blade makes and retains its contact. Scouse does not have the vocalized /l/ with the tongue away from the ridge.

Like other consonants, Scouse /l/ is velarized, and does not vary much according to syllable position. Before a vowel it may be darker than the RP sound, but after a vowel it is clearer than the Southern English pharyngealized one. The velarization may be more marked after /k, g/ as in clean, glove; alveolar follows velar contact, and there is no trace of the North Midland velarized alveolars of [ɛlin] or [əlov].



### 7.3. Syllable Peaks.

Vowels at the syllable peak, like consonants at the syllable margins, are arranged in abstract categories. Since vowel realizations depend on rather elusive auditory qualities and cannot be related with any confidence to articulatory movements, vowels readily change in time and vary considerably from one dialect to another. Our first task is to describe the categories which are found in English as a whole, or at least in what may be considered the standard varieties of English. Dialects differ in their systems of complete or partial contrast, and so we require a set of mutation rules to relate the abstract categories to the Scouse system of contrasts; these rules can be given in some 'x becomes y' notation, but we shall give them in straightforward prose where this is more appropriate.

For the abstract categories, we shall take the traditional 'vowel series' of comparative philology, but without any historical inferences. Standard English has ten vowel types arranged in the four grades - full, normal, reduced and zero - which we have already used in the discussion of rhythm. Zero-grade has by definition no realization, so we shall not be concerned with it further. In the following table, we give the vowel series for Scouse, with some comparative symbols for RP. The units at the intersections of series and grades are not in any sense 'phonemes', for they are distinguished or coalesced in different ways from one dialect to another.

Vowel Type	Grade: Full		Normal		Reduced	
	Scouse	RP	Scouse	RP	Scouse	RP
1. (i)	i, ai	i	ɪ	ɪ	i, i, e	i, e
2. (e)	i, eɪ	i	ɛ	e	i, i, e	i, e
3. (a)	ɛɪ	eɪ	a	æ		e
4. (o)	ou	eu		ʊ		e
5. (u)	u, uɪ	u	o	u		e
6. (ʌ)	au	au	o	ʌ		e
7. (iu)		ju	o	ʌ		e
8. (oi)		ɔɪ		-		-
9. (ɑ)		ɑ		-		-
10. (ɔ)		ɔ		-		-

This method of comparison is very similar to the traditional one of deriving extant vowels from the "long" and "short" vowels of "Middle English", although a historical statement is of course impossible for Scouse beyond the last century. Scouse and RP are very similar, and except for reduced (i,e) and normal grade (ʌ, iu) the comparison is largely a matter of matching symbols.

Something on the lines of this table (see e.g. the rather different solution offered by Fudge, 1969b:268) is required to deal with morphological patterns like sane/sanity; telephone/telephonic/telephonist; profound/profundity; or the derivation of grammatical weak-forms. Some words vary in the grade of certain vowels, e.g. fellow [felou, fele] can have either full or reduced (o) in Scouse. Scouse has full grade (u) before /k/ in words like cook, hook, book where RP has normal grade.

The units at the intersections of series and grade can vary considerably in their realizations not only from one dialect to

another, but also within a dialect. We have for example distinguished monophthongal and diphthongal variants of Scouse full grade (e) and (u), for they form alternative bases for certain derived peaks. A variant of one unit can become in time similar to the realizations of some other unit; this has happened for RP in the case of normal grade (a) in words like path, class, laugh becoming identical to the realizations of (a).

In addition to the basic peaks, English has a number of derived peaks formed by the simultaneous realization of a vowel plus following /r/, and by adjacent vowels not separated by a consonant at the syllable boundary.

7.3.0.1. Postvocalic /r/

Scouse and RP agree in the case of reduced and normal grade vowels. After /e/, /r/ is lost without any effect at all, so that e.g. Offa and offer are identical [ʊfe]; both take an r-link to another vowel as in [ʊferiz] 'Offa is, offer is'. A normal grade vowel combines with /r/ to form a derived vowel equivalent to full grade:

(ir, er, ur, ar) →	ɜ	as in <u>fir</u> , <u>fur</u>
(ar)	ɑ	as in <u>far</u>
(or)	ɔ	as in <u>for</u>

where /ɑ, ɔ/ are identical to vowel types 9 and 10 respectively, and /ɜ/ is a new type which has a number of realizations in Scouse and RP. All these are followed by an r-link before another vowel.

Full grade vowels are "fractured" before /r/, and this results in an epenthetic /e/; /r/ is then dropped except as a syllable link. The forms so derived are then subject to the rhythmic rules of a particular dialect. We shall discuss the full grade vowels (marked with the macron  $\bar{\quad}$ ) as in the following eight examples:

- |   |   |
|---|---|
| 1. ( $\bar{i}$ r) as in <u>fire</u> (f $\bar{i}$ r) | 5. ( $\bar{u}$ r) as in <u>tour</u> (t $\bar{u}$ r)   |
| 2. ( $\bar{e}$ r) as in <u>here</u> (h $\bar{e}$ r) | 6. ( $\bar{a}$ r) as in <u>hour</u> (h $\bar{a}$ r)   |
| 3. ( $\bar{a}$ r) as in <u>fare</u> (f $\bar{a}$ r) | 7. (i $\bar{u}$ r) as in <u>pure</u> (pi $\bar{u}$ r) |
| 4. ( $\bar{o}$ r) as in <u>four</u> (f $\bar{o}$ r) | 8. (oi $\bar{r}$ ) as in <u>coir</u> (koi $\bar{r}$ ) |

Some of these vowels have special variants before /r/, e.g. the forms of ( $\bar{a}$ r) in fare derive from / $\epsilon\epsilon$ / or \*/ $\epsilon r\epsilon$ / rather than / $\epsilon r + e$ /, and those of ( $\bar{o}$ r) in four derive from \*/ $ou\epsilon$ / rather than / $eu + e$ / in RP.

RP diphthongs and triphthongs have all prominence concentrated on the "stressed" element; the tendency is to increase the prominence of that element even further, and to take away from the others the little they have. Four rules are involved:

- (1) The inherent sonority of stressed /i, u/ is increased by lowering them to /ɪ, ʊ/.
- (2) Stressed /ɪ, ʊ/ still has less inherent sonority than following /e/ in the combinations /re, ve, juɛ/. Some speakers shift the stress in /re, juɛ/ to /e/ which is also lengthened to /ɛ/; /ɪ/ of /re/ becomes a proclitic j-glide in /jɛ/, and /juɛ/ drops medial /ʊ/ also becoming /jɛ/, e.g. /hjɛ/ 'here' and /kjɛ/ 'cure'.
- (3) Triphthongs are simplified by eliding enclitic /ɪ, ʊ/ before /e/.
- (4) The inherent sonority of stressed /u, o/ is further increased by lowering them to /ɔ/; /oɛ/ of this origin can be simplified to monophthongal /ɔ/.

These rules in that order generate a large number of possible vowels for RP. Rule 1 is obligatory, but the others are optional, and rules 2 and 4 give alternative developments for /jue/ :

<u>Example</u>	<u>Vowel</u>	<u>Rule:</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
1. <u>fire</u>	are				ae	
2. <u>here</u>	*ie		ie	je		
3. <u>fare</u>	*eie(?)				ee	
4. <u>four</u>	*oue(?)				oe	oe o
5. <u>tour</u>	*ue		ue			oe o
6. <u>hour</u>	ave				ae	
7. <u>pure</u>	*jue		jue	je		joe jo
8. <u>coir</u>	oie				oe(?)	

In Scouse, owing to the separation of "stress" and "focus", there is no such concentration of prominence on one element, and it is spread out over the stressed element and its enclitic elements. Rules 1-4 therefore do not apply; or more precisely, not as rhythmic rules. Corresponding to rule 3, Scouse has a rule 3A by which /i,u/ become j- and w-glides respectively at the trough between two phonetic syllables. The vowel /e/ of fare does not fit this general pattern. (This is a very old development in Lancashire and Cheshire. An early form of it seems to have been taken by planters from the North West of England to the Lagan valley in Ulster in the sixteenth and seventeenth centuries. Forms like /fær hæ/ 'fair hair' are common in the contemporary speech of Belfast.) For full grade (i) and (u), forms are derived both from monophthongal /i,u/ and diphthongal /#i, #u/:

<u>Example</u>	<u>Vowel</u>	<u>Rule:</u>	<u>3A</u>	<u>4</u>
1.	<u>fire</u>	are	aje	
2.	<u>here</u>	ie		
		ɪie	ɪje	
3.	<u>fare</u>	ɜ		
4.	<u>four</u>	oʊe	oʊe	oɔ o
5.	<u>tour</u>	ue	} oʊe o	
		ɪue		
6.	<u>hour</u>	ave	awe	
7.	<u>pure</u>	jue	} joe jo	
		jɪue		
8.	<u>coir</u>	ore	oje	

Scouse has a number of vowels apparently derived by rule 4, even though this rule is not motivated by Scouse rhythm. The most likely explanation is that vowels of the type /oɔ, o/ have been introduced to Scouse, ready-made as it were from outside. The influence is unlikely to be from RP itself, but more generally from British English. We have noted elsewhere (p153) that Scouse /wɛ/ for 'we're' was also irregular and apparently unmotivated, suggesting a corresponding RP \*/wɛə/. The first element of RP /rɛ/ - when it is not developed to /jɜ/ - is sometimes very open. In some non-RP varieties it is lowered to /ɛ/ parallel to the lowering of /ʊ/ to /o/ in rule 4, and in some dialects - (East Anglia?) - the final /ə/ can be lost, resulting in e.g. [hɛ:] 'here'. It is possible that Scouse /wɛ/ derives from some general British type, not specifically RP. The nature of this 'general British type' and how it comes to influence Scouse, remain to be investigated. For further discussion of the Scouse /oɔ, o/ forms, see next chapter.

7.3.0.2. Proclitic Syllables

In the word piano, /pi+ano, pi+ano/, the proclitic vowel /i/ becomes a j-glide to the stressed vowel in the derived peak /ja/. This would appear to be an isolated case, for although proclitic vowels tend to be shortened, they generally retain their syllabicity, e.g. react /ri+akt/ or to eat /tu+it/.

7.3.0.3. Enclitic Syllables

A number of derived peaks are formed by the combination of full grade vowels with a following /e/, often of the nomen agentis or comparative -er. RP uses rules 1 and 3:

<u>Example</u>	<u>Vowel</u>	<u>Rule:</u>	<u>1</u>	<u>3</u>
1. <u>higher</u>	ai+e			ae
2. <u>freer</u>	i+e		re	
3. <u>player</u>	ei+e			ee
4. <u>lower</u>	ou+e			ee
5. <u>bluer</u>	u+e		ue	
6. <u>how're</u>	au+e			ae (as in <u>How're things?</u> )
7. <u>newer</u>	ju+e		jue	
8. <u>em- ployer</u>	oi+e			oe

The Scouse equivalents are derived by rule 3A:

<u>Example</u>	<u>Vowel</u>	<u>Rule 3A</u>
1. <u>higher</u>	ai+e	aje
2. <u>freer</u>	i+e	
	#i+e	#je
3. <u>player</u>	ei+e	eje
4. <u>lower</u>	ou+e	owe
5. <u>bluer</u>	u+e	
	#u+e	#we

<u>Example</u>	<u>Vowel</u>	<u>Rule 3A</u>
6. <u>how're</u>	au+e	awe
7. <u>newer</u>	ju+e	
	jɜu+e	jɜwe
8. <u>employer</u>	ɔɪ+e	ɔje

Rule 4 does not generally operate, so that e.g. \*/blo/ is impossible for bluer. There are a few exceptions like /jo/ 'you're', and these are also found in Scouse.

RP has parallel forms before enclitic /ɪ/ as in -ing: /traɪŋ/ 'trying'; /bɪŋŋ/ 'being'; /pleɪŋŋ/ 'playing'; /gəʊŋŋ/ 'going'; /dəʊŋŋ/ 'doing'; /bəʊŋŋ/ 'bowing'; /rɪnɔːŋŋ/ 'renewing'; and /ənoɪŋŋ/ 'annoying'. Scouse has forms parallel to /awe, aje/ etc. before e.g. /ɪ/ of enclitic it:

<u>Example</u>	<u>Vowel</u>	<u>Rule 3A</u>
1. <u>try it</u>	aɪ+ɪ	ajɪ
2. <u>see it</u>	i+ɪ	
	ɛɪ+ɪ	ɛjɪ
3. <u>say it</u>	eɪ+ɪ	ɛjɪ
4. <u>sow it</u>	oʊ+ɪ	owɪ
5. <u>do it</u>	u+ɪ	
	ɛu+ɪ	ɛwɪ
6. <u>allow it</u>	au+ɪ	awɪ
7. <u>renew it</u>	ju+ɪ	
	jɜu+ɪ	jɜwɪ
8. <u>employ it</u>	ɔɪ+ɪ	ɔjɪ

Forms derived by rule 3A are occasionally heard before -ing, e.g. /dəʊwɪŋ/ 'doing', but a set of alternative forms are probably commoner. Because -ing ends in a nasal consonant, the whole



derived peak immediately before it is subject to initial focus.

#### 7.3.0.4. Initial Focus

Complex vowels in Scouse tend to have focus shifted to the stressed element before a nasal or /l/. This makes the stressed element rather longer, and the vowel is not so easily split into two phonetic syllables by the pitch contrasts of skipping tones.

Front (or fronted) vowels are also subject to fracture before /l/. In a word like mile this makes the diphthong /aɪ/ a triphthong, and similarly /ɛɪ/ in stale. However, the starting quality of the triphthong may shift, so that /ɛɪ, aɪ/ become not so much /ɛɪe, aɪe/ as /ere, are/. The triphthongs are phonetically di-syllabic, /ɪ/ beginning as a very weak j-link, and /ɪ/ and /e/ in the second syllable vary in their relative duration and prominence.

<u>Example</u>	<u>Vowel</u>	<u>Fracture</u>	<u>Quantity</u>	<u>Quality</u>	<u>Syllables</u>
mile	aɪ	aɪe	a:ɪe	a:ɪe	a: <sup>j</sup> ɪe
feel	i	ie	i:e		
	ɛɪ	ɛɪe	ɛ:ɪe		ɛ: <sup>j</sup> ɪe
stale	ɛɪ	ɛɪe	ɛ:ɪe	e:ɪe	e: <sup>j</sup> ɪe
coal	ɔʊ		ɔ:ʊ		
school	u	ue			(/u/ : [u+])
	ɛʊ		ɛ:ʊ		
cowl	aʊ		a:ʊ		
yule	ju	jue			(/ju/ : [ju+])
	jɛʊ		jɛ:ʊ		
oil	ɔɪ	ɔɪe	ɔ:ɪe		ɔ: <sup>j</sup> ɪe

(It should perhaps be pointed out that the sequence [ɔ<sup>j</sup>ɪe] is very quick and lacking in prominence, and much less prominent than the preceding segment.)

Before -ing Scouse also has initial focused triphthongs, but these derive not by fracture, but by the combination of the stressed vowel and the enclitic /ɪ/ (or sometimes /ə/) of -ing. The same adjustments are made for quantity, quality and phonetic syllabification. The sequence [ʲɪɪ] is simplified to [ʲɪ]. Diphthongs to /u/ become triphthongs, but the shift of focus is less complete, and the [u] element in the sequence [ʷuɪ] tends to be more prominent than [ɪ].

<u>Example</u>	<u>Vowel</u>	<u>Quantity</u>	<u>Quality</u>	<u>Syllables</u>
trying	aɪ+ɪ	a:ɪɪ	a:ɪɪ	a:ʲɪ
being	i+ɪ	i:ɪ		i:ʲɪ
	ɛɪ+ɪ	ɛ:ɪɪ		ɛ:ʲɪ
saying	ɛɪ+ɪ	ɛ:ɪɪ	ɛ:ɪɪ	ɛ:ʲɪ
going	oʊ+ɪ	o:ʊɪ		o:ʷʊɪ
doing	u+ɪ	u:ɪ		
	ɛʊ+ɪ	ɛ:ʊɪ		ɛ:ʷʊɪ
bowing	aʊ+ɪ	a:ʊɪ		a:ʷʊɪ
renewing	ju+ɪ	ju:ɪ		
	jɛʊ+ɪ	jɛ:ʊɪ		jɛ:ʷʊɪ
annoying	ɔɪ+ɪ	ɔ:ɪɪ		ɔ:ʲɪ

### 7.3.1. Vowel Systems

Our analysis of Scouse vowels resembles a historical approach, except that instead of sound-changes, we deal with synchronic processes. The notion of process is essential to the comparison of Scouse and RP. A phonemic analysis could be made, but it would not be very useful. In stair, staid, stale (st̄ar, st̄ad, st̄al), for example, the vowels of the first two are phonemically different, while those of the second two are allophones of the same

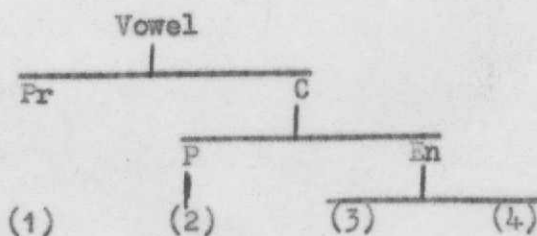
phoneme. Some combinations of vowel plus /r/ are treated as separate phonemes on account of their phonetic identity to other vowels, e.g. RP hearth and path, or port and caught. The bi-uniqueness criterion leads to some rather odd analyses for Scouse, e.g. [juel] 'you'll' has the same phoneme as brewer [brue] but "contrasts" with the phoneme of you'd [jud], or [fiel] 'feel' has the same phoneme as fear [fie] but "contrasts" with the phoneme of feed [fid]. Suppose that in a given text, -ing occurs as [en], and going occurs once as [gowen] with end focus, and once as [go:<sup>w</sup>en] with initial focus; if four occurs as [fowe] its vowel could be grouped with that of going even though its alternative forms are quite different. Whereas the alternative forms of going are allophones, those of four [fowe, foe, fo] are separate phonemes. Phonemic analysis works well enough for the set of vowels conventionally chosen for phonemic analysis; but there are many more vowels, and when they are included they quickly cause confusion. It is preferable to regard vowels as the result of processes acting on abstract phonological units; the units contrast where they are phonetically different, and the processes bring about more superficial contrasts, identities and slight differences.

The identity of any vowel depends on its relation to other vowels; that is, potentially to all other vowels, but more particularly to other vowels in the same system. In some phonemic analyses, the systems are based rather confusingly not on the phonetic realizations, but on the symbols that happen to be chosen for the phonemes. For example, Trager and Smith (1957:27)

symbolize the vowels of Southern British dear and far as /ih/ and /ah/ respectively - the latter on the very doubtful suggestion (p18) that 'most (sic) British (sic) speakers' have an [e] off-glide in words like part - so that these vowels belong to a system of -/h/ diphthongs. However, given the alternatives [i, =ɪ] for the Scouse vowel in bee, it is clear that the vowel belongs both to the system of monophthongs and to the system of -/ɪ/ diphthongs, irrespective of what symbols are used. Phonemes do not contrast qua phonemes, but qua allophones; vowel systems are not systems of phonemes, but systems of allophones. If there is any use for the term 'phoneme' it is for the abstract units in basic peaks; 'allophones' are what are produced by the phonological rules and act as units for realization.

Since some of the rules are optional, it follows that not all the members of each system will necessarily occur in the speech of any one speaker; but at the same time, any of them could occur, for the same reason.

Vowels can be grouped into systems according to the way they fill the available slots in the complex vowel structure:



(for the earlier discussion of this structure, see pp167-171).

Scouse has the following monophthongs occupying place (2) only:

/ i ɪ e ɛ a ʌ ɒ o u /. These vowels are of different origins, and may be of different grades, e.g. /i,ɪ/ can be either full and reduced or normal and reduced respectively.

Scouse has the rising diphthongs /jɔ, ju/ occupying places (1,2), and a number of falling diphthongs at (2,3):

/ ɪɪ, eɪ, aɪ, oɪ; ʊu, au, ou; ie, oe, ue /.

Triphthongs include the rising-falling type /jɪu, juə, joe/ at places (1,2,3), and the falling type at (2,3,4):

/ ɪje, eje, aje, oje; ʊwe, awe, owe; ɪji, eji, aji, oji;

ɪwi, awi, owi/.

We have already discussed in the chapters on rhythm and intonation the effects of initial and end focus. The only initial-focused types that have to be considered specially for realization are [a:<sup>j</sup>ɪə, e:<sup>j</sup>ɪə] as in mile and stale.

Scouse has two four-place vowels /jɪwe, jɪwi/.

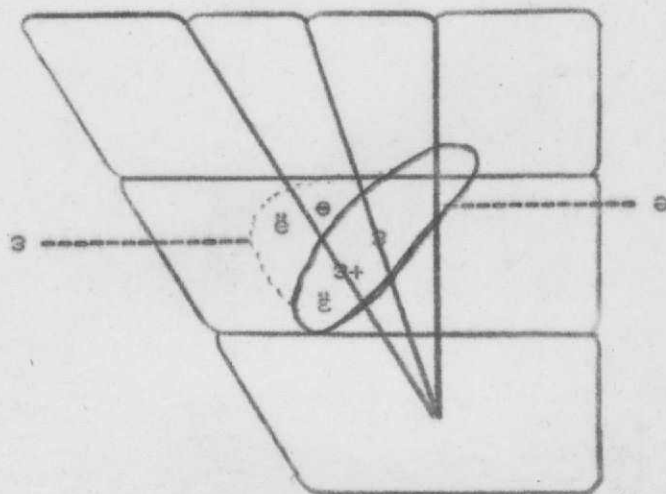
The three and four place vowels are phonetically di-syllabic, and so - under certain conditions - are the diphthongs and some of the monophthongs. The difference between vowels transcribed say, /ɪɪə, aɪə/ and /ɪje, aje/, concerns the way the phonetic qualities of the vowel fit the trough of prominence between the phonetic syllables. Since the phonetic qualities are not themselves affected, we shall ignore such differences in our discussion of vowel realizations.

### 7.3.2. Vowel Realizations

The phonetic qualities by which vowels are realized are related to each other within the Scouse vowel area, which is itself partly

determined by the articulatory setting (see the earlier discussion, pp108-111).

The positions of the neutral vowels /e,ɜ/ might be described as the "axis" of the Scouse vowel area, other vowels being related to this axis:



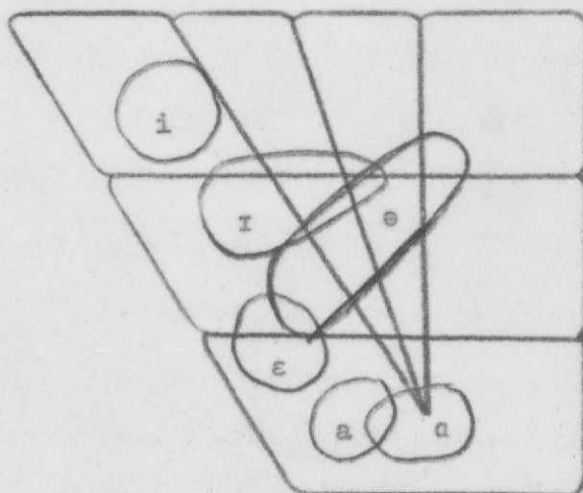
Reduced /e/ - marked by the thick black line - varies from about half-open and front of centre to perhaps more than half-close and back of centre. The front variety occurs finally, as in bitter, the retracted variety before a consonant, as in bitters, and a more central one otherwise, as in bitter lemon. Full-grade /ɜ/ is closely related to fronter kinds of /e/, but does sometimes occur outside that area, as shown by the broken line on the diagram.

The most conservative vowel would appear to be /e/, which is heard both in North-West England, and in Anglo-Irish, e.g. the Dubliner (13) has [T<sup>h</sup>erti<sup>e</sup>n] 'thirteen'. The raising of the tongue-tip for r-colouring in the Anglo-Irish type gives the auditory impression of rounding; in the Scouse vowel the tip is raised enough to suggest rounding - and may be accompanied by

slight lip-rounding - but not enough to suggest /r/. The "rounding" of /e/ may well be a vestige of r-colouring.

