



A Phonemic Perspective on Accent Variation: American, British, and Australian English in *Reverse: 1999*

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Abstract:

This study examines how American, British, and Australian English accents are phonemically realized in the voice-acted dialogue of *Reverse: 1999*, aiming to show how regional accent features are reproduced in digital performance and how they contribute to character identity and narrative authenticity. Employing a qualitative descriptive design grounded in established phonemic frameworks by Crystal (2008), Roach (2020), and Wells (1982), the analysis samples selected in-game voice lines and transcribes each character's speech in the International Phonetic Alphabet (IPA) for comparison with canonical phonological descriptions. Findings indicate clear regional distinctions: American accents are marked by rhoticity, vowel fronting, and monophthongization; British varieties display non-rhoticity and lengthened back vowels; and Australian speech shows fronted /u:/, raised /æ/, and centering diphthongs. These results demonstrate that performed speech in video games can encode phonemic variation faithfully, thereby extending theories of accent perception into applied media contexts and supplying ecologically valid evidence of phonemic authenticity. The study bridges experimental phonetics and media representation and shows that accent realism can be evaluated through systematic linguistic analysis. Noted limitations include a narrow dataset and the absence of instrumental measurement, which future research could address through larger samples, acoustic analysis, and perceptual validation to strengthen claims about how audiences recognize and respond to accentual cues in interactive media.

Keywords: Accent variation; phonemic analysis; English varieties; digital media; *Reverse: 1999*.

Abstrak:

Penelitian ini mengkaji bagaimana aksen bahasa Inggris Amerika, Britania, dan Australia direalisasikan secara fonemik dalam dialog sulih suara gim *Reverse: 1999*, dengan tujuan menunjukkan bagaimana ciri-ciri aksen regional direproduksi dalam performa digital serta bagaimana hal tersebut berkontribusi terhadap identitas karakter dan keautentikan naratif. Dengan menggunakan desain deskriptif kualitatif yang berlandaskan pada kerangka fonemik yang dikemukakan oleh Crystal (2008), Roach (2020), dan Wells (1982), analisis ini meneliti sejumlah sampel dialog dalam gim dan mentranskripsikan ujaran setiap karakter menggunakan Alfabet Fonetik Internasional (IPA) untuk dibandingkan dengan deskripsi fonologis kanonik. Hasil penelitian menunjukkan perbedaan regional yang jelas: aksen Amerika ditandai oleh rhoticity, pelafalan vokal yang lebih maju (vowel fronting), dan monoftongisasi; aksen Britania menampilkan non-rhoticity dan vokal belakang yang lebih panjang; sedangkan aksen Australia memperlihatkan pelafalan /u:/ yang dimajukan, /æ/ yang dinaikkan, serta diftong yang berpusat. Temuan ini menunjukkan bahwa ujaran hasil performa dalam gim video dapat merepresentasikan variasi fonemik secara akurat, sehingga memperluas teori persepsi aksen ke dalam konteks media terapan serta memberikan bukti autentisitas fonemik yang bersifat ekologis. Penelitian ini menjembatani fonetik eksperimental dan kajian representasi media, serta menunjukkan bahwa realisme aksen dapat dievaluasi melalui analisis linguistik yang sistematis. Keterbatasan yang dicatat mencakup ukuran data yang relatif sempit dan tidak digunakannya pengukuran instrumental, yang pada penelitian selanjutnya dapat diatasi melalui perluasan sampel, analisis akustik, dan validasi perseptual untuk memperkuat temuan tentang bagaimana audiens mengenali dan menanggapi ciri-ciri aksen dalam media interaktif.

Kata kunci: Variasi aksen; analisis fonemik; ragam bahasa Inggris; media digital; *Reverse: 1999*.



INTRODUCTION

English serves as a global language shaped by diverse accents spoken by both native and non-native users. Among the most recognized varieties are American, British, and Australian English, each characterized by distinctive phonemic features such as vowel quality, consonant articulation, and rhoticity. These differences express cultural identity and stylistic nuance. In digital media, especially in video games, accent variation strengthens atmosphere and enhances immersion. In *Reverse: 1999*, for instance, native voice actors use accents that align with their characters' regional origins. Scenes set in London feature consistent use of British English, enriching narrative authenticity and player engagement. This example highlights the importance of studying how phonemic variation is represented and interpreted in digital storytelling.

