The sound of 2066

A report commissioned by HSBC

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HSBC

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An Introduction

HSBC is launching voice biometrics as an element of its digital banking services.

The system verifies a caller's identity using leading-edge voiceprint technology, allowing customers access to their accounts using a simple universal 'pass phrase'.

As time goes on, voice-activated systems of this kind will be an ever more central part of our lives. 50 years from now, in 2066, we will only rarely interact with machines by pressing buttons, and the keyboard will have become obsolete.

Almost everyone can talk faster than they can type, and talking is the most natural communication system we possess. Speech recognition tools like Siri and Cortana are already part of our everyday lives, but these are only the beginning. Over the next decades the successors to these systems will become ever more reliable and 'smarter', as they take advantage of the boundless potential of the internet to train themselves to anticipate users' needs and to respond efficiently to our commands.

Our current speech technologies perform well under difficult conditions. They can cope with high levels of background noise, or when the speaker has a head cold or a sore throat. Strong regional or foreign accents don't affect their performance because the systems are trained to compensate for the numerous ways in which our speech varies. And impressive as these tools already are, they are improving all the time. In the future, our devices will understand everything we tell them. The way we interact with machines will converge on how we talk to other people, to the point where there will be no obvious differences between the two.

Balthazar Cohen, author of the 'Totes Ridic-tionary', described the internet as the place 'where language goes to die'. In reality it's just the opposite. The web is an inexhaustible wellspring of new words and phrases. Already we see how easily internet-inspired abbreviations like 'LOL' (laugh(ing) out loud), 'FOMO' (fear of missing out), 'FOLO' (fear of living offline), and 'brb' (be right back) have been turned into words (LOL to rhyme with 'doll', 'brb' with 'curb'). These aren't just confined to the speech of the young, either, as shown recently by the jokingly vengeful use of 'LOL' by a Scottish judge as he passed down a prison sentence. Emojis have been embraced as part of written English, to the extent that the Oxford Dictionaries UK Word of the Year in 2015 was the 'Face with Tears of Joy' symbol. We will find ways of integrating them into our speech too. There is even the possibility that in the near future, our computers will themselves invent new words and phrases, ones which we'll start to use ourselves because they seem especially useful or pithy.

We tend to think of computers as things that sit on our desks or that we carry around in our pockets, but they are of course already all around us: in car engines, inside our washing machines, or controlling the heating in our homes. Very soon all these systems will be connected together. The era of the 'internet of things' is all but upon us. Our homes, workplaces and means of transport will be ever more interconnected, with each appliance communicating with the other devices in its local network, and with the wider world via the web. In a sense, we ourselves will become elements of that network, while keeping executive control over the important decisions. Smart technologies will learn and adapt by tracking how we humans change in our preferences and our habits, and because we will give instructions using our voices they must of course keep

pace with changes in our speech and language.

Languages change constantly, and they do so whether or not we want them to. New words replace old ones, grammatical rules arise and fade away, and the ways we pronounce vowels and consonants are always shifting and mutating. English has changed enormously over its 1,500-year history. Even in the last 50 years we have seen big changes in the accents and dialects of the language, including Standard English. This leads us to ask: what will English be like 50 years from now?

In this report, we make a number of predictions about how some key accents of British English might sound in half a century's time. Some of the changes we identify have in fact already started. In other cases we're being more speculative, but by looking at how English has changed over the last 50 years, we can identify patterns that seem to repeat. For one thing, people tend to like to make talking as easy for themselves as they can, but without making life too hard for the hearer. So they knock off sounds at the ends of words ('tex' for 'text', 'vex' for 'vexed'), they simplify complicated sequences of consonants (hardly anyone says 'syoot' for 'suit' any more), and they rub the sharp corners off sounds by making them 'softer'. For example, although we say electric with a hard /k/ on the end, we say electricity with an /s/, and electrician with a 'sh' sound.

Languages also change when they come into contact with one another. English has borrowed thousands of words from other languages: mainly French, Latin and Greek, but there are 'loan words' from dozens of other languages in the mix. For instance, we wouldn't say we'd spilled chutney and shampoo on the veranda of the bungalow without first having borrowed these words from Hindi.

