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Readers are encouraged to send their own favorite linguistic kickshaws to the Kickshaws Editor. All answers appear in the Answers and Solutions at the end of this issue. This month we welcome a guest editor.

In Search of Brainchildren

One of the standard telephones used in New Zealand is called the Statesman. When more than one of these items is being discussed they are invariably referred to as Statesmans rather than Statesmen. It was this quirky plural which got me thinking recently when I heard the odd-sounding word brainchilds used in conversation. Is the plural brainchilds or brainchildren?

Webster’s Third New International Dictionary defines brainchild as 'a product of one's creative imagination'. Unfortunately the plural is not shown. Webster’s Second Edition indicates brain child as a two-word term, again with no plural listed. The Oxford English Dictionary has brain-child in hyphenated form, meaning 'the product of a person’s mind, an invention'. So can we presume that because the word in question derives from brain + child that the correct plural is brainchildren? Yes, indeed! The Oxford notes that the word first appeared in print over one hundred years ago. The earliest citation of use dates back to 1881, in a publication entitled Household Words, where we find the term used in the plural form: 'The brain-children (i.e. novels) of the illustrious dead.'

The it's Have It

Have you ever noticed how many plant names end in a double 'i'? This nomenclature is used when a particular flower or shrub has been discovered by someone, after whom the plant has then been named. For instance, Aleurites fordii (tung-oil tree), Araucaria cunninghamii (Moreton Bay pine), and Cornus nuttallii (mountain dogwood) were obviously named after people called Ford, Cunningham and Nuttall respectively. Here are some further examples taken from the Popular Encyclopedia of Plants, edited by V.H. Heywood and S.R. Chant, published in 1982:

- Acacia mearnsii (Australian black wattle)
- Adansonia gregorii (bottle tree)
- Arundinaria simonii (Simon bamboo)
- Galanthus elwesii (giant snowdrop)
- Ulmus thomasii (rock elm)
- Vernonia baldwinii (western ironweed)
What happens when a plant is named after someone with a surname ending in 'i', such as Rossi? If logologists were in control of a name ending in rossii would probably be created. Alas, botanists are not so imaginative, as evidenced by Aquilegia bertoloni, a type of columbine, which appears to have been named after someone called Bertoloni.

Taking the theory a step further, there are some rare individuals whose surname ends in a double 'i'. For example, there are three people with the Cook Island name Tekii listed in the latest Auckland, New Zealand telephone directory. Wouldn't it be great if one of the Tekiis discovered, say, a new kind of Japanese hemlock, which subsequently became known as Tsuga tekiiii? There's no harm in dreaming.

The Wordplay of Genesis

Previous comment has been made in Word Ways on the scarcity of wordplay exhibited in modern music. One of the groups that has been mentioned as an exception is the English band Genesis, who released an album in 1981 entitled Abacab, apparently named because it contains a melody based on the notes ABACAB in that order. I have followed Genesis since their formation in the late 1960s, and have always enjoyed their music, especially the innovative lyrics. Contrary to Benjamin Zimmer’s assertion in the November 1985 Kickshaws, the group is not defunct. Even the name Genesis is logologically suggestive with its two internal palindromes (ene, sis). Here are some examples of wordplay taken from three early albums.

Foxtrot (1972)
Feel your body melt, Mum to mud to mad to dad...
Dad to dam to dum to mum.
(Word ladders joining two palindromes in 'Supper's Ready')

Selling England by the Pound (1973)
Firth of Fifth
(song title, play on the Firth of Forth in Scotland)
He employed me as a karmacanic, with overall charms,
His hands were then fit to receive, receive alms.
With the thumpire's shout they all start to clout.
(examples of punning, from 'The Battle of Epping Forest')

The Lamb Lies Down On Broadway (1974)
Generally recognized as one of Genesis's finest works, this enigmatic double album relates the strange adventures of an individual named Rael in some unwelcome, futuristic New York. Rael is obviously a distortion of 'real', and this is reflected in the

Plectranthus oertendahlii (candle plant)
Acer hersii (Hers's maple)
Arbutus menziesii (madrona laurel)
Scilla hughii (Cuban lily)
Xanthosoma lindenii (Indian kale)
Metroxylon rumphii (prickly sago palm)
bizarre, sometimes cynical, lyrics. Everything is twisted, nothing is quite what it seems. Here are a couple of quotations:

Rael Imperial Aerosol Kid
Exits into daylight, spraygun hid.

