

## Steam, Streets and Slang

Of the many revolutions in the eighteenth and nineteenth centuries, the British Industrial Revolution had the greatest influence of all. It changed history utterly. It harnessed and mechanised nature, summoned up an army of inventors whose effect and whose imagination outsoared the makers of the Italian Renaissance and it has both liberated and disciplined millions of men, women and children everywhere. Cities and industries took over from rural dwellings and the countryside: the majority of the population of the world finally began to leave the land after one hundred to one hundred and fifty thousand years of cleaving to it. What would once have been thought of as magic – machines which raced on iron tracks, sound travelling through the air, bulbs which shone brightly all night – and what would have been considered the privilege and preserve of the wealthy – warmth, choice of clothes, travel – became commonplace in fully industrialised countries and available to vast numbers. The Industrial Revolution both exploited and educated the working masses; it changed the possibilities of life. And English met and responded to a challenge which was to make it the global language of economic progress.

In 1756, Professor John Robison went to see James Watt, the inventor of the steam engine, the man whose name marks the language as the unit of power. Robison was anxious to winkle out the latest news from the celebrated engineer and Watt was anxious not

to be drawn. In a letter after the meeting, Robison describes the encounter ruefully, but in the course of that letter, the following words are recorded, some new, some revitalised for industry: 'condenser' (new), 'vacuum', 'cylinder', 'apparatus', 'pump', 'condensation', 'air-pump', 'steam-vessel' (new), 'reservoir' (new), 'eduction pipe' (new), 'suck-pipe' (new), and 'siphon'.

Just over half a century later, in 1851, at the Great Exhibition, the English language showed the world what it had made of the machine age. A new vocabulary was on display. The 'trade terms' denigrated by Johnson and outside the ken of his contemporaries, now powered the language as emphatically, I would say, as Tyndale's Bible. The latter had put the Old Faith into English; the former put English at the service of the new and revolutionary Works. The inventors had a wonderful time; they smuggled in familiar terms, they went back when they could to analogies from one of the most formative springs of language for early modern industry – clock making – they looked into the ancient world, the classical world. What they had discovered was a new continent which needed names, directions, signposts, markers, specific locations everywhere, and the language rose to it. The term 'world's fair' entered into the language.

New words had already begun to establish themselves before the cataloguing of 1851. There was 'spinning-jenny', 'donkey engine' (leading to donkey jacket, because donkey engines were usually on board ship and very cold to work) and 'locomotive' (reaching back to Aristotle). Men who had worked as clockmakers were the first to work on Hargreaves' spinning-jennies and they brought their language with them – 'the wheels' they used were referred to as such with 'teeth', 'pinions', 'leaves', 'pivots' – all from horology. The agricultural labourers who came to the mills also brought their own terms, usually based on the shape of things – 'beetles' for hammering, 'rams' for extra heavy hammering. 'Pig-iron' came from the shape made by the casting of molten iron into little blocks which reminded the agricultural men of a sow being suckled by piglets. 'Horsepower' had to be invented as an aid to those who wanted

to buy a steam engine and needed to know how many horses it would replace.

These are some of the words from the catalogue of the Great Exhibition, making their first appearance here. Some are plain English, others are coinages from other languages: 'self-acting mills'; 'doubling machines'; 'power looms'; 'electro-plating'; 'centrifugal pump'; 'cylindrical steampress'; 'hair-trigger'; 'high-pressure oscillating steam-engine'; 'lithograph'; 'lorry'; 'anhydrohepseterion' (a machine for stewing potatoes in their own juice).

It is difficult now to realise the excitement and pride in British engineering which the Great Exhibition brought to the country. An extract from the journal of Queen Victoria after her visit gives us a taste of it:

Went to the machinery part, where we remained two hours, and which is excessively interesting and instructive . . . What used to be done by hand and used to take months doing is now accomplished in a few instants by the most beautiful machinery. We saw first the cotton machines from Oldham . . . Mr Whitworth's planing of iron tools, another for shearing and punching iron of just ½ inch thick, doing it as if it were bread! . . . What was particularly interesting was a printing machine on the vertical principle, by which numbers of sheets are printed, dried and everything done in a second . . . We saw hydraulic machines, pumps, filtering machines of all kinds, machines for purifying sugar – in fact every conceivable invention . . .

