Content and Correlational Analysis of a Corpus of MTV-Promoted Music Videos Aired Between 1990 and 1999

Music & Science

Volume 3: 1–14

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DOI: 10.1177/2059204320902369

journals.sagepub.com/home/mns

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Abstract

From 1990 to 1999 MTV promoted a series of 288 music videos called “Buzz Clips”, designed to highlight emerging artists and genres. Such promotion had a measurable impact on an artists’ earnings and record sales. To date, the kinds of musical and visual practices MTV promoted have not been quantitatively analyzed. Just what made some videos Buzzworthy, and others not? We applied two phases of content analysis to this corpus to determine the most common sonic and visual signifiers in Buzz Clips, then processed the results of that content analysis using polychoric correlations. Our findings show high degrees of shared variance between certain pairs of musical and visual elements observed in the sample music videos. We interpret a number of these relationships in terms of their relevance to a performer’s perceived ethnicity and gender, showing how certain audiovisual features regularly accompany white men (e.g., electric guitar) while others regularly accompany women and performers of color (e.g. drum machines).

Keywords

Buzz Clips, content analysis, correlational analysis, MTV, music video

Submission date: 18 April 2019; Acceptance date: 7 January 2020

Introduction

Recent research in music videos has applied a number of distinct approaches from different academic disciplines, especially popular music,¹ film and media studies (Caston, 2017; Korsgaard, 2013; Vernallis, 2013), gender and sexuality (Benson-Alcott, 2013), and critical race theory (Balaji, 2010; Reid-Brinkley, 2008). Several authors have attempted to combine approaches derived from each of these fields into an interdisciplinary study (Lafrance & Burns, 2017). The current study aims to augment this significant body of research by detailing a decade of musical and visual elements observable in a set of music videos and applying correlational analysis to draw conclusions about relationships between those variables.

Our corpus for this study is a series of 288 music videos MTV promoted in the 1990s as “Buzzworthy,” from the “Buzz Bin,” or simply as “Buzz Clips.”² Such videos were instantly recognizable as such, bearing an iconic “BUZZ BIN” logo alongside the video’s ID tags. Additionally, Billboard’s *Video Monitor* publication indicated which videos were being promoted as Buzz Clips with an asterisk. MTV

itself recorded the complete list of such videos on a now-defunct website.³ Table 1 shows the metadata for all videos analyzed in our corpus, including artist, video title, month of premiere, and peak position on the Billboard *Hot 100* chart (if applicable).

A number of hypotheses might be made about why these particular 288 videos were deemed “Buzzworthy.” There is, of course, a commercial incentive. According to *Entertainment Weekly* (1995), by 1994, an artist’s Buzz Clip was ~75% likely to earn its corresponding album gold or platinum sales. In addition, the “payola” schemes between the network and record companies have been well documented (Banks, 1997). Andy Schuon, then Executive Vice President at MTV, once said “The Buzz Bin is our way of saying

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Table 1. Metadata for all videos analyzed in the corpus.

Artist	Video	Premiere Date	Billboard Hot 100 Peak Position
The La's	There She Goes	1/89	49
The KLF	3 am Eternal	5/89	5
Smithereens, The	A Girl Like You	10/89	38
Jesus Mary Chain, The	Head On	10/89	–
Depeche Mode	Personal Jesus	11/89	28
Psychedelic Furs	House	12/89	–
Kate Bush	Love and Anger	12/89	–
Sinead O'Connor	Nothing Compares 2 U	1/90	1
Peter Murphy	Cuts You Up	1/90	55
Blue Nile, The	The Downtown Lights	1/90	–
Jesus Jones	Real, Real, Real	3/90	4
Depeche Mode	Enjoy the Silence	3/90	8
Cure, The	Pictures of You	3/90	71
House of Love	I Don't Know Why I Love You	3/90	–
Mission U.K., The	Deliverance	3/90	–
Church, The	Metropolis	3/90	–
NIN	Head Like a Hole	3/90	–
Lightning Seeds, The	Pure	4/90	31
Happy Mondays	Step On	4/90	57
The Sundays	Here's Where the Story Ends	4/90	–
Midnight Oil	Forgotten Years	5/90	–
D.N.A. ft. Suzanne Vega	Tom's Diner	6/90	5
Gene Loves Jezebel	Jealous	6/90	12
Concrete Blonde	Joey	6/90	19
Charlatans U.K.	The Only One I Know	6/90	–
Adrian Belew	Pretty Pink Rose	7/90	1
Soup Dragons	I'm Free	7/90	79
Sonic Youth	Kool Thing	7/90	–
Aztec Camera	The Crying Scene	7/90	–
Midnight Oil	King of the Mountain	8/90	–
World Party	Way Down Now	8/90	–
Jesus Jones	Right Here, Right Now	9/90	2
Urban Dance Squad	Deeper Shade of Soul	9/90	21
The Farm	Groovy Train	9/90	41
Cure, The	Never Enough	9/90	72
Replacements, The	Merry Go Round	9/90	–
Jane's Addiction	Stop!	9/90	–
Enigma	Sad(e?)ness, Part I	10/90	5
Iggy Pop	Candy	10/90	28
Cure, The	Close to Me	10/90	97
Neneh Cherry	I've Got You Under My Skin	10/90	–
EMF	Unbelievable	11/90	1
U2	Night and Day	11/90	–
Jane's Addiction	Been Caught Stealing	11/90	–
King's X	It's Love	11/90	–
Seal	Crazy	12/90	7
Jellyfish	That is Why	1/91	–
Alice in Chains	Man in the Box	1/91	–
Bingo Boys	How to Dance	2/91	25
Monie Love	It's a Shame	2/91	26
Living Colour	Love Rears its Ugly Head	2/91	–
Simple Minds	See the Lights	3/91	40
Lenny Kravitz	Always on the Run	3/91	–
Rembrants, The	That's Just the Way	4/91	14
Jellyfish	Baby's Coming Back	4/91	62
Definition of Sound	Now is Tomorrow	4/91	–
The Divinals	I Touch Myself	5/91	4

(continued)

