

PAPER 1

PHONICS AND ENGLISH

Learning to read means understanding how the sounds of a language can be represented in written symbols.

Meaning is found in words – clusters of sounds. The words themselves represent concepts.

Sounds and letters

As an example, in English we call this



a **cat**.

Three sounds. One concept: *A well-known carnivorous quadruped (*Felis domesticus*) which has long been domesticated, being kept to destroy mice and a house pet.*¹

In French, it's a different cluster of sounds - [un] **chat**. In Italian it's **gato**. In German it's **katze**. In Russian it's **kot**. In Arabic **qut**.

These sounds are known as **phonemes** (units of sound). In "cat" the three sound units are represented by the letters "c" ... "a" ... "t".

Reading English should be a matter of scanning the letters (eg c-a-t), translating them into the sounds, identifying the word being used (cat), then integrating them into the rest of the utterance or written passage to understand what is being communicated (eg "I like cats.").

¹ Oxford English Dictionary

And that's exactly what happens.

But ...

How regular are the sounds? Are they always sounded the same way?

At this point we encounter the dreaded exceptions. Take three common words with double vowels in the middle: blood, food and good. The consonants are phonetically quite regular – but the “oo” makes three different sounds².

Why are there irregularities in English?

Does this mean that learning to read English will be a nightmare?

The answer to the first question is the long and complex history of English.

The answer to the second is no – but teaching the mainly regular sound letter correspondences has to be done carefully, so that children are not overwhelmed by exceptions early in the process.

The History of English

English is complex. It has a long history and has been for 2,000 years a linguistic melting pot.

How many languages are embedded in English? At least five major ones, and a brace of minor ones.

In the two millennia that people have been speaking what we call “English”, the British Isles were invaded repeatedly, and every invasion brought an inrush of new words.

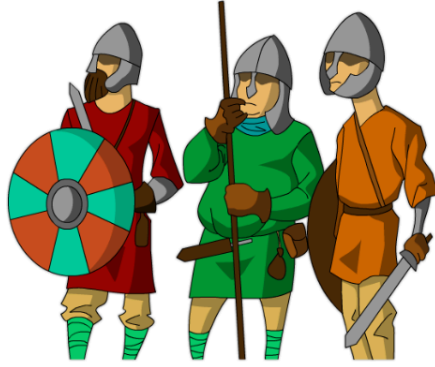
There were the Celts – who gave us words like bog, gull, hooligan, whisky and others.

Then the Romans arrived, in 55 BC, under none other than Julius Caesar. The Romans gave us candle, car, cheese, city, dish, day, street, wall, and many others³.

When the Roman Empire fell in 410 AD, leaving England without Roman protection, anyone with a boat and warriors could come ashore.

² Blood is from Old English *blod* (“blewd”), food is from Old English *foda* (“foada”) and good from Old English *god* (“goad”). This makes them all 1,600 years old – and subject to lots of sound changes over the centuries.

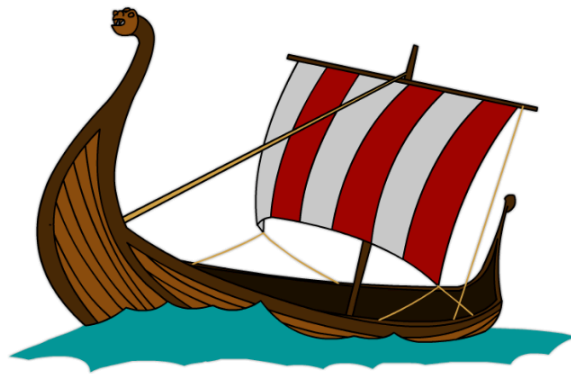
³ Crystal, D. (1995) *The Cambridge Encyclopedia of the English Language*, CUP



The first were the Germanic tribes – the famous Anglo-Saxons. Their language was “Englisc”⁴ (still the name we know it by 1,600 years later). They gave us most of the everyday words – baby, chicken, finger, foot, grass, hay, herd, house, job, maid, man.

This is where we first see the word cat (though for the Anglo Saxons it was *catte*⁵).

Then in the 800s came the Vikings. They gave us words like bag, bull, cake, club, dirt, husband, knife, gate, saga, skirt, skull.



In 1066, the French arrived. William the Conqueror invaded and claimed the British Isles for himself. The influx of French words was enormous – adding approximately 10,000 new words. Thus people speaking “English” were now also using words like army, bacon, beef, castle, chamber, chivalry, joy, marriage, pastry, prince, prison, soup.