Our speech and language patterns are absolutely central to our individual identities, and we exercise 'consumer choice' over which new linguistic trends we buy into, much as we do when choosing music or clothing. We adopt new ways of saying things because they're fashionable or cool, or because we want to sound like we're a member of a particular group of people. We use language to tell others something about ourselves in a way that costs nothing and is very immediate: uttering just a few syllables can be enough to signal where you come from, and what kind of social groups you identify with or admire. Young people often try very hard to sound different from people of their parents' generation. Using the right sort of words and pronunciations can be an enormously powerful symbol of belonging, of being cool, of having the right sort of knowledge, of being 'now'. However, in time what was once the height of linguistic fashion comes to seem stale, staid, and conventional, and so new trends must be followed by those who want to seem the most up-to-date and street-smart.

We must always allow for the unexpected, too: by 2066 English may have altered in ways we hadn't seen coming. This endless cycle of innovation and renewal is what makes the study of language change so fascinating.
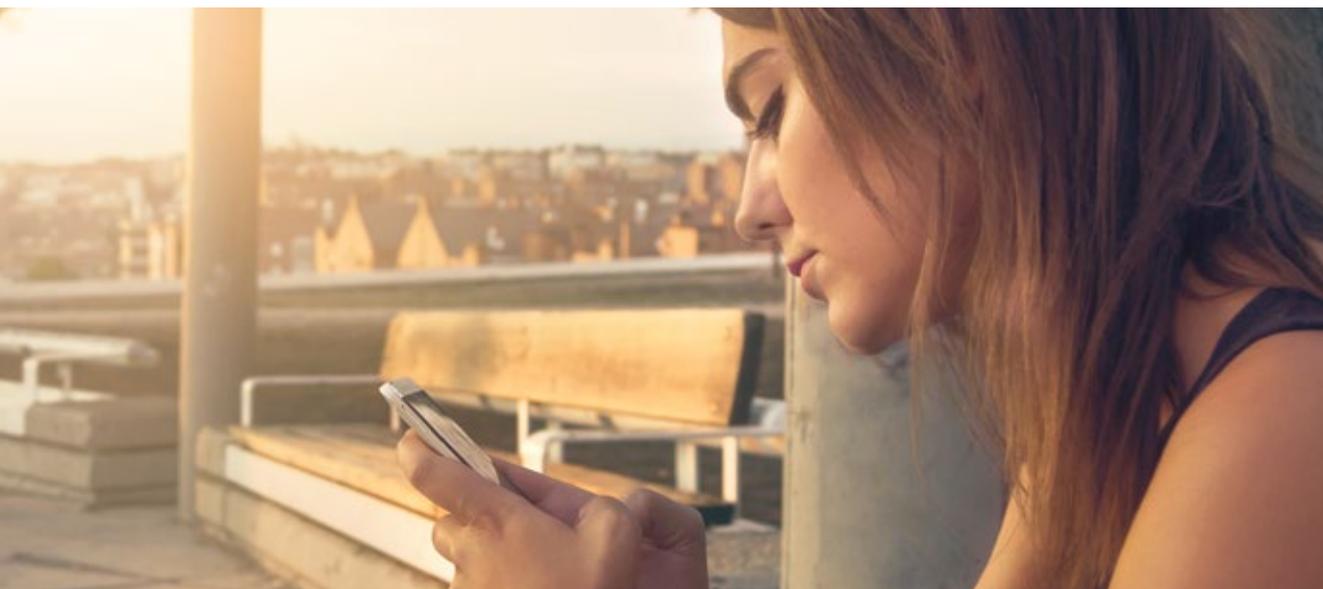
The homogenisation of English?

We can think of the dialect map of the UK as a jigsaw in which the pieces were once very small. Individual districts, towns and villages had their own dialects. Over the last century or so, the jigsaw pieces have grown larger, as dialects have become more focussed on the bigger urban centres such as Newcastle or Manchester. These days it can be harder to tell where someone is from on the basis of his or her speech than it was a couple of generations ago: the dialect distinctions between Yorkshire and Lancashire, or between Merseyside and north Wales, are becoming more blurred. This is usually put down to greater mobility, with people moving sometimes quite large distances to other towns and cities to study or find work, or relocating from the cities into the countryside in search of a better quality of life or more affordable housing. But it isn't the case that we're all starting to sound alike. As we'll see below, new varieties are taking root in different parts of the country. It's mainly the traditional rural dialects that are becoming less distinct from one another.