Table 1. (continued)

Artist	Video	Premiere Date	Billboard Hot 100 Peak Position
Crystal Waters	Gypsy Woman	5/91	8
La Tour	People are Still Having Sex	5/91	35
Siouxsie/Banshees	Kiss Them for Me	5/91	91
Elvis Costello	The Other Side of Summer	5/91	—
3rd Bass	Pop Goes the Weasel	6/91	29
Drivin' N Cryin'	Build a Fire	6/91	—
Daddy Freddy	Daddy Freddy's in Town	6/91	—
Thunder	Dirty Love	7/91	55
White Trash	Apple Pie	7/91	—
Toni Childs	I've Got to Go Now	7/91	—
PM Dawn	Set Adrift on Memory Bliss	8/91	1
EMF	Lies	8/91	18
Ned's Atomic Dustbin	Grey Cell Green	8/91	—
Julian Lennon	Saltwater	8/91	—
Nirvana	Smells Like Teen Spirit	9/91	6
RHCP	Give it Away	9/91	73
Pearl Jam	Alive	9/91	—
PM Dawn	Paper Doll	10/91	28
Big Audio Dynamite II	Rush	10/91	—
Seal	Killer	11/91	100
Teenage Fanclub	The Concept	11/91	—
Soundgarden	Outshined	12/91	—
Shakespears [sic] Sister	Stay	1/92	4
Live	Operation Spirit	1/92	—
Matthew Sweet	Girlfriend	1/92	—
Sugarcubes	Hit	1/92	—
RHCP	Under the Bridge	2/92	2
Primal Scream	Movin' on Up	2/92	—
Live	Pain Lies on the Riverside	2/92	—
Social Distortion	Bad Luck	3/92	—
Cracker	Teen Angst	3/92	—
Soundgarden	Rusty Cage	3/92	—
Beastie Boys	Pass the Mic	3/92	—
Soup Dragons	Divine Thing	4/92	35
Pearl Jam	Even Flow	4/92	—
King's X	Black Flag	4/92	—
Arrested Development	Tennessee	5/92	6
Beastie Boys	So Whatcha Want?	5/92	93
Midnight Oil	Sometimes (Live)	5/92	—
XTC	Ballad of Peter Pumpkinhead	5/92	—
Utah Saints	Something Good	6/92	98
Faith No More	Midlife Crisis	6/92	—
Alice in Chains	Would?	6/92	—
Sonic Youth	100%	7/92	—
Helmet	Unsung	8/92	—
Morrissey	Tomorrow	8/92	—
Stereo MCs	Connected	9/92	20
Blind Melon	No Rain	9/92	20
Gin Blossoms	Hey Jealousy	9/92	25
Tasmin Archer	Sleeping Satellite	9/92	32
Alice in Chains	Them Bones	9/92	—
Faith No More	A Small Victory	9/92	—
10,000 Maniacs	These are the Days	10/92	66
Temple of the Dog	Hunger Strike	10/92	—
Soul Asylum	Somebody to Shove	10/92	—
Mark Curry	Sorry about the Weather	10/92	—
Stone Temple Pilots	Sex Type Thing	10/92	—

(continued)

Table 1. (continued)

Artist	Video	Premiere Date	Billboard Hot 100 Peak Position
Lemonheads, The	Mrs. Robinson	11/92	—
NIN	Wish	11/92	—
Stereo MCs	Step it Up	12/92	58
Jesus Jones	The Devil You Know	12/92	—
Cranberries, The	Linger	1/93	8
Deep Forest	Sweet Lullaby	1/93	78
Belly	Feed the Tree	1/93	95
Digable Planets	Rebirth of Slick	2/93	15
Neneh Cherry	Buddy X	2/93	43
Screaming Trees	Nearly Lost You	3/93	—
Soul Asylum	Black Gold	3/93	—
Radiohead	Creep	4/93	34
Terence Trent D'Arby	She Kissed Me	4/93	—
Soul Asylum	Runaway Train	5/93	5
Stone Temple Pilots	Plush	5/93	—
Cypress Hill	Insane in the Brain	6/93	19
Porno for Pyros	Pets	6/93	67
Bjork	Human Behavior	6/93	—
Urge Overkill	Sister Havana	6/93	—
White Zombie	Thunderkiss 65	7/93	—
Breeders, The	Cannonball	8/93	44
Lemonheads, The	Into Your Arms	8/93	67
US3	Cantaloup	9/93	9
Smashing Pumpkins	Today	9/93	—
Crash Test Dummies	Mmm...	10/93	4
Mazzy Star	Fade Into You	10/93	44
James	Laid	10/93	61
Tony Bennett	Steppin' Out With My Baby	11/93	—
Flaming Lips	She Don't Use Jelly	12/93	55
Dig	Believe	12/93	—
Counting Crows	Mr. Jones	12/93	—
RATM	Freedom	12/93	—
Morrissey	The More You Ignore Me, The closer I get	2/94	46
Beck	Loser	3/94	10
Brand New Heavies	Dream On Dreamer	3/94	51
Green Day	Longview	3/94	—
Live	Selling the Drama	4/94	43
Frente!	Bizarre Love Triangle	4/94	49
Danzig	Mother '93	5/94	43
Beastie Boys	Sabotage	5/94	—
Offspring	Come Out and Play	5/94	—
Lisa Loeb	Stay	6/94	—
Weezer	Undone Sweater Song	7/94	57
Veruca Salt	Seether	7/94	—
Green Day	Basket Case	8/94	—
Dinosaur Jr.	Feel the Pain	8/94	—
Hole	Doll Parts	9/94	58
Cranberries, The	Zombie	9/94	—
Rancid	Salvation	9/94	—
Elastica	Connection	10/94	53
Urge Overkill	Girl You'll be a Woman Soon	10/94	59
Sponge	Plowed	11/94	—
Letters to Cleo	Here and Now	12/94	56
Bush	Everything Zen	12/94	—
Live	Lightning Crashes	12/94	—
Offspring	Self Esteem	2/95	—
Oasis	Live Forever	2/95	—