Throughout the millennia, elements of Greek (comedy, grammar, philosophy) and Latin (advantage, exit, item) were gradually added. Later still, with colonisation, other languages were included: from Spanish (potato, tomato, tobacco), Indian (pajamas, curry), African languages (banana, trek), Arabic (jar, safari), and Asia (soy, tea).

By the time of Shakespeare, English had 200,000 words⁶. Since then, it has more than doubled⁷

⁴ The *sc* was pronounced “sh”. We still say the word that way.

⁵ Winchester, S. (2003) *The Meaning of Everything*, Oxford University Press

⁶ Winchester (2003)

⁷ Deheane, S. (2010) *Reading in the Brain : The New Science of How We Read*, Random House

Phonetic Complications – how bad is it?

Here is the difficulty. Given that English has multiple parents, and a 2,000 year history, issues with pronunciation and spelling are not surprising.

Even the spelling has changed. Here is a very short ad by William Caxton from 1477. Caxton was the man who brought printing to England. He had set up a printing shop next to Westminster.

“If it plesse any man ... to bye [buy] ... late [let] hym come to Westmonester ... and he shal have [the books] good chepe.”⁸

The sense is clear, the sounds are familiar, but the spelling reflects how things were written down 600 years ago.

How confusing is English in terms of its phonic patterns?

People are inclined to panic when they consider words like *breakfast* [/b/r/e/k/f/ə/s/t/] or *cough* [/k/ɔ:/f/].

The good news is that these are outliers. Breakfast was originally two words: break (pronounced the normal way) and fast (not eating). However, when they were combined into one word in the fifteenth century the first sound was simplified to “brek” and the second was shortened to “fəst”. Odd, but not that hard.

The word *cough* is even older. It’s German, and would have been originally pronounced with a guttural sound: [/k/o/f/] the “gh” being sounded like clearing your throat. This too has been simplified over the centuries to an “f” sound, but the “gh” remains (locked in time).



The Good News

In fact, **84% of English is phonetically regular** – despite historical oddities like cough.

Here is Dr Louisa Moats, noted academic and psychologist on the subject:⁹

“There was a study done many years ago that was funded by the [US] Federal Government at the time to resolve this issue about whether English was predictable or not. ... It found that 50% of the words in English are predictable. If you know the phoneme-grapheme correspondences alone, and you don't know anything else, you

⁸ Winchester (2003)

⁹ Moats, Louisa (2021). Science of Reading: ThePodcast
<https://podcasts.google.com/feed/aHR0cHM6Ly9mZWVkey5idXp6c3Byb3V0LmNvbS82MTIzNjEucnNz?sa=X&ved=0CAkQlvsGahcKEwjAvOSP3PSAAxUAAAAAHQAAAAAQAg>

can spell 50% of the 20,000 most common words in English. And then you can spell another 34%, in addition, with [the chance of] one error ... And then you can spell another 10% accurately if you know the morpheme structures [or] if you take into account the origin of the word ... its etymology [Latin, French etc].”

While it is commonly alleged that English is inconsistent, it is far from random. For example:

“[According to Johnston¹⁰] the AY combination represents the long A sound [as in play] 96% of the time; OA represents the long O sound [as in boat] 95% of the time’ EE represents the long E sound [as in bee] 96% of the time; AI is a valid representation of the long sound A [as in drain] 75% of the time, and EY represents the long E sound [as in key] 77% of the time.”



(Play all day, *Easy Readers*)

Of the most common words, most are regular and phonetically transparent.

Here is the full list (in order of frequency):

¹⁰ Johnston, F.F. (2001). The Utility of phonic generalisations: Let’s take another look Clymer’s conclusions. *The Reading Teacher*, 55; 132-143

THE MOST COMMON WORDS IN ENGLISH

| | | | | |
|------|-------|-------|--------|---------|
| the | this | so | people | back |
| be | but | up | into | after |
| to | his | out | year | use |
| of | by | if | your | two |
| and | from | about | good | how |
| a | they | who | some | our |
| in | we | get | could | work |
| that | say | which | them | first |
| have | her | go | see | well |
| I | she | me | other | way |
| it | or | when | than | even |
| for | an | make | then | new |
| not | will | can | now | want |
| on | my | like | look | because |
| with | one | time | only | any |
| he | all | no | come | these |
| as | would | just | its | give |
| you | there | him | over | day |
| do | their | know | think | most |
| at | what | take | also | us |
| | | | | |

These are *the most common words* in the English language¹¹. The good news is that this list represents **50% of all words used in English**.¹²

While there are several that represent a challenge for children – such as *would*, *because* and *know* – most are relatively close to the normal phonetic patterns of written English and they are all words children have known since they could speak.