The typical middle-class vowel is /ɜ:/ or the RP type /ɜ:/ a little further back on the axis. This /ɜ:/ is more open than /e/, it has lost the "rounding", and is impressionistically front of centre. The corresponding working-class vowel is /ɛ/, further forward on the axis. A more advanced vowel used by younger speakers is /ɛ̃/, which has the centre of gravity of the tongue brought forward even further; however, the general auditory effect is not so much one of fronting as of raising, and hence the symbol ɛ̃. Although we have plotted /ɛ̃/ at the same place on the trapezium as we shall plot /ɪ/, they do have different phonetic qualities on account of different tongue-shapes. (This /ɛ̃/ is an interesting vowel because it cannot be described adequately in terms of cardinal vowel theory.)

The vowels /ɪ i/ are raised from the front of the axis, and /ɛ a a/ are lowered:



Normal grade /ɪ/ is usually between half-open and half-close, but

close enough to avoid confusion with /ɛ/. (There are a few examples of confusion, e.g. /jes, jɪs/ 'yes' and /gɛt, ɡɪt/ for the noun 'get', but these have probably come into Scouse from Anglo-Irish). This /ɪ/ is considerably centralized in certain environments like before /n, l/ in bin, milk, and here it overlaps with close central varieties of /e/. Reduced /ɪ/ occurs in the same area, and overlaps considerably with /e/, so that many reduced vowels could be transcribed either as /ɪ/ or /e/.

Full and reduced grades of /i/ are closer and fronter than /ɪ/, but still centralized from Cardinal 1.

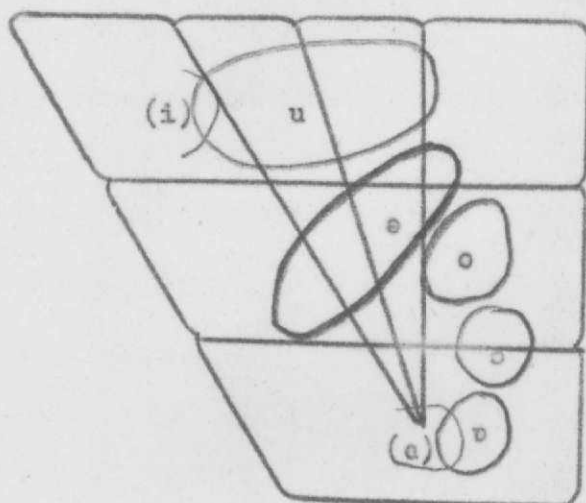
The vowel /ɛ/ is retracted from Cardinal 3, about half-open or perhaps a little more so. It overlaps with front varieties of /e/ so that /jɛ/ 'yes' and /ajɛ/ 'How're you?' share the sounds [jɛ-]. The overlap is extended towards the centre by retracted varieties of /ɛ/ as before /l/ in melt.

Open front /a/ is centralized from Cardinal 4, but is more open than /ɛ/ and distinct from it. Open central /a/ is not quite fully open, and varies considerably from front to back of centre. At the front it overlaps with retracted varieties of /a/, from which it is kept distinct by its greater duration. At the back it overlaps with /ɒ/, although /a/ has the greater duration and /ɒ/ has slight auditory rounding.

Of the remaining monophthongs, /u/ is raised from the back of the axis, and /o, ɔ, ɒ/ are lowered. In addition, these vowels have some kind of "rounding" which is progressively greater from the more open to the closer vowels. Slight rounding is made by hollowing out the front of the tongue, and more rounding is



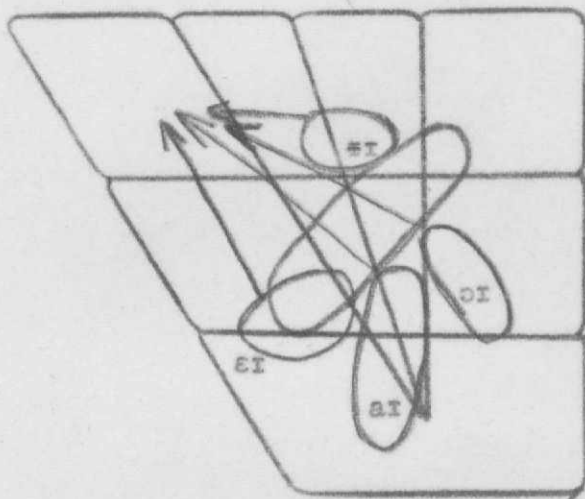
achieved by bringing the lips together vertically from the corners of the mouth to the centre.



Close central /u/ varies considerably from almost close to half-close, and from front of centre to back of centre. At the front it overlaps with /i/, but is quite distinct from it on account of the auditory qualities and tongue-shape associated with rounding. The vowel /o/ is slightly lowered from the axis, and thus rather more open than its RP equivalent /u/; it is between Cardinals 6 and 7 and fronted. Full-grade /o/ is fronted from Cardinal 6 and at about the same height; its quality may not be very different from /o/ but it has greater duration. Finally the vowel /v/ is centralized from Cardinal 13 (or 5 rounded), and its position overlaps with /a/ on the one side, and is very close to /o/ on the other. It is shorter than /o/, and is shorter than /a/ and has very slight rounding absent from /a/.

The rising diphthongs /jɔ, ju/ have /ɔ, u/ preceded by /j/, and need not be considered specially. The three kinds of falling diphthong have their end-points raised from the front of the axis, raised from the back of the axis, and on the axis respectively.

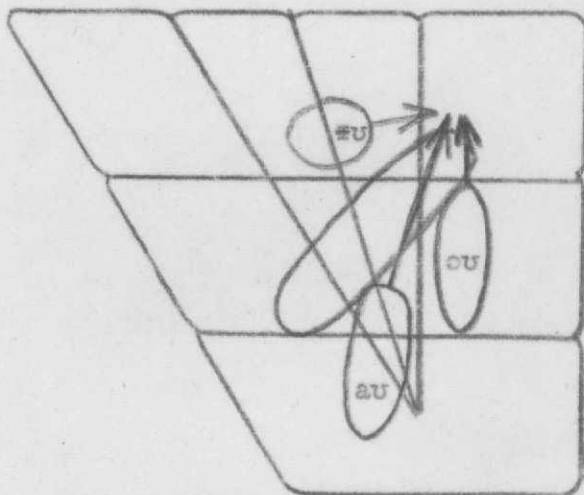
First, the diphthongs ending in /ɪ/:



The end point is rather closer than for monophthongal /ɪ/ and more like /i/. Diphthongal /ɛɪ/ begins very centralized and slightly more open than it ends; it tends to be used before another vowel and in absolute final position, as in three /θrɛɪ/. It can also replace reduced /i/ in similar environments, e.g. /tʌmɛɪ, mɛzɛɪ/ 'Tommy, Mersey', but /i/ is more likely to occur before a consonant, cf /wɔɪd/ 'worried'.

The other three diphthongs can begin near the position of monophthongal /ɛ a ɔ/, but often begin very centralized when they are given end-focus, as finally in bay, buy, boy /bɛɪ, bɛɪ, bɔɪ/ or before a strong coda in wait or wife /wɛɪt, wɛɪf/.

Diphthongs to /u/ end rather closer than monophthongal /o/ and in the position of a back variety of /u/. The end-point is, however, sometimes brought forward to a more central [ɤ]. The back variety is marked on the trapezium:

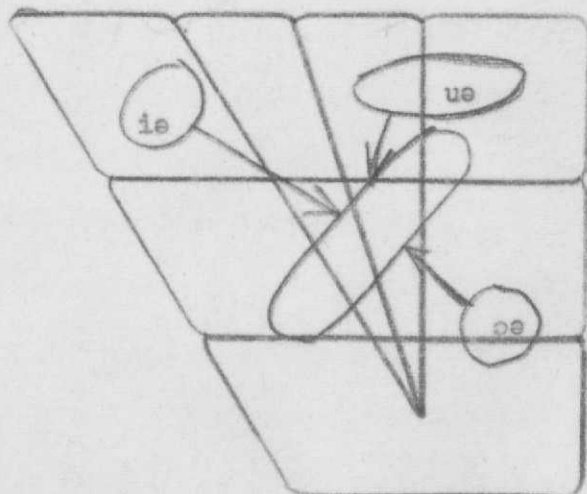


Diphthongal /ɤu/ begins neutral and ends rounded, but its total movement may well be within the area of variation of monophthongal /u/. The diphthong occurs finally and before other vowels, and also before /l/ as in school /skɤul/. (Middle class speakers imitating Scouse tend to use the diphthong in Liverpool /lɪvɛpɤl/; however, I noticed that people in the Scotland Road area actually use the monophthong /u/ in this word, [lɪvɛpəl].)

The other diphthongs /aʊ, ou/ can begin near the position of the monophthongs /a o/, but tend to be centralized - and have the total movement shortened - when given end-focus, as in now, no /nɔʊ, nɤʊ/ or nowt, note /nɔʊt, nɤʊt/. A number of adjustments are made to /ou/ by middle class speakers to make it more like

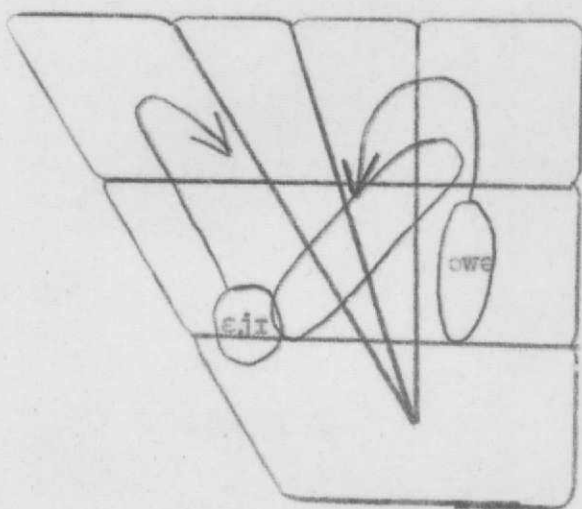
RP /eu/. The main differences between /ou/ and /eu/ are the starting point, and the greater prominence of /ou/ associated with end-focus. The adjustments involve fronting the first element to /e/ and possibly the second to [ɤ]; however, unless the rhythm of the diphthong is altered, the result is quite unlike RP. A genteel pronunciation is sometimes heard, with exaggerated fronting of both elements to [ɛy], the second element possibly accompanied by labio-dental rounding. This is used by some lower middle class and some upper working class speakers, and impressionistically by women rather than men.

The centring diphthongs /ie oe ue/ begin near the positions for monophthongal /i ɔ u/ and move to the axis /e/. This /e/ element can be fronted finally and retracted before a consonant.



The starting point for /ue/ tends to be further back than for /u/, and for some speakers may be more open, and nearer Cardinal 7.

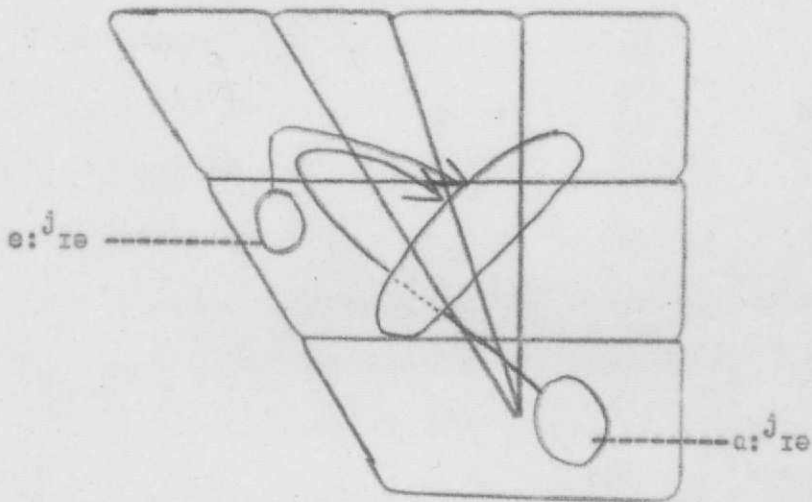
The rising-falling triphthongs /jɘu, juɘ, joɘ/ are like the diphthongs /ɘu, uɘ, oɘ/ preceded by /j/. The falling type are like the diphthongs followed by /e/ and /ɪ/, with /e/ fronted or retracted according to environment, and the four-place vowels /jɘwe, jɘwi/ are like /jɘu/ followed by /e/ or /ɪ/. There are no problems here, so two examples will suffice:



The triphthong /ɛɪɪ/ occurs for example in laity /ləɪtɪ/, and /oʊe/ occurs in poetry /pəʊetɪ/ - compare RP /pɛtɪ/ - and sometimes in four /fəʊ/. When these triphthongs have end-focus, the first element can be centralized, and the first movement considerably narrowed, as in fire /fɪə/. However, on account of the focus, the quality of the second element is properly reached, and Scouse does not normally have the simplified movements characteristic of RP (compare the movements marked by Gimson (1970:138) for /aɪ/ and /aʊ/.) Any simplification involves raising the first element rather than lowering the second, so

that e.g. /owe/ sometimes starts almost half-close.

The full triphthongal movement is retained even when focus is shifted on to the first element:



The first movement in /e:ʰre/ as in they'll is very narrow; in /a:ʰre/ as in I'll the vowel moves to the close front position before turning off again towards the centre.

Chapter 8:

Some Phonological Variables

8.1. The Nature of Phonological Variation

In our description of Scouse sound patterns, we have made frequent use of such phrases as 'may be', 'can be' or 'is often'. Although the pattern itself might be described as "Scouse", it does not follow that it is consistently used all the time by everyone who speaks with a Scouse accent. It is with the variation in the dialect that we shall be concerned in the present chapter.

We have set up the hypothesis that Scouse belongs phonologically to the North-West Midlands, but that many of its phonetic patterns are of Anglo-Irish origin. The Irish immigrants of the nineteenth century took on North-Western phonology, retaining relatively little of their own, and this has led to considerable uniformity in working-class speech. Middle class people attempt to retain the traditional regional speech, but have been heavily influenced by Anglo-Irish phonetics. Social levels of speech in Merseyside depend to some extent on the balance between North-Western and Anglo-Irish. However, the port of Liverpool is in contact with the whole of the English speaking world, and is consequently open to new developments. This leads to a further conflict in middle class speech between the traditional and the new forms. The source of the influence is British English generally, rather than RP. (A general development does not necessarily come from a single prestige

source; e.g. the general British development of Germanic "stain- to stan 'stone' does not imply the existence of some Old English equivalent to RP. If Liverpool speech is influenced from outside, there is no reason to assume the influence is from RP.)

To trace the variation, we shall take the individual responses to some of the set questions. We shall divide the informants up according to (a) social class, distinguishing "working-class" Vauxhall from "middle-class" Aigburth, (b) religion, Catholic or Protestant (or at least non-Catholic), (c) sex, and (d) age-group in 1968, with six groups (1) 21-30, (2) 31-40, (3) 41-50, (4) 51-60, (5) 61-70, (6) over 70. The distinction of social class is admittedly rather crude, and we are investigating only the one style of the questionnaire responses. However, even if we achieved greater precision here, we would still have the problem that the informants come from only two areas of Liverpool. If instead of Vauxhall we had chosen the Dingle or the North end of Birkenhead, or if instead of Aigburth we had chosen Blundellsands and Crosby, we might well have got a different set of results. The results are in any case accurate only for Vauxhall and Aigburth. Our intention is to give only an approximate description of variation within Scouse.

We have described a number of phonological units and sound patterns which combine in various ways to give the impression that the speaker is a Scouser. Certain combinations are particularly important in this respect, and these are the "shibboleths" that middle class speakers try to avoid; they are also the obvious variables to choose for socio-linguistic analysis. We might plot



the responses for any variable on a scale from 'Scouse' to 'non-Scouse', or from 'non-prestige' to 'prestige', or even from 'vulgar' to 'polite'. However, the plotting would be a subjective process determined by the socio-linguistic background of the transcriber: a Merseysider and a Londoner would hear the boundaries at a different point. (My own subjective reactions are very different now from what they were six years ago.) Accordingly, any transcriptions would be accurate for the transcriber, but not necessarily for anyone else.

Suppose instead that transcriptions are based not on the response to shibboleths, but directly to phonetic categories. Assuming that this is possible - (an assumption I myself am not willing to make, see the discussion above pp83-89) - the transcriptions would have to be far narrower than any phonetician could make with any confidence or accuracy. We have made some very narrow transcriptions, but these are systematic rather than impressionistic, for they are general hypotheses based on a large corpus of data and not on individual cases. For example, after listening for several hours to several Scousers, it is reasonable to claim that Scouse /o/ as in put or shut is back of centre, slightly rounded and between half-close and half-open. But the phonetic quality of any given example of /o/ is determined by the details of tongue-shape and the position of the lips and jaw and other organs, and it is not an easy matter to extract just those details of quality which can be ascribed to some precise point on the vowel trapezium and some degree of "rounding". Given a hundred examples of /o/, one will

hear a hundred different phonetic qualities, but to say exactly what these differences are is a major problem of experimental phonetics, and not something which can be done as a matter of course.

Transcription is not an objective process which can be carried out once for all. The analyst's work begins impressionistic, using 'cardinal' categories of vowels and consonants, but becomes systematic as the categories relevant for the dialect emerge. For example, he will interpret Scouse /t d s z/ in terms of 'plosive' 'aspirated' 'affricate' 'fricative', but when the categories which we have described as stops and approximants emerge, some distinctions like that between aspirated and affricated plosives prove not to be very useful for the dialect. A systematic transcription largely involves deciding which general pattern a particular case fits. The general pattern can be social as well as strictly linguistic, and here there is an uncertain margin between checking a particular case against the pattern, and allowing the pattern to force itself on the particular case. For example, if one suspects that younger Scousers use [ɔ] rather than [ue] in sure, and a given younger Scouser's pronunciation of sure is unclear, it is very tempting to class it as [ɔY].

The uncertain nature of transcriptions casts considerable doubt on any statistics based on them. Suppose we calculate for a given group that some feature x is used 84 per cent of the time, and y the remaining 16 per cent. This probably means that the group overwhelmingly prefers x to y. It could also mean that they always

use x, but that the transcriptions are only 84 per cent accurate; or that they only use 60 per cent x, but some unconscious prejudice has skewed the results. The percentage could even be quite meaningless, e.g. if one were to claim that Scouse /t/ was 84 per cent an affricate and 16 per cent an aspirated plosive: this would imply that the speaker has to choose between a pattern of phonation and the manner of controlling the release of a stop, when he must make choices for both.

These theoretical difficulties have all been at some time very real practical problems in the study of Scouse variables. I spent a number of months making calculations for several variables, but my confidence in the transcriptions decreased as my understanding of Scouse sound patterns increased. Eventually, the work had to be scrapped and the calculations discarded. The precision of calculation does not solve the fundamental problem of phonetic description.

The tables in the following sections are based on revised transcriptions made when the last four chapters were drafted, but before the final version. If the work were done again, some symbols might be changed, and the results made slightly different. The study of variables is not an exact science, of objectively converting auditory stimuli into visual symbols and processing the data. All that we can claim is that if we set up useful hypotheses and then find that most of the evidence points in a particular direction, we are probably on the right track.

## 8.2. /o/ and /ʌ/

Scouse agrees with the rest of the linguistic North in having the same vowel in such words as put and but. As in other Northern cities, the middle classes tend to make some sort of difference.

The middle class Liverpudlian's /ʌ/ varies considerably in phonetic quality, but tends to be in the area to the back of centre, about half-open, and unrounded. Some speakers have a very central [e]-like quality. Now the Scouse /o/ is also back of centre, it can be relatively open, and is not very rounded, and is thus not very different from /ʌ/. It follows that just by listening to an example of up or drum, it is impossible to tell whether the speaker is using Scouse /o/ or what for him is an /ʌ/. Some speakers may use a closer variety of /o/ in words like foot or good more like RP /u/, but not all do. The prestige pronunciation of words like but, up, drum does not involve imitating RP /ʌ/, but merely making the vowel slightly different from /o/. This slight difference might well go unnoticed by outsiders, who hear the Liverpudlian /ʌ/ as exactly the same as Scouse /o/ or perhaps as a variety of /e/.

Liverpudlian /ʌ/ does not really 'contrast' with /o/, and the relation is asymmetrical. If /o/ of look is replaced by /ʌ/, the meaning of the word is changed to luck; but if /ʌ/ of luck is replaced by /o/ the meaning of the word is not necessarily changed. The important fact about /ʌ/ is not that it has some definable position on the vowel trapezium different from that of /o/, but that the speaker makes it different from /o/ or at least thinks he is doing so. The occurrence of /ʌ/ cannot easily be traced by plotting

vowels on the trapezium, but requires an intuitive response to the speaker's vowel in up, drum etc., to decide whether or not it is the same as the vowel of foot, good. In the following table, informants who made some distinction are marked (+), and those who did not are marked (-); the abbreviation n.r. stands for no response:

			1	2	3	4	5	6	
<u>V</u>	<u>RC</u>	<u>M</u>	11 - 38 -	23 - 29 - 34 -	39 -	10 - 48 -			
		<u>F</u>	25 -	13 - 50 -	36 - 40 -	15 - 26 - 42 -	8 - 9 -	20 +? 35 n.r.	
	<u>Prot</u>	<u>M</u>				17 -	14 -		
		<u>F</u>			19 -				
	<u>A</u>	<u>RC</u>	<u>M</u>					84 +	
			<u>F</u>					90 +	
<u>Prot</u>		<u>M</u>	73A - 86 +	51A - 88 + 56A +	77 +? 93 +	69 -	59A + 72 + 80 +	96 +?	
		<u>F</u>	57 +	51 + 56 +	53 + 61 + 95 +?		60 + 81 - 81A + 87 +		

We remain non-committal as to exactly what we have heard when we say that a speaker makes some kind of distinction.. Only one informant in Vauxhall does, and all but four do in Aigburth. Three of the four are men, and only one - perhaps surprisingly a school-

teacher - is a woman. Many of those who make a distinction are inconsistent, e.g. (20) has /o/ in drum, (95) has /o/ in up and gloves, and (96) has it in month and rubber; (77) gives /boɪb/ 'bulb' as an example of a prestige pronunciation which he had learnt from his Devonian wife.

The relation between /o/ and /ʌ/ is very complex and confused, and there is no question of them being separate "phonemes". Rather there is a single "phoneme" /o/ which is pronounced differently in different words, and the speaker has to learn which words have which vowel. Many use the wrong vowel on occasion, as /o/ in drum, bulb, or even /ʌ/ in bush, butcher. The variation of /o/ and /ʌ/ is not so much a selection by the speaker of one of two phonemes or even phonetic forms, but the presence or absence of a rule affecting the realizations of one phoneme /o/.

My own difficulties with /ʌ/ provide some evidence for a rule rather than a selection. It is as though I am constantly monitoring my own speech so that just before an /o/ which has /ʌ/ in RP, a mechanism is set which ensures that /o/ is realized as [ʌ]. Problems arise when two cases of /o/ occur close to each other as in look up or good luck, since the first /o/ releases the mechanism and there is no time to re-set it for the second, with the resulting /lʌk ʌp, gʌd lʌk/. On the other hand I would produce much good correctly and would be very unlikely to say \*/mʌtʃ; gʌd/. Good luck sounds wrong, as though one of them should have been /ʌ/, while buck up with /bʌk ʌp/ feels like a hypercorrection. This contextual problem is quite different from

that of individual lexical items. If I think consciously about words like putty, sugar, mush, I easily get confused and am unable to tell whether they have /u/ or /ʌ/ in RP, and have to look them up in a pronouncing dictionary. But after an actual slip like 'I've just pulled /pald/ a button /botn/ off my coat' I am perfectly aware that pull has /u/ and button /ʌ/ in RP.

Now it is possible that my problems with /ʌ/ are entirely idiosyncratic, and talk of a "mechanism" might be dismissed as crude psychologizing. Nevertheless, the available evidence leads to the following conclusion about Liverpudlian /ʌ/. The middle class speaker responds to general British influence and makes some difference between /o/ and /ʌ/. He is not certain how to pronounce /ʌ/, and speakers of other varieties of English may not even be aware that he is doing so; not is he sure when to use /ʌ/, and makes a number of mistakes and hypercorrections. The influence upon him is not so much to adopt a particular phonetic form - such as the RP realizations of /ʌ/ - as to carry out a rule.