Queen Victoria's journal goes on and provides an excellent and enthusiastic review of the exhibition from a surprisingly diligent and, I think, typically amazed visitor.

The scientific and technical vocabularies grew enormously. By the end of the seventeenth century a great number of words had been introduced for basic anatomy and mathematics. From the beginning of the nineteenth century there was a surge in chemistry, physics and biology. 'Biology' itself came in in 1819, 'petrology' (1811), 'morphology' (1828), 'taxonomy' (1828), 'palaeontology' (1838),

'ethnology' (1842), 'gynaecology' (1847), 'histology' (1847), 'carcinology' (1852). In chemistry, 'tellurium' (1800), 'sodium' (1807), 'platinum' (1812), 'silicon' (1817), 'caffeine' (1830), 'chloroform' (1838), 'cocaine' (1874). In physics, 'sonometer' (1808), 'centigrade' (1812), 'altimeter' (1847), 'voltmeter' (1882), 'watt' (1882), 'electron' (1891). In biology, 'chlorophyll' (1810), 'bacterium' (1847), 'spermatozoid' (1857), 'symbiosis' (1877), 'chromosome' (1890), 'photosynthesis' (1898). In geology, 'jurassic' (1831), 'cretaceous' (1832), 'bauxite' (1861). In medicine, 'gastritis' (1806), 'laryngitis' (1822), 'kleptomania' (1830), 'haemophilia' (1854), 'diphtheria' (1857), 'claustrophobia' (1879) – a term which might be transferred to the sensation in the mind caused by being so crowded in by lists of words.

English went back to Latin and Greek in many of its descriptions of the new, often via the French: 'oxygen', 'protein', 'nuclear' and 'vaccine' did not exist in the classical languages but their roots are there. Some did come straight from Latin, in the nineteenth century, like 'cognomen', 'opus', 'ego', 'sanatorium', 'aquarium', 'referendum' and 'myth'; or from Greek, such as 'pylon'. It was considered good practice to use parts of the classical languages: for example, anthropo-, or bio-, neo-, poly-, tele- as prefixes; or, as suffixes, -glot, -gram, -logy, -morphism. A great number of words found a use for the ending -ize.

Part of the fun of invention was to find the name. It is interesting how very few times a proper name was used – compared with, say, the British frontiersmen in the American west who freckled the landscape with names from wives, pals, relations, and names from the old country. Scientists either through diffidence or wishing to claim a distinction for their discipline which matched anything in antiquity, tended to root around in the past. So when John Arnold made his Chronometer Number Thirty-Six (as blank a title as anything in Bach), it would once have been called a 'timekeeper'. But together with the Hydrographer of the Navy, Alexander Dalrymple, he reinvented 'chronometer' (dormant for about a hundred and fifty years) from 'chronos', meaning time, and 'metron', a measure.

It has been estimated that between 1750 and 1900 half the world's

published papers on mechanical, industrial and scientific advances were written and distributed in English. When James Watt needed to pursue his work in mathematics he had to learn and read French and Italian. Now English was the key tongue. Steam technology had revolutionised printing and so information could spread faster and further – telegraphy and telephony – than ever before. Moreover, the language became a magnet for European scientists who came west, to Britain, to pursue their work: the language delivered, among others, Marconi from Italy, Siemens from Prussia and Marc Isambard Brunel, father of Isambard Kingdom Brunel, from France. In the first part of the nineteenth century these small islands had become the world's leading trading and industrial nation, 'the workshop of the world', and the language, built over centuries, supple in all the arts of absorbing, stealing, inventing and restructuring, had matched the economic explosion. The expanded English language, a product of the Industrial Revolution, became an engine which drove it forward.