Cuckoo cocoon have I come to, too soon for you?
The last track on the album is called simply ‘It’. Some excerpts:
Just a little bit of it can bring you up or down.
It is inside spirit, with enough grit to survive.
It is here, it is now
It is Real, it is Rael.

Pauseless Palindrome
Tell a plateman on a morose dam-side by me to note my bed is made so Roman on a metal pallet.
The above palindrome is the longest known to me that can reasonably be spoken or written without pause. Can anyone come up with a longer example?

Q for Quiz
Here is a short quiz for Q addicts. How many words starting with Q can you identify?
1. discharge from office
2. an extinct South African wild ass
3. suppurative tonsillitis
4. a boastful pretender to knowledge and skill
5. an apple, of various varieties
6. one who aids the enemy
7. the round clam
8. small Australian marsupial
9. the yellow-barked oak
10. world’s most abundant bird

The Name of the Game
The Australian People magazine of 19th April 1988 relates the story of shy Londoner Michael Cotran. Having limited success with the girls Michael decided to change his name to Howard. Not Howard Cotran, but Howard You-Like-To-Go-Out-For-A-Drink! His new name is quite legal—he forked over £20 to have solicitors draw up the papers.

Now the young salesman reckons he doesn’t need to pluck up courage to ask girls out—he just tells them his name. This tactic is already working.

‘I rang someone up through work and she asked my name,’ he smiles. ‘I said: Howard You-Like-To-Go-Out-For-A-Drink, and she simply said yes. It was incredible.’

It is obviously a more catching name than that on his birth certificate, Michael Omeri Napoleon Cotran, which he considered too much of a solution. I

And if by husbands or

A Loser In

There has been a lot of discussion of the full GAN. Many people have taken part in fact he became office. As Zep

Alphabetic F

An alphabet second with Q.

A couple of "In"

How inconsequen

Just killing Nazis, obnol:

Quarrelling with

Secretive tit

Vicious war:

Xenophobes

Superdemons

This coul
d: 20 of the terms were not guaran

pronunciation in breathing

Score: 0 (or you che
too much of a mouthful anyway.

'This is a serious business,' he said, 'but I'll have to use the name carefully; otherwise I could have trouble from jealous husbands or end up with women I don't fancy.'

And if by chance things do get out of hand Howard's got the solution. 'If I get fed up with the name I can always change it to something else.'

A Loser In A Wrong Land?

There have been many anagrams exhibited in *Word Ways* based on the full name of former American president RONALD WILSON REAGAN. Many of the Reaganagrams are derogatory, none more than the excellent INSANE ANGLO WARLORD. Perhaps the negativity stems from the president's public image; toward the end of his last term he was obviously not the energetic 'goer' of former times, and in fact he had become 'worn' by advancing age and pressures of office. As a cynic might have commented on the American nation (with apologies to Lewis Carroll), it was a case of ALAS IN WORN-GOERLAND. Of course Reaganophiles would not agree with this at all, as they no doubt feel he often had AN ALL-REASONING WORD.

Alphabetic Poetry

An alphabetic poem has the first word starting with 'A', the second with 'B', the third with 'C', and so on through to 'Z'. A couple of years ago, a high school English teacher in Hastings gave his class the task of writing an alphabetic poem for homework. The best example, titled 'Zeppelin', was composed by 14-year-old Felicity Basher. The other one shown below was written by myself, in honour of the incomparable Bing Crosby.