### 8.3. /a/ and /ɑ/

In words like last, grass, aunt, mask, Scouse agrees with the linguistic North in having /a/ as opposed to the standard /ɑ/. Middle class speakers tend to have vowels shifted in the direction of /a/, but without necessarily reaching it. Liverpudlian /a/ overlaps in its retracted varieties with front varieties of /ɑ/, but /a/ is regularly longer; the compromise vowel - which we can give the ad hoc symbol ʌ - is typically too retracted to sound like /a/ and too short

to sound like /a/. Sometimes a further gesture is made towards /a/ by making A intermediate in length between /a/ and /a/, and this is symbolized A\*. The following table gives the vowels used in the questionnaire responses for aunt and mask, and where these words had different vowels, that in aunt is given first:

		1	2	3	4	5	6	
<u>V</u>	<u>RC</u>	<u>M</u>	11 a 38 a	23 a 29 a 34 a/a	39 a	10 a 48 a		
		<u>F</u>	25 a	13 a 50 a	36 a 40 a	15 a 26 a 42 a	8 a 9 a 20 a 35 n.r.	
	<u>Prot</u>	<u>M</u>				17 a	14 a	
		<u>F</u>			19 A			
	<u>A</u>	<u>Prot</u>	<u>M</u>	73A a 86 a	51A a 56A a 88 a	77 A/a 93 a/a	69 a	59A A/A 72 A/a 80 A*
			<u>F</u>	57 a	51 a 56 a/A	53 a 61A*/a 95 a		60 A 81 a 81A a 87 A/a
<u>RC</u>		<u>M</u>					84 A	
		<u>F</u>					90 a	

In Vauxhall, the Irishman (34) retains his long (front variety of) /a/ in mask, but not in aunt, and the other Dubliner (13) conforms to the local /a/. The Protestant woman (19) has A, and (20)



has a fronted and raised [æ], but otherwise the Vauxhall informants uniformly use /a/.

The Aigburth informants are equally divided whether they use /a/ or modify it: six men and six women use it, and six men and six women modify it. Note, however, that the men who modify it are in the older groups 3 and 5, and not in 1 or 2.

The modification of /a/ is not so much a selection of some prestige form, but the result of a rule which makes /a/ in some words different from ordinary /a/. The inconsistency of middle class speech is partly due to uncertainty which words the rule should apply to, and partly to lexical differences among individuals. For example, (72) is quite clear that he 'panders to the Southern soft-a' in master /maste/, but not in mask /mask/: there is no uncertainty here. On the other hand, (77) was uncertain, and pointed out that he had replied [Ant] for 'aunt' because his wife had often nagged him about that particular word, which he naturally pronounced [ant].

Hypercorrections are rare, except perhaps circumstances /səkemstənsɪz/. There may be some restriction on the operation of the rule in context, e.g. if path /pæθ/ and past /pæst/ occur together as in the path past the house, the rule may operate only on the first word giving /pæθ pæst/; the other possibilities /pæθ pæst/ and /pæθ pæst/ strike me as odd and 'RP' respectively.

#### 8.4. /v/ in 'one'

The forms /wʌn, wɒns/ 'one, once' are widespread in the North, including Merseyside. Only two middle class women (53,56)

had the RP /wan/ for 'one', and all the other informants used /v/. It is probable that even educated Merseysiders are in the main unaware of /wan/ as a prestige form.

8.5. /u/ in 'book'

The use of /u/ instead of /v/ before /k/ is heard in the North Midlands from Merseyside to beyond Leeds. The following table shows whether each informant used /u/ or /o/ in book:

				1	2	3	4	5	6
Y	RC	M		11 u 38 u	23 u 29 u 34 u	39 u	10 u 48 u		
		F		25 u	13 u 50 u	36 u 40 u	15 u 26 u 42 u	8 u 9 u	20 u 35 n.r.
	Prot	M					17 u	14 u	
		F				19 u			
A	RC	M						84 o	
		F						90 o	
	Prot	M		73A u 86 o	51A o 56A u 88 u	77 u 93 u	69 o	59A o 72 o 80 o	
		F		57 o	51 o 56 o	53 o 61 o 95 u		60 u 81 o 81A u 87 u	96 u

All the Vauxhall informants use the local form with /u/ and this includes the Irish (13,34). The Aigburth informants are

divided, ten of them using /u/ and fourteen the standard equivalent /o/. There is a problem of transcription here: because /u/ is regularly short before voiceless /k/, there is not much phonetic difference between a retracted variety of /u/ and an /o/ which has been raised in the direction of RP /u/.

The use of /o/ is not a matter of age, as can be seen by taking the three younger Aigburth groups together as opposed to

the three older:      1-3 /o/ : 7      4-6 /o/ : 7  
                             /u/ : 6                        /u/ : 4

Nor is it a matter of sex:      M /o/ : 7      F /o/ : 7  
   /u/ : 5                        /u/ : 5

However, if we subdivide into sex and age, a pattern emerges:

M 1-3 /o/ : 2      4-6 /o/ : 5      F 1-3 /o/ : 5      4-6 /o/ : 2  
                         /u/ : 5                        /u/ : 0                        /u/ : 1                        /u/ : 4

Old men and young women prefer the standard equivalent vowel, and young men and old women preserve the traditional local vowel. The Welsh immigrants all use the preferred form of their group: (59A) is male, group 5, and has /o/, (93) is male and group 3, and has /u/, and (96) is female and group 6, and has /u/.

Two of the informants commented on the word book. The first is (19) who herself used /u/ :

"I should imagine that /bok/ would be B-U-C-K, but /buk/ is B-O-C-K (sic) isn't it? - (G.K.) Some people say /buk/, some say /bok/, I don't know what the difference is myself.  
- (19) One of these telephone..(?)..I.T.V. you know.../bok/.  
- (G.K.) Oh, aye, yeh, well - (19) Well that's not right is it?"

She assumes of course that her vowel is the correct one, and ascribes what is in fact the standard vowel to the degenerate speech of

commercial television. Perhaps (72) would agree with her, for although he himself used /o/, he suggested that /u/ might be the superior pronunciation:

"But he had one word - and I can't think what it is - which he said with the utmost precision, and very much off the record, and I found that it was a...it was a characteristic of Liverpool speaking. I wouldn't be at all surprised if it wasn'ttthe double-o sound. We automatically called it /bok/ or /lok/, he was always very careful to pronounce it fully as /luk/ and /buk/...very careful to give it its full value, the double-o sound."

It is possible that the variation in Aigburth is due to a conflict between the local and national standards. There may be some resistance to the national standard because it involves not modifying but changing the local vowel. Compare the frequency of /ʌ/ and /ɒ/ which modify local /o/ and /a/, with the rarity of /ʌ/ in one which replaces local /ɒ/; many speakers will modify /a/ to make aunt different from ant, but fewer will actually replace it by /a/ to make aunt identical to aren't.

In the case of women's speech, it seems that the national standard has broken down the resistance in the course of time; the younger women will have grown up hearing the national forms in films, radio and television. This explanation does not hold for the men. Perhaps the men in groups 4 and 5, as they have grown older and risen in their jobs, have become increasingly aware of the national forms and been influenced by them. Young men, although hearing the national forms as much as the women, keep to the traditional local standard.

## 8.6. /ŋg/

In parts of the North and West Midlands, from Merseyside across to Sheffield and down as far as Birmingham, /g/ is sometimes retained after /ŋ/. In Scouse, /g/ is always optional, except perhaps in such standard /ŋg/-forms as longer, stronger and Bangor. The occurrence of /g/ is probably restricted to final or prevocalic position, and it would certainly be odd before a consonant as in stringed /striŋd/, gang-plank /ganplank/ or the song that... /ðe sɒŋ ðet/. Reduplicated /ŋg/-forms as in singing /sɪŋŋɪŋ/ do occur, but are not particularly common; it is unlikely that they are avoided on grounds of euphony, but they have to compete with half a dozen alternatives: /sɪŋŋɪŋ, sɪŋŋɪŋ; sɪŋŋɪn, sɪŋŋɪn/. There is also the standard /sɪŋɪŋ/.

In final position, it can be difficult to decide whether there is a final /g/ or not. In thing /θɪŋg/ as opposed to think /θɪŋk/, /ŋ/ is longer before /g/ than before /k/, and /g/ is short and indistinct, and has little voicing if any. The length of /ŋ/ is probably as important as any phonetic feature associated with /g/ in recognising /ŋg/ rather than /ŋ/. There are cases which sound like the Scouse /ŋg/ rather than the standard /ŋ/, but which have no audible /g/. If thing is phonologically /θɪŋ/, /ŋ/ is a weak coda, and not particularly long, and shorter than when followed by /g/. There are thus three possibilities for the coda of thing:

(1) /ŋg/ : /ŋ/ is lengthened before /g/, which is realized as a weak devoiced velar plosive.

(2) /ŋg/ : /ŋ/ is lengthened before /g/, which has no audible realization itself.

(3) /ŋ/ which is shorter than in /ŋg/.

However, final nasals in Scouse are subject to the phonation pattern by which voice trails off before the end: if the release of the velar closure is audible - which it often is - it sounds exactly like a weak oral [ŋ], since there is no longer any nasal resonance.

There are thus two sound patterns determining the variation in /ŋg/: the presence or absence of phonological /g/, and the phonation of final nasals. An impressionistic transcription treats together weak [ŋ] from either source and probably disregards the duration of final [ŋ]. The table gives impressionistic transcriptions of /ŋg/ in string:

			1	2	3	4	5	6	
V	RC	M	11 ŋg 38 ŋg	23 ŋg 29 ŋg 34 ŋ	39 ŋg	10 ŋg 48 ŋg			
		F	25 ŋg	13 ŋ 50 ŋg	36 ŋg 40 ŋg	15 ŋg 26 ŋg 42 ŋg	8 ŋg 9 ŋ	20 ŋ 35 n.r.	
	Prot	M				17 ŋ	14 ŋg		
		F			19 ŋg				
	A	RC	M					84 ŋ	
			F					90 ŋg	
Prot		M	73A ŋ 86 ŋg	51A ŋ 56A ŋ 88 ŋg	77 ŋg 93 ŋ	69 ŋ	59A ŋ 72 ŋ 80 ŋ		
		F	57 ŋ	51 ŋg 56 ŋg	53 ŋg 61 ŋg 95 ŋg		60 ŋ 81 ŋg 81A ŋg 87 ŋg	96 ŋ	

The Irish immigrants in Vauxhall both have /ɨ/, but most of the others have /ɨg/, the three exceptions (17, 9, 20) being in the older age groups. In Aigburth, there is a remarkable difference in the usage of men and women. All the men in groups 4 and 5 have /ɨ/, and so do a majority of the younger men; three quarters of the women use /ɨg/.

We can offer no satisfactory explanation for this. The situation is possibly confused by the transcriptions. Where [ɨg] derives by denasalization of /ɨ/ it contributes to the impression of 'adencidal' speech, and as such is very much non-prestige. On the other hand, [ɨg] as the realization of /ɨg/ seems to have some prestige attached to it; it is noteworthy that (53,56) who in other respects are closer than most to RP, and even have /ʌ/ in one, both have /ɨg/ : [ɨg]. There could be a conflict here between the local and national norms.

### 8.7. /ɜ/ and /ɛɛ/

The use of /ɜ/ and its variants - which we shall discuss separately - for standard /ɛɛ/ in such words as fair, scarce, is more localized in the North-West than the previous variables. Again there is pressure on middle-class speakers to make some sort of difference between /ɜ/ and /ɛɛ/, but there is no definable prestige form for Liverpudlian /ɛɛ/. A person using [ɜ+] in hairs may front the vowel to [ɛ-] in hairs, which for him makes it different; but this [ɛ-] is phonetically identical to the Scouse variant of /ɜ/ which we have symbolized /ɛ/. What for the speaker is

a gesture towards the prestige standard, may be for the hearer just another variant of a dialect vowel. In the following table, informants who used a different vowel in hair, square, pear, swear, parents than in Mersey, first, word, are marked (+), those who did not are marked (-), and those who seemed aware of some distinction but were inconsistent are marked (+?):

		1	2	3	4	5	6		
V	RC	M	11 - 38 -	23 - 29 - 34 +	39 -	10 - 48 -			
		F	25 -	13 + 50 -	36 - 40 -	15 - 26 - 42 -	8 - 9 -	20 +? 35 n.r.	
	Prot	M				17 -	14 -		
		F			19 -				
	A	Prot	M	73A + 86 -	51A - 56A - 88 +?	77 +? 93 +	69 +?	59A + 72 + 80 -	
			F	57 +	51 +? 56 +	53 + 61 + 95 +?		60 +? 81 + 81A + 87 +	96 +?
RC		M					84 +?		
		F					90 +?		

The Vauxhall informants generally make no distinction. The Dubliners (13,34) retained an Anglo-Irish type of /ær/, and (20) appeared to imitate the middle class fronted vowel, but was inconsistent in free speech, using e.g. /ɛ/ in there.



The women of Aighurth seem to be more sensitive to this variable, since all of them make some sort of difference for at least one word, while four of the men make none. We can distinguish four main types of vowel corresponding to RP /ɛɛ/: (1) an RP-type /ɛɛ/, (2) /ɛ:/ which is like /ɛɛ/ minus the centring off-glide, (3) /ɛ/ which is more retracted than /ɛ:/ and sufficiently central to sound like a variant of /ɜ/, (4) central /ɜ/. Five of the women have /ɛɛ/, namely (53,56,57,61,81A) - apart from /ɛ:/ in parents for (81A) - (87) uses /ɛɛ/ and /ɛ:/, and the retired schoolteacher (81) has /ɛ:/. Of the men, only (93), a college lecturer, uses /ɛɛ/ apart from /ɛ:/ in parents; three others, (73A, 59A, 72), had /ɛ:/ except for pear where (59A, 72) had /ɛɛ/. Consider now the vowels used by the inconsistent Aighurth speakers:

No	hair	square	pear	swear	parents	Mersey	first	word
<u>M</u> 88	ɜ	ɛ	ɛ/ɜ	ɜ	ɛ	ɛ	ɛ	ɜ
77	ɜ	ɜ	ɛɛ/ɜ	ɜ	ɛ	ɛ	ɛ	ɜ
69	ɛ	ɛɛ	ɛ	ɛ	ɛ	ɛ	ɛ	ɜ
84	ɛɛ	ɛɛ	ɛɛ	ɜ	ɛ	ɜ	ɜ	ɜ
<u>F</u> 51	ɜ	ɜ	ɜ	ɜ	ɛ	ɜ	ɜ	ɜ
95	ɛ	ɛ	ɛ/ɜ	ɛ	ɛ	ɛ	ɛ	ɛ
60	ɛɛ	ɜ	ɜ	ɜ	-	ɜ	ɜ	ɜ
96	ɛ	ɛ	ɛ	ɛ	ɛ	ɛ	ɛ	ɛ
90	ɛɛ	ɜ	ɜ	ɜ	ɜ	ɜ	ɜ	ɜ

The schoolmaster (84) patterns like (93) apart from his /ɜ/ in swear. The other men front some occurrences of /ɜ/, but front it variously to /ɛ/, /ɛ:/ or /ɛɛ/, and even front vowels which would be /ɜ/ in RP. The women, where they make the vowel different from their /ɜ/, shift it to /ɛ:/ or /ɛɛ/. It may be that men merely make a difference, but women attempt to imitate the national standard vowel.

8.8. /ɪ/ and /e/ as Reduced Vowels

The present variable differs from those we have considered so far in that it is not restricted geographically to the North or North-West of England. In many dialects, including RP, Australian English and American English, traditional reduced /ɪ/ is being replaced by /e/. Scouse agrees with RP in general, having /ɪ/ in the plural horses /hosɪz/, the past tense loaded /ləʊdɪd/ and the /ɪŋ(ɡ)/ form of -ing; words like problem and medicine have /e/ - /probleɪn, medɪsen/ - rather than the /ɪ/ of conservative RP. Reduced /ɪ/ is often centralized /ɛ/ which overlaps with closer central varieties of /e/, so that it is not always possible to decide between /ɪ/ and /e/ in a given case. The table gives the first vowel of eleven and the second vowel of orange in that order:

		1		2		3		4		5		6		
V	RC	M	11 e/e 38 ɪ/e	23 e/e 29 e/e 34 e/e	39 e/ɪ	10 ɪ/e 48 ɪ/ɪ								
		F	25 e/e	13 e/e 50 e/e	36 e/e 40 e/e	15 e/ɪ 26 e/e 42 e/e	8 ɪ/e 9 e/e	20 ɪ/- 35 e/ɪ						
	Prot	M				17 e/ɪ	14 e/e							
		F			19 e/ɪ									
	A	RC	M						84 e/e					
			F						90 e/ɪ					
Prot		M	73A ɪ/ɪ 86 ɪ/ɪ	51A ɪ/ɪ 56A ɪ/ɪ 88 e/ɪ	77 e/ɪ 93 ɪ/ɪ	69 ɪ/ɪ	59A ɪ/ɪ 72 -/ɪ 80 ɪ/ɪ							
		F	57 ɪ/ɪ	51 e/ɪ 56 ɪ/ɪ	53 ɪ/ɪ 61 ɪ/ɪ 95 ɪ/ɪ		60 ɪ/ɪ 81 ɪ/ɪ 81A ɪ/ɪ 87 ɪ/ɪ	96 ɪ/ɪ						

There is a clear difference <sup>here</sup> hear between the two communities, most Vauxhall people using only /e/, and most Aigburth people using only /ɪ/. Where a person uses one of each, he is more likely to have /e/ in eleven and /ɪ/ in orange than the other way round.

The actual figures are:

	V	A	Total
(a) e/e	13	1	14
(b) ɪ/e	3	0	3
(c) e/ɪ	5	4	9
(d) ɪ/ɪ	1	18	19

These figures exclude (20,72) for whom one of the responses was lacking.

The vowel reduced in orange is enclitic, while the first vowel of eleven is proclitic. Proclitics are generally weaker than enclitics, and so one would expect the vowel of eleven to be further reduced to /e/ more readily than the vowel of orange. Indeed, the (e/ɪ) pattern is three times as common as (ɪ/e).

People in Aigburth are more conservative than those in Vauxhall. In Vauxhall, only (48) has /ɪ/ in both words, and the five who have the intermediate stage (e/ɪ) are in the groups 3-6; most of the others have /e/ only. Two of the three Protestants, incidentally, have (e/ɪ). In Aigburth, three of those who use (e/ɪ) are in groups 2-3; that is, they are rather younger than those in Vauxhall with this combination. It is probably sheer coincidence, but the two Aigburth Catholics are less conservative here than the Protestants, and pattern with the working-class.

We have interpreted the development of /ɪ/ to /e/ in rhythmical terms, in that a vowel in a weak position is made weaker still. It is consistent with rhythmical tendencies which Scouse shares with every other variety of English, and it could well have arisen as a 'sound-change' spontaneously and independently in the many varieties of English where it is found. In other words, we do not need to trace the development in Merseyside speech to any influence from outside.

#### 8.9. /oe/ and /o/

In many (non-rhotic) varieties of English, the first element of traditional /oe/-type diphthongs in words like four, shore is lowered to [ɔ], and then [e] is elided so that four and shore become homophonous with for and Shaw respectively. We have associated the increase in inherent sonority of [ɔ] to [o] with the tendency in RP and other dialects to place all the prominence on the first element of a diphthong or triphthong (pp260-62). Scouse does not share this tendency, and so [ɔ]-forms are apparently unmotivated, and are introduced ready-made as it were from other dialects.

We have analyzed the traditional Scouse vowel as /ou/ + /e/, and it may be phonetically [o+we] (p277). The triphthongal movement is simplified by some speakers, especially in the middle class. Since we are not concerned with minor differences, but with the difference between traditional and new vowels, we shall group all traditional forms together under the simplified symbol oe.

The new vowels /œ, ø/ are not properly integrated into the Scouse system. Scouse /e/ or various origins can be fronted finally to [ɛ-] as in [fo+wɛ-, dʌkɛ-] 'four, docker', but this does not apply to [e] in /œ/, and \*[fœc-, jœc-] for /fœ, jœ/ 'four, shore' would be impossible. Secondly, [e] in [œ] is ambiguously part of the realization of /œ/ or a phonologically irrelevant off-glide of /o/; e.g. (14) has [œ] : /œ/ in four and shore which is clearly different from his [o] : /o/ in Shaw, whereas (73A) has [o<sup>ø</sup>] : /o/ in both shore and Shaw.

The table gives the vowels used in four and shore; where different vowels were used, the one in four is given first:

		1		2		3		4		5		6		
V	RC	M	11 ø 38 ø	23 ø 29 ø 34 ø/œr	39 ø	10 œ/ø 48 ø								
		F	25 ø	13 œ/ø 50 ø	36 ø 40 ø	15 ø 26 ø 42 ø	8 œ/ø 9 ø	20 œ 35 œ						
	Prot	M				17 œ	14 œ							
		F			19 ø									
	A	RC	M					84 œ						
			F					90 œ/ø						
Prot		M	73A ø/ø <sup>ø</sup> 86 ø	51A ø 56A ø 88 ø	77 ø <sup>ø</sup> 93 œ/œ	69 œ/ø	59A ø/œ 72 œ 80 œ/œ							
		F	57 ø	51 ø 56 ø	53 œ/ø 61 ø 95 ø		60 ø/ø 81 œ/ø 81A œ/ø 87 ø	96 œ/œ						

In Vauxhall, monophthongal /ɔ/ has clearly become the norm. The Dubliners (13,34) are inconsistent in their use of Angle-Irish diphthongs or the Scouse /ɔ/ of their age-group. Six of the older people in groups 4-6 use a diphthong, and two of these are Protestants. The conservative pronunciation is commented on by (29):

"A lot of old women are yocksie, you know...you know the way they talk, like...you know, they er... /dɔe/ 'door' and /foe/ 'four', you know, /ʃot de dɔe/ 'shut the door'.. I slip up with it myself."

He interprets the conservative vowel as exaggerated Scouse.

The pattern is slightly different in Aigburth, where all informants in groups 4-6, and two in group 3, use diphthongs at least sometimes. The reaction of (87) was rather revealing, for she was rather hesitant in using /ɔ/ in shore, and when asked to repeat it, she "corrected" herself to /œ/. The retired telephone supervisor (60) who used an odd vowel which we have transcribed oo rationalized her preference for the diphthong in four on the grounds that it was more audible over the telephone line. This, together with the occasional tendency to introduce centring off-glides on to /ɔ/ as in Shaw, suggests the middle classes attach some prestige to the diphthongs.

According to our analysis of Scouse sound patterns, the diphthong /œ/ and the monophthong /ɔ/ are together 'new' as opposed to the traditional triphthongs and closer diphthongs. The social distinction seems to cut right across, setting the monophthong against all diphthongs and triphthongs as a group. It is perhaps significant that the diphthong most commonly preserved in Aigburth -

but not Vauxhall - is /œ/ rather than any local vowel. This /œ/ is diphthongal like some of the local vowels, and begins about half-open like /ɔ/, and is thus a sort of compromise between traditional and new.

8.10 /ue/ and /ɔ/

A number of vowels corresponding to RP /ue/ are being replaced by /ɔ/. The table gives the vowels used in poor and sure, and where they are different, that of poor comes first:

			1	2	3	4	5	6	
V	RC	M	11 ɔ 38 ɔ	23 ɔ 29 ɔ 34 uer	39 ɔ/ue	10 œe/ue 48 ue			
		F	25 ɔ	13 œe/ɔ 50 ɔ	36 ɔ 40 ɔ	15 œe/ue 26 ɔ 42 œe/ɔ	8 œe/ue 9 œe/ɔ	20 œe/ue 35 n.r.	
	Prot	M				17 œe/ue	14 œe/ue		
		F			19 ue/ɔ				
	A	RC	M					84 œe	
			F					90 œe/ɔ	
Prot		M	73A ɔ <sup>ə</sup> 86 ɔ	51A ɔ 56A ue 88 ɔ	77 ɔ 93 œe/ue	69 œe/ɔ	59A ue/œe 72 œe/ɔ 80 œe		
		F	57 ɔ	51 ɔ 56 œe	53 œe 61 œe 95 ɔ		60 ue 81 ɔ 81A œe/ɔ 87 œe/œe	96 œe	

There are several vowels in use here: (1) /ɔ/ and /œe/ as in

four and shore, (2) a number of vowels transcribed /ue/ formed by the addition of varieties of /e/ to varieties of /u, #u/, including [ue, ue-, #we, #we-], (3) vowels similar to /oe/ of four and shore, (4) a compromise between /ue/ and /oe/, transcribed /ue/, which is the most similar to the RP equivalent /ue/.