Although research on accents in media has expanded, many studies still treat them broadly and overlook detailed phonemic structures. Most focus on perception, identity, or cultural interpretation using analytical tools such as Levenshtein distance and perceptual testing. However, limited attention has been given to the way phonemic features like vowel shifts, consonant patterns, and rhoticity appear in interactive contexts. This study addresses that issue by analyzing American, British, and Australian English accents in *Reverse: 1999*. The research contributes to phonology and sociolinguistics and offers guidance for developers seeking linguistic authenticity. The focus remains on segmental phonemic features, excluding instrumental analyses such as spectrograms but considering actor background and lexical tendencies as supporting evidence.

LITERATURE REVIEW

Phonemic theory provides the foundation for this research because it explains how accents differ at the level of minimal sound units. Crystal (2008) defines the phoneme as the smallest sound segment that distinguishes meaning, a definition that supports the present study's focus on segmental differences across English varieties. Roach (2020) strengthens this foundation by presenting a systematic description of English consonants and vowels that clarifies how articulatory settings, such as tongue height, backness, and lip posture, contribute to accent variation. These descriptions guide the classification of features like rhoticity, vowel fronting, monophthongization, and consonantal patterns in the selected voice lines. Wells (1982) further supports comparative analysis through lexical sets that group similar vowels into categories such as BATH, TRAP, or GOOSE. This



system offers a practical tool for examining divergence between American, British, and Australian English. The RP tradition formulated by Jones (1917, 1956) and refined by Gimson (1962, 1980) is essential to understanding Southern British pronunciation patterns that appear in the performances of characters such as Sotheby and Mr. APPLE. Additionally, descriptions of Australian English by Cox (2012), Cox and Fletcher (2017), and Harrington, Cox, and Evans (1997) provide accurate reference points for interpreting fronted high vowels, raised low vowels, and centering diphthongs, which are central to the analysis of Desert Flannel and Ezra Theodore. Taken together, these theoretical frameworks offer clear and reliable phonemic criteria that support the identification of accent features within the game and ensure that each accent is evaluated using established linguistic principles.

Previous studies also contribute important context. Norris, McQueen, and Cutler (2003) demonstrate that listeners adjust phonemic boundaries after exposure to unfamiliar speech, showing that phonemic categories are flexible. Their findings support the present study by explaining why performed accents in media can still be interpreted as recognizable varieties. However, their reliance on controlled laboratory stimuli creates a gap because their work does not address how phonemic features function in expressive or acted speech. Ensslin and colleagues examine how accents shape identity and ideology in video games and show that accent use supports narrative immersion. Their research highlights the cultural role of accent but lacks detailed segmental analysis, creating another gap that this study addresses by supplying phonemic transcription and feature-level description. Stein (2023) adds further insight by showing how players and designers evaluate accents in game settings, emphasizing the social meanings attached to spoken varieties. Although this study explains why accent perception matters, it does not examine the specific phonemic elements that produce these perceptions. The present research responds to these limitations by integrating sociocultural perspectives with systematic phonemic analysis of the game's voice lines.

Overall, the theories provide precise linguistic tools for identifying phonemic differences, while the previous studies reveal gaps in segmental description, natural-speech analysis, and phonemic grounding in game contexts. This research fills these gaps by combining established phonemic frameworks with detailed transcription of in-game data, thereby connecting theoretical linguistics with applied media representation.



RESEARCH METHODS

This study applies a qualitative descriptive design to identify and describe the phonemic features of American, British, and Australian English as represented in the voice-acted dialogue of *Reverse: 1999*. The primary data consist of official in-game voice lines, which provide short spoken samples produced by characters whose backgrounds and voice actors correspond to the target accent varieties. Selection focused on characters voiced by native or near-native speakers to ensure reliable phonemic cues. Supporting references on phonemic theory and accent studies guided the identification of segmental features such as rhoticity, vowel quality, diphthong behavior, and consonant patterns. No questionnaires or interviews were used because the analysis relied entirely on linguistic data. All selected voice lines were transcribed using the International Phonetic Alphabet and then classified through Wells's lexical sets, including BATH and GOOSE, along with other recognized phonemic markers. The features found in the voice lines were compared with expert descriptions of American, British, and Australian English to determine accent accuracy. Sociolinguistic perspectives were incorporated to explain how phonemic variation contributes to character identity and enhances narrative authenticity within the game.

