Ghosts

What words sound like they contain letters that they do not?

When we first learn to read, we are taught to pronounce words by "sounding out" their letters. This strategy works fairly well since most letters correspond to phonemes, and where they do not, many exceptions are easy to learn. However, Dmitri Borgmann compiled a list of words containing an Invisible Alphabet in *Beyond Language* (Scribner's, 1967, p. 250). His list contains one word for each letter in the alphabet, where each word contains the phoneme usually associated with its letter—but the letter itself is not in the word. We call such letters "ghost letters."

A list of words for each letter in the alphabet makes sense if each letter represents one phoneme, but this is the very assumption Borgmann is having fun with. Below is a similar list, which instead contains words for each phoneme—but the letter or letters that are usually pronounced as the phoneme are missing. We will call such missing letters "ghost phonemes."

My choice of phonemes is entirely subjective, but I have been guided somewhat by the International Phonetic Alphabet. In compiling the list, I preferred words in which no letter represents the phoneme (e.g., BURGH /bu-ro/, MBIRA /em-bir-a/), words that are common, and words not recently borrowed from a foreign language (if the word was recently borrowed, the language of origin is bracketed, except French). I do not consider proper names or acronyms (e.g., P.O.W. for a word containing the sound of L but not the letter L). I do allow mispronunciations that have become common enough to be listed in *Merriam-Webster's Collegiate Dictionary* without a substandard or dialect label (e.g., I do allow GOVERNMENT with the V pronounced like a B, but I do not allow OPERA pronounced like OPRY). Finally, I do not list words where it makes more sense to consider a letter as silent than it does to consider it as being pronounced unusually, e.g., PSALM.

Many people have seen the spelling GHOTI for FISH (GH sounded like F in LAUGH, O sounded like I in WOMEN, TI sounded like SH in NATION). From the list below we also have the spelling WAS for FISH (W sounded like F in TAW, A sounded like I in AGATE, S sounded like SH in SURE). What does CLOMP spell? (Answer at end of article.)

Phoneme	**Usual**	**Example**	**Ghost**	**Example**
schwa	various		–	CHASM
\a\	A	ADD	E	THRESH
			EI	CEINTURE
			ER	CHERT
			I	MERINGUE
			UI	GUIMPE
\A\	A	APE	OI	QUOIT
	EI	LEI	EE	GEEST [German]
	ER	FOYER	OE	ROEMER [German]
	EY	PREY	UI	UITLANDER [Afrikaans]
\á\	A	AH	I	LINGERIE
	E	ENTREE	U	FURTHEST
	O	COT		
\b\	B	BABY	P	MUNICIPAL
			V	GOVERNMENT
\ch\	CH	CHIN	SE	RINSE
	SI	TENSION	SH	WELSH
	TE	RIGHTEOUS	TH	POSTHUMOUS
	TI	QUESTION	CK	KOLACKY [Czech]

	T	NATURE	CZ	CZARDAS [Hungarian]
			KY	KYAT [Burmese]
			TT	AFFETTUOSO [Italian]
\d\	D	DO	T	TAO [Chinese]
			T	PARTNER
			TT	BUTTINSKY
			Z	INTERMEZZO [Italian]
\e\	E	ELF	–	MBIRA [Bantu]
	A	ANY	I	DOMINICK
	U	BURY	AOI	TAOISEACH [Irish]
\E\	E	EAT	A	BOLOGNA
	I	SKI	AY	QUAY
	Y	PRETTY	OIS	CHAMOIS
			J	FJORD
			AGH	SHILLELAGH [Irish]
\f\	F	FAN	V	LEV [Bulgarian]
	PH	PHASE	W	TAW [Hebrew]
	GH	LAUGH		
\g\	G	GO	C	ECZEMA
	X	EXAM	K	KIP [Lao]
\h\	H	HAT	–	THRESHOLD
	WH	WHO	G	GILA MONSTER [Spanish]
			J	JUNTA [Spanish]
			X	QUIXOTE [Spanish]
\hw\	WH	WHO	JU	MARIJUANA [Spanish]
			HU	AYAHUASCA [Spanish]
\i\	I	IS	A	AGATE
	E	AGED	O	WOMEN
	U	BUSY		
	Y	GYM		
\I\	AI	AISLE	AE	BRACCAE
	AY	AYE		
	EI	HEIST		
	EY	EYE		
	I	ICE		
	UY	BUY		
	Y	SLY		
\j\	J	JOB	CH	OSTRICH
	G	GEM	SI	TRANSIENT
	D	PROCEDURE		
\k\	K	KID	G	LENGTH
	C	CAB	GH	LOUGH [Irish]
	Q	QUEUE		
	X	FIX		
\kh\	GH	AUGHT	H	HAZAN [Hebrew]
	CH	OCH	TH	CLARSETH [Scottish]
			X	XAT [Haida]
\l\	L	LOW	–	KU KLUX KLAN
\m\	M	ME	ND	GRANDPA
				SANDWICH