As for the last variable, the diphthongs are giving way in the younger groups to a monophthongal /o/. The development is different for the two words, one group having /oe/ in poor but /ue/ in sure, and another group having /oe/ in poor but /o/ in sure. Consider now the variation for the younger and older groups together for Vauxhall and Aigburth:

Vowel	Vauxhall		Aigburth	
	1-3	4-6	1-3	4-6
o	8	1	8	1
oe/o	1	2	0	3
oe	0	0	3	3
oe/ue	0	6	1	0
ue	0	0	0	1
other	3	2	1	3

In Vauxhall it seems that poor begins with /oe/ and sure with /ue/, and that /ue/ is replaced by /o/ earlier or more readily than /oe/. The only exception is (39), who has /o/ in poor and /ue/ in sure. This pattern is compatible with (48)'s non-committal /ue/, and (19)'s (ue/o) rather than (oe/o). The Irishman (34) retains his Anglo-Irish /uer/, but the woman (13) conforms to the Scouse pattern (oe/o).

The starting point in Aigburth is /oe/ rather than /ue/ and more like the RP /ue/; this /oe/ is replaced by /o/ in sure before



poor without much use of an intermediate /œ/. The diphthongs are used more in groups 2-3 than is the case in Vauxhall, and may carry some prestige. The schoolteacher (81) originally used /ɔ/, but when asked to repeat sure "corrected" the vowel to a diphthong; but the diphthong she used was the distinctly Liverpudlian [ɛɛ-] which one might expect to be less prestigious than /ɔ/. No (87) originally gave /œ/ in sure but then "corrected" the vowel to something more like RP /ue/.

The development in poor, sure is less complete than in shore, four, and the main socio-linguistic division is made at a different place:

<u>poor</u> , <u>sure</u> :	ɔ	œ	/	œ	ue	ue
<u>shore</u> , <u>four</u> :	ɔ	/	œ	œ		

The first division is between relatively open and relatively close starting-points for the vowel, and the second is between diphthongs and monophthongs. Liverpool speech is here following a general development in British English. Jones's Pronouncing Dictionary (thirteenth edition, 1967) gives /ue/ (= /œ/) first for poor, sure, and /œ,ɔ/ in brackets as less common alternatives; it gives /ɔ/ for shore, four with /œ/ as the less common alternative. Windsor-Lewis (1973) gives alternatives with /ɔ/ for some words with /ue/ and not for others; he lists /ʃɔ/ for 'sure' but not /pɔ/ for 'poor'. Some RP-speakers may retain a preference for /ue/ in some words, especially after /j/ as in pure, cure, mature; these are regularly /pjo, kjo, metʃɔ/ for younger Liverpudlians.

8.11 "Focus" in diphthongs

Falling diphthongs in Scouse tend to be given "focus" on the second element. There are several kinds of prominence which give the impression of end-focus: (1) the focused element attracts the extra duration before a weak coda, (2) certain tones create a contrast in pitch between the stressed and focused elements, and (3) the stressed element is sometimes obscured and centralized. The distribution of prominence over the two elements gives the further impression that they belong to separate phonetic syllables, especially when they contrast in pitch.

The predominant English tendency, found for instance in RP, is to place stress and focus on the same element, concentrating different kinds of prominence. This leads historically to more open stressed elements, and the simplification of wide diphthongs to monophthongs, e.g. [fi:v, fɪv] becomes [fɜ:v] 'five' and in many dialects [fa:v]. In the North Midlands, initial focus is found for most diphthongs, e.g. /aɪ/ in time [ta:n], but /aʊ/ varies from initial to end focus, giving in a word like town both types [tau:n, ta:n]. Southern Anglo-Irish also has end-focus which is most readily perceived in the centralized first elements of words like out, fight [eʊt, fert].

In the table, (+) indicates an initial focused diphthong, and (-) end focus:

<u>V</u>	<u>RC</u>	<u>M</u>		<u>nine</u>	<u>spider</u>	<u>tiger</u>	<u>eye</u>	<u>sky</u>	<u>brown</u>	<u>cow</u>	<u>train</u>	<u>page</u>	<u>grey</u>
	1	11	+	+	-	-	-	-	-	-	+	-	-
		38	+	+	+	-	-	+	-	+	+	-	-
	2	23	+	+	+	-	-	+	-	+	+	-	-
		29	+	+	+	-	+	-	-	+	+	-	-
		34	+	+	+	-	+	-	-	+	+	-	-

			<u>nine</u>	<u>spider</u>	<u>tiger</u>	<u>eye</u>	<u>sky</u>	<u>brown</u>	<u>cow</u>	<u>train</u>	<u>page</u>	<u>grey</u>
<u>V RC M</u>	3	39	+	+	+	-	+	-	-	+	+	-
	4	10	+	+	-	-	-	+	-	+	+	-
		48	+	+	+	-	-	+	-	+	-	-
<u>F</u>	1	25	+	n.r.	+	-	-	+	-	+	+	+
	2	13	+	-	+	-	-	+	-	+	+	+
		50	+	+	+	+	+	+	-	+	+	+
	3	36	+	+	+	-	-	+	-	+	+	-
		40	+	+	+	+	-	+	-	+	-	-
	4	15	+	+	+	+	+	+	-	+	+	+
		26	+	+	n.r.	+	+	+	-	+	+	+
		42	+	+	+	+	+	+	-	+	+	-
	5	8	+	-	-	+	-	+	-	+	-	-
		9	+	+	+	+	+	+	-	+	+	-
	6	20	+	+	+	+	+	+	-	+	+	n.r.
<u>Prot M</u>	4	17	+	+	+	+	+	+	-	+	+	-
	5	14	+	+	-	+	+	-	-	+	+	-
<u>F</u>	3	19	+	+	+	+	+	+	-	+	+	-
<u>A RC M</u>	5	84	-	+	-	-	-	+	-	+	-	-
<u>F</u>	5	90	+	+	+	+	+	+	-	+	-	-
<u>Prot M</u>	1	73A	+	+	+	+	+	+	-	+	+	+
		86	+	+	+	+	+	+	-	+	+	-
	2	51A	+	+	-	-	+	-	-	-	-	-
		56A	+	+	+	+	+	-	-	+	+	-
		88	+	+	+	+	+	+	-	+	+	+
	3	77	+	+	-	+	+	+	-	+	+	+
		93	+	+	+	+	+	+	-	+	+	-
	4	69	+	+	+	+	+	-	-	+	+	-
	5	59A	-	-	-	+	+	-	-	+	-	-
		72	n.r.	-	-	+	+	+	-	+	+	+
		80	+	+	+	+	-	+	-	+	+	-
<u>F</u>	1	57	+	+	+	+	+	+	-	+	+	-
	2	51	+	+	+	+	+	+	-	+	+	-
		56	+	+	+	+	+	+	-	+	+	+
	3	53	+	+	-	+	+	+	+	+	+	+
		61	+	+	+	+	+	+	+	+	+	+
		95	+	+	+	+	+	+	-	+	+	-
	5	60	-	+	-	+	+	+	-	+	+	+
		81	+	-	-	+	+	+	-	+	+	-
		81A	+	+	-	+	+	+	-	+	+	-
		87	+	+	+	+	+	+	-	+	+	+
	6	96	+	+	+	+	+	+	-	+	-	+

The results are not easy to interpret, because the three vowels /aɪ au ɛɪ/ occur in different environments and in different numbers of words. There is also the problem of inaccurate transcription, since the decision as to (+) or (-) depends on different auditory features on different occasions. However, as a first approximation, here are the percentages of replies with initial focus (+):

<u>V</u>	/aɪ/	74	/au/	39	/ɛɪ/	67
<u>A</u>		85		48		72

Initial focus is used most for /aɪ/, less for /ɛɪ/ and least for /au/. Initial focus is also used more in Aigburth than in Vauxhall.

Environment has considerable influence on the occurrence of initial focus. Consider the percentages calculated separately for the environments (i) open syllable and final, (ii) before /n/, (iii) before another voiced consonant:

	<u>/aɪ/</u>		<u>/au/</u>		<u>/ɛɪ/</u>	
	<u>V</u>	<u>A</u>	<u>V</u>	<u>A</u>	<u>V</u>	<u>A</u>
(i) open syllable	52	92	0	8	19	42
(ii) before /n/	100	87	77	83	100	96
(iii) before a voiced consonant	83	75			82	79

Vauxhall speech seems to follow different rules for each environment, and Aigburth follows a similar pattern, but without varying to the extremes of 0 and 100 per cent initial focus:

(i) Final diphthongs have end-focus; /au/ is most affected by this rule, and /aɪ/ least affected.

(ii) Initial focus is normal before /n/; /ɛɪ/ is most affected by this rule, and /au/ least affected.

(iii) Before a voiced consonant other than /n/, the extra duration

is added more often than not to the first element of the diphthong, giving it initial focus.

There are considerable discrepancies between the sexes, age-groups and even religious groups:

(i) Final End-focus: /au/ is end-focused by all except two women in the younger Aigburth group 3.

/ɛɪ/ is end-focused by all the Vauxhall men and about two-thirds of the women; two-thirds of the Aigburth men and half of the women.

/aɪ/ is end-focused 81 per cent by male Vauxhall Catholics, 60 per cent by female Catholics in the younger groups 1-3, and only 8 per cent (actually one instance) in the older group 4-6.

The Vauxhall Protestants, however, all have initial focus. The Aigburth men have 83 per cent initial focus, and the women 100 per cent initial focus.

The confusion is resolved if we can assume that initial focus is the traditional local pattern, and that end-focus is an innovation. End-focus spreads more readily to /au/ than to /ɛɪ/, and to /ɛɪ/ more readily than /aɪ/; it spreads more readily in the working class than in the middle class, in men than in women, in the young than the old, and possibly amongst Catholics than Protestants.

(ii) Initial-focus before /n/: /ɛɪ/ is given initial focus by all except one man in Aigburth group 2.

/aɪ/ is given initial focus by all except two men and one woman, all in Aigburth group 5.

/au/ is given initial focus by all the women, by half the men in Vauxhall, and two thirds of the men in Aigburth.

The occurrence of end-focused /au/ is consistent with our assumption that it is an innovation: it is used by men more than women, and in Vauxhall more than Aigburth. Sporadic end-focused /ɛɪ, aɪ/ in Aigburth remains unexplained.

(iii) Initial focus before a voiced consonant: /aɪ/ does not vary much in Vauxhall. Men use 85 per cent initial focus, and women 82 per cent. In Aigburth, there are differences between the sexes and age-groups:

<u>A</u>	<u>M</u>	1-3	86	<u>F</u>	1-3	92
		4-6	50		4-6	67

Women use initial focus more than men, but for both sexes there is a considerable increase in the younger groups over the older ones.

/ɛɪ/ follows a similar pattern. Vauxhall men have 80 per cent initial focus, and women 83 per cent. Aigburth women use it more than men, but there is a considerable increase for the younger groups:

<u>A</u>	<u>M</u>	1-3	85	<u>F</u>	1-3	100
		4-6	60		4-6	67

The obvious inference that initial focus is an innovation contradicts our previous assumption. (The situation might be clarified by a comparable example of /au/ such as in loud, but this environment was unfortunately missed in the questionnaire. The /ɔv/ of nose would be suitable in principle, but in practice its two elements vary so much in quality and relative prominence that I have no confidence at all in impressionistic transcriptions.)

It may be that neither kind of focus is traditional, and neither innovating. Both types are found in North Midland speech, Anglo-Irish might have favoured the development of end focus from the working class up, and general British influence might counteract this from the middle class down. There could be just a changing balance between initial and end focus, with the balance at a different place for each environment.

However, one would expect Anglo-Irish influence to be nineteenth century, and hence rather earlier than the general British, especially the received standard of the mass media. Some vowels could have changed from initial focus to end focus and then back again to initial focus.

We have admitted that there are phonetically different things interpreted as "focus" (just as different things are interpreted as "voiced" or "rounding"), e.g. end-focus in eye might be recognized by the centralization of /a/ as in Anglo-Irish, but by the duration of /u/ in brown as in the Northern English type. Scouse has two types of initial focused /au/. First there is the very rare and self-consciously dialectal [a:] as in [da: ne ta:n] 'down the town'; (23) gives the example [eba: da] 'about that' with exaggerated supraglottal tension. This is like the Northern English [a:]. The commonest vowel in brown, however, is [a:u] with phonetic qualities similar to end-focused [au:] but a rhythm much closer to RP [a:u].

Our discussion of focus must remain inconclusive. It is clearly of social significance in Liverpool speech, but a lot more work needs

to be done to clarify the notion of focus, and to find out more about diphthongal patterns in Anglo-Irish and the dialects of the North-West of England.

8.12 Centralization in /aɪ, əv/.

The table shows whether or not the vowels of white and mouth were judged to have a centralized first element:

			1	2	3	4	5	6
V	RC	M	11 + 38 +	23 + 29 + 34 +	39 +	10 + 48 +		
		F	25 +	13 + 50 +	36 + 40 +	15 + 26 + 42 +	8 + 9 +	20 + 35 +?
	Prot	M				17 -	14 +	
		F			19 +			
A	RC	M					84 -	
		F					90 +	
	Prot	M	73A - 86 +	51A + 56A + 88 +	77 + 93 -	69 -	59A + 72 + 80 -	
		F	57 -	51 + 56 -	53 - 61 - 95 +		60 - 81 - 81A - 87 +	96 -

These diphthongs are short before the voiceless consonants. In the Anglo-Irish type [məɪt, məʊt], both elements are short, the second is focused and the first more centralized than in the longer vowels of wide and loud. Centralization in the Scouse type /aɪ, əv/



is not so marked, and since /aɪ, aʊ/ begin well in from the periphery of the total vowel area any way, it can be difficult to decide whether a given short diphthong begins "more" centralized or not. The subjective judgement as to the degree of centralization could easily be influenced by some other feature of the diphthongs which makes them sound "Irish" or "non-prestige".

These reservations apart, centralization in white and mouth would seem to be normal in Vauxhall. The younger men in Aigburth have it more than the older men, and the women seem to avoid it. This is the sort of pattern we would expect of end-focus spreading from the working class up.

#### 8.13 The Vowels of 'Two' and 'Three'.

Before a consonant, as in the plurals twos, threes, /i/ and /u/ are relatively monophthongal. The tongue shape for the vowel is taken up very quickly after the preceding consonant, or even during it, so that the transition from consonant to vowel is made very smartly. But when the vowel is final, there may be a short delay between consonant and vowel, the voiced transition being heard as a neutral [e] or the closer central [ɜ]. The transition becomes a vocalic element in its own right as part of a rising diphthong [ɛú, ɛɪ] (where the acute accent marks the "stressed" element). Stress readily shifts to the first element, giving [ɛu, ɛɪ] which fit into the general pattern of Scouse falling diphthongs. However, [ɛu] is not always obviously of the 'falling' type, because like /aʊ/ it tends to have end-focus in this position, and [u] retains considerable prominence, especially duration.

Having emerged as a quasi-independent diphthong, /ɛu/ is subject to other rules; e.g. both stress and focus can be shifted on to the first element in some environments such as before /l/ as in school [skɛ:uɫ].

The table lists the vowels of two, three, marking the stress for variants of /u/. The word zoo was also included in the questionnaire, and where it had a different vowel than two, the vowels of both words are given, that of zoo below that of two:

		1	2	3	4	5	6	
V	RC	M	11 ɛu/ɛɪ 38 ɛu/ɛɪ	23 ɛu/ɛɪ 29 ɛu/ɛɪ 34 ɛu/ɛɪ	39 ɛu/ɛɪ	10 u/i 48 ɛu/ɛɪ		
		F	25 ɛu/ɛɪ	13 ɛu/ɛɪ 50 ɛu/ɛɪ	36 u/ɛɪ (zɛu) 40 ɛu/ɛɪ	15 ɛu/ɛɪ 26 ɛu/ɛɪ 42 ɛu/ɛɪ (zɛu)	8 ɛu/ɛɪ 9 ɛu/ɛɪ	20 u/ɛɪ 35 u/ɛɪ
	Prot	M				17 ɛu/ɛɪ	14 ɛu/ɛɪ	
		F			19 ɛu/ɛɪ			
	A	RC	M				84 u/ɛɪ	
			F				90 ɛu/ɛɪ	
Prot		M	73A ɛu/ɛɪ 86 ɛu/ɛɪ	51A ɛu/ɛɪ 56A u/i 88 u/ɛɪ	77 ɛu/ɛɪ 93 ɛu/ɛɪ	69 ɛu/ɛɪ	59A u/i 72 n.r. (zu) 80 ɛu/ɛɪ	
		F	57 ɛu/ɛɪ	51 ɛu/ɛɪ (zɛu) 56 u/i (zɛu)	53 ɛu/ɛɪ (zu) 61 u/ɛɪ (zɛu) 95 ɛu/ɛɪ		60 u/ɛɪ 81 u/ɛɪ (zɛu) 81A u/i 87 u/ɛɪ	96 u/ɛɪ

Only half a dozen informants have a vowel in three which was transcribed as a monophthong, and four of these also have /u/.

The occurrence of /u/ is common in the older groups in Aigburth, and it seems to be giving way to [ẽ, ẽ]. In Vauxhall, the monophthongs and rising diphthongs of the older groups give way to the falling diphthong [ɛ̃u].

8.14 The Vowel of 'Pew'

The rising diphthong /ju/ of pew has a development parallel to that of /u/ in two:

		1	2	3	4	5	6	
V	RC	M	11 ju 38 jɛ̃u	23 jɛ̃u 29 jɛ̃u 34 n.r.	39 jɛ̃u	10 ju 48 ju		
		F	25 jɛ̃u	13 ju 50 jɛ̃u	36 ju 40 ju	15 jɛ̃u 26 ju 42 jɛ̃u	8 jɛ̃u 9 ju	20 ju 35 n.r.
	Prot	M				17 jɛ̃u	14 ju	
		F			19 jɛ̃u			
	A	RC	M				84 ju	
			F				90 ju	
Prot		M	73A jɛ̃u 86 ju	51A ju 56A ju 88 ju	77 jɛ̃u 93 ju	69 ju	59A ju 72 ju 80 ju	
		F	57 ju	51 jɛ̃u 56 ju	53 jɛ̃u 61 ju 95 ju		60 jɛ̃u 81 ju 81A ju 87 ju	96 ju

In the vowel /ju/, the close front position of [j] is followed by the fairly close central rounded [ɛ̃]. The articulatory movements involved would seem quite simply a retraction

of the tongue and rounding of the lips. In fact the tongue movement is much more complicated, and the lips do not move much at all. The [ɤ] is too close and central to allow much hollowing out of the front of the tongue, as for the opener rounded vowels [ɔ, ʊ], and the tongue is rather bunched at the front with the tip pulled in. The unrounded [ɛ] on the other hand has the tip in a lower and fronter position.

In moving from [j] to [ɤ] the tongue moves back and changes its shape. If the impression of "rounding" is synchronized with the impression of "retraction", the result is transcribed /ju/, but if the "rounding" is at all delayed, there is an intermediate stage heard as [ɛ] or as a close variety of [e].

Most Aigburth speakers have /ju/, and so do a number in Vauxhall. Most of the rest have [ɛ, ɔ] in a 'rising' diphthong, but there are a few advanced types where [ɛ] has attracted the stress to form a 'falling' diphthong, especially in the younger Vauxhall groups. It is not always easy to decide which element is stressed, because [u] normally retains features of prominence associated with focus.

#### 8.15 The Vowels of 'Fire' and 'Flower'

The second element of /aɪə, aʊə/ is inherently less prominent than the first and third, and thus forms a 'trough' which makes the vowel phonetically di-syllabic. This second syllable tends to have focus, especially in final position; the prominence of /ɪ, u/ is reduced further in respect of loudness, duration and pitch (in that they coincide with tonic 'skipping' movements) so that they are transcribed as the glides [j, w]. Final /ə/ can regularly be fronted

to [ɛ-], and /a/ is sometimes centralized. The initial focused type is heard in Liverpool, but is much rarer: the prominence of the second and third elements is reduced, and /r,u/ is eventually eliminated altogether, resulting in diphthongs of the kind /ae, ce/. The table gives the vowels used in fire and flower:

		1	2	3	4	5	6		
V	RC	M	11 əje əwe 38 əje əwe	23 əje awe 29 əje əwe 34 əje awe	39 aɪe awe	10 əje awe 48 əje əwe			
		F	25 əje awe	13 əje awe 50 əje awe	36 əje awe 40 əje awe	15 əje awe 26 n.r. awe 42 əje awe	8 aɪe aue 9 əje awe	20 aɪe ce 35 n.r.	
	Prot	M				17 əje aue	14 əje awe		
		F			19 əɪe əue				
	A	Prot	M	73A aɪe aue 86 əje awe	51A əje aue 56A aɪe awe 88 aɪe aue	77 aɪe aue 93 aɪe awe	69 əje awe	59A əje awe 72 ae aue 80 əje awe	
			F	57 aɪe aue	51 aɪe aue 56 ae aue	53 aɪe awe 61 əje awe 95 əje aue		60 aɪe awe 81 əje awe 81A ae ce 87 ae ce	96 əje awe
RC		M					84 aɪe awe		
		F					90 a(r)e a(u)e		

The table can be summarized as follows:

		<u>a:je</u>	<u>a:ie</u>	<u>ae</u>	<u>awe</u>	<u>awe</u>	<u>ae</u>	
<u>V</u>	<u>M</u>	1-3	5	1	0	6	0	0
		4-6	4	0	0	3	1	0
	<u>F</u>	1-3	5	1	0	5	1	0
		4-6	3	2	0	4	1	1
<u>A</u>	<u>M</u>	1-3	2	5	0	3	4	0
		4-6	3	1	1	4	1	0
	<u>F</u>	1-3	2	3	1	2	4	0
		4-6	2	2	2	3	1	2
		-	-	-	-	-	-	
		26	15	4	30	13	3	

As expected, the /a:je, awe/ forms are commonest; /ae ae/ is rarest, and its users tend to be middle class and female and in the older age-groups. The intermediate /a:ie awe/ are used more in Aigburth than in Vauxhall, and there is a shift in the proportion of /a:ie awe/ to /a:je awe/ of 5:12 in the older groups in Aigburth to 16:9 in the younger. (The shift is also slightly greater for men than for women). In Vauxhall, there is a slight shift if anything from /a:ie awe/ to /a:je awe/, so that the different social levels seem to be moving in opposite directions.

### 8.16 Variants of /ɜ:/.

There are a number of variants of the vowel of first, girl, word etc., and - for most speakers - square, pear and swear. We have distinguished the rounded [ɜ], the RP-type [ɜ], the slightly fronter [ɜ+], the fronter still and half-open [ɜ̄], and the "closer" [ɜ̄], where the term "closer" is entirely auditory.