(continued)

Table 1. (continued)

Artist	Video	Premiere Date	Billboard Hot 100 Peak Position
Toadies	Possum Kingdom	2/95	—
Dionne Farris	I Know	3/95	4
Better Than Ezra	Good	3/95	30
Jeff Buckley	The Last Goodbye	3/95	—
Shudder to Think	X-French Tee Shirt	3/95	—
Spearhead	Hole in the Bucket	3/95	—
Filter	Hey Man Nice Shot	4/95	76
Bush	Little Things	4/95	—
White Zombie	More Human Than Human	4/95	—
Sponge	Molly (16 Candles Down the Drain)	5/95	55
Jill Sobule	I Kissed a Girl	5/95	67
Radiohead	Fake Plastic Trees	5/95	—
Silverchair	Tomorrow	5/95	—
Alanis Morissette	You Oughta Know	6/95	6
D'Angelo	Brown Sugar	6/95	27
Edwyn Collins	A Girl Like You	6/95	32
Better Than Ezra	In The Blood	6/95	—
Goo Goo Dolls	Name	8/95	5
PUSA	Lump	8/95	—
Garbage	Queer	8/95	—
Civ	Can't Wait One Minute More	9/95	—
Rancid	Time Bomb	9/95	—
Foo Fighters	I'll Stick Around	9/95	—
Oasis	Wonderwall	10/95	8
Rentals, The	Friends of P	10/95	—
Everclear	Santa Monica	10/95	—
Spacehog	In the Meantime	1/96	32
Radiohead	High and Dry	1/96	78
Goo Goo Dolls	Naked	1/96	—
Joan Osborne	One of Us	2/96	4
Garbage	Only Happy When it Rains	2/96	55
Dog's Eye View	Everything Falls Apart	2/96	66
Foo Fighters	Big Me	2/96	—
Stabbing Westward	What Do I Have to Do?	2/96	—
Wallflowers, The	6th Avenue Heartache	2/96	—
Prodigy	Firestarter	3/96	30
PUSA	Peaches	4/96	29
Marilyn Manson	Sweet Dreams	4/96	—
RATM	Bulls on Parade	4/96	—
Garbage	Stupid Girl	5/96	24
311	Down	5/96	—
Folk Implosion	Natural One	6/96	29
Beck	Where It's At	6/96	61
Tracy Bonham	Mother Mother	6/96	—
Superdrag	Who Sucked Out the Feeling	7/96	—
Nada Surf	Popular	7/96	—
Sublime	What I Got	7/96	—
Fiona Apple	Shadowboxer	7/96	—
Eels	Novocaine for the Soul	8/96	—
Filter	Jurrassitol	8/96	—
RATM	People of the Sun	8/96	—
Cake	The Distance	9/96	—
Marilyn Manson	The Beautiful People	9/96	—
Tool	Track #1 ("Stinkfist")	9/96	—
Chemical Brothers, The	Setting Sun	10/96	80
Ginsburg/McCartney/Glass	The Ballad of the Skeletons	10/96	—
Prodigy	Breathe	11/96	—

(continued)

Table 1. (continued)

Artist	Video	Premiere Date	Billboard Hot 100 Peak Position
REEF	Place your Hands	11/96	—
Erykah Badu	On and On	12/96	12
Roots, The	What They Do	12/96	34
Cardigans, The	Lovefool	12/96	—
Verve Pipe, The	The Freshman	1/97	5
Veruca Salt	Volcano Girls	1/97	—
Squirrel Nut Zippers	Hell	2/97	—
Fiona Apple	Sleep to Dream	2/97	—
Blur	Song 2	3/97	—
Rammstein	Du Hast	3/97	—
Hanson	MMMBop	4/97	1
Daft Punk	Around the World	4/97	61
Chemical Brothers, The	Block Rockin' Beats	4/97	—
Fatboy Slim	Going Out of my Head	5/97	—
Dandy Warhols, The	Not if You Were the Last Junkie on Earth	5/97	—
Missy Elliott	The Rain	5/97	—
Radiohead	Paranoid Android	5/97	—
Verve, The	Bittersweet Symphony	6/97	12
Sugar Ray	Fly	6/97	—
Finley Quaye	Sunday Shining	6/97	—
Sarah McLachlan	Building a Mystery	7/97	13
Forest for the Trees	Dream	8/97	72
Cornershop	Brimful of Asha	8/97	—
Radiohead	Karma Police	8/97	—
Busta Rhymes	Put Your Hands Where My Eyes Could See	8/97	—
Sermon/Redman/Murray	Rapper's Delight	10/97	—
Space Monkeys	Sugar Cane	11/97	—
Bob Dylan	Not Dark Yet	11/97	—
Natalie Imbruglia	Torn	12/97	42
Semisonic	Closing Time	3/98	—
Fastball	The Way	4/98	—
Eve 6	Inside Out	6/98	28
Stardust	Music Sounds Better With You	8/98	62
Robbie Williams	Millennium	9/98	72
Limp Bizkit	Faith	11/98	—
Fatboy Slim	Praise You	12/98	36
Lo Fidelity Allstars	Battleflag	2/99	—
Ricky Martin	Livin' La Vida Loca	3/99	1
Eminem	My Name Is	3/99	36
Orgy	Blue Monday	3/99	56
Kid Rock	Bawitdaba	3/99	—
Baz Luhrman	Everybody's Free (To Wear Sunscreen)	4/99	45
Godsmack	Whatever	4/99	—
Jennifer Lopez	If You Had My Love	5/99	1
Buckcherry	Lit Up	5/99	—
Freestylers	Here We Go	5/99	—
Enrique Iglesias	Bailamos	6/99	1
Macy Gray	Do Something	6/99	—
Christina Aguilera	Genie in a Bottle	7/99	1
Len	Steal My Sunshine	7/99	9
Bif Naked	Moment of Weakness	7/99	—
Static-X	Push It	8/99	—
Jimmie's Chicken Shack	Do Right	8/99	—
Staind	Mudshovel	8/99	—
Eve	Gotta Man	9/99	—
Hot Boys	We On Fire	9/99	—
Macy Gray	I Try	10/99	5
Kelis	Caught out There	10/99	54
Stroke 9	Little Black Backpack	10/99	—
Powerman 5000	Nobody's Real	11/99	—
n=288			

‘Of all the things on MTV, here’s what you should pay attention to’” (Entertainment Weekly, 1995).