We're not all becoming more standard in our speech, either. Over the last 50 years we have also seen Standard English and Received Pronunciation ('Queen's English') lose some of their status. Where once it was more or less obligatory to speak these for anyone wishing to enter the professions, the clergy, the upper ranks of the military, acting, or broadcasting, these days, non-standard accents and dialects are much more widely accepted. We've come to realise that speaking in such-and-such a way isn't necessarily a sure sign of someone's intelligence or competence. This improves opportunities for people from a wider variety of social and educational backgrounds. It's sometimes forgotten that even the standard forms of English are always changing. Today we laugh at the way announcers spoke in TV news programmes from the 1960s because it seems so stiff and old-fashioned. It would sound odd if someone born in 1966 – say, David Cameron – were to speak like someone of his grandfather's generation. We don't expect young members of the Royal Family to speak in the same way as old ones do. The Queen's English spoken by Prince George as he grows up is not going to be the same as the Queen's English spoken by the Queen.

Looking more globally, Chinese and Spanish seem set to become yet more influential worldwide, leading to large numbers of words and phrases from these languages coming into mainstream use in English. Other major languages, such as Japanese, Portuguese, Arabic or Russian, may boost English vocabulary by donating names for new concepts.
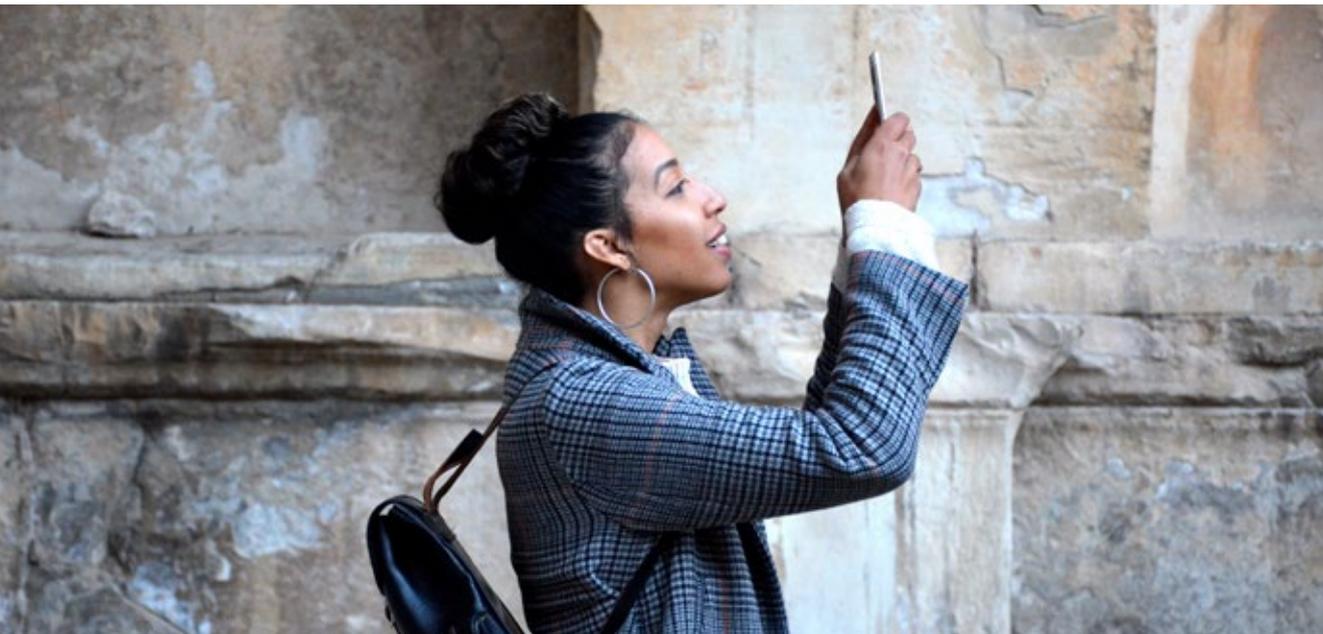
'Informalisation' of English: talking to machines and listening to Americans