One aspect of English which has been a recurring feature in its history is the way a word will be adapted from one age to another so that a 'chip' can go from wood to silicon, include golf and a slight and feature as fifty per cent of a British diet. In this boom time for words, the old were often and again recalled to do duty as the new. English had no pride in this. When stuck, it just grabbed what was handiest and let posterity sort out any resulting confusions. 'Coach' is one of the simpler ones. It was part of a horse-drawn carriage in the sixteenth century, became part of a steam-drawn vehicle in the nineteenth century, a bus in the twentieth century, a description of your status on an aeroplane, besides, of course, being the name of a person who tells more talented people what to do, especially at sport. It seems to bear these meanings without showing too much strain.

A word can be a history. 'Industry' has been part of recorded English since 1566. 'Industrious', meaning either skilful or assiduous, was also there in the sixteenth century, as was 'industrial', which meant the distinction between cultivated and natural fruits. It was not until the late seventeenth and eighteenth centuries that 'industry'

began to assume a modern meaning. In 1696, there was mention of a 'College of Industry for all Useful Trades and Husbandry'. But the most widespread eighteenth-century use was in 'House of Industry', which meant the workhouse where forced application and useful work came together. Adam Smith wrote of 'funds destined for the maintenance of industry' in 1776 and by the mid nineteenth century this use was common. Disraeli spoke of 'our national industries' (1844); Carlyle talked of 'Leaders of Industry' (1843). There were other developments from the root of the word. In the 1830s, Carlyle introduced 'Industrialism' to indicate a new order of society; John Stuart Mill used 'Industrial Revolution' in 1848. The word 'industry' grew as industry itself flourished.

'Class' is another word whose passage is worth tracking into the Industrial Revolution and from there into the late nineteenth and twentieth centuries where it saturated the pages of so much that was written about society. The different point here is that it did not change its meaning all that much despite great changes around it.

It derives from 'classis', Latin, a division according to property of the people of Rome. Then it became a term used in Church organisation, which was extended to describe other divisions or groups. In the seventeenth century in England 'class' acquired a special link with education, from 'classroom' to 'Second Class Honours'. Defoe, in 1705, seems the harbinger of what was to become something of an English (more than a British) obsession, when he writes: 'tis plain the dearness of wages forces our people into more classes than other nations can show.' Today we nod at Defoe but in fact he was before his time. Until well into the eighteenth century, still in the nineteenth and even in some manner in the twentieth century, the most common words were 'rank' and 'order'; 'estate' and 'degree' were more common than 'class'. All those terms related to birth.

What we see as 'class' relates to a group within society. It is a regression to the Latin to describe the way in which society now chose to describe itself. Placing by birth diminished in importance. Although it has not yet disappeared it is twilight to the noon blaze

of Chaucer, Shakespeare and Dr Johnson's day. There is a different sense of society, which the Industrial Revolution midwived.

Like many words describing the complications of society itself, class as we know or knew it took its time to establish itself. 'The Lower Classes' was used in 1772; 'lowest classes' and 'lowest class' were 'common' from the 1790s. 'Middle class' was recorded in 1756 and by the 1840s it was as widely used a term as 'lower classes'. From the mid nineteenth century it was full industrial steam ahead to 'lower middle class', 'upper middle class', 'lower working class', 'upper working class', 'skilled working class', 'upper class', 'middle middle class', and those who would be unclassifiable, royalty, the aristocracy and the company of artists, vagabonds, thinkers and Celts who often escaped the bondage of these scalpelled classifications. Today 'class' is losing its old certainty and its old sting.

Awareness of class brought accent and pronunciation on to the stage more acutely than ever before. Cockney is a useful example here, partly because by the end of the eighteenth century London was the biggest metropolis in England. Its population was to become four and a half million by the end of the nineteenth century. (In Elizabeth I's reign, the population of the entire country was less than that.) Also rates of literacy were higher in London than anywhere else: seventy per cent of servants could sign their name by 1700; ninety-eight per cent of all books printed in English were printed in London; over half the booksellers were established there. And the Cockney dialect has a fascinating history and in Charles Dickens a genius to give it lasting literary life.