**Zeppelin**

Airborne blimp circling dangerously
Enemy from Germany
How inconsiderate
Just killing life meaninglessly
Nazis, obnoxious people
Quarrelling relentlessly
Secretive times unleashing
Vicious warfare
Xenophobes yielding 'Zeppelin'.

**Bing**

Annually, Bing Crosby's dream
Echoes forth
Giving hope
Invoking joy, kinship, love
Magic night of peace
Quiet!...reindeer...Santa!
The universal visitation
White Xmas
Yuletide zinger!

Superdemons

This could be the hardest test of its type you have ever attempted: 20 of the most demonic spelling demons of all time. Some of the terms will be known to *Word Ways* readers, but familiarity may not guarantee success here. The words required are defined by pronunciation and definition; for example, dis-nee-uh (difficulty in breathing) would indicate 'dyspnoea'.

Score: 0 average; 1-2 very good; 3-5 excellent; over 5 brilliant (or you cheated!).
The Long and Short of It

A dictionary will usually define a term in as concise a manner as possible, often more than not taking less than a dozen words to cover each sense. However, there are occasions when it is necessary to provide a much more lengthy explanation, as in the case of the mathematical term 'witch', or more fully 'witch of Agnesi', defined as follows in *6000 Words*, a supplement to Webster's Third New International Dictionary:

A plane cubic curve that is symmetric about the y-axis and approaches the x-axis as an asymptote, that is constructed by drawing lines from the origin intersecting an upright circle tangent to the x-axis at the origin and taking the locus of points of intersection of pairs of lines parallel to the x-axis and y-axis each pair of which consists of a line parallel to the x-axis through the point where a line through the origin intersects the circle and a line parallel to the y-axis through the point where the same line through the origin intersects the line parallel to the x-axis through the point of intersection of the circle and the y-axis, and that has the equation $x^2 y = 4a^4 (2a - y)$.

Whew! Well over 100 words needed to accurately portray 'witch', including a stretch of 97 words without punctuation, and a section where 'of' is used 4 times within the space of 7 words. To anyone but a mathematician this comprehensive exposition would surely be little more than gibberish.

At the other end of the scale, short explanations can be equally confusing. A prime contender for the brevity record must surely be the slang term nicker', which is defined in Chambers Twentieth Century Dictionary without the use of words at all! The definition is shown simply as '£1', which is not very enlightening unless you are aware that the symbol '£' represents the pound sterling. Does anyone know of longer or shorter definitions than these?
Mac's Scam

I bumped into my old friend Mac in a hotel bar and asked what he had been doing with himself. 'Night school,' he said, 'taking a class in Human Biology.' 'So you can tell your ass from your elbow?' I inquired, laughing. 'Something like that,' he replied.

A few weeks later we met again, and Mac informed me he had started studying Orchestral Music. 'Whatever for?' I asked. 'So I can tell my brass from my oboe, of course,' he shot back triumphantly. The game was on.

When we next ran across each other I was ready. 'Any new challenges, Mac?' 'Yes, I'm learning all about Astronomy,' he responded. 'Let me guess; so you can tell your Mars from your Pluto?' 'That's right.' He sounded crestfallen.

At our next meeting I was a trifle overconfident. 'How's night school, Mac?' 'Ace,' he said, 'I'm taking tuition in Feminine Studies.' I was caught flat-footed. 'What on earth is that?' I faltered. 'Why, it's where we learn to tell a lass from a bimbo.'

When I last saw Mac he looked tired. I had prepared well for the showdown; this would be the tie-breaker. 'You look beat,' I opened cautiously, hoping the double meaning would throw him. 'Yes, I have very little free time. I'm taking two night classes now, you know.' Two classes! I wasn't ready for that. 'What are they?' I asked apprehensively. 'Well, I'm doing Ethnic Weaving and Auto Maintenance.' I was dumbstruck for a full ten seconds, brain racing frantically. 'So you can tell cars from abos?' I ventured lamely. 'Not even close,' Mac smirked. 'It's so I can tell a grass basket from a brass gasket.' What could you say? The rules had changed, but I conceded gracefully -- game, set and match.