As we've seen, high technology is a very rich source of new words in English. In turn, English provides other languages with new terms they need in this area. Young people everywhere now use the English words app, troll, or hashtag rather than the equivalents in their own languages. English is the language of the latest trends in social media, and computer users know that being in command of the latest terms will allow them to participate in a globally connected world. Though the science that underlies systems such as Twitter and Facebook is advanced and hugely complex, the innovators and designers behind these brands want to keep the image of social media as relaxed and informal as possible. The terms that are used for common functions and ways users can interact (like, friend, follow, retweet, block) are therefore short, simple and memorable ones. The fact that so many innovations in computing come from California is undoubtedly linked to this relaxed and unpretentious approach.

A preference for informal, chatty and jokey language in the technological and scientific domains is a recent phenomenon, but it's one which makes these areas seem more accessible and less po-faced, and we are likely to see more and more of it. After all, there's really no good reason we shouldn't name features on the surface of Pluto and its moon Charon after characters from Star Wars, Star Trek or The Lord of the Rings, or call underground bacteria snottites because they look like nasal mucus dangling from cave roofs, or name an Antarctic research vessel Boaty McBoatface, just for the fun of it. A glance at the online Urbandictionary testifies to the endless creativity and humour of English speakers. Freeing ordinary language users up to invent and share new words and phrases like this is a mark of how much more democratic and liberated our linguistic lives have become.

With all of these factors in mind, we turn now to ask what the English of 2066 might sound like in different cities around the country.

Sounds of
the city

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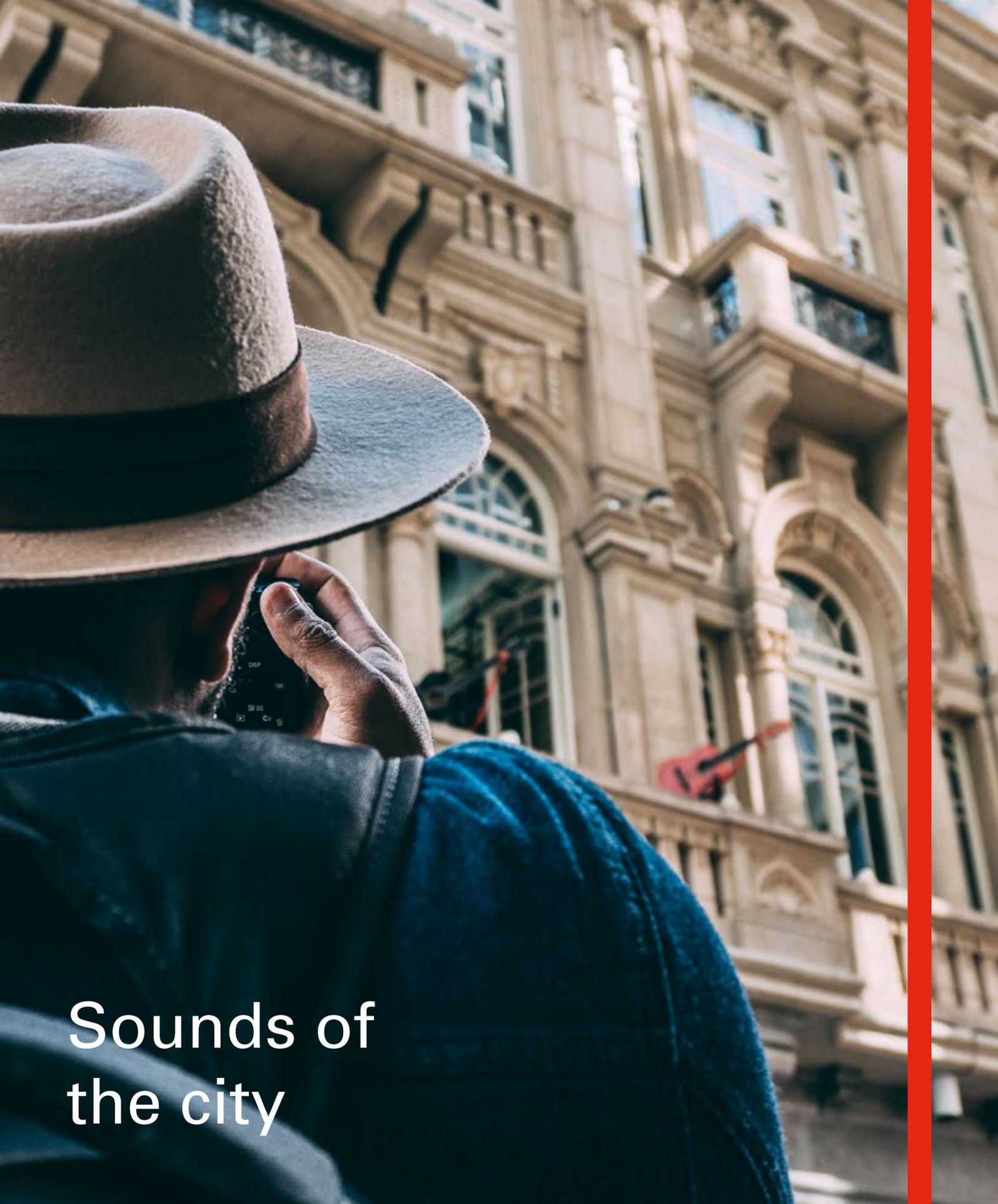
London