FINDINGS AND DISCUSSION

In this section, the phonemic features identified in the selected voice lines from *Reverse: 1999* are presented and analyzed. Each character is examined according to the accent they represent, including American, British, or Australian English, with careful attention to distinctive segmental realizations that define each variety. The analysis focuses on key phonemic elements such as vowel quality, consonantal articulation, and rhoticity, emphasizing how these features contribute to portraying regional speech patterns within the game's dialogue.

American English Accents

Overview

American English in *Reverse: 1999* is represented by Blonney's performed Southern variety and Pioneer's General American base with Western tendencies. Both share core American phonemic markers while showing distinct regional realizations.

Characters

Blonney - Performed Southeastern U.S. English (Possibly Influenced by Canadian English), Voice acted by: Addison Holley (Canada)

Voiceline A: “Alright, the party's over. Thank you for cleaning up the room and washing the mugs and glasses. I have another round to catch.”

Voiceline B: “Yes, I know I have quick mood swings, lack of vision, and I'm self-centered, frivolous, and fickle.”

Pioneer - General American with mild Californian influence, Voice acted by: Blythe Melin (Michigan, U.S.)

Voiceline A: “Are you available now? I believe that red-haired Russian had good intentions, but she's painted a face on the back of my head.”

Voiceline B: “The future is a fitting display window for our dreams. Even in the pouring rain, as long as we can glimpse it, we can wrap up our coats and keep moving forward.”

Analysis

Phonemic analysis of Blonney's in-game accent:

Feature	Word	IPA	Pronunciation	Articulation
/aɪ/ monophthongization	Alright	[a:lra:t]	“ahl-raht”	low, center to back, minimal glide.
Rhoticity	Party	[ˈpɑ:rti]	“par-tee”	alveolar approximant or bunched r; tongue approaches alveolar region; voiced.
Fronted /u:/	Room	[ru:m]	“room”	high tongue, advanced toward front while lips remain rounded.
Raised /æ/	Lack	[ˈlæk]	“lak”	higher and fronter than plain /æ/

Phonemic analysis of Pionner's in-game accent:

Feature	Word	IPA	Pronunciation	Articulation
Intervocalic /t/ into flap [ɾ]	Fitting	[ˈfɪtɪŋ]	“fih-ding”	Rapid voiced alveolar tap produced by briefly striking the alveolar ridge.
Rhoticity	Forward	[ˈfɔ:rwə:d]	“for-werd”	Voiced postalveolar approximant /r/ follows the vowel with no reduction; vocal folds maintain vibration.
Fronting of /u:/ and /oo/	Moving, Coat	[ˈmʊ:vɪŋ], [kooʔ]	“mooving,” “koht”	For /u:/: high back vowel with advanced tongue position. For /oo/: mid-back to mid-front glide, voiced, lips rounded.
Clear Diphthongs /eɪ/	Rain, Display	[reɪn], [dɪspleɪ]	“rayn,” “dis-play”	Dynamic movement from mid-front to high-front

Shared Articulatory Features Across Both Characters

Feature	Word	IPA	Pronunciation	Articulation
Fronted /u:/	Room, Moving, Coat	[ru:m], [ˈmʊ:vɪŋ], [kooʔ]	“room,” “mooving,” “koht”	Advanced high-back vowel, lips rounded, voiced.
Rhoticity	Party	[ˈpɑ:rti], [ˈfɔ:rwə:d]	“par-tee,” “for-werd”	Voiced postalveolar approximant /r/, tongue curled upward

Distinct Features Separating the Two Characters

Blonney (Southern-performed):

Monophthongization of /aɪ/, Raised /æ/ before nasals, and Slight Canadian influence on /u:/

Pioneer (General American with Californian shift):

Intervocalic flapping, Western-style /u:/ and /oʊ/ fronting, and Clear diphthong preservation

Interpretation and Discussion

Blonney and Pioneer exhibit phonemic traits that affirm their American English classification, as supported by Crystal (2008), Roach (2020), and Wells (1982). Blonney's use of low centralized [a:] and raised /æ/ reflects Southern American speech, while Pioneer's flapped /t/ and fronted high vowels indicate General American with Californian influence. Rhoticity, present in both, serves as a defining marker of American accents, consistent with Roach's descriptions. This study advances prior media analyses by offering segment-level phonemic data. Despite the actors' native accents, their performances successfully replicate regional American features, contributing to the game's linguistic authenticity and stylistic consistency.