Dried Flower Arrangement

Dried flowers
are clearly
Die flowers
or merely
Dead flowers
unvitality
De-flowers them
in surreality
You could say
I like d'flowers
any way

Large Squares

Lest the logological world think that the construction of large word squares died out with the great formists of the National Puzzlers' League past, here are two newly-discovered squares of the eighth order, and a near-miss square of the ninth.
Seven of these words can be found in Webster's Second Edition: a THALLOME is a thallus, ALISTERS are males named Alister, and PLOTTAGE is the value resulting from the combination of small tracts of land into larger ones. RADIOLES are the spines of a sea-urchin, according to the Oxford English Dictionary, O-Scz Supplement.

MATRICAL is pertaining to the matrix of algae, TIRVINGS is an old term for borders turned back or up, an IRISHIAN is one skilled in the Irish language, CANOISTE is a spurious feminine form of canoeist, and AGGRATES means 'gratifies'. All words in this square are taken from the Oxford English Dictionary.

QUESTRIST, UNSERENER, SERENISED, REGIMENAL, INOSINATE and SELENATES are in the Oxford, ESTRAGOLE and TREDDLEST (though treddlest) in Webster's Second Edition, and TRANSMIND is a coinage. A logical synonym for 'transmental', it certainly could appear somewhere, perhaps in a modern science fiction work.

Halliwell's Dictionary of Archaic and Provincial Words, published in 1868, contains the two remarkable terms selerelles, visors or masks, and teyelleyer, a tailor. If only we could add an 'I' to the first word, making sellerelles, or alter the second to either teyelleyet or reyelleyer! A similar word is Helemmelek, almost, but not quite, a 10-letter palindrome. Heartbreaking! Why couldn't it have a variant spelling, either Helemmeleh or Kelemmelek? The name appears in one of the Pseudepigrapha of the Old Testament, the Book of Enoch, 82:18. Helemmelek is described as the leader of that season in which there is glowing heat and dryness, trees ripen their fruits, and the sheep pair and become pregnant.

Two more near-misses are the Websterian specimens sparadraps, cloths smeared with melted wax used as plasters, and chinamaniac, one with a mania for china (porcelain).

Arguably the most eye-catching of near-palindromes are two examples found in Hodge's Handbook of American Indians North of Mexico, published in 1907. Q'anilkHlaq was an ancestor of a Nakomgilisala (Kwakiutl Indian) gens, after whom the gens itself was sometimes called 'mirror versa, we will call it Qaudjuq. Akudnirmiut on Baffin Island add another near-palindrome in exist.

An Endanger

The indefinite article is commonly be an x-ray, a y-ray, or 'eu'(yU), or 'is'?

There is a logical synonym for 'transmental', it certainly could appear somewhere, perhaps in a modern science fiction work.

The Same to You

A Chinese scholar, Teyelleyer, once travelled to Japan and returned.

The inscription on a Yorkshire tombstone is in Latin.

His family believed it means. It was anything further than change it'.

A neighbour is in no way worried.

Tricky Twoe

Many of the words contain the letters at, be, do, and can you identify all words of 2-letter terms that can you identify...
sometimes called. If the 'l' could be changed into an 'n', or vice versa, we would have a sensational Q-palindrome. Finally, there is Qaudjuqduaq, the Eskimo name for the winter settlement of the Akudnirmiut Eskimos between Frobisher Bay and Cumberland Sound, on Baffin Land. If only we could swap a couple of letters and add another we would undoubtedly have the most remarkable palindrome in existence -- Qaudjuqduaq! If only...

An Endangered Article

The indefinite article 'an', as everyone knows, is used most commonly before a vowel sound, for example an eagle, an honour, an x-ray, an SS agent. It is also used on occasion before an 'h' or 'eu'(yû), as in an hotel or an euphonic change.