			N	BOYSENBERRY
				DAVENPORT
\n\	N	NO	MP	COMPTROLLER
			M	MUSHROOM
\o\	O	OFF	U	CRITERIUM
	A	ALL		
	AU	HAUL		
	OU	FOUR		
\O\	O	OPEN	–	BURGH
	EAU	EAU	A	QUAHOG [Narraganset]
	EW	SEW		
	AU	HAUT		
\oe\	EU	BLEU	OE	OEILLADE
\oi\	OI	OIL	AW	LAWYER
	OY	BOY	AU	FRAULEIN [German]
			EU	KREUZER [German]
\ou\	OU	OUT	O	COMPT
	OW	NOW		
	AU	KRAUT		
\p\	P	PORT	–	HAMSTER
			F	CHAMFER
			GH	HICCOUGH
			B	ABLAUT [German]
\r\	R	RED	LO	COLONEL
			F	NEUFCHATEL
			U	MILIEU
			Y	BOGEYMAN
			J	JEN [Chinese]
			OE	LOESS [German]
\s\	S	SAY	Z	LOZENGE
	C	CELL	TH	HETH [Hebrew]
	X	WAX		
\sh\	SH	SHY	S	SURE
	TI	NATION	X	LUXURY
	CH	CHEF		
	CI	APPRECIATE		
\t\	T	TEA	Z	PALAZZO [Italian]
	D	WUNDERKIND	–	MARZIPAN
	ED	PASSED		
	–	ABUNDANCE		
	–	ANSWER		
\th\	TH	THIN	GH	TROUGH
			D	AMADAN [Irish]
			T	TAOISEACH [Irish]
\dh\	THE		D	CAID [Spanish]
			DD	EISTEDDFOD [Welsh]
\u\	U	UP	WO	TWOPENCE
	O	OF	OO	BLOOD
	A	WAS		
	E	THE		

	I	BIRD		
\U\	U	GNU	–	GEODUCK [Chinook]
	O	DO	W	CWM [Welsh]
	OO	OOZE	WO	TWO
	EW	EWE		
\ue\	UE	BIENVENUE	U	GUDE [Scottish]
\v\	V	VERY	B	HABDALAH [Hebrew]
			F	OF
			GH	TROUGHS
			PH	NEPHEW [British]
			W	WAGON-LIT
\w\	W	WAY	–	ONE
	U	QUA	O	COIF
			V	PECCAVI
			JU	MARIJUANA [Spanish]
\y\	Y	YARD	G	LASAGNA
	U	UNIT	J	HALLELUJAH [Hebrew]
	I	OPINION	J	JAEGER [German]
	EW	EWE	H	SENHOR [Portuguese]
	LL	BILLION		
\z\	Z	ZONE	TH	CLOTHES
	S	IS	G	PARMIGIANA
	X	XYLOPHONE		
\zh\	Z	AZURE	G	GENRE
	S	VISUAL	J	BIJOU
	SI	ASIA	X	LUXURY
	TI	EQUATION		

Answer: CLOMP spells GROAN (C sounds like G in ECZEMA, LO sounds like R in COLONEL, nothing sounds like OA in BURGH, and MP sounds like N in COMPTROLLER).

anjan—longest uncommon head 'n' tail centered on letter j (5)—*an Indian tree*

ankh—shortest common isolano (4-t)

anna—longest common palindrome beginning with letter a (4)

anthems—longest length three linkade with common words [ant & nth & the & hem & ems] (7-t)

antichristianly—longest uncommon word with consecutive letters adjacent on phone keypad beginning with letter a (15)—*acting in a way that is not befitting a Christian*

anticoagulants—longest common word with consecutive letters adjacent on phone keypad beginning with letter a (14)

anticonstitutionalist—uncommon word containing the most repeats of letter t (5-t)—*one opposed to a constitution*

antidisestablishmentarianism—longest uncommon word containing three types of vowels (28)—example of a sesquipedalian word [see "Longest Word" article, page 106]—*opposition to separation of church and state*

antiferromagnets—longest well-mixed transposal with an uncommon word [refragmentations] (16-t)—*resisting magnets*

antiparticles—longest well-mixed transposal with common words [paternalistic] (13)

antiskepticism—longest uncommon word with typewriter letters from alternating hands (14-t)—*opposition to skepticism*

antsier—see "anestri"—*more restless*