It's often said that traditional working-class London speech – Cockney – has more or less died out. We can now hear a hybrid accent known as 'Estuary English' (EE), which combines older London features with more standard-like speech forms. EE is recognisably south-eastern, but it can be very hard to locate a speaker within that region. It also seems to blur the class divide, leading to accusations that some middle-class speakers – politicians such as Nigel Farage and celebrities like Jamie Oliver – 'dumb down' their speech so as to conceal a privileged upbringing or to sound more like they are 'one of the people'. EE has similarities to another newcomer on the UK dialect scene, 'Multicultural London English' (MLE). MLE incorporates pronunciations from Englishes spoken by people from ethnic minority groups, particularly from the Caribbean, West African and Asian communities. Given this mix, and the status of London as the linguistically most influential city in the English-speaking world, we can expect to see significant changes between now and the middle of the century.

For example, there are signs that /h/ is being restored. Generations of Londoners have dropped /h/ from the beginnings of words like hat, Highgate, Harrods, Hampstead Heath, or Henry Higgins. Another feature of London speech is the treatment of the two 'th' dental consonants, as in words like thin and this. We see either 'TH-stopping' (dis and dat) or 'TH-fronting' (fink for 'think', muvver for 'mother'). In future we're likely to see the standard 'th' sounds being lost altogether. Fin and thin will no longer be distinguished even in careful speech, and bother will always rhyme with hover. This may come as a relief to foreign learners of English, who struggle with the dentals more than any other pair of sounds.

Saying dook for 'duke' or nooze for 'news' is already pretty firmly established in London, but this habit, known as 'yod-dropping', may continue so that even words like cute or beauty are affected, as they are in East Anglia, where they're pronounced the same as coot and booty. Simplifying clusters of consonants like this is one way English has changed over its history. We don't say the /k/ at the beginning of 'knee' or 'knight' any more, or the /w/ that used to occur at the beginning of 'wrong' (these letters are now silent, but we haven't ever bothered to change the spelling). We've lost some other great consonant clusters since the earliest days of English: the word for 'to sneeze' in Old English, for example, had a very sneezy-sounding /fn/ sequence at the beginning.

/w/ and /r/ are already very similar for many southern English talkers (e.g. Roy Hodgson, Chris Packham, Jonathan Ross), so the two may collapse together completely, so that wed and red are no longer distinct. We may also see consonant+/r/ clusters smushing together into sounds more like 'ch' and 'j', so trees and cheese, or dress and Jess, sound more alike.

At the ends of words, /r/ was dropped centuries ago, and /l/ is likely to follow suit by turning into a vowel. So words like Paul, paw and pool could be indistinguishable, as they already are in Cockney. Lastly, the glottal stop pronunciation of /t/ – a brief catch in the throat rather than a sound which involves the tongue tip closing against the roof of the mouth – will be the default pronunciation. People in 2066 will be mystified as to why Tony Blair, Ed Miliband and George Osborne were slammed so mercilessly by the press for having been caught saying voters without using a 'proper' /t/ in the middle.