How Does this Affect Teaching?

Scholars affirm that “decoding” letters – being able to see that the word “cat” consists of three letters, and so on - is the key in learning to read.

¹¹ The table shows frequency, so column 1 # 1 is *the* - the all out winner; *column 5 # 100 is us*).

¹² "The Oxford English Corpus: Facts about the language". *OxfordDictionaries.com*. Oxford University Press. What is the commonest word?.

Since the NRP (National Reading Panel)¹³ concluded 20 years ago that phonetic instruction is a necessary starting point for reading instruction, there has been a gradual acceptance of the need for sound-letter and decoding lessons (phonics) in teaching beginners how to read. Fortunately, children come to school already understanding the words.

The dog looks at the cat.



The only phonetically challenging word here is “the” – the *most common of all English words* (see above), which they will have heard and seen thousands of times before they are in class. To suggest that phonetic instruction is unnatural because of a word like “the” is misguided.

Here are the most common words across all grammatical categories (114 in total). For every tricky word like “eye” or “world”, there are dozens that are completely regular.

| Rank | Nouns | Verbs | Adjectives | Prepositions | Others |
|------|------------|-------|------------|--------------|--------|
| 1 | time | be | good | to | the |
| 2 | person | have | new | of | and |
| 3 | year | do | first | in | a |
| 4 | way | say | last | for | that |
| 5 | day | get | long | on | I |
| 6 | thing | make | great | with | it |
| 7 | man | go | little | at | not |
| 8 | world | know | own | by | he |
| 9 | life | take | other | from | as |
| 10 | hand | see | old | up | you |
| 11 | part | come | right | about | this |
| 12 | child | think | big | into | but |
| 13 | eye | look | high | over | his |
| 14 | woman | want | different | after | they |
| 15 | place | give | small | | her |
| 16 | work | use | large | | she |
| 17 | week | find | next | | or |
| 18 | case | tell | early | | an |
| 19 | point | ask | young | | will |
| 20 | government | work | important | | my |
| 21 | company | seem | few | | one |
| 22 | number | feel | public | | all |
| 23 | group | try | bad | | would |
| 24 | problem | leave | same | | there |
| 25 | fact | call | able | | their |

¹³ National Reading Panel *Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction*, (2000) NICHD

“Exception” Words

Teaching phonics does not ignore irregular words, but treats them as a special category – “exception” words, to be taught in carefully staged sessions (not too many at a time).

Here are the most common “exception words” introduced at Year 1/Grade 1¹⁴.

the, do, today, of, said, says, are, were, was, his, has, I, you, your, they, be, he, me, she, we, no, go, so, my, here, there, where, love, come, some, one, once, friend, school, put, push, pull, full, house, our

Needless to say, the balance has to be right. A child given more than one or two of these “exception words” at a time would be confused. However, if the teacher says, “Today we will look at a word that *can’t* be sounded out the normal way. We all know what a house is. Here’s a picture. Well, it is sounded and spelled in a slightly different way...”

To put it in perspective, most 5-year-olds have a vocabulary of 10,000¹⁵ words. For example, if the percentage of “exception” words is 40 (the list above), that’s a ratio of 0.010% – eminently manageable by any early years teacher.

To Sum Up

English is a mix of phonetically regular words (eg cat, rat, sat) and a small number of irregular words (eg house or world).

The reason is that English has been around for a very long time and has absorbed elements of more than five other languages (Celtic, Latin, German, Norse, and French). English is a big language (500,000 words) with many historical inputs. Thus there are many irregularities.

However, these irregularities are *not* random. Most English words follow patterns, and when there are exceptions, they can be explained (see PD 6 for examples).

In teaching young children to decode letters, it is important to start with the more regular words, and *gradually* introduce “exception words”. With enough practise, these irregular words will be stored in the child’s long-term memory (see Paper 2) and become automatic.

Teaching phonics is necessary to establish strong links in children’s minds between the sounds of English and the letters used to represent those sounds.

Science has now made it clear how to do this effectively and thus ensure a new generation of skilled readers.

¹⁴ <https://www.twinkl.com.au/resource/t-1-5155-new-year-1-common-exception-words>

¹⁵ Merritt, D.D (2016) *Typical speech and language development for school-age children*, <http://ctsec.org>