The table lists the vowels used corresponding to RP /ɜ:/ :

		1	2	3	4	5	6	
V	RC	M	11 ə 38 ə	23 ə 29 ə 34 ɛ/ə	39 ə	10 ɛ 48 ɛ/ɜ+		
		F	25 ɛ/ɛ	13 ɛr/ə 50 ə	36 ə 40 ə	15 ɛ 26 ə 42 ə	8 ɛ 9 ɛ/ə	20 ɜ+ 35 ə
	Prot	M				17 ɛ	14 ɜ+/ɛ	
		F			19 ɛ			
A	RC	M				84 ɜ+		
		F				90 ɜ		
	Prot	M	73A ɜ+ 86 ɜ+	51A ɜ+ 56A ɜ+ 88 ɜ+/ɛ	77 ɜ+ 93 ɛ/ɜ	69 ɜ+	59A ɜ 72 ɜ 80 ɜ+/ɛ	
		F	57 ɜ	51 ɜ+ 56 ɜ	53 ɜ 61 ɜ+/ɛ 95 ɜ/ɛ		60 ɜ+ 81 ɜ+/ɛ 81A ɜ+/ɛ 87 ɜ	96 ɜ/ɛ

The most conservative vowel is almost certainly /ɛ/ where the "rounding" is a vestige of r-colouring (note the Irish (13)'s /ɛr/). It is used in Vauxhall by (48, 17, 14) in the older groups, and two of these are Protestants. It may be significant that (17), living on the boundary of the traditional Catholic and Protestant communities, used /ɛ/, for he suggested that his Catholic wife used /ɛ ɛ/, and his teenage daughter - brought up as a Catholic - had quite clearly /ɛ/. This is not a case of Protestant and Catholic vowels as such, and the distinction certainly does not occur throughout Merseyside: it is just that (17) and (14) happen to

be rather conservative in this respect.

This /e/ gives way to /ɜ:/ which is somewhat more open, front of centre, and perhaps a little "rounded"; /ɜ:/ is the characteristic middle class vowel which merges at the back with the RP-type /ɜ/ and at the front with the local /ɛ/. Many Vauxhall speakers have /ɛ/, but this has largely given way in the younger groups to /ɛ/. Both the Irish (13, 34) seem to be picking up /ɛ/, which is the vowel for their age-group.

The analysis of /e/ as traditional and /ɛ/ as advanced is confirmed by a study of primary school-children's speech carried out in 1966. In the township of New Ferry, just South of Birkenhead on the Wirral, children used both /e/ and /ɛ/, and in the village of Thornton Hough in the centre of Wirral, I found /e, ɜ, ɛ/; it could be that /ɛ/ is spreading into traditional /e/ and /ɜ/ areas. Both /ɛ/ and /e/ are heard in Birkenhead speech, without any easily discernable pattern. (Working in a soapery with men and women one long vacation, I formed the impression that /ɛ/ was dominant; but the next year, working in a margarine oil refinery with just men, I found /e/ dominant. This vowel merits further study for various age-groups and in various parts of Merseyside.)

#### 8.17 The Vowels of 'Year' and 'Years'

Scouse agrees with many varieties of English in having as alternatives a diphthongal /ie re/ or monophthongal /ɜ/ in the word year. Year was included in the questionnaire for that reason. In the course of field-work, I observed casually that years sometimes had a different vowel than year. Where there are two vowels in the



table, the second is that in years. Where the plural was missed in early interviews, this is marked (-). Otherwise the same vowel was used in singular and plural.

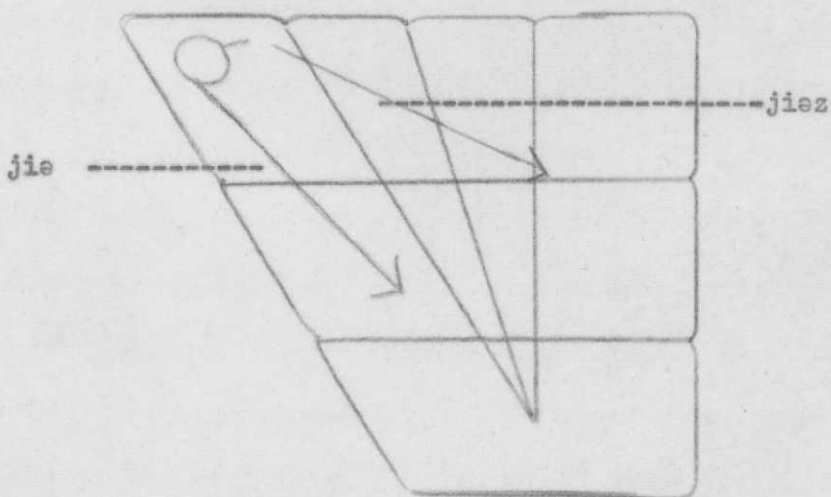
		1	2	3	4	5	6	
V	RC	M	11 ie 38 ə	23 ie,ə 29 ie,ə 34 ie,-	39 ie,-	10 ie 48 ie		
		F	25 ie,ə ?	13 ie 50 ie,ə	36 ie,- 40 ie,-	15 ie 26 ə,- 42 ə	8 ə 9 ie,ə	20 ie,- 35 n.r.
	Prot	M				17 ie,ə	14 ie,ə	
		F			19 ie,ə			
	A	RC	M				84 ie	
			F				90 ə	
Prot		M	73A ie 86 ie	51A ie 56A ie 88 ie	77 ə 93 ə	69 ie	59A ie 72 ə 80 ie	
		F	57 ie	51 ie 56 ie	53 ie 61 ie,ə 95 ie		60 ie 81 ie 81A ie 87 ə	96 ie

The Aigburth people seem to have the same sort of choice as RP speakers, although they are perhaps more conservative in their preference for the diphthong. What appears at first to be a similar choice in Vauxhall proves on inspection to be quite different: there seems to be a development from /ie/ to /ə/ taking place in the plural before the singular. Secondly, the new vowel is specifically /ə/ and not any of the other variants of /ə/. While /jie, je, jē/ are all acceptable Liverpudlian forms for

year, /jɛ, jə/ are rather odd. Indeed, (17,14) who use /e/ elsewhere both have /ɛ/ in the plural years. The likelihood is that this is parallel to the RP development, but independent of it.

Whereas the development of /ie/ to /ɛ/ in year is an isolated case in Liverpool, there are other examples in RP, e.g. /hjɛ, djɛ/ 'hear, dear'. Starting with [iə], the stress is shifted forwards on to the opener element [e], forming the rising diphthong [iɛ, jɛ]. Year [jfe] has a similar vocalic movement, but starting a little nearer Cardinal 1; the stress is again shifted, resulting in [jɪɛ, jɛ]. All these RP vowels have a continuous movement from near Cardinal 1 towards the centre.

In Scouse /jie/ the tongue first moves forward to /i/ and then down to a front variety of /e/. But where /e/ is not final, as in years, /e/ tends to be closer and much further back; the tongue thus moves forwards from /j/ to /i/, and then back to /e/. It is this back and forth movement that is simplified to simple retraction:



In /jie/, the stressed element and centre of prominence follows the

glide for [j]. If the stress follows [j] in the simplified /jie(z)/ it falls on a fairly close central [ɨ] in [j#ɨz]. This [ɨ] is rather closer and more central than /ɛ/ but is closer to it than any other vowel, and merges with it for some speakers. (Impressionistic transcriptions have possibly confused other cases that are slightly different from /ɛ/.) It is perhaps worth pointing out that while /ie/ is normally quite distinct from /ɛ/, so that there is no possibility of confusing e.g. mere /mie/ with mayor /mɛ/, it is not always easy to decide whether a given occurrence of year or years should be transcribed /ie/ or /ɛ/.

8.18 /e/ and /ɛ/

Scouse has the RP-type interdental fricatives [θ ð] as well as the "Anglo-Irish" [T, D] which can be post-dental or (apico-) alveolar stops, ~~corresponding~~ interdental fricatives or occasionally affricates, especially after homorganic contact as in month. These details are far too subtle to transcribe with any accuracy or consistency, so we shall make a cruder distinction between consonants that sound 'English' and those that sound 'Irish', but marking the affricate [Tθ] where it occurs in month. The 'Irish' types are virtually restricted - in the questionnaire replies at least - to working class Catholics. Otherwise (87) and (19) have post-dentals in that, (56) has [Tθ] in month, (96) has it in thirteen, and (95) has it in thirteen and three and a postdental stop in that. The list gives the replies of the working class Catholics to words containing /e/ or /ɛ/:

			<u>thirteen</u>	<u>three</u>	<u>mouth</u>	<u>truth</u>	<u>month</u>	<u>that</u>	<u>breathe</u>		
<u>V</u>	<u>RC</u>	<u>M</u>	1	11	ə	ə	ə	ə	ə	ə	(0)
				38	ə	T	ə	ə	Tə	ə	(2)
		2	23	ə	ə	T	T	ə	ə	D	(3)
			29	Tə	T	T	T	T	T	D	(6)
			34	T	T	T	T	T	D	ə	(6)
		3	39	T	T	T	T	T	D	D	(7)
		4	10	T	ə	ə	ə	ə	ə	ə	(1)
			48	ə	ə	ə	ə	ə	ə	ə	(0)
<u>F</u>		1	25	ə	ə	ə	ə	ə	ə	ə	(0)
		2	13	T	T	T	T	T	ə	D	(6)
			50	ə	ə	ə	ə	Tə	D	ə	(2)
		3	36	ə	ə	ə	ə	ə	ə	ə	(0)
			40	ə	ə	ə	ə	ə	ə	ə	(0)
		4	15	ə	ə	T	ə	Tə	ə	ə	(2)
			26	Tə	ə	T	T	T	D	D	(6)
			42	T	T	T	ə	Tə	D	ə	(5)
		5	8	ə	ə	ə	ə	ə	D	D	(2)
			9	ə	ə	ə	ə	ə	ə	ə	(0)
		6	20	ə	ə	ə	ə	ə	ə	ə	(0)
			35	T	T	-	-	-	-	-	(2)
				-	-	-	-	-	-	-	
				8	7	8	6	9	6	6	

The Dubliners (13, 34) use the 'Irish' forms as might be expected, and men use them perhaps a little more than women. Otherwise there is no clear pattern, the frequency of the 'Irish' forms being idiosyncratic for each person, and there being no significant variation according to environment. (The frequency for /ð/ might seem slightly below /ə/, but in fact the most noticeable 'Irish' form in free speech is for initial /ð/ in words like the, that, they etc.) This variable requires further study in different styles, and perhaps subdividing the Vauxhall working-class.

#### 8.19 Stops with Incomplete Closure

Most Merseysiders use stops with incomplete closure at least

sometimes, and the majority of informants used them even in the slow deliberate style of the questionnaire responses. The list gives occurrences of incomplete /k/ (marked ad hoc K) and incomplete /g/, similarly marked G.

			<u>six</u>	<u>snake</u>	<u>neck</u>	<u>black</u>	<u>clock</u>	<u>smoke</u>	<u>book</u>	<u>tiger</u>		
<u>V</u>	<u>RC</u>	<u>M</u>	1 11	k	K	K	K	K	k	G	(6)	
			2 23	k	K	K	K	K	K	G	(7)	
			29	k	k	K	K	K	k	G	(5)	
			3 39	k	k	k	K	k	k	g	(1)	
	<u>F</u>		1 25	k	K	K	K	K	k	g	(5)	
			2 13	k	k	k	k	k	k	G	(1)	
			50	K	K	k	K	K	K	G	(7)	
			3 36	k	K	K	K	K	K	G	(7)	
			4 15	k	k	k	k	k	k	G	(1)	
			26	K	k	K	K	k	k	g	(3)	
			42	k	K	K	K	K	k	g	(5)	
			5 8	k	k	K	k	k	k	g	(1)	
			9	k	K	K	k	K	k	g	(3)	
<u>V</u>	<u>Prot</u>	<u>M</u>	5 14	k	k	k	k	K	k	g	(2)	
	<u>F</u>		3 19	k	k	k	k	K	k	g	(1)	
<u>A</u>	<u>Prot</u>	<u>M</u>	2 88	K	k	k	k	k	K	g	(3)	
			4 69	k	K	K	K	k	K	k	G	(5)
	<u>F</u>		5 81	K	k	K	k	k	k	g	(2)	
			81A	k	K	k	k	k	k	G	(2)	
			6 96	k	K	k	k	k	k	G	(1)	
				—	—	—	—	—	—	—		
				4	10	11	10	9	9	5	10	

Incomplete closure is possibly a working-class feature which has spread to middle class speech. Exactly how it is recognized depends on the environment. Since the difference between velar stops and approximants is not phonologically distinctive, the stops can be replaced by close approximants. Approximation is relatively easy to

hear if it is maintained at that degree of closeness usually associated with a 'fricative', especially when it is accompanied by 'uvular scrape' as it often is after /ε a ɒ/. But if the articulators move into extremely close approximation and out again, as happens before /s/ in six, it is difficult to decide whether or not the extreme constriction amounts to a 'closure'. To some extent, then, the apparent frequencies of incomplete closure in different environments are created in the course of phonetic transcription. The low frequency of incomplete closure in book, on the other hand, may be due to the fact that the tongue is already held close to the velum for /u/ so that a slight movement brings it into contact.

Another stop which is often incomplete is /t/:

			<u>white</u>	<u>thirteen</u>	<u>that</u>	<u>short</u>	<u>daughter</u>	<u>foot</u>	<u>sprout</u>	
<u>V</u>	<u>RC</u>	<u>M</u> 2 23	t*	t	t	t	t	t*	t	
		29	t	t	t	t	t	t*	t	
			4 10	t*	t	t	t	t	t	
		<u>F</u>	1 25	t*	t	t*	t*	t*	t	
	2 13		t	t	t	t	t	t*	t	
			50	t*	t*	t*	t*	t	t	
			3 36	t	t	t*	t	t	t*	t
			40	t	t*	t	t	t	t	t
			4 26	t*	t	t	t*	t	t	t
			42	t*	t	t*	t*	t*	t*	t*
			5 9	t*	t	t	t	t	t*	t
	<u>V</u>	<u>Prot</u>	<u>F</u> 3 19	t	t	t	t*	t*	t*	t
	<u>A</u>	<u>RC</u>	<u>M</u> 5 84	t	t	t	t*	t*	t	t
			<u>Prot</u> <u>M</u> 2 88	t	t	t	t*	t*	t	t*
		<u>F</u> 3 95	t	t	t	t*	t*	t	t	
		5 81	t	t	t	t	t*	t	t	
			-	-	-	-	-	-	-	
			7	2	4	8	8	8	2	

(Incomplete closure is marked t\*, since T is already in use elsewhere.)

In the case of the alveolars, the difference of stop and approximant is distinctive, and Scouse /t/ is not what is normally thought of as a 'fricative'. Again transcription is difficult, and it is a matter of debate what physical reality corresponds to the perceived boundary between 'complete' and 'incomplete' closure.

Incomplete /t/ is used more in the working class than the middle class, and by the women more than the men. There also seems to be quite a variation according to environment, but this is far too complex to analyze at present. It possibly depends on the distance travelled by the tongue from the previous vowel position to the alveolar ridge, the angle of approach and the surface presented to the ridge, and the duration of the /t/.

#### 8.20 Varieties of /r/

Scouse /r/ in initial position, and usually when stressed, is a post-alveolar open approximant not significantly different from the RP sound. Friction is produced in some environments, e.g. when the tongue tip is moving away from contact with the ridge in the case of /tr dr/, or when the breath flow is strong enough during the aspirated plosive release in /kr/. In other positions the tongue may strike the ridge as it passes from one part of the mouth to another. In the table over-page we make a simple distinction between the (open or close) approximant, symbolized r, and the flap which we symbolize R. As for /ə ð t k/, it is not always easy to tell the difference between actual contact and near contact.

	<u>breath</u>	<u>fresh</u>	<u>three</u>	<u>train</u>	<u>drum</u>	<u>shrink</u>	<u>cream</u>	<u>grass</u>	<u>sprout</u>	<u>scratch</u>	<u>mirror</u>	<u>arrow</u>	<u>hurry</u>
<u>11</u>	R	R	R	r	r	r	r	R	R	r	R	R	R
<u>38</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>23</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>29</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>34</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>39</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>4</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>10</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>48</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>125</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>15</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>50</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>36</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>40</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>15</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>26</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>42</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>8</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>9</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>17</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>14</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>19</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>73A</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>51A</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>88</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>77</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>93</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>60</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>81</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>96</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>10</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>10</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>8</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>9</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>22</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>2</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>2</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>4</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>2</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>1</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>7</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>6</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>6</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>4</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>7</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>15</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>23</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>13</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>11</u>	r	r	r	r	r	r	r	r	r	r	r	r	r
<u>19</u>	r	r	r	r	r	r	r	r	r	r	r	r	r

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Although a flapped /r/ does not call attention to itself in RP, it seems to be a non-prestige feature in Liverpool. Middle class speakers tend to avoid it, and the younger men and older women who do use it, do not use it very much.

The different frequencies of the flap in different words suggests that environment is probably significant:

- (a) After labials the movement of the tongue into the position for /r/ is sometimes delayed until the release of the labial stricture, and this produces the vocalic interval heard as an epenthetic [e], e.g. [b<sup>e</sup>rið] 'breathe'. The total syllable onset is produced very quickly, and so unless the labial plus [e] is separated off as a proclitic syllable, the movement for /r/ has to be very rapid, and the tongue-tip may strike the ridge as it passes to the vowel position.
- (b) After /ə/ as in three, the tongue tip has to move from the forward position for /ə/ to the retracted position for /r/ and then into the vowel position. The flap can be avoided if the raising of the tip for /r/ is delayed until the tongue has been pulled back sufficiently; otherwise it tends to strike the ridge.
- (c) After alveolar consonants /r/ is more often a fricative than a flap. Most Scousers have the English type of [tr, dr] rather than the Anglo-Irish [TR, DR].
- (d) After /s/ [r] requires just a very slight change of tongue shape producing intermediate fricative qualities. Some speakers delay [r], and then move rapidly to it from the quality of [s] and strike the ridge on the way.
- (e) After velars the flap is probably due to delayed raising of the

tongue tip. The infrequency of the flap in cream may be due to the fricative noise overriding the impression of contact.

(f) In the combinations /spr, skr/, /r/ is flapped for the same reason as in /br gr/, the labial and velar stops being voiceless and unaspirated. In /str/, /t/ is usually retracted to the position for /r/ which is fricative, but if it remains in the forward position as for /s/, the following /r/ is sometimes a flap.

(g) Between vowels the flap is particularly common. The highest figures - boosted in this case by Aigburth usage - are for ferry and hurry: in both words the tongue is moving from between half-close and half-open to a close front position, and during the movement the front of the tongue hollows out and raises the tip, and then flattens out again. Unless the flattening is completed early on in the total movement, the tip will tend to touch the ridge. In mirror if the tongue is pulled back and then the tip raised, the result is an approximant; but if the tip rises while the tongue is going back, the result is likely to be a flap.

The relative timing of articulatory movements cannot account for the flap in arrow or orange. In arrow the body of the tongue moves a little back and up from [a] to [ou], but keeps well away from the alveolar ridge leaving room for the tip to move without making contact. There is also room for the tip to move as the tongue rises in orange from [v] to a central [\*, e]; when /e/ and /n/ are realized together as a syllabic [n], the tip moves from approximation behind the ridge for /r/ into contact under the ridge for /n/. In fact, a flap in orange involves contact behind the

ridge quickly followed by contact under the ridge. Speakers who have the flap in arrow or orange tend to use it intervocalically in most of the other words too. It may be that they have a more general rule to flap intervocalic /r/.

In general phonetic terms, approximants and flaps might be thought of as belonging to quite different categories. The difference is really a very minor one, whether the tip strikes or misses the ridge as the front of the tongue changes shape. What is more important is that the flap is symptomatic of the relative timing of articulatory movements, and of the general manoeuvring of the speech organs in Scouse.

#### 8.21 Conclusions

The first six variables were concerned with geographically restricted phonological features. The results confirm the hypothesis that Scouse is basically North-Western English, for working class speech is uniform, and the phonological influence of Anglo-Irish has been virtually nil. The middle classes, especially the younger women and older men, respond to the national standards, with perhaps some conflict with the older local standards. The next three variables (8.8 - 8.10) are not so restricted geographically, and the new forms are not particularly prestigious, and have spread more readily in the working class than the middle class. The response to outside influence is more a gesture towards a standard form than the acceptance of RP forms as such. RP is only one influence amongst several on the speech of Liverpudlians.

The discussion of the last ten variables (8.11 - 8.20) is less

conclusive. We may have demonstrated that middle class speakers use phonetic features which are markedly 'Scouse' less than the working classes, but this is obvious anyway from casual observation. What we have failed to do is to demonstrate the full influence of Anglo-Irish phonetics on middle class speech. Most of the Aigburth informants, even when using a 'prestige' form, are still recognizably Liverpudlians.

The speaker uses sound-patterns of many different kinds: articulatory setting and voice-quality, rhythm and intonation, articulation and phonation. Any of these can be used socio-linguistically. The middle class Liverpudlian who wishes not to be taken for a Scouser first modifies obvious things like vocabulary, details of grammar and turns of phrase, and the incidence of phonological units, and these can be analyzed fairly satisfactorily. The sound-patterns which still betray him are rather more elusive.

We have been somewhat cautious in trusting to the reliability of impressionistic transcriptions. The total speech signal carries different kinds of information, and just the accentual information must be extracted. The analyst first responds intuitively to accentual differences, and chooses convenient symbols for what he hears. The problem then is to find out what he is responding to. His aim is establish hypotheses which make his intuitive responses compatible with perceived phonetic categories. (A false hypothesis will lead to a conflict; e.g. I thought at first that the variation in /θ/ was between a prestige fricative and a non-prestige stop or affricate, but I began to hear cases of /θ/ which I responded to as non-prestige,

but in which I could not hear any closure.) A valid hypothesis should also point to a credible pattern of variation in society. Unless the study of variables is based on a set of such hypotheses, any results would seem to be of doubtful value.

For the first nine variables, where we have found a credible pattern, we have set up hypotheses of different kinds: (a) that the speaker chooses between some phonological /x/ and /y/, where /x y/ can vary in turn in their phonetic realizations, (b) that some /y/ is made different from /x/ and perhaps more like /z/, (c) much more rarely that the speaker selects some phonetic [x'] in preference to some [x''].

In (8.11 - 8.15) we have begun to find out something important about Scouse diphthongs and triphthongs, but the ultimate failure to trace a consistent social pattern is probably due to an inadequate description of "focus". The difficulty in our last three variables (8.18 - 8.20) is that we are dealing with very complex articulatory patterns which can be traced in those symptomatic cases which sound characteristically 'Scouse': whether cases are transcribed as 'Scouse' or not they are almost certainly produced by very similar articulatory movements. The phonetic differences which keep the middle class apart from the working class are most of them far too subtle to be marked in an impressionistic transcription. The real variables are not the symptomatic phonetic 'forms' or 'states' or 'features' but the underlying articulatory movements which produce them. For instance, if a middle class speaker modifies the way he produces a stop, this affects the total auditory impression given by his stops;

in some cases the difference is great enough to mark in transcription, but in other cases it will go unmarked. In order to trace the influence of Anglo-Irish phonetics on middle class speech we would have to show that irrespective of what can or cannot be transcribed, the underlying articulatory movements are of Anglo-Irish origin. From listening to Liverpudlians and Irishmen I suspect that this is the case, but I have been unable to prove it.

Our interest in the study of variables has been chiefly phonological, to find out what is varying. The real result of this study is the way we have presented Scouse phonology in the chapters on articulatory setting, rhythm, intonation and the syllable. It would be worth-while making a further study of a more socio-linguistic nature, to trace in more detail the variation in the speech of a single person, between groups in society, and in different parts of the Liverpool urban field where the accent is influenced by Scouse.

Appendix 5:A Note on the Speech of R.J.Lloyd

Richard Lloyd's Northern English has already been mentioned (p19), but his description is difficult to interpret, since he omits to mention what kind of Northern English is being described, beyond the fact that it is his own speech. I am indebted to Mr Jack Windsor-Lewis for pointing out that Lloyd was mentioned in early editions of Daniel Jones's Pronunciation of English. In the second edition (1914, reprinted 1927, page 117), Jones states the 'the late Dr Lloyd was born and brought up in Liverpool and spent most of his life there'. Lloyd's description can therefore be taken to be of educated middle-class Liverpool speech at the turn of the century.