Most Buzz Clips were from new, breakthrough artists, and most artists only got one video in the corpus. MTV tended to prioritize and promote new, emerging genres. The series focused on alternative rock, grunge, and hip-hop from 1990 to 1993, and, as the decade progressed, helped introduce the world to pop-punk, music associated with the Lilith Fair Festival, electronica, and nü-metal. As such, Buzz Clips constitute a subgenre of MTV’s video output in the 90s, and are themselves linked to particular emerging genres.

Our approach differs from methods described above in that it relies on quantitative methods to analyze this corpus of data. The most applicable antecedent for such an approach comes from music video researcher Kip Pegley’s 2008 book. Pegley watched one continuous week (November 4–11, 1995) of programming on the Canadian music video network MuchMusic. Through a process known as content analysis, she recorded the frequency with which a number of pre-determined variables appeared. Her aim was to establish what kinds of people and content were being promoted through these music videos. Highlighting the concept of identity formation in the pre-internet era—especially for women and sexual/ethnic minorities—Pegley claims “Before North American teenagers began downloading on-demand videos from countries at home and abroad, MTV and MuchMusic were the two sources that shaped their lifestyle and their sense of themselves as a gendered and racially defined citizen of the United States or Canada” (Pegley, 2008, p. 15). Pegley was especially interested in how often viewers saw women playing instruments (other than the voice).⁴ Koskoff (1987, p. 7) has highlighted the importance of analyzing women’s musical performance particularly because it reflects a particular society’s gender structure and views regarding women’s sexual identity.

Like Pegley, our analysis sets out to assess the kinds of people and cultural practices MTV promoted as buzz-worthy in the 1990s. However, our analytical methods differ from those applied in Pegley’s book. For example, while Pegley’s statistical tools are designed to answer questions like how often black musicians were seen relative to white musicians,⁵ we introduce two further steps in order to answer ethnomusicologist Bruno Nettl’s (2015, p. 468) challenge to bring to bear more sophisticated tools to the analysis of music and identity. First, we split the content analysis into separate quantitative and qualitative phases. Second, we apply correlational analyses to that content to more accurately describe how certain people and practices are portrayed alongside one another.

Our research activity took place across three phases. The following research questions are provided to guide the reader during the explanation of these three phases, as well as the results and discussion.

- Phase 1: What themes emerge from content analysis of the Buzz Clips corpus?
- Phase 2: To what extent are the emergent Buzz Clips themes present in the corpus?
- Phase 3: What types of relationships exist between both musical and visual qualities in Buzz Clips?

Methods

Phase One, completed in May 2017, was an exploratory, bottom-up content analysis of the marked audio-visual themes in these videos. Content analysis procedures were chosen for their suitability in analyzing frequency and trend.⁶ Phase Two, completed in August 2017, was a corpus study in which the primary investigator, along with two PhD candidates from musicology and film studies, re-analyzed the 288 videos from a quantitative perspective in order to determine the frequency of the 88 most common themes generated in Phase One. Phase Three, completed in December 2018, was a correlational study conducted by the secondary investigators that estimated the strength of the relationships between any two signifiers coded in Phase Two.

In Phase One, we watched all 288 videos and created codes for recurring themes in a spreadsheet. For example, the first flannel shirt appears in Alice in Chains’s 1991 video “Man in the Box.” After noticing this in several other videos, we created the code (Flan) to signify the emergent theme of flannel clothing.⁷ We inserted this code as a vertical column in a spreadsheet, creating a matrix with the 288 music videos in the horizontal rows. Any corresponding cells of music videos containing flannel shirts received a code of “1”. Absence of flannel resulted in a code of “0”. This procedure was repeated for all music videos and all emergent themes.

In order to maximize the possibility of spotting all trends, two additional research assistants acted as independent coders, watching all 288 videos separately and keeping their own independent spreadsheets. In addition to each of our individual spreadsheets, we also maintained a separate shared log of collective emergent themes and codes as they were created. As soon as new codes appeared on our shared spreadsheet, each of us began to look for instances of that theme in subsequent videos. These themes emerged as data-sensitive, authentic representations of music video analysis. The complete list of the 88 emergent themes resulting from Phase One can be found in Table 2.

The 88 emergent themes from Phase One constituted the variable set utilized in Phase Two. In Phase 2, two raters analyzed all videos for code frequencies within the thematic categories of fashion, setting, imagery, gender/sexuality/race, and narrative. Supplemental Material 1 displays the presence (marked with a “1”) or absence (marked with a “0”) of each of these 88 themes in each of the 288 videos. Per the standards of Landis and Koch (1977), we calculated Cohen’s Kappa, a measure of observer agreement. Values

Table 2. Total variables by observation frequency.