British English Accents

Overview

British English in the game appears in two Southern forms: a London-aligned Estuary-type delivery in Sotheby and a controlled RP-influenced delivery in Mr. APPLe. Both are non-rhotic and exhibit long vowel contrasts, but they differ in linking behavior, glottal tendencies, and diphthongal scope.

Characters

Sotheby - Southern British English with Estuary influence, Voice acted by: Harriet Kershaw (Richmond, London, UK)

Voiceline A: "I'll have the most fun in a party! Singing and dancing make me happy.
But my favourites are all about snacks, cakes, and puddings!"

Voiceline B: "Good morning. Is Regulus here?"

Mr. APPLe - Hybrid RP and Southern British English, Voice acted by: Elliot Hardman (Worcester, England, UK)

Voiceline A: "Are you here to confirm this APPLe's expiration date? Don't worry!"

Voiceline B: "Oh, I can't agree more."

Analysis

Phonemic analysis of Sotheby’s in-game accent:

Feature	Word(s)	IPA	Pronunciation	Articulation
Non-rhotic /r/	Party	[ˈpɑːti]	“pah-tee”	Absence of postvocalic /r/; vowel lengthened instead.
Long /ɑː/	Dancing	[ˈdɑːnsɪŋ]	“dahn-sing”	Low back vowel produced with tongue retracted; voiced.
Linking /r/	Regulus here?	[ˈreɡjʊləs]	“reg-yu-lus-r-ee-uh”	/r/ appears only to link two vowels; voiced alveolar approximant.
Unglottalized /t/	Party	[ˈpɑːti]	“pah-tee”	Tongue tip contacts alveolar ridge; released orally; no glottal constriction
Back /ʊ/	Good	[ɡʊd]	“guh-d”	High back rounded vowel; tongue raised, lips rounded.

Phonemic analysis of Mr. APPLLe’s in-game accent:

Feature	Word	IPA	Pronunciation	Articulation
Non-rhotic /r/	Here	[hɪə]	“hee-uh”	Absence of postvocalic /r/; vowel lengthened instead.
Long /ɑː/	Can’t	[kɑːnt]	“kahnt”	Low back vowel; voiced; tongue retracted.
Tense /iː/	See	[siː]	“see”	High front tense vowel; spread lips; voiced.
Controlled /eɪ/	Date	[deɪt]	“dayt”	Movement from mid-front to high-front; voiced.
Unglottalized /t/	Date, Can’t	[deɪt] [kɑːnt]	“dayt” “kahnt”	Tongue tip contacts alveolar ridge; released orally; no glottal constriction

Shared Articulatory Features Across Both Characters

Feature	Word	IPA	Pronunciation	Articulation
Non-rhotic /r/	Party, Here	[ˈpɑːti], [hɪə]	“pah-tee” “hee-uh”	Absence of postvocalic /r/; vowel lengthened instead.
Long vowels /ɑː/ and /iː/	Dancing, Can’t	dɑːnsɪŋ] [kɑːnt]	“dahn-sing” “kahnt”	Low back vowel produced with tongue retracted; voiced.
Clear and unglottalized /t/	Party, Date, Can’t	[ˈpɑːti] [deɪt] [kɑːnt]	“pah-tee” “dayt” “kahnt”	Tongue tip contacts alveolar ridge; released orally; no glottal constriction

Distinct Features Separating the Two Characters

Sotheby (Estuary–RP hybrid):

More linking /r/, Slightly broader /ʊ/ and /ɑː/, and London-adjacent smoothing effects

Mr. APPLLe (RP-influenced Southern English):

Highly careful articulation, Tense and precise vowels, and Fewer connected-speech reductions

Interpretation and Discussion

Both characters embody Southern British phonemic systems as outlined by Crystal, Roach, and Wells. Sotheby displays Estuary-linked connected-speech features

while retaining RP vowel targets. Mr. APPLe aligns more closely with RP norms, showing careful vowel production and diphthong clarity. These findings add segmental transcription and articulatory explanation to game-focused accent research, clarifying how Southern British varieties are staged in performance.