Here is a short extract from one of Lloyd's phonetic texts, an example of 'small talk, rapidly spoken' (second edition, 1908:121):

"its getini:ɿ ti:taim. wo:ntʃu ste: n av ti:?  
 θaŋks, ai wɪl, ɪf its no: trabl tə ju:.  
 nən ə tɔ:l. ʃe:ɿ dʒAs(t) le:ɪn ðə kloθ.  
 ðən aɪl ste:ɪ wɪə pleɪzɿ, ən hav ə fɿ:ðɿ tʃat.  
 se:rə, pli:z ge(t) ti: redi fɿ tu:.  
 o: pli:z do:mp me:k eni fAs. aɪm nɒt ə stæ:ɪndʒɿ.  
 no: wɪ wo:mp me:k eni fAs. bət wɪ:l wɒn(t) ti: fɿ tu:,  
 ə'teni re:t.  
 wəl v: ko:ɿs, bə do:m putʃɿ self aʊt ə ðə we:ɪ ɒn maɪ ə'kaʊnt.  
 o: no:, nɒt ə tɔ:l. haʊ dʒu laɪk maɪ ti: sɿ:vis?  
 aɪ laɪk ɪt veri mʌtʃ. ɪts veri prɪti."

Apart from ə for inverted a, and ɔ for ɑ, Lloyd's symbols have been retained. Perhaps the most striking feature is the retention of r-colouring; Lloyd mentions (p23) the 'wealth of coronal-alveolar articulations, leading to a habitually retracted, flat, or even

up-turned attitude of tongue. R-colouring and its associated tongue-shapes have now disappeared except as a feature of vowel rounding.

Lloyd's  $\underline{a}$  and  $\underline{u}$  are 'obscure' vowels, which are not quite the same as the central vowel, for which he uses  $\underline{a}$ . These 'obscure' vowels are still normal in rapid speech in some words - e.g.  $\left[ \underline{e}gzam, \underline{a}dopt, k\underline{a}ns\underline{a}n \right]$  'exam, adopt, concern' - and are less centralized than is normal in RP.

In the consonants, /p t k/ are apparently unaspirated (pp8,11,14), and /m/ is distinguished from /w/ (p14); trilled /r/ is giving way to the continuant (p11-12). As in the modern dialect, /j, w/ and (historical) /r/ are used as syllable links (pp13,14,25).

The Northern monophthongs /e:, o:/ still occur, although the former has an  $\left[ \underline{r} \right]$  off-glide when long, e.g.  $\left[ me:k \right]$  'make' but  $\left[ we:Y \right]$  'way'. Long /u/ is used in /ku:k/ 'cook', and it is retained in /ʃu:<sup>r</sup>, dju:riŋ/ 'sure, during' in preference to /ʃo:<sub>A</sub>, djo:riŋ/ (p21). Long /o:/ in law is apparently more open than short /o/ in cot (p20).

Lloyd's description is on the whole hardly distinguishable from the Southern Received Standard of the time. The few Northern characteristics mark his speech as rather more 'Lancastrian' than that of modern middle-class Liverpudlians. However, in his attempt to describe a uniform manner of speech used from Durham to Birmingham, and which is also his own, he omits any mention of local features, e.g. /ŋg/, or the problem of /u/ and /a/. Such forms as /ε:/ for /e/ - as in /sɛ:rɪ/ 'Sarah', or /bɛ:riŋ/ 'bearing' (p20) or /prɛ:<sup>r</sup>/ 'prayer' (p25) - are consequently suspect.



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Appendix 6:

The Rhythm of English Syllables

The following piece of work was written as a separate article, and it is closely connected with Chapters Five and Six on rhythm and intonation. Since it has not yet been published, a copy is included here as an appendix to the thesis.

## The Rhythm of English Syllables

### 1. Introduction

The rhythm of English syllables has received the attention of scholars since the Renaissance, but it remains one of the least understood parts of English phonology. It is not even clear what the term rhythm means. Northern English differs rhythmically from RP, but rhythm in this context could mean the placement of stress, the regularity of beat, the tempo of speech, or even the length of segments and syllables. In the wider usage of literary critics the term can refer to a number of things - intonation, metre, rhetorical schemes, choice of vocabulary - which certainly contribute to rhythm but which must be distinguished from it.

A number of writers (e.g. Thomson (1923); Sonnenschein (1925); Chatman (1965)) deal first with rhythm in general, and then treat speech rhythm as a special case. If the ticking of a clock, the beat of the heart and of music, the sound of the internal combustion and the recurrence of the tides and seasons are all manifestations of rhythm, then the concept is a very general one, involving the patterning of events in time. What constitutes a pattern differs from one kind of rhythm to another, so that the analogies of musical rhythm or body rhythms may be quite irrelevant to the discussion of speech rhythm.

The temporal patterns of speech are formed by the interaction of strong and weak events, or stress, and long and short events, or quantity. The auditory patterns are not repeated in speech as they are in music, and therefore what is considered "rhythmical" in

speech may well be arhythmical in music. Even in the stylized rhythm of metred English verse only the stress pattern is repeated, and - apart from the higher frequency of short stressed syllables in trochaic than in iambic verse - there is no corresponding pattern of quantity.

## 2. Isochronous Stress

The most widely held view of English rhythm is that it is based on isochronous stress: that is, stressed syllables occur at approximately equal intervals of time, and the quantities of unstressed syllables vary to fit the time available between stresses (see e.g. Steele (1775); Pike (1945); Abercrombie (1964a,b); Halliday (1967)). English stress is not isochronous in any objective or absolute sense (cf O'Connor (1965,1968)), and a number of explanations have been suggested, including 'very approximate' (Gimson(1970:261)), 'subjective' or 'perceived' (Crystal (1969:162)), and 'phonological isochronicity' (Halliday (1967:12)).

The advantage of 'perceived' or 'subjective' isochrony, is that it takes into account the ability of the brain to impose isochrony and other rhythmic patterns on to sequences of sound (cf Chatman (1965:25ff)). Its chief disadvantage is that the intervals between stresses can be so unequal that they are readily heard to be so. For example, if we compare:

- (1) 'Twelve 'great 'big 'fat 'old .men.
- (2) 'Dozens of 'broken-down 'specimens of o'bese hu.manity.

the polysyllabic groups are much longer than the monosyllabic ones, unless (2) is deliberately spoken with a much faster tempo. Similarly in:

(3) 'Fred 'ate 'three .sandwiches for ,lunch.

the interval between sand- and lunch is greater than the others; if subjective isochrony is imposed on (3) it sounds decidedly unnatural English.

A second problem is to define the limits of subjectivity. An analytic technique sometimes suggested (e.g. by Abercrombie (1961a) ) is to beat time with a finger or pencil. This disguises enormous differences of interval,<sup>1</sup> and works best when the analyst is beating time to a sentence which he is producing himself; that is, when speaking, hearing and tapping are all controlled by the same brain. In this case, the intervals between the subjectively isochronous taps vary with the actual intervals between the stresses. This is simply demonstrated by using a metronome instead of finger-tapping. For example, I am quite capable of tapping out a beat with intervals of about 0.3 seconds, and speaking (1), (2) and (3) to it without feeling that I am seriously distorting either the beat or the speech-rhythm. However, if I speak (1) with the metronome set at 0.3 seconds, I have to increase the interval by a third to 0.4 seconds before I can produce (2) with what is subjectively the same tempo; it is impossible to set the metronome for (3) without seriously distorting the speech-rhythm.

Thirdly, if the intervals are subjectively isochronous, it must at least be possible for the analyst to decide which syllables are supposed to be stressed. This is perhaps the case for verse, This is the house that Jack built, and English Language teaching materials in general, but only because in these kinds of English the speaker automatically approaches what we shall call below "word-stress timing". In the case of full-speed, spontaneous

colloquial conversation, it is frequently possible for the analyst to impose quite different rhythmical analyses on a given sentence, depending on which syllables he picks out as "stressed". A particularly perplexing recorded example is the following:

(4) Liverpool people talk the plainest English in the country.

(a) / x / / x / x / x / x / x / x

(b) / x x / x / x / x / x x x / x

(c) / x x x x x / x / x x x / x

The total time of the sentence is approximately 2.4 seconds, and it seems to fit (a) eight taps at 0.3 second intervals, (b) six taps at 0.4 second intervals, and (c) four irregular taps at an average interval of 0.6 seconds. Of these, (a) is certainly the most accurate as checked with the metronome, but taps coincide with syllables like -pool and in which one might not otherwise consider stressed. With taps on stressed syllables only, the analysis is (b). But if the speaker is in any way trying to equalize intervals, there is reason to believe that those are the intervals of (c).

If we then weaken the claim for isochrony to 'very approximate' equality, we observe that that stressed syllables in French are also 'very approximately' isochronous. If the principle is not sufficiently precise to distinguish the rhythm of English and French, then it is not really worth having at all. By a process of elimination we are left with 'phonological isochronicity': the intervals between English stresses vary less than they would do if all syllables were of the same length. There remains the problem of which syllables are the stressed ones.

### 3. Stress and Prominence

From the point of view of the speaker, a stressed syllable is

one produced with a greater degree of force, or greater effort, than unstressed syllables (Jones, 1950:134ff); the hearer on the other hand perceives some syllables as more prominent than others. A purely relative view of stress is of course inconsistent with the isochronous stress theory, which requires some syllables to be "stressed" and others "unstressed".<sup>2</sup> The problem could be solved if it was possible to isolate some phonetic feature that always accompanied a "stressed" syllable and never an "unstressed" one. In fact the situation is more complex, since there are several kinds of stress in English realized by different kinds of prominence, and prominence is not necessarily the exponent of stress.

#### A. Prominence

(i) Inherent Sonority: Open vowels tend to have greater sonority or "carrying power" (Jones, 1960:23-24) than close ones. Although inherent sonority is in principle unconnected with stress, a syllable with an open vowel is more likely to be taken for stressed than one with a close vowel; compare on in He arrived on the Tuesday with in in He arrived in the morning.

(ii) Quantity: Stressed syllables are usually longer than unstressed, but can in certain cases - e.g. summer, holly - be considerably shorter. Quantity can also mark vowel grade, and the so-called "long" vowels tend to be slightly longer than the "short" ones in similar environments; it may accompany inherent sonority so that open vowels are longer than close ones.

(iii) Quality: Many unstressed syllables are made less prominent by a shift in quality to "reduced" /ɪ/ and /e/.

(iv) Loudness: The more important stressed syllables are in general louder than unstressed syllables. However it is often



difficult or impossible in practice to distinguish loudness from inherent sonority. Unstressed syllables can also on occasion be prominently loud, e.g. in RP 'Thats .better<sup>3</sup> where -tter may be louder than stressed be-.

(v) Pitch: The most important stressed syllables are made more prominent by a change in pitch, or at least a contrast in pitch against surrounding syllables. There are a few exceptions, as in the case of the RP rise-fall tone, e.g. excellent where the second and unstressed syllable is higher in pitch and contrasts with the other two.

It is clear that prominence is not in itself a reliable guide to stress; the analyst will in practice allow his knowledge of the language to override perceived prominence. To take an extreme example:

(5) 'D you sell .jazz records?

The final syllable -cords can be very long, it has an unreduced quality, it can be quite loud, and it completes the pitch pattern; but any speaker of English knows that even if it is lacking in prominence, the first syllable of records is the stressed one.

## B. Stress

Stress involves three different but interrelated phonological systems: word-stress, rhythm and intonation. A rhythmical stress is termed ictus, and an intonational stress accent.

(1) Word-stress: The syllables of a word are either stressed or unstressed. One word-stress is primary and all others are secondary. In citation forms, the word is treated as a tone-unit, and all the stresses are accented, the primary stress taking nuclear accent (q.v.

below). But accent is a property of the tone-unit rather than the word, and a word-stress need not be accented in context. Although a syllable with word-stress determines the rhythm of unstressed syllables clustering round it, it need not itself be prominent in any way.

There are also two kinds of unstressed syllable: reduced and unreduced. This involves another system which we shall discuss below, namely grade.

(ii) Ictus: A syllable with ictus is louder than surrounding syllables, and longer than it would be if it lacked ictus (i.e. it may still be shorter than a following unstressed syllable).

(iii) Accent: Accent is realized by pitch prominence, and nuclear accent with moving pitch can be distinguished from non-nuclear accent with level pitch.

In so far as stress is relative, seven degrees can be distinguished in English:

- |                         |                           |
|-------------------------|---------------------------|
| (i) nuclear accent      | (iv) primary word-stress  |
| (ii) non-nuclear accent | (v) secondary word-stress |
| (iii) ictus only        | (vi) unstressed unreduced |
|                         | (vii) unstressed reduced  |

where (i-iii) are concerned with sentence-stress and (iv-vii) with word-stress. An accented syllable takes ictus, and ictus usually falls on a syllable with word-stress; in the other direction some but not all syllables with word-stress have ictus, and not all syllables with ictus are accented. There are just a few cases in RP where sentence-stress can fall on a syllable without word-stress, and which may actually be reduced, e.g. /'mentʃɪ'ste, 'westmɪn'ste/ 'Manchester, Westminster', or /,et ðə 'meʊmənt/ 'at the moment'.

All syllables contribute to sentence rhythm according to their degree of stress. Those with word-stress only may lack prominence in the context, e.g.:

(6) .George says its a .load of old `nonsense

(where we have adopted as a convention the use of underlining to mark word-stress only<sup>4</sup>); but they still govern the rhythm of dependent syllables without word-stress. For instance in a phrase like your silly `nonsense, si- governs the length of your and -lly whether it has sentence-stress or not. Monosyllables can have word-stress, or they can be unstressed, e.g. demonstrative that /ðæt/ is stressed and contributes to sentence rhythm in a different way than the conjunction that which is normally reduced to /ðət/.

In order to reconcile the isochronous stress theory with the scale of relative stress, it is necessary to define which kind of stress is isochronous. It is clearly not word-stress, and it is unlikely to be accent. Only ictus can be isochronous, and ictus is the least well defined kind of stress; it is extremely difficult to estimate relative loudness, or the length of a syllable relative to what it would have been in another context!

However unsatisfactory the notion of ictus might be, English rhythm cannot be accounted for without it. There is clearly an intermediate stage between accent and word-stress only, e.g.:

- (7)(a) 'Stop 'that `noise. (that is accented)  
 (b) 'Stop •that `noise. (that has ictus)  
 (c) 'Stop that `noise. (that has word-stress only)

The pitch level of that contrasts with the level of stop and the fall of noise in (a) but not in (b) or (c), and that is considerably longer in (a) and (b) than in (c).

Secondly, ictus is interestingly different from accent and word-stress in the complex verse-rhythm sometimes called "counterpoint rhythm":

(8)	Of	man's	first	diso	bedience	and	the	fruit
(a)	x	/	x	/	x	/	x	/
(b)	x	/	/	/	x	/	x	(/)
(c)	x	/	/	x	x	/	x	/

where (a) marks the metrical scheme to which the line conforms, and (b) gives all the word-stresses (the word-stress on and will be explained later), and (c) represents a possible interpretation of the line, the diagonal stroke marking accent. When the line is read aloud, accent can be realized simply by a high pitch contrasting with the low pitch of unaccented syllables. There are alternative treatments of and: either it can be preceded by a "silent beat", or it can be given ictus, which in this case involves the non-prominent low pitch of the unaccented syllables and the full length appropriate to an accented syllable. Note, incidentally, that rhythm and metre are related in different ways to the word-stress pattern.<sup>5</sup>

#### 4. Tempo

Tempo illustrates another important difference between speech-rhythms and certain other kinds of rhythms. If the tempo of a piece of music is altered, for example, all the notes are lengthened or shortened proportionately, but their length and strength relative to each other remains constant. The tempo of speech can also be changed by increasing or decreasing the rate of delivery of syllables and segments, but the stress pattern can be involved.<sup>6</sup> In English, the occurrence of ictus and non-nuclear accent is

to some extent determined by tempo. As the tempo is increased, so the prominence of the most important syllables is protected at the expense of less important ones, e.g. in (7) that first loses its pitch prominence and then its length. (Although stress changes are a possible consequence of tempo change, they are not of course necessary, since (7a) can be spoken very fast just as (7c) can be spoken very slowly.)

In general, the slower the tempo, the more word-stresses take ictus, and the more the rhythmic beat approaches isochrony. Conversely, the faster the delivery, the fewer unaccented syllables take ictus, and isochrony is virtually lost. We can refer to the extremes as word-stress timing and accent timing respectively.

Word-stress timing is appropriate in kinds of English - public speeches and sermons, news reports, football results, and prose reading in general - where clarity is important, and the hearer has no opportunity of asking for a repeat. It appears in stylized form in verse, some advertising and some political slogans, where rhetorical schemes are used to bring out the rhythmic beat. In spontaneous conversation, on the other hand, the hearer can interrupt, and there may be relatively few unaccented syllables with ictus. The distinction between word-stress timing and accent timing corresponds roughly to what Crystal (1969:163) calls rhythmic and arhythmic utterance.

Word-stress timing is rarely reached owing to the English tendency to avoid accenting two adjacent syllables, e.g. Birkenhead is /'bɜkn'hed/ in isolation, but may have only one stress in context, cf Lord Birkenhead /'lɔd bɜkn'hed/ or Birkenhead market /'bɜknhed 'mɜkɪt/. Similarly, Belfast may have word-stress on both syllables,

and occur in isolation as /'belfast /, and vary in context, e.g. East Belfast /'ist bel'fast/ but Belfast Lough /'belfast 'lox/. The full-forms of grammatical words rarely have ictus when adjacent to a sentence-stress, e.g.:

(9) We 'saw that .tramp a gain. (This see Chataway, 1943:26-7).

(10) 'Who did you 'speak to? here, and so can take the first

but they readily take ictus at slow tempo when surrounded by unstressed syllables, cf:

(11) 'Whats 'happened to .that a 'larm-clock?

(12) Be .cause I jolly well 'wanted ,to.

Note that in (12) slow tempo is restricted to the syllables following the nuclear accent, which is a normal pattern in English.

Monosyllabic lexical items may also have word-stress but not sentence-stress. Our examples (1) and (3) above were implicitly marked with word-stress timing, but this would be unusual in conversational style. A more likely rhythm would be:

(1a) 'Twelve 'great big 'fat old .men.

(2a) 'Fred ate 'three .sandwiches for ,lunch. (See 161) callie

If big, old and ate are not given ictus, the total time for the sentence is reduced, but the interval between remaining ictuses may be paradoxically increased, e.g. the interval between Fred and three in (2a) is longer than between Fred and ate in (2). Whereas in music tempo can be defined by the interval between rhythmic beats, this is not possible for speech, so that an average interval of, say, 6.4 seconds could occur with slow delivery on one occasion and with fast delivery on another. A further point is that if big, old and ate lack sentence-stress, they may take up about half of the interval or they may not. But to detect the principle involved here, we must distinguish rhythm and beat.

### 5. Rhythm and Beat

So far, we have been chiefly concerned with stress and beat, which is not the whole of rhythm. Rhythm is also concerned with quantity and the way long and short, or strong and weak, fall into groups (for a general discussion of this see Chatman, 1965:26-7). A musical analogy is appropriate here, and we can take the first phrase of Greensleeves. The notes fall into rhythmic groups containing one or two short notes followed by a long note:

de-dum de-dum di-di-dum de-dum

The beats as measured by the bar, however, break up the groups since bar-lines are drawn between the short and long notes. There are six beats to the bar, in two sets of three, and the boundary between the sets - here marked (+) - also comes between long and short notes:

de / dum de + dum di di / dum de + dum ...

The traditional prosodic foot and what Kingdon (1958a:161) calls a stress-group analyzes rhythm in the wider sense; what Abercrombie and Halliday call a foot measures out the beat. Compare:

(10)(a) 'This is - the 'house - that .Jack - ,built.

(b) /This is the /house that /Jack /built.

In (a), unstressed syllables are grouped with the appropriate stressed syllable, group boundaries being marked (-), while in (b) unstressed syllables are automatically grouped with the preceding stress. In Abercrombie's case, the b-type of analysis is a matter of practical convenience (1964b:28), but Halliday appears to attach theoretical importance to it (1967:12). But it must be pointed out that while (a) makes a correct analysis of the

rhythm whether the beat is actually isochronous or not, there seems little point in (b) unless the "feet" really are equal in length. The whole purpose of (b) is to mark the stressed syllables, and it ignores or obscures the rhythm.

Another difference is the kind of statement about isochrony that (a) and (b) lead to. In (a) the groups of syllables are arranged in such a way that the intervals between sentence-stresses are roughly equal: there is a tendency towards isochrony. But in (b), isochrony is taken as the norm, and the facts of speech must be interpreted as a failure to meet it, or as a movement away from isochrony. An interesting corollary is the theory of verse: according to (a) a normal tendency of speech appears in stylized form, while for (b) verse is the norm which speech rhythm departs from. On all counts, (a) is preferable to (b).

Although the isochronous stress theory of English rhythm makes an important generalization, we have encountered three major objections to it. First, it is difficult to define stress in terms of the theory, and sometimes to recognize stressed syllables; secondly, whatever isochrony there is in certain styles at slow tempo is readily lost if tempo is increased or if the number of unstressed syllables between stresses is very unequal; thirdly, the theory is analyzing beat rather than rhythm. The objections can be avoided, and the useful generalizations retained, by adopting the a-type of analysis.

## 6. Rhythm Units

Phonological units tend to cluster round more highly stressed



units. Enclitics which follow ("lean on") the higher stress can be distinguished from proclitics which anticipate it. The general rhythmical principle is that proclitics are rushed over on the way to the stress, and thus tend to be shortened, while enclitics are lingered on and may be as long as - or longer than - the more highly stressed unit. The "clitic principle" operates most clearly at the level of the syllable, but can be found at all levels from the tone-unit to the minutiae of diphthongs and triphthongs.

In the tone-unit, syllables before the nuclear accent may be delivered very quickly, followed by a perceptible slowing down in the tail; ictus may fall on units lower down on the stress scale in the tail than in the head. This explains the rhythm of the following examples, which were recorded in a Liverpool slum-clearance area. The first analysis was made with the finger-tapping technique:

(14)(a) /Just a/bout /ready for /coming /down /now /these /are.

(15)(a) and /we're /ready for /coming /down.

This analysis disguises a rather different rhythm of ready for coming down in the two examples. The nuclear accent falls on ready in (14) and on down in (15), and a preferable analysis is:

(14)(b) ,Just about `ready for ,coming ,down now .these are.

(15)(b) and `we re ready for coming .'down.

The long tail of (14) approaches word-stress timing, while accent timing is approached in (15). The first analysis is quite inaccurate - ready for is considerably longer than -bout - and the only reason for a beat to be "heard" on are is that the tempo has slowed down sufficiently for the analyst's finger-tap to coincide with that syllable.

At the next level, ictus clusters round accent. Compare:

- (16)(a) 'Jack .drank - a 'rum and 'coke.  
 (b) 'Jack - 'drank a 'rum and 'coke.

where (a) answers What did Jack drink?, and (b) answers What did Jack do?. The given information is separated rhythmically from the new, and drank takes the rise of the fall-rise if it is enclitic to Jack, but not if it is proclitic to coke.

Word-stresses cluster round sentence-stresses. If we reconsider (1a), we find that old can be enclitic to fat or proclitic to men:

- (1a)(i) 'Twelve 'great big - 'fat old - .men.  
 (ii) 'Twelve 'great big - 'fat - old .men.

Old may be shorter as a proclitic in (ii) than as enclitic in (i), and reflect a difference of meaning: (i) means 'twelve men who are great big fat and old', whereas (ii) means 'twelve old men who are great big and fat'.

The phonetic difference between (i) and (ii) may be so slight that the hearer cannot be relied on to get the right message unaided. The proclitic can be marked by an immediately preceding short pause (silent beat), accompanied perhaps by physical gesture.

The clustering effect can be seen more clearly in the case of unstressed syllables round word-stresses. Consider the following:

- (17)        re'public                di'rection  
              de'terminе            ba'nana  
              for'gotten             ex'citing

The first syllable is rushed over, and the third tends to be longer even when it has a reduced vowel or syllabic nasal. Similarly in phrases with grammatical clitics:

- (18)        for 'nothing                de'test her  
              some 'porridge        they 'can t ve  
              can 'Harry?             to 'help you

The grammatical words behave rhythmically exactly as the unstressed syllables of polysyllabic words. The phrases can in fact be treated as phonological words.