Total variables (n=88) listed by observation frequency		
Code	Definition	Frequency
Nice	Interview/clubbing clothing	259
VC	Verse/chorus form	259
Dark	Dark/black clothing	241
Silly	Humorous video content	219
Coll	Misc. vignettes, no storyline	206
Spd	Video speed effects	193
DTRK	Dolly, tracking shot	190
Light	Light effects	177
Zoom	Zooming shots	168
Over	Overdriven guitar	167
Shak	Shaky, handheld camera	165
Dim	Dark lighting	155
Color	Video color manipulation	144
Solo	Instrumental solo	126
Super	Video superimposition with fading	123
Leath	Leather clothing	121
Nat	Nature scenery	121
Urban	Urban setting	120
Mono	Black and white/monochrome video	119
Alt	Significantly altered image	113
LA	Vintage-looking clothing	98
Water	Ocean or river setting	96
2Col	Multiple people of color	95
Clean	No guitar distortion	91
TopL	Shirtless man	90
Car	Driving car, motorcycle, golf cart, etc.	87
Dance	Choreographed dancing	87
Dist	Heavily distorted guitar	87
Perf	Band performance, no storyline	86
Tank	Woman wearing tank top	82
Bald	Bald man	81
D.Mach	Drum machine	77
Spiky	Spiky haircut on man	73
Keys	Keyboard lead instrument	70
Baggy	Baggy clothing	68
Crop	Woman wearing cropped shirt	68
Srs	Serious imagery/themes	66
8mm	Grainy, compressed, blurred video	65
Narr	Clear story with plot and characters	62
Ac.G	Acoustic guitar use	60
ExNo	Extra, non-musical noises	60
Cap	Capitalist imagery	56
Fade	Gradual song fadeout	53
H.Bod	Large hollow body guitar pictured	52
Gaze	Predatory man gaze/behavior	49
Flan	Flannel shirt	46
Multi	Split screen	42
Pixie	Woman with pixie haircut	42
SSVC	Identical/similar verse and chorus	42
LP	Iconic LP guitar	41
Relig	Religious/antireligious imagery	41
Wfem	Lead singer is white woman	41
Strat	Iconic Strat guitar	40
Alc	Alcoholic drinks	38
Bowl	Man with bowl haircut	38
Make	Man wearing makeup	38

(continued)

Table 2. (continued)

Total variables (n=88) listed by observation frequency		
Code	Definition	Frequency
NoBand	Band performance not shown	38
T.Miss	Timbral mismatch	37
Orch	Brass or string instruments	34
Pol	Police/military	34
Digi	Digitally-created video objects	33
Finst	Woman playing instrument	33
Indus	Industrial setting	33
Agg	Aggressive playing/instrument smashing	32
Marsh	Marshall amp logo visible	30
Bmal	Black man lead singer	28
Str	Strophic form	28
Sat	Satire/parody of product or genre	25
332	3-3-2 groove	23
Long	Long shots	23
Scr	Screaming	23
Torn	Torn/tattered clothing	23
Bfem	Black woman lead singer	19
Nerd	Nerdy clothing	19
Reflx	Video shows filming of video	19
Butch	Masculine woman	18
Cow	Cowboy clothing	18
Tele	Iconic Tele guitar	18
Mirr	Symmetrical mirror shot	17
Cross	Man crossdressing	16
Efem	Effeminate man behavior	16
Gay	Homosexuality shown/implied	16
Lace	Woman wearing lace	16
SG	Iconic SG guitar	14
Circ	Circus performers	11
Dream	Dream sequence	11
Cart	Cartoons	10
2char	One actor plays two characters	8
Movie	Film scenes used	5

were quite high in all categories, ranging from “substantial” (.61–.80) to “almost perfect” (.81–.99) in all categories: fashion (.73), setting, (.77), imagery (.69), gender/sexuality/race (.89), and narrative (.73). Music and video codes were only observed by one rater, so rater reliability was not calculated for either of these categories. Phase Two normalized the dataset by showing us exactly when trends began, regardless of when they were observed in Phase One. For example, Phase One coders only noticed pixie haircuts (Pixie) alongside the rise of women singer-songwriters in 1994, but Phase Two revealed that there were several instances of pixie cuts in both 1990 and 1992.

Phases One and Two tackled the same problem from different angles. The strength of Phase One was its bottom-up assessment. It presumed nothing—viewers recorded what happened in the videos without imposing a preconceived idea of what they expected might happen. Phase Two was, instead, a top-down assessment that determined the frequencies of codes, implying the emergence, rise, and fall of these trends. Following research standards in social sciences and communication studies (Stevens,

Table 3. Observation frequency ordered by category.

Code	Definition	Frequency
Fashion		
Nice	Interview/clubbing clothing	259
Dark	Dark/black clothing	241
Leath	Leather clothing	121
LA	Vintage-looking clothing	98
TopL	Shirtless man	90
Tank	Woman wearing tank top	82
Bald	Bald man	81
Spiky	Spiky haircut on man	73
Baggy	Baggy clothing	68
Crop	Woman wearing cropped shirt	68
Flan	Flannel shirt	46
Pixie	Woman with pixie haircut	42
Bowl	Man with bowl haircut	38
Make	Man wearing makeup	38
Torn	Torn/tattered clothing	23
Nerd	Nerdy clothing	19
Butch	Masculine woman	18
Cow	Cowboy clothing	18
Cross	Man crossdressing	16
Lace	Woman wearing lace	16
Gender/Sexuality/Race		
2Col	Multiple people of color	95
Gaze	Predatory male gaze/behavior	49
Wfem	White female lead singer	41
Finst	Woman playing instrument	33
Bmal	Black male lead singer	28
Bfem	Black female lead singer	19
Efem	Effeminate male behavior	16
Gay	Homosexuality shown/implied	16
Imagery		
Silly	Humorous video content	219
Dance	Choreographed dancing	87
Srs	Serious imagery/themes	66
Cap	Capitalist imagery	56
Relig	Religious/antireligious imagery	41
Alc	Alcoholic drinks	38
Pol	Police/military	34
Agg	Aggressive playing/instrument smashing	32
Circ	Circus performers	11
Musical Elements		
VC	Verse/chorus form	259
Over	Overdriven guitar	167
Solo	Instrumental solo	126
Clean	No guitar distortion	91
Dist	Heavily distorted guitar	87
D.Mach	Drum machine	77
Keys	Keyboard lead instrument	70
Ac.G	Acoustic guitar use	60
Fade	Gradual song fadeout	53
H.Bod	Large hollow body guitar pictured	52
SSVC	Identical/similar verse and chorus	42
LP	Iconic LP guitar	41
Strat	Iconic Strat guitar	40
T.miss	Timbral mismatch	37
Orch	Brass or string instruments	34
Marsh	Marshall amp logo visible	30
Str	Strophic form	28

(continued)

Table 3. (continued)