There is a disturbing modern trend in evidence. It is the replacement of the word 'an' in spoken language with 'a', which is pronounced either as uh or ay (as in say). We can all live with a hotel and a euphonic change, but every day it seems my ears are assailed with phrases like a orange, a interview, a honest person, a ess, and so on. The perpetrators are primarily members of the younger generation for uh and older people for ay.

Has anyone else noticed this occurrence? Is it happening worldwide? Can we do anything about it? (Probably not.) We could be witnessing the gradual demise of a small but important word that has been around for over 800 years.

The Same to Yue, Mr To

A Chinese man who has lived in Britain for 30 years still can't understand the shocked stares he gets when he is asked his name and replies: 'Fuk Yue To'!

The inscrutable Mr To doesn't realise that the folk of Ilkley, Yorkshire think he is swearing at them. The retired restaurant owner is in his seventies and hardly speaks a word of English. His family believe it would be insulting to tell him the saucy double meaning of his name or ask him to change it.

His son, Kam To, says, 'We have never told him what his name means. It would not be polite to do so. His name doesn't mean anything funny in Chinese, and it would be wrong to ask him to change it'.

A neighbor says, 'We have always just called him Mr To. There is no way we could bring ourselves to say his full name!'
1. a side-issue  
2. Japanese drama  
3. a heavy Burmese knife  
4. the tincture gold or yellow  
5. a fish of the carp family  
6. 11th month of Jewish calendar  
7. chamber pot  
8. a drainage canal  
9. precious jade  
10. the three-toed sloth  
11. a Japanese game  
12. to drive, propel  
13. a copper coin  
14. small Pacific liliaceous tree  
15. Scots grandchild  
16. a jackdaw  
17. cessation, moderation  
18. always, for ever  
19. a Maori fort  
20. to loathe

P-S1

Until a few years ago, the longest term in the Oxford English Dictionary was floccipaucinihilipilification (alternatively spelt in hyphenated form with 'n' in the seventh position) with 29 letters. This was surpassed by the 45-letter pneumonoultramicroscopicsilicovolcanoconiosis (or -koniosis), which is listed in the O-Scz supplement. But is this really the longest word in the Oxford? Actually no. In the same supplement, under 'propanidid', we find in the definition a 51-character hyphenated chemical term: propyl-4-diethylcarbamoylmethoxy-3-methoxyphenylacetate!

English As She Is Spoked

When foreigners write notices in English they rarely get it quite right. Happily the results of this loss in translation are often hilarious. To illustrate the point, here are some examples from Dennis Winston's recently-published collection of howlers, French Windows in Every Room.

Flying water in all room. You may bask in sin on patio (hotel notice, Istanbul, Turkey)

TABU DISCOTEQUE with or without a date and in summer -- plus open air banging-bar (poster, Torremolinos, Spain)

On September 30, winter timing will start. As of 12:00 midnight all clocks will be forward one hour back (hotel notice, Cairo)

Ladies can have fits upstairs (dress shop notice, Tel Aviv, Israel)

Hair cutter and clean shaver. Gentlemen's throats cut with very sharp razors with great care and skill. No irritating feeling afterwards (barber shop notice, Bombay, India)

You are invited to visit our restaurant where you can eat the Middle East Foods in an European ambulance (hotel notice, Ankara, Turkey)

Suggestive views from every window (hotel brochure, Amalfi, Turkey)

If service required give two strokes to the made and three for the varlet (notice by hotel room bell-push, Austria)

A sports jacket may be worn to dinner but no trousers (hotel notice, France)

This hotel is renowned for its peace and solitude. In fact, crowds from all over (hotel brochure, Italy)

We have nice chambermaid (hotel notice, Switzerland)

No automobiles (hotel notice, Potsdam)

Enter the cab lift sign, Potter (hotel notice, Paris)

If set breaks (hotel notice, Rome)

WERE STRONK

The country's last emperor drunk of 57 years (poster, Paris)

The hour will be a Roman cruise ship (hotel notice, Gent)

If you wish you can have a chambermaid (poster, Riga)

Daft Fad

A silly creature (poster, London)

large tom-cat's加大猫 (poster, Tokyo)