Liverpool

The Liverpool accent is highly distinctive but it's not an especially old one. It mixes local Lancashire features with ones imported from Ireland during the 19th century. The influence of Liverpool speech is wide: there are towns on the coast of north Wales in which people speak with accents which are strongly coloured by Scouse. All the same, Liverpool speech will probably start to fall into line more closely with the accents of other major northern cities. The 'tapped' /r/ sound in words like green and brown, or four and five, is likely to go the way of this consonant in Scottish or Yorkshire English.

One of the very distinctive things about Scouse is the way that /k/ and the other 'stopped' consonants /p/ and /t/ are produced. At the end of back you'll hear a 'ch' sound like the one in Scottish loch or German Bach. A lot of people say they dislike this habit, but it's actually a very natural sound change, and quite common across other languages. It's quite possible that we'll see more of this softening of the stop consonants not just in Liverpool but in other accents around the country.

Liverpool, like all the other northern cities, has an accent in which pairs of words like put and putt are pronounced alike. A great number of the changes we see in current English involve a levelling out of local differences, however, and it's possible that by 2066 the northern accents will have come into line with the global norm for these vowels. At present there are many northerners who would wince at the thought of saying cup or bus anything like southerners or Americans do, so as a compromise they may start to use some intermediate 'fudged' vowel in these and other putt-class words instead. The very suggestion that the north and the south could converge linguistically always meets with heated argument, but it's not so outlandish an idea – in fact, the process has already been happening for many centuries.

Glasgow

In Glasgow, and lowland Scotland generally, English sits at one end of a language spectrum. At the far end is the Scots dialect, which is so different from most sorts of English that some call Scots a full-blown language in its own right. It seems clear, though, that the urban Scots spoken in Glasgow is on the wane. Surveys of Scottish schoolchildren show that they aren't familiar with many of the Scots words and phrases that their parents and grandparents would use (bampot, clarty, glaikit, stooshie, and thousands of others). Some of the dialect words will remain, though it's impossible to say which will survive. Pronunciations like gless 'glass', hame 'home', bane 'bone', or fit 'foot' may soon come to seem too old-fashioned for young people to use.

Dropping of /r/ after a vowel is already well underway among working-class Glaswegians, meaning that pairs of words like hut and hurt can now be hard to tell apart. As in London, word-final /l/ is also disappearing (so Paul and paw are more alike), and the 'th' consonants are turning into /f/ and /v/.