It was, of course, despised by those who wanted to order English into line. In the eighteenth century it was totally discredited, thought of as the language of crime, poverty and ignorance, useful only as comic relief in the less distinguished dramas on the London stage.

In 1791, John Walker, in his *Critical Pronouncing Dictionary of the English Language*, pronounced on it very critically indeed. 'Most [barbarous],' he wrote, 'is the cockney speech of London.' He is very put out that the Cockneys have not learned from their betters in



London; indeed they have made so little of this privileged proximity that their regional tongue is 'a thousand times more offensive and disgusting' than differences in Cornwall, Lancashire and Yorkshire.

In *Piers Plowman* (1362) 'cockeneys' means eggs, small and misshapen as if laid by a cock. In Chaucer, 'cockney' is a mother's darling. By the early sixteenth century it meant people brought up in cities and ignorant of 'real life'. By the early seventeenth century, this low value applied to only one region, 'the Cockney of London' (1611) or the 'Bow Bell Cockney' (1600) – noting that the true Cockney was one born within the sound of the Great Bell of Bow in the City of London. 'Cockneys' soon became Bow Bell Cockneys with, it was said, no interest in anything not on their own patch of ground.

John Walker made them a target. He stated, with contempt, that Cockneys, 'the lowest only', pronounced words like 'fists' and 'posts' in two syllables – 'fistiz' and 'postiz'. The 'v' did the service of the 'w' and vice versa: 'wine' and 'veal' became 'vine' and 'weal'. The 'h' was a culprit once again: no pronounced 'h' in 'while' meant it was indistinguishable from 'wile'; and sinking the 'h' was endemic – 'art' for 'heart', 'arm' for 'harm'. 'F' replaces 'th' as in 'firty' (for 'thirty'), and 'fahsn' (for 'thousand'); and it's 'bovver' not 'bother', 'muvver' not 'mother'. The charges pile up: 'yewmour' for 'humour', 'tewwim' for 'tell him'. The grave crime of the double negative appears ineradicable. 'There ain't nuffink te see.' Question tags litter the sentences: 'That arright then?' 'Ain't it?' which eventually becomes 'Innit?'.

Some writers seized on this with the enthusiasm of Mark Twain across the water. Henry Mayhew, for instance, in his *London Labour and the London Poor* interviewed many of Walker's criminally tongued Cockneys and came out with phrases we now look on with nothing but perplexed pleasure. A tailor, for instance, who issues bills, tells him:

Mr— nabs the chance of putting his customers awake, that he has just made his escape from Russia, not forgetting to clap his mawleys upon

some of the right sort of Ducks to make single and double backed slops for gentlemen in black, when on his return home he was stunned to find one of the top manufacturers of Manchester had cut his lucky and stepped off to the Swan Stream, leaving behind him a valuable stock of Moleskins, Cords, Velveteens, Plushes, Swandown &c, and I having some ready in my kick, grabbed the chance, and stepped home with my swag and am now safe landed at my crib.

Mayhew is full of such meat. It is fortunate for us that London as well as claiming one of the greatest social historians in the mid nineteenth century also claimed one of our finest writers – many think our greatest novelist. Charles Dickens was not the first to use speech as a sign of class but he did it so memorably! His genius in this area was to turn John Walker's discredited slum talk into literature. He could and did indicate illiteracy but did not withhold the generosity of his respect for and attention to his characters and their way of talking. An epigraph for Dickens' use of 'lower class' especially London and Cockney speech can be found in *Our Mutual Friend*:

The visitors glanced at the long boy, who seemed to indicate by a broader stare of his mouth and eyes that in him Sloppy stood confessed.