Code	Definition	Frequency
332	3-3-2 groove	23
Scr	Screaming	23
Tele	Iconic Tele guitar	18
SG	Iconic SG guitar	14
Narrative		
Coll	Misc. vignettes, no storyline	206
Perf	Band performance, no storyline	86
Narr	Clear story with plot and characters	62
Sat	Satire/parody of product or genre	25
Movie	Film scenes used	5
Setting		
Nat	Nature scenery	121
Urban	Urban setting	120
Water	Ocean or river setting	96
Car	Driving car, motorcycle, golf cart, etc.	87
NoBand	Band performance not shown	38
Indus	Industrial setting	33
Dream	Dream sequence	11
Video Elements		
Spd	Video speed effects	193
DTRK	Dolly, tracking shot	190
Light	Light effects	177
Zoom	Zooming shots	168
Shak	Shaky, handheld camera	165
Dim	Dark lighting	155
Color	Video color manipulation	144
Super	Video superimposition with fading	123
Mono	Black and white/monochrome video	119
Alt	Significantly altered image	113
8mm	Grainy, compressed, blurred video	65
ExNo	Extra, non-musical noises	60
Multi	Split screen	42
Digi	Digitally-created video objects	33
Long	Long shots	23
Reflx	Video shows filming of video	19
Mirr	Symmetrical mirror shot	17
Cart	Cartoons	10
2char	One actor plays two characters	8

2012), the blend of bottom-up and top-down methods is helpful for avoiding both selection and exposure biases.

In Phase Three we computed polychoric correlations between each of the variables to look at relationships between the various musical and non-musical aspects of each video. The commonly used Pearson correlation was not appropriate for this analysis, because it underestimates the relationship between variables in dichotomous data. We also considered analyzing purely descriptive data, but worried that this type of information lacked inferential power necessary to prompt future research on this topic. It seemed best to reference a statistical standard for guidance in our analysis, though not through the utilization of alpha to determine statistical significance. As a result, we elected to calculate tetrachoric correlation coefficients. These correlations are a special case of polychoric correlations and are appropriate for binary data (Chesire et al., 1933; Muthén & Hofacker, 1988). The full

Table 4. Heat map.

correlation matrix of all variables coded can be found in Supplemental Material 2 and Supplemental Material 3.

Using these resulting correlations, we elected to use a measure of shared variability between variables to identify relationships warranting future analysis. The variance inflation factors (VIF) references the extent of shared variability between variables through a numerical score. Truly independent variables have a VIF of zero. As the VIF increases, the degree of dependence increases. We elected to use a VIF of 5 (representing no less than 80% shared variability between fit lines) as our threshold for analysis.⁸ Selected relationships reflecting VIF values above 5 can be viewed in Table 5.

Results and discussion

Results of Phases 1 and 2 define the presence and magnitude of 88 emergent themes in the corpus. Table 2 shows the frequency with which the themes appear. Table 3 shows

these same 88 variables ranked by observation frequency, but grouped by category.

Interpreting Table 2 is difficult because of the sheer number and variety of variables coded. It also reveals that some codes generated as a result of emergent themes in Phase One may have been too broad. For example, nice clothing (Nice) was found in 259 (89.9%) of all videos. That a more specific signifier, leather (Leath), appears in 121 videos (42%) gets closer to establishing a prominent fashion aesthetic for these videos. Other signifiers that drew our attention in Phase One, such as music videos that contain scenes from a motion picture (Movie), nevertheless appear as outliers in the corpus (5 videos, 1.7%). In this article we focus on statistical signifiers, though it is worth considering the possibility that viewers might just as well take special notice of novel yet rare signifiers such as the appearance of movies in music video.

Table 3 separates the Table 2 data into different coding categories (e.g. Music, Fashion, Narrative), making it easier

Table 5. Selected (moderate to strong) positive and negative correlations.

Variables	r	R squared	VIF
Musical Elements			
Telecaster Guitar			
Choreographed Dancing	-.983	.966	29.664
Black Woman Lead Singer	-.899	.808	5.214
Black Man Lead Singer	-.987	.974	38.713
Gibson SG Guitar			
Black Man Lead Singer	-.933	.870	7.721
Timbral Mismatch			
Flannel Shirt	-.907	.823	5.639
Interview/Clubbing Clothing			
Screaming	.941	.885	8.732
Video Elements			
Cartoons			
Brass or String Instruments	-.902	.814	5.365
Police/Military	-.902	.814	5.365
Symmetrical Mirror Shot			
3-3-2 Groove	-.931	.867	7.505
Long Shots			
Woman in Lace	-.917	.841	6.285
Man Crossdressing	-.917	.841	6.285
Masculine Woman	-.944	.891	9.186
Fashion			
Man Crossdressing			
Black Woman Lead Singer	-.939	.882	8.455
Black Man Lead Singer	-.963	.927	13.768
Band Performance, No Storyline	-.902	.814	5.365
Man with Bowl Haircut			
Identical/Similar Verse and Chorus	-.935	.874	7.951
Setting			
Dream Sequence			
Police/Military Imagery	-.925	.856	6.926
Imagery			
Circus Performers			
Interview/Clubbing Clothing	.975	.951	20.253
Woman Instrumentalist	-.917	.841	6.285
Black Man Lead Singer	-.946	.895	9.516
Gender/Sexuality/Race			
Black Woman Lead Singer			
Cowboy Clothing	-.899	.808	5.214
Effeminate Man			
Cowboy Clothing	-.897	.805	5.118
Narrative			
Movie Footage			
Verse/Chorus Form	.932	.869	7.612
Keyboard Lead Instrument	-.928	.861	7.204
Drum Machine	-.939	.882	8.455

to draw conclusions about the people and practices represented in this corpus. We can see that women are only shown playing instruments in roughly one of every nine videos ($N_{Finst} = 33$, 11.4%). Black men are shown as lead vocalists ($N_{Bmal} = 28$) more often than black women ($N_{Bfeml} = 19$), with white women faring better than either ($N_{Wfem} = 41$). But those three together ($N = 88$) represent less than half of the remaining 200 videos, in which white men are depicted as lead singers. Savage et al. (2015, p. 8991) has explained the widespread disparities between men's and women's

musical participation across cultures as evidence of "patriarchal restrictions on female performance."