On the other hand, if a second independence referendum were to go in favour of Scotland's separation from the UK, the picture could be very different in the Glasgow of 2066. Because language and identity are so closely tied together, it might be that the Scots language lobby would step their efforts up a few gears, as a way of highlighting the separateness of Scotland's culture and heritage. Making the language of the new state seem as distinctive as possible is exactly what the Norwegians did when they split from Denmark a hundred or so years ago. One of the big unknowns when trying to map out how languages will develop in the future is the effect of political upheavals. The history of English is full of these: think of the arrival of the Vikings, or the Norman Conquest.
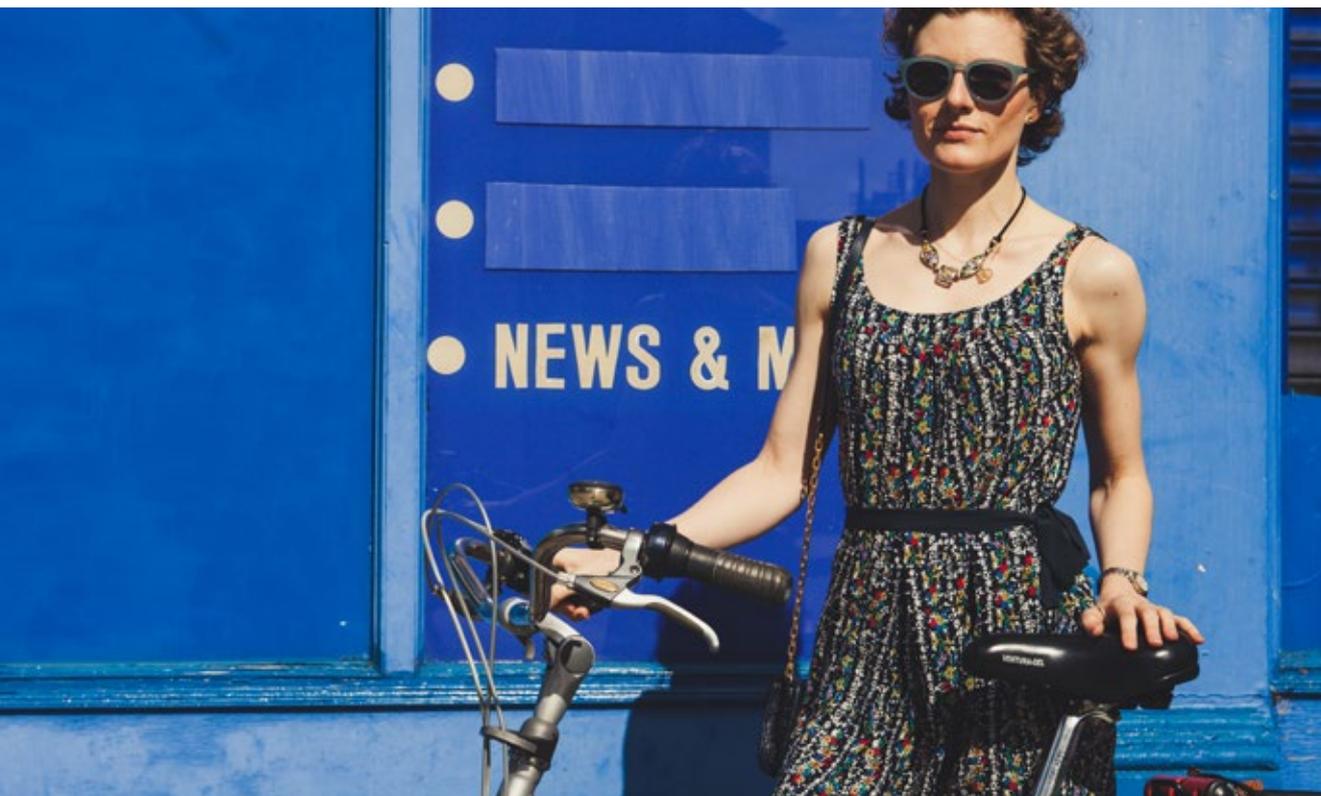
Newcastle

British people tend to nominate one of two accents when they're asked which is the hardest to understand. Glaswegian is one, and Geordie is the other. There are some in the north-east of England who claim that Geordie and the dialect of Northumbria are the closest forms of English to Anglo-Saxon. Though this is an exaggeration, there are features of Geordie which hark back to when Middle English was spoken (hoose for 'house', neet for 'night', and so on).

These are becoming scarcer, though. The general pattern is for Geordie to sound more like other northern dialects. The characteristic pronunciations of 'face' and 'coat' ('fee-uss', 'coo-ut') are much less common than they were two or three generations back. These days, more generic northern-sounding vowels are preferred. Over the next 50 years we predict that they will sound close to what is found in southern England. The characteristic 'hiccuping' Geordie pronunciation of /p/, /t/ and /k/ in words like caper, waiter, and baker may go the same way.

Geordies used to pronounce the vowel in words like 'nurse' as an 'aw' sound, so that shirt sounded the same as short. Words like 'talk' were pronounced 'taak'. These differences are the basis of the story in which a Geordie with an injured leg goes to see the doctor. The doctor bandages the Geordie's leg and says, "Now then, do you think you can walk?" The Geordie replies, in disbelief, "Walk? Ah can hordly waak!" (= "Work? I can hardly walk!"). These pronunciations can still be heard when you're oot and aboot in the Toon, but they now have an old-fashioned flavour. 'Walk' now tends to rhyme with 'fork', and 'work' with 'jerk'. However, there's a change going on in which the 'jerk' vowel is moving forward in the mouth. It seems to be linked to the habit of pronouncing the 'coat' vowel as something like 'er'. So we find jokey spellings like 'turtle' for 'total', 'terst' for 'toast', 'jerk' for 'joke', 'serp on a rerp', and 'The Perp' (that's the head of the Catholic church).