'For I ain't, you must know,' said Betty, 'much of a hand at reading writing-hand, though I can read my Bible and most print. And I do love a newspaper. You mightn't think it, but Sloppy is a beautiful reader of a newspaper. He do the Police in different voices.'

That last sentence could stand as Dickens' credo. His phenomenal success – the penny edition of *Oliver Twist* sold 150,000 in three weeks – was helped by his experience as a journalist. He observed the London scene and perhaps his shorthand helped him catch its phrases. His mimicking skill honed in amateur dramatics meant that direct speech often carried characterisation and he loved the language of 'the lowest classes'. He loved the speed and accuracy with which it 'placed' people.

In *David Copperfield*, for instance, the linguistic scholar Lynda

Mugglestone, who is a virtuoso on 'h', points out that Clara Peggotty's accent is conveyed by her dropping the letter 'h': this places her immediately as somebody inferior. "There's the sea; and the boats and ships; and the fishermen; and Am to play with" – Peggotty meant her nephew Ham – but she spoke of him as a morsel of English grammar.'

'H' dropping, according to Alexander Ellis in 1869, was 'social suicide'. Yet Lynda Mugglestone picks out the most famous 'h' dropper in all literature – Uriah Heep – and here Dickens uses the grammatical 'error' as a way to alert us to the uncomfortable, hypocritical nature of the man. "I am well aware that I am the 'umblest person going," said Uriah Heep modestly, "... and my mother is likewise a very 'umble person. We live in a numble abode, Master Copperfield, but have much to be thankful for. My father's former calling was 'umble.'"

Interestingly, again spotted by Lynda Mugglestone, when Heep reveals himself in his true arrogance, the 'h', the mark of superior class, the proof of social standing and authority, makes a miraculous recovery: 'You had better not join that gang,' he says. 'I have got some of you under the harrow.'

A lingering myth of English is that the rural poor and the largely rural aristocracy were brothers and sisters under the skin and one piece of evidence is that the aristocrats drop the 'g', as in 'huntin', shootin' and fishin'' as does, say, Mr Peggotty in *David Copperfield*: 'You're a-wonderin' what that's fur, sir ... when I'm here at the hour as she's a comin' home, I puts the light in the winder.' What is overlooked in this cosy comparison is that the duke would recognise Peggotty's origins instantly and vice versa: accent would outclout the dropped 'g'.

Dickens is excellent on phonetic spelling to give a clear indication of speech and so character. Mrs Gamp says 'minnit' not 'minute', 'pizon' for 'poison': while Mrs Crupp has 'spazzums' not 'spasms'. Sam Weller earned immortality with his 'v's and his 'w's. 'And that was a wery partickler and uncommon circumstance vith me in those

days.' But Dickens can be deliberately blind also when a potential genteel hero or heroine becomes involved: Kate Nickleby, a milliner, says 'correctly' 'oblige'; Mr Peggotty used the old and by that time vulgar form 'obleege'. But Kate is a gentleman's daughter and similarly Oliver Twist, though reared in a workhouse, also speaks like the son of a lady, which it transpires he is. Sentiment can outgun genius in Dickens any time he decides the story needs it; and also, he knew that his middle-class or aspiring middle-class readers still loved a lord and lady more dearly as the centre of the book than your common-or-garden creations however lovingly portrayed. And he likes to confuse us: for despite largely holding to the view that speech portrays character, he will still have those of fine speech behaving badly and those of poor speech behaving nobly.

Dickens' mass of characters in their very number and variety express the massing of industry, population, achievement and invention in the nineteenth century. You can use him as a quarry for the speech of the time: equally he can be used to celebrate the fecundity of fictional invention as much as for his vocabulary. The streets and back yards are represented but so are the aspiring parlours and the would-be great houses. And for my generation and possibly others, Dickens was also known to be a writer who had swallowed a dictionary, your own copy of which had to be within reach on first encountering his 'big words'.