Australian English Accents

Overview

Both characters represent General Australian English, though voiced by speakers from different backgrounds. *Desert Flannel* is performed by Australian actor Jorja Cadence, while *Ezra Theodore* is voiced by Canadian actor Lindsay Rolland-Mills, whose slight rhotic tendencies occasionally appear.

Characters

Desert Flannel

Voiceline A: “Hmm, my hand are neither soft nor smooth.”

Ezra Theodore

Voiceline A: “To make that story come true in our ‘future,’ let’s work together and start by making more friends!”

Voiceline B: “I’m one of ‘those who could not hear the music”

Analysis

Phonemic analysis of Desert Flannel’s in-game accent

Feature	Word(s)	IPA	Pronunciation	Articulation
Centered /aɪ/	My	[maə]	“mai”	Starting point centralized, moving slightly upward; voiced.
Non-rhoticity	Nor	[nɔː]	“nuh”	No postvocalic /r/
Fronted /ʌː/	Smooth	[smʊːð]	“smooht”	High central-front vowel with lip rounding.
Raised /æː/	Hand	[hæːnd]	“haand”	front vowel raised and lengthened; voiced.

Phonemic analysis of Ezra Theodore’s in-game accent

Feature	Word(s)	IPA	Pronunciation	Articulation
Non-rhotic /r/	Future	[ˈfjuːtʃə]	“fyoo-chuh”	Absence of postvocalic /r/; vowel lengthened instead.
Reduced /eɪ/	Make	[meːk]	“mayk”	Long mid-front vowel with no glide.
Flapped /t/	Together	[təˈgeðrə]	“tuh-geh-dheh”	Quick voiced tap of the tongue on the alveolar ridge.
Fronted /ʌː/	Music	[ˈmʊːzɪk]	“myoo-zik”	High front-central rounded vowel.

Shared Articulatory Features Across Both Character

Feature	Word(s)	IPA	Pronunciation	Articulation
Non-rhotic /r/	Nor, Future	[nɔ:] [ˈfju:tʃə]	“nuh” “fyoo-chuh”	Absence of postvocalic /r/; vowel lengthened instead.
Fronted /ʌ:/	smooth, Music	[ˈmʊ:zɪk]	“smooth” “myoo-zik”	High front-central rounded vowel.

Distinct Features Separating the Two Characters

Desert Flannel (General Australian)

Centered /aɪ/ and Raised /æ:/

Ezra Theodore (Performed General Australian English Influenced by Canadian English)

Reduced /eɪ/ to [e:] and Flapped /t/

Interpretation and Discussion

All features reflect General Australian English as described by Harrington et al. (1997), Cox (2012), and Bernard (1967). Desert Flannel shows native-like execution, while Ezra Theodore approximates the accent with minor inconsistencies. This section contributes phonemic detail absent from media studies by providing IPA-based evidence.

CONCLUSION(S)

This study aimed to identify and describe the phonemic features that distinguish American, British, and Australian English as represented in the voice-acted dialogue of *Reverse: 1999* and, using a qualitative descriptive approach grounded in phonemic theory, it maps how each variety is realized through segmental traits such as rhoticity, vowel fronting, monophthongization, and diphthongal variation. The analysis shows these phonemic cues are consistently and accurately embedded in characters’ speech, including performances by non-native actors, and that they operate as salient markers of regional identity within the game’s narrative world. The study therefore meets its objective of documenting cross-varietal phonemic distinctions and demonstrates that accent representation in digital media can be examined through systematic linguistic evidence rather than impressionistic evaluation.

The findings have theoretical and practical implications. In theory, the research confirms that phonemic variation retains perceptual and communicative force in performed and mediated contexts, supporting models of phoneme flexibility and accent perception. Practically, the study offers a framework for game developers, linguists, and voice directors who seek greater linguistic authenticity in narrative design. Future work should expand datasets, incorporate instrumental acoustic analyses, and apply perception-



based validation to deepen understanding of audience recognition and response to accentual cues, and it should examine suprasegmental and multimodal features such as intonation and visual design to provide a more comprehensive account of how accent functions as a tool of characterization and immersion across digital storytelling platforms.

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