Grammatical clitics fall into fairly well defined categories:

- (i) articles, excluding demonstratives,
- (ii) some titles, like Sir, Saint,
- (iii) prepositions,
- (iv) conjunctions,
- (v) personal pronouns and the locative pronoun there,
- (vi) verbal auxiliaries,
- (vii) the verb to be before its complement,
- (viii) the past infinitive marker have /ev/.

A number of the clitics are subject to gradation, and lists of the commonest "weak-forms" are given in the usual hand-books. Most of them are proclitic only, but non-finite have /ev/ is enclitic only; the personal pronouns are proclitic or enclitic according to syntax. Proclitic weak-forms can only be used when they are followed by the word or phrase they are enclitic to, so that a preposition cannot be weakened in a construction like 'Who did you speak to? where to is separated from who; similarly final verbal auxiliaries must have the full-form, e.g. 'John can where the main verb is omitted altogether. Two grammatical words in sequence cannot very well be mutually clitic, and one of them usually takes word-stress, e.g.:

(19) It was ex'tremely \*kind of you

where either of or you will take word-stress (and possibly ictus, since it occurs in the tail of a tone-group) leaving the other clitic; perhaps you is more likely to attract the stress on account of the accent immediately preceding of. After, say, thoughtful, of is likely to be stressed, i.e. \*thoughtful ,of you.

However, it must be conceded that in rapid speech - especially in the head of a tone-unit - mutual clitics certainly do occur, and that they can even be given <sup>so</sup> sentence-stress when surrounded by unstressed syllables, e.g.:

(20) Its ad<sup>\*</sup>.visable for him to return it  
for him could occur as /for ɪm/ or /fe hɪm/, or even /.fer ɪm/  
 or /fer \*ɪm/.

The rhythm of certain conjunctions like and, or varies in an interesting way. When the conjunction introduces a new clause or sentence it is short and proclitic:

(21) John read French and Mary read German.

On the other hand, if and joins words or phrases to form one compound constituent, it is longer and enclitic, cf:

(22) John and Mary read Modern Languages.

Here, John and Mary are treated together as a group. If and joins members of a group it is enclitic, but if it joins individuals it is proclitic:

(23) I've had to speak to Fritz and Ahmed.

If and is proclitic here, Fritz and Ahmed are treated individually so that (23) can be interpreted

(23a) I've had to speak to Fritz and I've had to speak to Ahmed.

In other words, even though the syntax is elliptical, (23) is still treated rhythmically as a case of sentence conjunction. Compare:

(24) George and Liz and Jeff went to the party.

If Liz went to the party with one of the two lads, she is linked to him enclitically, and separated from the other by a proclitic and.

It would be unrealistic to suggest that people react correctly

and consistently to rhythmic subtleties of this kind, or that they can even hear them when they are pointed out. For practical purposes, unless the proclitic is reinforced with a silent beat and perhaps a physical gesture, proclitic and enclitic and can be considered ambiguous (pace Albrow, 1968:32 fn7).

Enclitic and frequently occurs in idiomatic or metaphorical contexts; compare

- (25) The herbs were cut and dried. (short proclitic and)  
 (26) The matter was cut and dried. (longer enclitic and)

Now (25) is a case of sentence conjunction, since it can be paraphrased

- (25a) The herbs were cut and the herbs were dried.

But a comparable analysis is obviously impossible for (26). More generally, enclitic and is found in frequent collocations:

- |      |                  |                    |
|------|------------------|--------------------|
| (27) | fish and chips   | black and white    |
|      | meat and two veg | wattle and daub    |
|      | knife and fork   | head and shoulders |

It is enclitic in fish and chips even though

- (28) We had fish and chips for supper  
 might be paraphrased

- (28a) We had fish for supper and we had chips for supper.

It is worth noting that fish and chips operates as a single lexical item, its first and third syllables lacking sentence stress in the immediate environment of accent:

- (29) 'Joe s fish and .chips; a 'fish and chip .supper.

The conjunction or patterns in a similar way. Consider

- (30) I saw one or two people.

If or joins sentences it is proclitic, with (30) meaning

(30a) Either I saw one person or I saw two people.

But or is enclitic if (30) has the idiomatic meaning

(30b) I saw a few people.

Another interesting example is

(31) Would you like tea or coffee?

With the rhythm and intonation of a WH-question:

(31a) Would you like 'tea or .coffee?

or is a proclitic sentence conjunction, giving a simple choice:

(31b) Would you like tea or would you like coffee?

Tea and coffee are acceptable answers, while yes please is deliberately facetious. But with the rhythm and intonation

(31c) Would you 'like 'tea or .coffee?

tea or coffee is treated as a single unit with enclitic or. The question is equivalent to

(31d) Would you like something to drink?

and acceptable answers include yes, no, tea, coffee, and even I'd rather have cocoa.

The preposition of is normally proclitic, but it has been observed (e.g. by Albrow, 1968:30) that of is enclitic after measures of quantity, as in piece of string or a lot of nonsense. This fits our general rule, since enclitic of joins the parts of a single exocentric construction, so that e.g. he spoke a lot of nonsense does not entail he spoke a lot. Of has a number of weak-forms. Enclitic of /ev/ can be further reduced to /e/ except before vowels, and this is reflected in spellings like a cuppa or a pinta. Proclitic of /ev/ tends to drop /e/ and retain /v/, as in

the joys of spring. The distinction is made consistently enough to distinguish e.g. I gave him a piece of my mind with /e/, and It gave him peace of mind with /v/.

### 7. The Syllable

We have been taking the notion of syllable for granted in our discussion, but we must take note of the fact that it is currently fashionable to deny the existence of syllables.

Chomsky and Halle (1968) for instance, have "morpheme structure rules" (p380ff) and a feature "syllabic" (p354), but no syllables. One might argue first that morpheme structure rules can only be formulated at all because they derive logically from syllable structure rules, and secondly that given the rules and the feature of syllabicity a simple process of induction might lead to the discovery of the syllable. In fact, the avoidance of the syllable is not based on any observations about language, but follows as a logical necessity from the premise (e.g. Chomsky, 1965:16) that phonology is merely an interpretive component of a generative grammar. The grammar contains only one initial symbol, namely S(entence), and a syllable grammar would involve the introduction of a second initial symbol.

Chomsky-Halle phonology cannot deal adequately with those areas of English phonology concerned with syllables and rhythm. For example, their theory of stress (1968, chapter 4) is superficially interesting until one asks exactly what they mean by stress. It does not seem to have anything to do with rhythm, for rhythm - like syllable - does not even appear in the index.<sup>7</sup> Chomsky approaches rhythm when he attempts to dismiss the phoneme theory with an inaccurate reference

to the phonetic details of writer and rider, claiming (1964:83) that the words "differ phonetically only (sic) in their second elements".

Kohler (1966) also rejects syllables. He has them in all but name, distinguishing pre- and post-vocalic consonant clusters, and giving rules for the structure of something very like the syllable. He argues (p346):

"...the syllable is either an unnecessary concept, because the division of the speech chain into such units is known for other reasons, or an impossible one, as any division would be arbitrary, or even a harmful one, because it clashes with grammatical formatives."

The syllable, on the contrary, is a necessary concept for any statement of English rhythm; it is quite illogical to deny its existence on account of some theoretical difficulties. The problem of syllable division is well known, but the existence of syllables is a separate matter altogether. One might by the same logic argue that the concept of light is an impossible one on account of the difficulties of the quantum theory, and that it is a harmful concept because it clashes with the ideas of classical physics. The case for non-syllabic phonology has not really been made.

Syllable division can be determined by reference to a number of phonological patterns. Syllable structure rules exclude /dl/ or /lr/ from a single syllable, so that words like medley or walrus must be analyzed med+ley, wal+rus. Voiceless allophones of /r/ occur only after a preceding voiceless consonant in the same syllable, so that mattress, macron are to be analyzed ma+ttress, ma+cron. If general rules of syllable quantity can be established,



the rules themselves can be used to decide doubtful cases: the odd cases are much more likely to follow the basic pattern than to constitute a new type on their own.

A complication is that different patterns can sometimes lead to conflicting divisions. Different divisions are required for different purposes, or to put it another way, syllable boundary can shift in the course of a derivation. One example of this that has frequently been noted is the tendency in some Scots and Irish dialects for a stressed syllable to take over the final consonant of the preceding syllable, e.g. an egg /e `næg/, the IRA /ðr `are `ræ/. A similar shift is found in morphology, as in comparing as opposed to comparison. In both words /r/ begins the second phonetic syllable, but its phonological status is different: in comparing it ends the first syllable (otherwise one would expect the vowel /er/), and in comparison it begins the second syllable (otherwise one would expect the vowel /e/.)

### 8. Grade

The theory of grade or "ablaut" is highly developed in Indo-European and Germanic philology (e.g. Prokosch, 1939), but it is hardly mentioned in synchronic linguistics. The effects of grade on vowel and syllable quantity have been observed in considerable detail for Modern English, but grade has not been recognized as a phonological system because of the tendency to express all phonological patterns in terms of phonemic contrast. Chomsky and Halle (1968) deal rather neatly with grade in their informal descriptions, but in "formal" descriptions (e.g. p178ff) confuse it with the phonetic feature of tenseness and the purely historical

## Great Vowel Shift.

There are four vowel grades in English:

- (a) Full Grade: Vowels of this grade include the so-called "long" vowels and diphthongs.
- (b) Normal Grade: The six "short" vowels /i, e, æ, ʊ, ʌ, u/.
- (c) Reduced Grade: The commonest reduced vowels are /i, e/; reduced /e/ combines with a following /l/ or nasal in the same syllable to form a syllabic /l/ or nasal.
- (d) Zero Grade: In this grade the vowel disappears completely, and a post-vocalic /l/ or nasal is non-syllabic. Zero grade occurs in the second syllables of every, factory which become /evri, faktɹi/; the reduced grade /evəri, faktəri/ sound over-careful or old-fashioned.

9. Syllable Quantity

All proclitic syllables tend to be short, but the degree of shortening varies according to grade, and a reduced vowel is rather shorter than one with normal or full grade, cf /me `fæðe/ as opposed to /mæ `fæðe/ 'my father'. An unexpectedly long proclitic can easily be mistaken for a stressed syllable on account of its prominence, as in the case of the Anglo-Irish /sæ `rɪn/ 'siren'. Similarly, the unreduced verbal prefixes of many kinds of Northern English may sound stressed to Southern ears; this is possibly more true of the open vowels of /ɛg `zæmɪn/ 'examine', /ad `mære/ 'admire', or /kɪn `sjʊm/ 'consume', than of the closer vowel of /ɪn `spære/ 'inspire'.

It is possible to find pairs of sentences which differ only in the potential length of the proclitic:

(32) We saw a child.

(33) We saw her child.

The /s/ of her is potentially longer than /e/ of the indefinite article, but the distinction is not consistently made or heard. The quality of /s/ is already similar to /e/, so that reduction in this case involves only the quantity. The following example was conveniently produced while this section was being written:

(34) Will you 'bring her 'chair down please.

This was at first heard as a chair, but the only possible meaning in the circumstances was her chair.

Although proclitics are in general shorter than enclitics, they do overlap in length, e.g.

(35) We saw her. (her is enclitic pronoun object)

(33) We saw her child. (her is proclitic to child)

If the proclitic is not reduced, it can be as long as the enclitic. It follows that quantity alone is not a reliable guide to the rhythmical status of a syllable.<sup>8</sup>

The relative quantities of stressed syllable and enclitic depend on their respective grades. There are three main classes:

Class I      Short-Long

When the stress falls on an open syllable with normal grade, the stressed syllable is short and the enclitic long:

(36)	'pillow	'rubbish	'hit him /'hi+trɪm/
	'nephew	'bottle	'tell her /'te-lɪz/
	'agile	'happen	'should ve /'ʃu+dev/

The short-long pattern is clear when the enclitic contains a full grade vowel or ends in a consonant; the pattern is not affected

whether the enclitic is lexical or grammatical. But if the enclitic ends in a reduced vowel, the rhythm is variable, cf:

- (37) (i) <sup>ˈ</sup>rubber      (ii) <sup>ˈ</sup>coffee      (iii) <sup>ˈ</sup>Offa  
           <sup>ˈ</sup>collar            <sup>ˈ</sup>lucky            <sup>ˈ</sup>kappa  
           <sup>ˈ</sup>seller            <sup>ˈ</sup>is he? /<sup>ˈ</sup>r+zr/

The vowel is not final in words of type (i) in dialects which have post-vocalic /r/, so that they are regularly short-long, and some dialects (e.g. Geordie, but not Scouse) have a long full grade /i/ in words of type (ii). A feature of RP is that word-final /r,ə/ can be fully long; Abercrombie (1964b:30) appears to argue that this is always the case, but Sonnenschein (1925:136) is probably more accurate in restricting it to before a pause, and to other special rhythmic contexts.

Abercrombie's stronger position, that all words of (37) are always short-long in RP, follows as a logical necessity from the premise of isochronous stress. If the interval between beats is a constant, then in the phrases cuckoo-clock and cooker-clock the total lengths of cuckoo and cooker must be equal; since their first syllables have the same segments /ku/ and quantity, their second syllables must also be equal in length. If, on the other hand, one makes a weaker claim for isochrony - that English merely tends towards it - then there is no problem allowing that cooker and the words of (37) are in general shorter overall than cuckoo and the words of (36).

In many dialects other than RP, it may well be the case that (37) are always short-short; at very slow tempi extra length may be given to the intervocalic consonant rather than the vowels, e.g. /<sup>ˈ</sup>puddɪn/ 'pudding' in some kinds of Northern English. A

similar phenomenon possibly occurs in RP in a word like democracy at extremely slow tempo: the final syllable /sɪ/ can be given ictus and lengthened, but both /v/ and /e/ must remain short (any lengthening of /v/ would sound distinctly provincial!) so that any additional time is spent on protracted /kr/.

Class II      Equal-Equal

If the stressed syllable is full grade, or normal grade followed by a consonant in the same syllable, the stressed syllable and enclitic are approximately equal in length:

(38)	*Barlow	*bedlam
	*elbow	*butler
	*harem	*Elgin
	*blasé	*Ezra

Consonant sequences like /dl, tl, lg, zr/ cannot belong to the same syllable, so that the first consonant necessarily belongs to the first syllable.

There are a number of exceptions to the equal-equal rule, and e.g. elbow with a final full vowel is quite different in rhythm from elder with a final reduced vowel. The exceptions are dealt with in Class III.

Class III      Long-Short or Equal-Equal

Words of this class fulfil a number of conditions:

- (a) The first syllable contains either a full grade vowel or a normal grade vowel plus a nasal or /l/.
- (b) The second syllable begins with a consonant that enters into the voiced/voiceless distinction.
- (c) The vowel of the second syllable is of reduced grade.

If the first consonant of the second syllable is voiced, the full

vowel, nasal or /l/ immediately preceding is lengthened - making the first syllable long - and the second syllable is short; if the first consonant of the second syllable is voiceless, the two syllables are of about equal length:

- |      |                   |                |
|------|-------------------|----------------|
| (39) | filter / elder    | Eton / Eden    |
|      | ample / amble     | writer / rider |
|      | renting / rending | outer / louder |
|      | thinker / finger  | Orton / Auden  |

The first member of each pair is equal-equal, and the second long-short.

The conditions (a,b,c) are rather complicated but they are all necessary: (a) if the first syllable contains a normal grade vowel only, e.g. hatton, hadden, the word is short-long according to Class I, and the vowel does not vary in length before voiced and voiceless consonants (cf hat and had); (b) if the first consonant of the second syllable is voiced, but has no voiceless phonemic counterpart, e.g. meaning, feeling, the word is equal-equal according to Class II; (c) if the vowel of the second syllable is not reduced, e.g. mango, cargo, and the word is equal-equal according to Class II.

The rules of Class III explain a rather puzzling example:

- |      |                     |                             |
|------|---------------------|-----------------------------|
| (40) | *pay him / *per im/ | *pay them / *per ðem/       |
|      | *pay her / *per ɜ / | *pay the men / *per ðe men/ |
|      | *pay 'em / *per em/ |                             |

The problem is that them has the quantity of proclitic and reduced the, and is shorter than the other enclitics, which are equal in length to the stressed syllable \*pay (Class II). In fact, pay them fits Class III and is regularly long-short, just like Eden or rider.<sup>8</sup>

Taking proclitics and enclitics together, we can set up three basic phonetic types: short-long, equal-equal and long-short, corresponding to Abercrombie's types A, B, C (1964b:31). Type A corresponds to Class I enclitics, but type B derives from several sources: (a) compound words like naughty, blackbird without sentence-stress on the second element, (b) phrases with long proclitics e.g. met her in We met her mother, (c) Class II enclitics, (d) Class III enclitics beginning with a voiceless consonant. Type C corresponds to (a) phrases with short proclitics, e.g. catch the in Catch the thief, and (b) Class III enclitics beginning with a voiced consonant. Type C also includes the Yorkshire pronunciation of Peter (Abercrombie, p34); in this variety the vowel is fully long even before a voiceless consonant, so that the word is rhythmically similar to RP Eden (Class III) with /i/ before a voiced consonant.

These quantities are found only when a single clitic occurs between stresses. A large number of different quantities occur with sequences of clitics, and in order to make any generalization at all, we must examine the structure of the rhythm unit. There are a number of reasons for considering enclitics to be more closely connected to the peak of the unit than are proclitics. At the level of the tone-unit, the pitch pattern of the tail is determined by the nucleus, while syllables before the nucleus can vary independently of it. In the word-stress unit, the proclitic is just minimal in quantity, while the enclitic is related systematically to the stressed syllable. This suggests the following structure:

FIGURE 1.

The proclitic is peripheral to the unit as a whole, and does not affect the quantities of the centre. It can, however, take up time from the preceding unit, so that phone is progressively shortened in phone John, phone for John and phone for the boss. If phone is followed by enclitic -ing, the proclitics take time from the preceding centre leaving the respective quantities of peak and enclitic more or less unchanged, of phoning John, phoning for John, and phoning for the boss.

If several proclitics come together, each is considerably shortened, and this brings about a number of compound weak-forms like /we, je, 3e/ 'we are, you are, they are'. In parts of Yorkshire, prepositions combine with the definite article, e.g. /ɪntɪ, ʌntɪ, fətɪ, tətɪ, wɪtɪ/ 'in the, on the, for the, to the, with the'. In Merseyside speech, compound prepositions are often simplified before the, e.g. of is omitted from out of the window and to from down to the ale-house.

In lexical items, sequences of proclitics are avoided by the placement of secondary word-stress, as in tele`phonic or photo`graphic. The relative quantities of the first two syllables show that they are related as peak and enclitic (tele- short-long by Class I, and photo- long-short by Class III); in other words, the proclitic is organized as a rhythm unit of a lower level. If the proclitic syllables happen to be grammatical words, the first one can also take a secondary "word-stress", e.g. out of work where out of can be treated as a subordinate unit with out as peak and of as enclitic; enclitic of can be regularly reduced to /ə/ making out of identical to outer.



Stressed grammatical clitics are usually given the full-form, but weak-forms are fairly common in RP, and especially in the usage of BBC announcers where they may even be given ictus and accent. The following example was heard on the BBC Northern Ireland news (25/8/72):

(41) ....'bomb-damage 'to /'te/ the ho.tel....

The stressed clitic is usually a preposition or a conjunction like and. The tendency to stress these words is made use of in verse, where they can count as metrical stresses:

(8) Of man's first disobedience and the fruit

(42) When that Aprill with his shoures soote

The droghte of March hath perced to the roote,...

An acceptable reading of and the, with his, to the, is to give them the relative quantities of stressed syllable and enclitic, but not the loudness or pitch prominence of other stressed syllables.

Enclitic syllables are related systematically to the peak. If we compare phone John with phoning John, the peak phon- is clearly shortened by the addition of -ing. If a second enclitic is added, e.g. phoning him /'feunɪŋɪm/, both syllables of phoning may be shortened, but more time is taken from -ing than phon-. In lexical words, the first enclitic may be so shortened that it is reduced to zero-grade and disappears, as in factory, every and perhaps telephonist /trɪ'lefnɪst/. In a sequence of three enclitics, one of the syllables may be made zero-grade in RP, but given secondary stress in other varieties, thus giving rise to RP /'sekretri, 'nesesri/ 'secretary, necessary' as opposed to /'sekre,teri, 'nesə,seri/. An RP hypercorrection is sometimes

found in the pronunciation of Londonderry, where /<sup>ˈ</sup>landən,derɪ/ is "corrected" to /<sup>ˈ</sup>landendrɪ/. Secondary stress is used by nearly all speakers for longer enclitic sequences, so that necessarily is /,nesɪ<sup>ˈ</sup>serɪlɪ/ (with shift of primary stress) rather than /<sup>ˈ</sup>nesesrɪlɪ/. The last enclitic of a series is the most prominent, and in the tail of a tone-unit can attract ictus (e.g. /<sup>ˈ</sup>sekre,tri/) and complete an intonation pattern (e.g. /<sup>ˈ</sup>sekre.tri/), even though they are reduced in quality.

Our rules for syllable quantity are sufficiently general to account satisfactorily for the examples given by Abercrombie (1964b:32) of what he calls 'trisyllabic feet':

- (i) one for the road: for the is proclitic and takes up the minimum time.
- (ii) anything more: EITHER anything is a compound, in which -thing has word-stress but not ictus, and is an enclitic equal in length to any-; at the next level any- is short-long (Class I).  
OR anything is not treated as a compound, but the stressed syllable is short and the final enclitic is longer than the first.
- (iii) seven o'clock: o'- is a short proclitic; the remaining time for seven is divided short-long (Class I).
- (iv) after the war: the is a short proclitic; the remaining time for after is divided equal-equal (Class II).
- (v) nobody knows: EITHER nobody is a compound, in which -body has word-stress but not ictus, and is an enclitic equal in length to no-; at the next level body is short-long (Class I).  
OR nobody is not treated as a compound, and stressed no- is longer than the enclitics (Class III); the first enclitic is shorter than the second and may have zero-grade, i.e. /<sup>ˈ</sup>neubdɪ/.

The rules can also deal with the Scouse example (4). At the level of the word-stress unit, i.e.

(4d) Liverpool people talk the plainest English in the country,  
 (i) Liver- is short-long (Class I); (ii) people is equal-equal (Class III); (iii) the is a short proclitic to plainest, which is itself equal-equal (Class II); (iv) English is equal-equal (Class II); (v) in is given word-stress as the first of two grammatical proclitics, taking the as its enclitic, and the unit is long-short (Class III); and (vi) country is equal-equal (Class III).

The sentence is given accent timing, and only accented syllables are given ictus; other word-stresses cluster clitically round the accents:

(4e) 'Liverpool people + talk the 'plainest+'English + in the 'country.  
 Both -pool and people are enclitic to Liver- and the second enclitic is more prominent than the second; talk is proclitic to the plainest and in the as a unit is proclitic to country.

Enclitics are in general longer than proclitics, and the two enclitics of Liver- together are much longer than the single proclitic of the plainest. However, when the longer time is divided between -pool and people, the three clitic units -pool, people and talk are not very different in length. Since there are unstressed syllables on either side of on, it is easy to "hear" a stress on it. As a result, when this sentence is analyzed impressionistically, it appears to have isochronous word-stress (Analysis 4a).

For analysis (4b), it is necessary to disregard the least prominent word-stresses -pool and in. First, the difference in length of the enclitics and the proclitic is disregarded, and a beat is heard on the more prominent enclitic peo- and on talk.

Secondly, the extra-long interval between Eng- and count- is allowed to compensate for the extra-short interval between plai- and Eng-. It is interesting to note that although (4a) and (4b) interpret "stress" in different ways, and consequently pick out a different number of stressed syllables, they are mutually compatible in terms of the theory of subjectively isochronous stress. The timing of the beginning of the stressed syllables is estimated as follows:

(4) Liverpool people talk the plainest English in the country.

(a) 0    0.3   0.6    0.9       1.2       1.5       1.8       2.1       2.4 sec.

(b) 0            0.4    0.8       1.2       1.6                    2.0       2.4 sec.

If it is admitted - as it obviously must - that the actual intervals vary slightly from the idealized intervals according to the number of unstressed syllables, then (4a) and (4b) can be maintained simultaneously as the analysis of (4). Example (4) is not only difficult to analyze impressionistically: it actually reduces impressionistic analysis to the absurd. What is presented in (4c) and (4e) as the preferred rhythmical analysis cannot be arrived at impressionistically, and relies on interpretation of the sentence in rhythmical units of different size.