Score: 0-4 al; 20 palindromes

1. half a dozen
2. bad fruit
3. stupid small
4. watched over
5. insane or
6. loopy India
7. strained
8. dim circular
9. sinful small
10. bloody European

The Last Word

It is perhaps on the final page of any dictionary that it is best to be a word, volume 1, A-AB1, followed by A-AAB1, signet-bearer
from all over the world flock here to enjoy its solitude (hotel brochure, Italy)

We have nice bath and are very good in bed (hotel brochure, Zürich, Switzerland)

No automobiles. Pederasts only (hotel courtyard sign, Barcelona)

Enter the cabin of full lighting only and never backwards (hotel lift sign, Potsdam, East Germany)

If set breaks, inform manager. Do not interfere with yourself (notice on hotel TV set, Belgrade, Yugoslavia)

WERY STRONK BIER (bar notice, Finland ferry)

The country’s agents stamped on the backside will carry out the honour of the guarantee in their country (Akai tape-recorder guarantee)

Emperor Jehangir had 7,000 ladies in the harem. As he was a talented drunkard and a luxurious man he died in 1627 at the age of 57 years (guidebook, India)

The hour will be 60 minutes late today (time zone warning, Italian cruise ship)

If you wish disinfection enacted on your presence please ring for chambermaid (hotel notice, Lisbon, Portugal)

Daft Fad

A silly craze could aptly be described as a daft fad, and a large tom-cat as a big gib. See how many 2-word palindromic phrases you can solve from the following short descriptions.

Score: 0-4 novice; 5-9 competent; 10-14 excellent; 15-19 exception-al; 20 palindrome grandmaster.

1. half a dozen Greek letters
2. bad fruit
3. stupid sludge
4. watched over fish-catcher
5. insane original man
6. lofty Indian pillar
7. strained last courses
8. dim circuit
9. sinful smell
10. bloody European river
11. crooked beak
12. pre-eminent fools
13. tardy deserters
14. spacious health
15. evil fish
16. old cats
17. eaten away mineral aggregates
18. lagging miser
19. tired old argument
20. the best place

The Last Word

It is perhaps appropriate that we should end with an update on the final entry in the ultimate lexicon, the theoretical super-dictionary that contains every combination of letters considered to be a word, within the broadest possible sense. We examine Volume 1, A-ABIB, which commences with the indefinite article A, followed by AA, a type of rough, scoriaceous lava, then AAA, head signet-bearer of the Egyptian king Aspalut, and then AAAA, a Ta-
hitian interjection of laughter or ridicule.

Walking to the far end of the room, we lift the last tome, Volume 1331, ZEZE-END, from its place on the shelf and start leafing through. Moving to the final few pages, we note some familiar terms: ZYTHUM, ZYXT and ZYZZLE, as well as the entomological ZYXOMMA, ZYZZOGETON and ZYZZYVA. Our eyes flick over a pair of Polish words, ZZYMAC (to shrink) and ZZYMAC (to mow off), before alighting on another old favourite, ZZYX, a small community in California. The final pages are almost entirely taken up with a plethora of contrived surnames, obviously culled from various telephone directories: ZZAPITO, ZZER, ZZRAK, ZZUP, ZZYA, ZZYNOT, ZZYZKI, ZZYZZKOFF, ZZU, ZZYD, ZZYPT, ZZZZAP, ZZZZZZABAKOV, ZZZZZZZZZRA, and so on. There are a few exceptions, such as the slang verb ZZZZ, meaning 'to snore'.

We have finally reached the ultimate page of the super-dictionary, and there are only 3 terms shown on it. There is the 15-Z surname of Mrs Elsie ZZZZZZZZZZZZZZZ, a candidate for the fictitious Silly Party, who originally appeared in Monty Python's 'Big Red Book'. Then there is a multi-Z monstrosity which was used by a film critic to describe the apparently soporific effects of Eric Rohmer's 'Summer': ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ. And the last word? It is ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