While Pegley's discussion relates this data to a wide swath of social practices (contractual, socio-economic), her data is limited to counting the frequency of these variables. We wanted to determine not only the frequency of these variables, but also which variables were regularly seen (or not seen) together. Supplemental Material 2 shows the number of times that any pair of variables appears together in the 288 videos analyzed during the third and final phase of this project. Supplemental Material 3 displays that same information as a complete correlation matrix showing the strength and direction of the relationships between each of the 88 variables. Table 4 presents this information as a visually accessible heat map—negative correlations are red, positive correlations are blue, and the opacity of the color in each cell reflects the strength of the correlation. We are including Tables 2–4 and Supplemental Material 1, 2 and 3 as downloadable, editable .xlsx files with a CC BY-NC license in the hopes that future researchers will analyze the data to reach yet unforeseen conclusions.

Table 5 shows selected moderate-to-strong positive and negative correlations that emerged from Supplemental Material 3 and Supplemental Material 2, separated into the same categories presented in Table 3. Correlation coefficients are an index of a linear relationship between any two variables.⁹ Correlation coefficients imply direction: they can be either positive (X and Y tend to appear together) or negative (X and Y tend to appear separately). In addition, correlation coefficients communicate strength on a scale between -1 and +1 with the central point of 0 indicating no linear relationship. In other words, correlation coefficients indicated by values of ± 1 communicate a perfect linear relationship between two variables (for every single increase/decrease of X, a respective increase/decrease of Y can be expected). Values between ± 1 imply varying relationship magnitudes, with values $\pm .30$ or smaller generally implying weak relationships, $\pm .50$ implying moderate relationships, and values of $\pm .70$ implying strong relationships. For the purpose of this study, though, we elected to use variance inflation factor results above our designated cutoff value (higher than 5) as standard for potential discussion. In the following paragraphs, we will address and interpret the relationships from several categories demonstrating high amounts of shared variability.

Musical elements

All three of the most common electric guitar types seen in the corpus—the Fender Stratocaster (Strat), the Gibson Les Paul (LP), and the Gibson SG (SG)—correlate negatively with women (Finst) and musicians of color (2col), suggesting that the electric guitar, the most identifiable signifier of rock music, is associated with white men. By contrast, the drum machine (D.mach), an instrument that is virtually anathema to rock "authenticity" in the 90s, correlates

strongly with musicians of color, keyboards (Keys), and choreographed dancing (Dance) regularly seen in hip-hop and R&B videos. Timbral mismatch (T.miss), in which the seen instrument does not match the heard timbre, correlates negatively with flannel shirts (Flan), the dominant fashion aesthetic of (white) grunge music.

In addition to the visual appearance of these instruments, it is hard to overstate the sonic importance of the electric guitar and drum machines in determining rock and hip-hop genres (respectively). While the latter has remained a dominant sound in the Billboard *Hot 100* hits of today, the electric guitar has largely been replaced by synthesizers as a primary chording instrument. As such, it is possible that the sound of a (distorted) electric guitar playing (power) chords might signify a “throwback” 90s sound.

Video elements

In certain videos, one actor plays two separate fictional characters (2char). This correlates strongly with videos that contain dream sequences (Dream), in which the dreamt character is usually portrayed by the same actor as the dreaming character. Conversely, the presence of an actor playing two fictional characters correlates negatively with performance videos (Perf), in which the dominant narrative (or lack thereof) is the band playing on a simulated soundstage. It would be both visually confusing (and technologically demanding in the 90s) to see one musician playing alongside another played by the same actor.

Fashion

Men dressing in fashion attire or makeup generally associated with women, aka cross-dressing (Cross), appears in only sixteen videos (5.5%), but it correlates negatively with musicians of color (2col). It was more culturally acceptable in this corpus to depict white musicians transgressing masculine gender norms than it was for musicians of color. Baldness (usually intentional, i.e. shaved head; Bald) was much more common among musicians of color than white musicians.

Setting

Music videos with dream sequences (Dream) correlate negatively with videos that contain police or military imagery (Pol), suggesting that these topics were too “serious” to be depicted through dreams. They correlate positively with videos that contain well-formed narrative stories (Narr), and negatively with videos that do not (e.g., performance videos; Perf), in which the narratives are replaced by extensive footage of the band performing. Urban settings (Urban), which constitute just under half of all videos in the corpus (41.6%), correlate strongly with themes of police, military, and capitalism (Cap), suggesting the city as the site of such cultural practices.

Imagery

Circus performers (Circ) are relatively rare in the corpus ($N = 11$), but they correlate negatively with women instrumentalists (FInst) and people of color (2col). It could be the case that white men have the cultural capital to risk being depicted alongside such “freaks,” while others do not. Extended dance sequences (Dance), a hallmark of hip-hop and R&B videos, correlate positively with other elements heard and seen in those videos, including musicians of color and use of keyboards (Keys).

Gender/sexuality/race

When black women (Bfem) appear as lead singers in these videos, they are depicted in more “butch” fashions (Butch) than white women (Wfem). They also almost never wear cowboy/western-influenced clothing (Cow). Men perceived as dressing effeminately (Efem) also disavow cowboy clothing, as well as flannel (Flan), and are regularly seen wearing makeup (Make) and/or crossdressing (Cross).

Narrative

When movie footage (Movie) does appear in Buzz Clips, it is always from a movie in which the heard song appears on the soundtrack. Though there are only 5 such videos, it is interesting that movie footage correlates strongly with a number of elements linked to rock music, including verse/chorus forms (VC) and overdriven guitars (Over). These videos correlate negatively with elements linked to hip-hop or R&B, including drum machines (D.mach), keyboards (Keys), and musicians of color (2col). Buzz Clips, then, promoted movies associated with white rock culture (e.g. Urge Overkill’s video “Girl You’ll be a Woman Soon,” promoting *Pulp Fiction*) but not hip-hop videos promoting black culture (e.g. Dr. Dre’s video for “Keep Their Heads Ringin’,” promoting the movie *Friday*).