#### 10. Syllable Structure

We have so far been considering the higher levels of rhythm, taking the syllable as the smallest unit. Individual segments have varying degrees of prominence and quantity in the context of the syllable, and we must first establish the structure within which they vary. The study of possible phoneme sequences, or phonotactics, (e.g. Gimson, 1970:239ff), presents a syllable structure of the

'finite state' type; but this cannot be adequate, since segments arrange themselves in groups which are proportionate in length to other groups. A purely abstract kind of syllable is presented by Fudge (1969), who considers several possible structures, and selects the one given in Figure 2. Places (1,5) are filled by true consonants, and (2,4) by /l,r,w/ and the homorganic nasal /N/, and the vowel occurs at place (3). Place (6) deals with the final consonant of morphologically derived syllables like helped or dogs.

Figure 2

One of the structures which Fudge rejects deserves further attention, and is reproduced here as Figure 3.

Figure 3

Fudge remarks (p272) that Figure 3 "implies that there are two types of Coda (non-word-final, in which place 6 is not used, and word-final)". This describes the state of affairs accurately, and is a reason for adopting Figure 3, not for rejecting it. Fudge needs to ignore place (6) for the formulation of his co-occurrence rules, and this can be done simply by leaving morphologically derived syllables out of consideration.

Fudge's second objection (p272) is that Figure 3 "links the normally morphological place 6 too closely to the Coda". There are a number of reasons for treating it as actually part of the coda.

First, the phonetic forms of the two commonest terminations (in cats/dogs, worked/slaved) depend on the preceding consonant in the coda. Less commonly, place (6) will determine the quantity of a preceding segment in the coda, e.g. warmth, or learnt as opposed to learned /lɔnd/. Places (4,5) and (6) cannot be treated as independent of each other.

Secondly, (6) is rhythmically part of the coda, and place (6) has the same influence on preceding segments as place (5). Exceptions are found in some Scots and Ulster dialects which distinguish tide with place (5) from tied with place (6), or greed from (a)greed. To account for the rhythm of these dialects, one has to postulate two distinct types of coda.

Thirdly, (5) and (6) must be taken together to define acceptable clusters in loan-words. For instance, text is modelled on, say, waxed /wɛks-t/, and Ritz on, say, bits /brɪt-s/. The new cluster is treated as place (5) and can take a termination, e.g. texts /tekst-s/, even though the cluster /ksts/ would not be found in native words.

Fourthly, the use of the term rhyme suggests a link with literary schemes. "Alliteration" involves the repetition of the onset, or at least place (1), and "assonance" the repetition of the peak. "Rhyme" is the repetition of the rhyme of Figure 3 rather than Figure 2, so that mist/missed, or lift/sniffed are perfect rhymes. More complicated schemes used by Hopkins involve repetition of onset and peak, or of onset and coda. English verse structure thus confirms the distinction of onset and rhyme, and of onset peak and coda, presupposing (6) as part of the coda.

Fifthly, Figure 3 reproduces for the syllable exactly the same structure as the higher level rhythm units given in Figure 1. Even the details are similar: more than one element can occur in the proclitic onset position, or in the enclitic coda. The possibility is opened up of tracing the pattern of the rhythm unit down to individual segments. This is particularly interesting, since Fudge's phonology is entirely abstract, and his immediate problem in investigating syllable structure was quite unconnected with rhythm.

#### 11. Segment Quantity

If English stress was exactly isochronous, it would follow that syllable length was independent of the number or type of segments it contained, and that the length of individual segments varied accordingly. But just as the isochronous stress theory has had to be modified for higher levels of rhythm, so it must be modified here. O'Connor (1968) has demonstrated that syllable length varies with the number of segments; the type of segment is probably important too. For instance, the vowel of card is very much longer than /ɪ/ in kit, and although /t/ may be longer than /d/, it is by no means certain that it fully compensates for the difference in vowel length.

At these lower levels of rhythm, any pattern which the speaker might be said to be aiming at is seriously distorted by the minimum time required to produce segments and combinations. Thus the addition of /s/ to /sekts/ to form /seksts/ (O'Connor, 1968:4-6) increases the total time much more than the added /k/ of /sekts/ as opposed to /sets/; this may well be due to the

intrinsic difficulty of pronouncing /ksts/, rather than to any pattern or lack of pattern specific to English.

The syllabic onset corresponds to the proclitics of higher levels, and like them it tends to be rushed over and takes what time it must. Its total length depends on the number of segments in it, but the more segments there are, the shorter each one is. In the series rye - pry - spry, for example, /spr/ is audibly longer than /r/ of rye, but the individual segment /r/ of rye is longer than the segment /r/ of spry.

The coda corresponds to enclitics and varies systematically in length according to the length of the peak. The conditioning factors are the grade and possibly inherent sonority of the vowel, and the type of coda; the phonological pattern may be subsequently distorted by the number of segments in the coda, so that the vowel is shorter relative to the coda in colds or sixths than in coal or sick.

The coda is strong if it contains a voiceless consonant, and weak otherwise, e.g. width has a strong coda since it contains voiceless /θ/, while wide has a weak coda, containing only voiced /d/. In general, a strong coda is relatively long, and a weak coda short. In the peak, a full grade vowel is relatively long, and a normal grade or reduced vowel short. The syllabic rhyme is accordingly long-short if a full grade vowel is followed by a weak coda, as in heave or hard, and short-long with a normal grade vowel plus strong coda, as in lip or cat. Rhymes in which both peak and coda tend to be long, or both tend to be short, vary from one dialect to another and from vowel to vowel.



Vowel length in RP depends to some extent on inherent sonority. The grade of close vowels has less influence than the type of coda, so that the vowel of bid is longer than the /ɪ/ of bit, and the vowel of beat considerably shorter than the /i/ of bead. In fact, coda length may so override vowel length that the full vowel of beat is actually shorter than the normal grade of bid. An open vowel, on the other hand, tends to be long if it is full grade or if it is followed by a weak coda. In the series cot - cod - cart - card, cot is regularly short-long and card long-short; the full vowel of cart takes precedence over the strong coda, and is almost as long as in card, while the weak coda of cod may allow considerable lengthening of the normal grade vowel. Lengthened /æ/ is particularly noticeable before nasals, e.g. jam, man, and in a number of words like bag, mad; many speakers have a longer vowel in the proper name God than in the common noun god, so that God [gɔ:d] may be almost identical to guard [gɑ:d]. Vowels can also vary in length before plosives and fricatives, so that /e, æ, u/ can be longer in guess, mass, cough than in get, mat, cop; lengthened /e/ is particularly marked in the isolated example yes. Lengthening of /æ, u/ has in the past led to the recategorization of these vowels as full grade /a, o/ as in laugh, bath, off etc.

Grade is only one of a number of factors influencing vowel length in RP: its influence may be markedly less in some Scots and Ulster varieties, which rely on vowel height and type of coda, and possibly the distinction between peripheral and centralized vowels. In Ulster Scots, vowels are long before morphological endings and before voiced fricatives, but may be short otherwise, e.g. /i/ is long in (a)greed and grieve but short in greed.

In sharp contrast to RP and Scots and Ulster English is a Northern English type, which is heard in the area delimited by Lancaster - Leeds - Sheffield - Manchester and probably outside it. In this type, vowel length is almost entirely determined by grade, and inherent sonority and coda-type have very little influence. The shortness of normal grade vowels is noticeable in words like bad, jam, God, where RP speakers would lengthen them; normal grade /a, ɔ/ are also retained in bath, off and are phonetically short. Equally noticeable is the length of full grade close vowels as in week, boot where RP speakers would shorten them. The length of full grade vowels also affects words of Class III like Peter, which is long-short, or smoky bacon, which is long-short-long-short and very different from RP. In Northern English, some vowels are distinguished by quantity, with very little difference in quality, e.g. wick/week; bed/bared; pack/park, and the final consonant is much longer after the short vowel than after the long one; a similar situation is found in the Scandinavian languages (Lehiste, 1970:33-4,42), and it is not impossible that Northern English retains Scandinavian influence.

The patterns of peak and simple coda that we have considered so far are distorted by long codas. If a consonant at place (5) is preceded by /l/ or a nasal, then the vowel may be considerably shortened, e.g. in bend or band as opposed to bed or bad; length distinctions are made on /l/ or the nasal rather than the vowel, so that /n/ is longer in bend than in bent, and /l/ is longer in shelve than in shelf. (There are a few exceptions to this, and in

Ulster English the vowel may be long in shelve [ʃe:lv] or band [ba:nd] followed by a relatively short coda). Final voiced consonants are very short after lengthened /l/ or nasal, and voiced plosives are frequently lost in this position; e.g. /b/ is lost in lamb, while /p/ is retained in lamp, and most dialects drop /g/ in sing while retaining /k/ in sink. Some dialects also drop /d/ in sand, hand or old.

Quantity differences before voiced and voiceless codas contribute to the distinction between "voiced" and "voiceless" consonants; that is, they realize what is phonologically a segmental, rather than a strictly rhythmical, pattern. There is another source of instability in codas, and in this case a rhythmical pattern is traditionally interpreted in segmental or phonemic terms. The coda is in a sense "enclitic" to the peak, and the consonant at place (4) is frequently the first of a sequence of enclitics; it tends to lose its segmental identity, especially when it is short in a strong coda. In the dialects of South East England, /l/ is vocalized to form a diphthong with the preceding vowel, e.g. milk [mɪɔk], and in some American varieties a nasal can form a nasalized vowel with the preceding vowel, e.g. can't [kɑ̃t]. By far the commonest case is that of /r/, which in many dialects combines with the preceding vowel to form a whole range of full vowels, diphthongs and triphthongs.

## 12. Syllabic Peaks

The peak may contain a single vowel element, i.e. a monophthong, or it may contain several elements. In order to

account for the relations among elements, we must treat the peak - rather surprisingly perhaps - as an independent rhythm unit on the next level. The structure of the peak is given in Figure 4.

Figure 4

Monophthongs are elements at place (2), which is the peak of the vowel unit. "Rising" diphthongs occur at (1,2), and "falling" diphthongs at (2,3). Place (1) is not much used, since apart from /ju/ as in news, beauty, English diphthongs are of the "falling" type. Triphthongs normally occur at (2,3,4), although (1,2,3) is occasionally heard, e.g. the Scouse vowel in news [nj#uz]. Four place vowels (tetraphthongs?) are extremely rare, but not unknown: an example is one of the older Scouse vowels in a word like pure, namely [pj#wɛ].

A feature of RP-type diphthongs is that prominence is concentrated on one element (Jones, 1960:58-9; 1954). The element at place (2) is more open, i.e. it has greater inherent sonority, so that RP diphthongs are typically "closing" as well as "falling". Exceptions to the general rule are /re,ve/, where /e/ is more open than /r,u/ : these are made to conform by treating /re/ as a "rising" diphthong, e.g. [næɪ `dʒe:] or [ˈhje: .hje:] 'my dear', 'hear! hear!', and by lowering the first element of /ve/ to [ɔ], e.g. [ʃɔe, ʃɔ:] 'sure'. A similar development has given rise to the alternative pronunciations [jre, je:] for 'year'.

Secondly, place (2) attracts length, and in particular the extra length before a weak coda, e.g. RP [lɔ:t, lɔ:ʊd; mɛ:t, mɛ:ɪd];

it is also long in an open syllable, e.g. [ne:u; ðe:e] 'no', 'there'. Some Northern varieties which make little difference in monophthongs before strong and weak codas, actually make a greater distinction than RP in the case of diphthongs: place (2) is longer than (3) before a strong coda, e.g. [fe:rt, fa:rf, ke:vt] 'fate, five, coat', but (2) is even longer, and (3) even shorter (marked [ \* ]), before a weak coda, cf. [fe::fd, fa::fv, ke::vd] 'fade, five, code'. Place (3) is so short relative to (2) that these vowels are normally interpreted as monophthongs.

Thirdly, the quality of (2) is made clearly, and transitions to it are rapid, and those away from it tend to be slow. Place (1) may be reduced to a vocalic glide, as in new /nju/ or even influence /'inflwens/, where two syllable peaks coalesce in a rising diphthong; /j/ readily assimilates to a preceding consonant in the syllabic onset, e.g. [tʃun, keu, cu] 'tune, queue, Hugh'. The quality of (3) may not be properly reached at all, e.g. [hæe, heeo] 'high, how'.

Finally, place (2) has the peak of loudness and pitch prominence.

The concentration of prominence on (2) and the lack of prominence on (3) leads historically to the loss of (3) altogether. Old English spellings like stan, stream 'stone, stream' represent different stages in the monophthongization of /ar, au/. In Middle English the vowel of day /ar/ merges with the lengthened /a/ of name, and daughter loses its /u/ element. In the shift of long vowels, /i/ and /u/ have prominent starting points which are progressively opened to /ai/ and /au/; the /r/ element subsequently

tends to be lost in dialects as far apart as North England, New Zealand and parts of the U.S.A, and /u/ is weakened or lost in the South East, and in the traditional rural speech of West Yorkshire and South Lancashire. The pattern of contemporary RP diphthongs would thus appear to be of considerable antiquity.

Prominence is similarly concentrated on the first element of triphthongs - which occur before weak codas or in open syllables - and the first element is typically at place (2). The time for the "enclitic" elements at (3) and (4) is very short: according to the general pattern of the rhythm unit (3) is weaker than (4), and this is reinforced by the greater inherent sonority of /e/ at (4) than of /ɪ/ or /u/ at (3). In addition, the slow transition away from (2) makes it less likely that the quality of (3) will actually be reached. All these patterns combine to eliminate (3) so that the triphthongs are reduced to diphthongs, e.g. in tire /tairə/ becomes /tae/, and in tower /taue/ becomes /tce/. Triphthongs formed by the coalescence of a stressed vowel with an unstressed one are similarly reduced, e.g. /pleɪə/ to /plee/ 'player', /məʊə/ to /mee/ 'mower', /ˈpeʊtrɪ/ to /ˈpertrɪ/ 'poetry', and possibly even /əˈlaʊt/ to /eˈlart/ 'allow it'. The last two, however, are di-syllabic.

The vowel unit is organized rather differently in some dialects of the 'Celtic fringe, and do not fit into either the "rising" or "falling" category. The /ɪu/ diphthong used by many Welsh speakers in /nɪuz/ 'news' frequently appears to be perversely "rising" and "falling" at the same time, and Anglo-Irish /əʊ/ as in /əʊt/ 'out' is quite different from the RP vowel of cat. Middle class Liverpoolians

use a diphthong in no which begins near central /e/ and moves towards /ɔ:/; and yet they sound distinctly Liverpudlian. Before weak codas, as in nine, nose, there may be a trough of prominence between the elements of the diphthongs, so that at the phonetic level it might be necessary to treat them as di-syllabic and hence not strictly diphthongs at all (cf Jones, 1960:58).

On closer inspection, however, the features of prominence on either side of the trough prove to be of different kinds. Instead of having all prominence concentrated on one element, some is placed on the element at (2) and some at (3). Place (2) is the centre of pitch prominence, it usually has greater inherent sonority, and tends to be louder, while (3) has prominence of quality and quantity. Whereas in RP the transition from (2) to (3) is slow, and the quality of (3) may not be properly reached at all, in this type the transition is rapid, and the quality of (3) is made clearly; in fact, when the diphthong is short before a voiceless coda, the quality of (2) is often blurred and centralized, e.g. /waɪvz/ 'wives' but /weɪf/ 'wife', or /ˈhaʊzɪz/ 'houses' but /heʊs/ 'house'. And whereas in RP (3) is never longer than (2), this is frequently the case in the "Celtic" type, especially before a weak coda. The most important kind of prominence, namely pitch prominence, always falls on (2), the "peak" of the vowel unit, which might be described as the "stressed" element: a prominent place (3) might be said to be "focused". Stress and focus coincide in RP, but they are separated in "Celtic" diphthongs.

In the latter type, relations between (2) and (3) parallel to a remarkable degree those of stressed syllable and enclitic. In Scouse, for instance, there is an incomplete rise-fall tone

in which the low level or low rise of the stressed syllable contrasts with the mid pitch of the enclitic, e.g. /su'me/. At the level of the vowel unit, low pitch on (2) contrasts with mid pitch on (3), as in /edəʊnə'u/ 'I don't know'. The enclitic of words of Class I is longer when it contains a weak coda, e.g. summers, than when it is an open syllable, cf summer; similarly the second element of Scouse /cu/ is longer in nose than in know.

In the case of triphthongs, place (2) is stressed, and focus is put on (3,4) together. The final "enclitic" at (4) attracts more prominence than the first at (3), especially when it has the greater inherent sonority of /e/ as opposed to /i/ or /u/ at (3). Place (3) is reduced to a mere glide /j,w/ to (4), and (3,4) may be heard as a separate phonetic syllable, e.g. /təɪə, təwə/ 'tire, tower' become /təjə, təwə/. Apart from the fact that (2) may be centralized /tejə, təwə/, these triphthongs pattern like words of Class I. As one might expect, the vowels of adjacent syllables do not readily coalesce, so that e.g. Scouse /'pɔwɪtri/ 'poetry' is markedly different from RP /'peɪtri/.

This splitting of the triphthong into two units contrasts with the RP reduction. It is possible that there is some connection between this and the regional tendency to split a single word-stress unit like secretary into /'sekre,təri/ and the RP reduction of the unit to /'sekretri/.

### 13. Conclusion

The present study grew out of an attempt to describe the speech of Liverpool.<sup>10</sup> It was clear from the beginning that Scouse rhythm was very different from RP, but how to deal with



rhythm was a problem in itself. Abercrombie's theory was taken as a starting-point, but as more and more exceptions were found, and difficulties encountered, it was found necessary to incorporate the theory of isochronous stress and its many corollaries in a more flexible, complex and comprehensive framework.

It is generally agreed that English rhythm is extremely complicated. The complication derives from the mutual influence of a number of components which are themselves relatively simple. The most important is the rhythm unit which operates at every level from the highest to the minutiae of triphthongs, although the pattern of any higher level unit depends on the number of lower level units it contains in clitic position. In addition, a unit is complicated by grade, coda-type, and the physiologically required minimum time.

We began with higher level stylistic differences, and ended with dialect differences at the lower levels. A hypothesis which is at least worth consideration is that all varieties of English are similar above the level of the word-stress unit, and that differences are restricted to this level and below. Sound change is similarly restricted, and many changes which are apparently unmotivated when analysed in segmental terms prove to be very simple rhythmical developments. Rhythmical analysis can also account simply for a number of odd facts and observations which are familiar to phoneticians but which do not belong anywhere in particular in more conventional kinds of phonological description. Details of segment quantity, for example, are often to be found haphazardly listed under "allophones", while vowel grade is dealt

with simply as a case of phonemic distinction.

Finally, let us return to the problem with which we began, namely the definition of speech rhythm. Any similarity to other kinds of rhythm is confined to the higher levels, and there is nothing in music or the rhythms of nature that the distribution of prominence among the elements of vowels can be compared with. Speech rhythm must be described on its own terms: the layering of units of different size makes it more complex than other rhythms not only in degree but in kind. It is necessary to abandon false analogies if the full extent of rhythmic patterning in speech is to be recognized.

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1. It is precisely because tapping allows a wide margin that it makes an excellent pedagogical device: the only danger is that a student may interpret isochrony too literally.
2. This is of course the problem in analyzing (4); the syllables with an intermediate degree of stress could be classed as either "stressed" or "unstressed".
3. Here and elsewhere the apostrophe is omitted where it could be confused with the raised dash marking a level tone.
4. Other marks for stress and intonation are based on Kingdon's tonetic stress-mark system.
5. Consequently, it is the position of word-stresses, and not the rhythm, which distinguishes an iambic pentameter from an arbitrary arrangement of ten syllables.
6. Syllabicity is also involved, e.g. police /pe`lis/ readily loses its first syllable and becomes /`plis/ in rapid speech.
7. Halle and Keyser (1971) investigate stress in lexical items and the structure of verse, without dealing with rhythm. Verse without rhythm is surely like painting without pigment.
8. Before I had sorted out the rhythm unit, grammar and grade, I wrongly assumed that her was always enclitic, and that them was always proclitic.
9. The double colon does not mark the vowel element as over-long in any absolute sense, but only relative to the second element.
10. In preparation.

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Figure 1

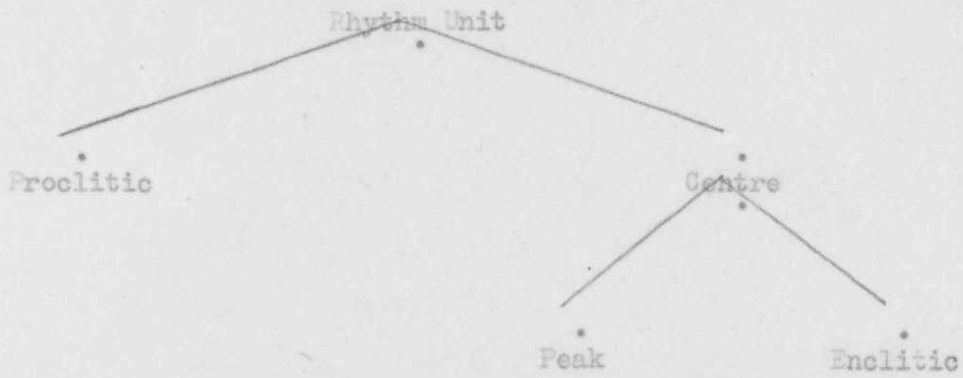


Figure 2

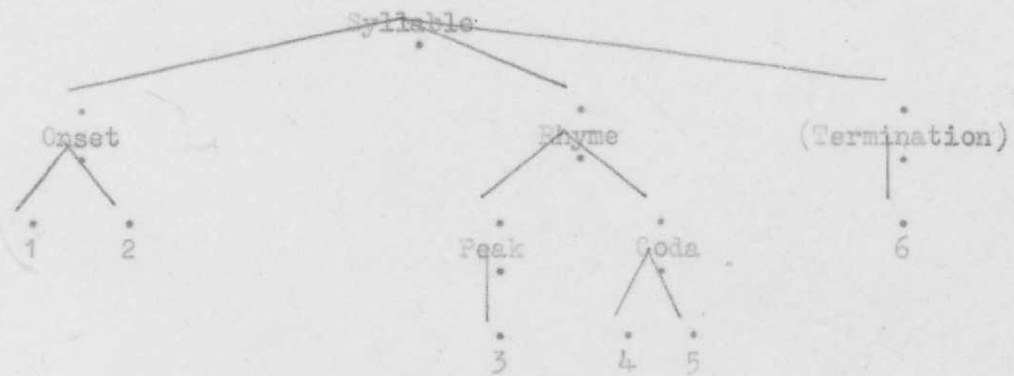


Figure 3

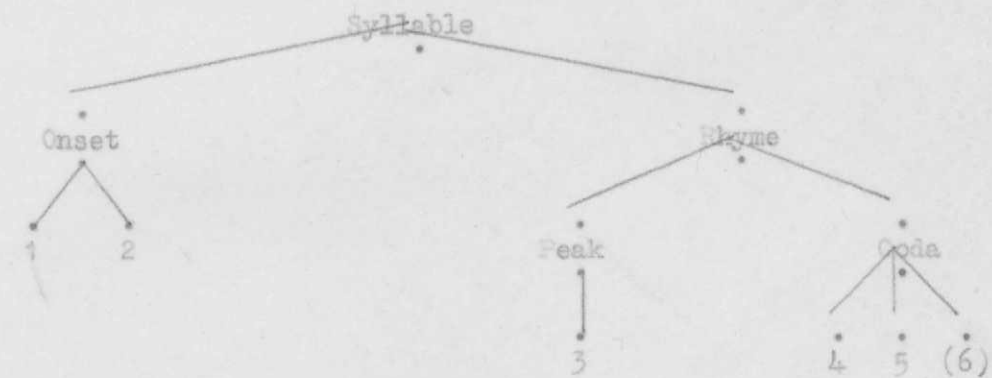


Figure 4