Manchester

Some of the same changes that we'll see in Newcastle are also liable to take place in Manchester. 'Turtle' for 'total' has spread westward through urban Yorkshire and already seems to have crossed the Pennines into Manchester. The iconic vowel pronunciation at the end of Manchester (something like 'Manchest-or') seems fairly new, but whether it will last is an open question. Not all sound changes stick. Another feature of Manchester and other parts of the north-west (though not Liverpool) is the vowel at the ends of words like happy and city. At the moment, in Manchester it's more 'eh'-like than 'ee'-like. The vowel in many British accents is now firmly an 'ee' sound – happ-ee, rather than happ-ih. Mancunians may in time start to use the 'happ-ee' option, making them sound more like Scousers in this respect.

As mentioned earlier, the Liverpudlian habit of producing /k/ as the Scottish-like 'ch' is a very natural thing to do, phonetically speaking. So is saying /t/ as an 's'-like sound, so that 'mat' and 'mass' sound very alike. It's conceivable that Mancunians could start producing these sounds the same way. This convergence might seem improbable, what with Mancs claiming to despise Scousers and vice versa, but in reality the rivalry between the two cities isn't necessarily a barrier to their dialects becoming more similar. There are pairs of cities around the country in which people say they loathe one another (e.g. Derby and Nottingham), but the dialects spoken in them may become so alike that they're hard to tell apart.

Birmingham

By virtue of being the closest to London of the cities listed above, Birmingham is likely to adopt the new trends in London speech before the others do. Examples might include the following.

If we are right about the restoration of /h/ in London, we might expect this to trickle down to Birmingham, so that by 2066 it's being used in Brum with at least some consistency. Glottal stop for /t/ will be the default pronunciation (except at the beginnings of words; tea will still need a /t/, but won't won't!). TH-fronting (fing for 'thing', bovver for 'bother') has a firm foothold in the Midlands already, and a /w/-like pronunciation of /r/ is also common. These forms will increase in frequency, and the other features listed for London may also come to dominate Brummie speech.

We could see the phasing out of localised features like the 'velar nasal plus', where an audible / / is produced at the end of sing and wrong, and where singer ('sing-guh') and finger rhyme. This habit is common in the West Midlands and in north-western cities including Manchester and Liverpool. People in these areas often say that they think they're using the correct, standard way of saying 'ng' at the ends of words and syllables. In fact, it isn't the way Standard English speakers pronounce these words. Brummies are probably being influenced by the spelling here, and so believe that the 'proper' pronunciation involves a sequence of two sounds at the end of sing instead of just one.

As with the northern varieties described above, we may see a split between the words of the put and putt sets, bringing the vowel system more closely into alignment with southern accents.

Conclusions

Over the course of the next fifty years, our lives will be transformed by technology at least as much as they were over the past fifty years.

We may see the rate of change accelerate, with each decade bringing an ever wider range of technologies to make our social and working lives easier, safer, and more efficient. The impact of these developments on society will result in new ways of using language. We will need to coin new terms for new inventions and concepts at a rapid pace, of course, but we will also interact with one another, and with the machines that will surround us in all areas of our lives, in ways that may at first feel unfamiliar. The era of voice-activated computer systems, which are faster, smarter and more secure than ever before, is already upon us. These will not force us into particular ways of speaking, because they are designed to be responsive to our vocal patterns. They are not judgemental about how we speak and make no distinctions between accents or dialects: to them, all languages and their subvarieties are equal, and there is no 'correct' or 'incorrect' way of speaking. We can talk to them however we please. In short, the latest generation of secure voice biometrics systems will let you be you.

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Co-author of the report

Brendan Gunn holds an MA and a PhD in linguistics. He began working as a Dialogue and Dialect Coach in 1986 after leaving the University of Ulster where he was a Lecturer in Linguistics.

Robert De Niro, Brad Pitt, Edward Norton, Aidan Quinn, Cate Blanchett, Jim Sturgess, Heather Graham, Rupert Grint, Julia Roberts, Richard Gere, Natalie Portman,Daniel Day Lewis, Penelope Cruz, Saoirse Ronan, Colin Farrell and Stephen Rea are just some of the actors who have worked with world renowned dialect and dialogue coach, over the last 25 years.