It was also the time when slang refused to retreat any more, especially not in London where there were many varieties, such as cant, flash, gibberish, patter pedlars French, slang lingo and St Giles Greek. There was university slang from Oxford and Cambridge: 'wooden spoon' arrived in the nineteenth century – the large spoon was lowered on to the shoulders of those at the bottom of the honours list as they were receiving their degrees; to 'plough' (fail) a paper, to 'floor' a paper (to answer every question), to 'post' (to reject a candidate), to 'spin' (to summon a candidate).

The Cockney rhyming slang was identified by Henry Mayhew in 1851. 'The new style of cadgers' cant is done all on the rhyming

principle.' It became the most relished characteristic of Cockney; its wit and innuendo still give it a life. 'Trouble and strife' – wife; 'apples and pears' – stairs; 'a bull and a cow' – row. And more recently: 'Mars Bar' – scar; 'Tommy Steele' – eel; 'Hong Kong' – pong, and a long tail of ruder rhymes for 'D'Oyley Carte', 'Elephant and Castle', 'Raspberry Tart'; 'Becks and Posh' – nosh. There are what might at a stretch be called classics such as those with which the paragraph began and 'Adam and Eve' – believe; 'Dicky Dirt' – shirt; 'frog and toad' – road; 'tea-leaf' – thief; 'whistle and flute' – suit. On it goes still: 'dog and bone' – phone; 'boat race' – face; 'elephant's trunk' – drunk; 'jam jar' – car.

As the Victorian age hit its stride and fired on all cylinders including the censorious, public language, mainly innuendo and slang, became an enjoyably risky way to tweak noses. Marie Lloyd, racy star of the music hall, whose catchphrase was 'a little of what you fancy does you good', outraged the Watch Committee when she sang 'she sits among the cabbages and peas'. Miss Lloyd changed it to 'she sits among the cabbages and leeks' and there was no problem.

Coded gay content came in. 'Earnest' was slang of the period for 'gay'. *The Importance of Being Earnest*, Oscar Wilde's play, takes on another strand of meaning. There are learned theses about this play which deconstruct it as a perfectly disguised description of the place of homosexuals in Victorian society. Sometimes there seems to be hard proof. Jack and Algernon consume muffins: apparently the brighter portion of the audience would know that 'a muffin' was also a gay man, especially a cute one.

It is tempting to see the nineteenth century as the apotheosis of industrialisation with its multitude of interlocking functions and skills being matched by an increase in classes and in the niceties of a language that had taken yet another great leap forward. Accent and language became a game, sometimes cruel, of fine distinctions which seemed intended to put everyone in his or her place. Like an industrial plant, nothing would be left to chance. George Bernard Shaw put it very clearly in his preface to *Pygmalion*. His Irish prejudice

and his satirical scorn only lightly tincture a fair view of the truth of that time.

The English have no respect for their language and will not teach their children to speak it. They cannot spell it because they have nothing to spell it with but an old foreign alphabet of which only the consonants – and not all of them – have any great speech value. Consequently no man can teach himself what it should sound like from reading it; and it is impossible for an Englishman to open his mouth without making some other Englishman despise him.

Professor Higgins saw English as still the captive of its original tribes. 'You can spot an Irishman or a Yorkshireman by his brogue. I can place any man within six miles. I can place him within two miles in London. Sometimes within two streets.'

And yet, floating above it all is a language which is not Standard Pronunciation, nor anything like Ideal Pronunciation, but it is nevertheless, as Shaw implies in a letter, the ruling tongue. 'It is perfectly easy,' he wrote, 'to find a speaker whose speech will be accepted in every part of the English-speaking world as valid 18 carat oral currency . . . if a man pronounces in that way, he will be eligible as far as speech is concerned for the post of Lord Chief Justice, Chancellor of Oxford, Archbishop of Canterbury, Emperor, President or Toast Master at the Mansion House.'

It was that eighteen-carat voice, on the back of unparalleled industrial wealth, which took English yet more intensively over the globe.