Conclusion

This article has introduced quantitative methods for the analysis of a corpus of music videos, has discussed some of the most common elements observed in those videos, and has attempted to interpret some of the correlations between those elements. We are making the data available to music video researchers in the hopes that it will promote future research along these lines by other scholars.

Action editor

Tecumseh Fitch, University of Vienna, Department of Cognitive Biology.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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Contributorship

BO researched literature and conceived the study. ER and KW were involved in empirical design and data analysis. All authors drafted, reviewed, and edited the manuscript and approved the final version of the manuscript.

Peer review

Patrick Savage, Keio University Shonan Fujisawa Campus, Faculty of Environment and Information Studies.
Carol Vernallis, Stanford University, Department of Music.

Supplemental material

Supplemental material for this article is available online.

Notes

1. See Burns 2017, as well as several of the chapters in Hawkins (2017).
2. Buzz clips actually began, modestly, in 1987, and petered out in 2004. There were only 14 buzz clips in 1987, and 4 in 2004. In each year of the 1990s there were, on average, 29.3 buzz clips per year.
3. We were able to archive this website, which lists the total Buzz Clips for each year, before it was removed. We then cross-referenced it with Billboard's *Video Monitor* list for select years to check for accuracy.
4. Lafrance et al. (2018) have applied a similar statistical analysis to the success of music made by women as measured in *Billboard* chart data.
5. Pegley reveals that First Nations, Hispanic, Asian, and other ethnic identities are rare enough so as to be rendered statistically insignificant in Pegley's week-long sample (Pegley, 2008, p. 118).
6. See Krippendorff (2013) for rationale and procedures guiding content analysis research.
7. Codes will appear in parentheses as their corresponding coded themes are discussed in the document.
8. See Thompson et al. (2017) for more information on the VIF and its supported cutoff values.
9. See Thorndike and Thorndike-Christ (2010) for further explanation of correlational analysis.

References

- Balaji, M. (2010). Vixen resistin': Redefining black womanhood in hip-hop music videos. *Journal of Black Studies*, 41, 5–20.
- Banks, J. (1997). Video in the machine: The incorporation of music video into the recording industry. *Popular Music*, 16, 293–309.
- Benson-Allott, C. (2013). Going Gaga for glitch: Digital failure @nd feminist spectacle in twenty-first century music video. In C. Vernallis, A. Herzog, & J. Richardson (Eds.), *The Oxford handbook of sound and image in digital media* (pp. 127–137). Oxford: Oxford University Press.
- Burns, L. (2017). Multimodal Analysis of Popular Music Video: Genre, Discourse, and Narrative in Steven Wilson's "Drive Home". In C. X. Rodriguez (Ed.), *Coming of age: Teaching and learning popular music in academia*. Ann Arbor, MI: Michigan Publishing, University of Michigan Library. doi: 10.3998/mpub.9470277
- Caston, E. (2017). "The first cut is the deepest": Excerpts from a focus group on editing music videos, with explanatory historical and theoretical notes. *Music, Sound, and the Moving Image*, 11, 99–118.
- Chesire, L., Saffir, M., & Thurstone, L. L. (1933). *Computing diagrams for the tetrachoric correlation coefficient*. Chicago, IL: University of Chicago Press.
- Hawkins, S. (Ed). (2017). *The Routledge companion to popular music and gender*. London: Routledge.
- Korsgaard, M. B. (2013). Music video transformed. In C. Gorbman, J. Richardson, & C. Vernallis (Eds.), *The Oxford handbook of new audiovisual aesthetics* (pp. 501–521). Oxford: Oxford University Press.
- Koskoff, E. (Ed.). (1987). *Women and music in cross-cultural perspective*. New York: Greenwood Press.
- Krippendorff, K. (2013). *Content analysis: An introduction to its methodology* (3rd ed.). Thousand Oaks, CA: Sage.
- Lafrance, M., & Burns, L. (2017). Finding love in hopeless places: Complex relationality and impossible heterosexuality in popular music videos by Pink and Rihanna. *Music Theory Online*, 23, 1–17.
- Lafrance, M., Worcester, L., & Burns, L. (2018). Gender and the billboard top 40 charts between 1997 and 2007. *Popular Music and Society*, 41, 557–570.
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33, 159–174.
- Muthén, B., & Hofacker, C. (1988). Testing the assumptions underlying tetrachoric correlations. *Psychometrika*, 53, 563–577. <https://doi.org/10.1007/BF02294408>
- Nettl, B. (2015). *The study of ethnomusicology: Thirty-three discussions* (3rd ed.). Urbana, IL: University of Illinois Press.
- Pegley, K. (2008). *Coming to you wherever you are: Muchmusic, MTV, and youth identities*. Middletown, CT: Wesleyan University Press.
- Reid-Brinkley, S. R. (2008). The essence of res(Ex)pectability: Black women's negotiation of black femininity in rap music and music video. *Meridians*, 8, 236–260.
- Savage, P. E., Brown, S., Sakai, E., & Currie, T. E. (2015). Statistical universals reveal the structures and functions of human music. *Proceedings of the National Academy of Sciences*, 112, 8987–8992.
- Staff, *Entertainment Weekly*. (1995, March 17). Taking care of Buzz-Iness: Meet alternative rock's best friend. *Entertainment Weekly*. <http://www.ew.com/ew/article/0,,296425,00.html>

- Stevens, J. P. (2012). *Applied multivariate statistics for the social sciences* (5th ed.). London: Routledge.
- Thompson, C. G., Kim, R. S., Aloe, A. M., & Becker, B. J. (2017). Extracting the variance inflation factor and other multicollinearity diagnostics from typical regression results. *Basic and Applied Social Psychology*, 39, 81–90.
- Thorndike, R. M., & Thorndike-Christ, T. (2010). *Measurement and evaluation in psychology and education* (8th ed.). London: Pearson.
- Vernallis, C. (2013). Music video's second aesthetic? In C. Gorman, J. Richardson, & C. Vernallis (Eds.), *The Oxford handbook of new audiovisual aesthetics* (pp. 437–465). Oxford: Oxford University Press.