

Listening to movies

creating a user-centred catalogue of music for films.

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Summary

- There is widespread use of pre-existing commercial music in film, TV, advertising and computer games.
- Music supervisors and specialist music searchers are employed by film and games companies to find music to match moving images.
- Previous research into the communications between them and music rights holders has shown there is a mismatch between their discourses, which causes difficulties in the music search process.
- This talk discusses this mismatch and presents a cataloguing scheme designed to reflect the users' way of thinking about music.

Music Search Engines

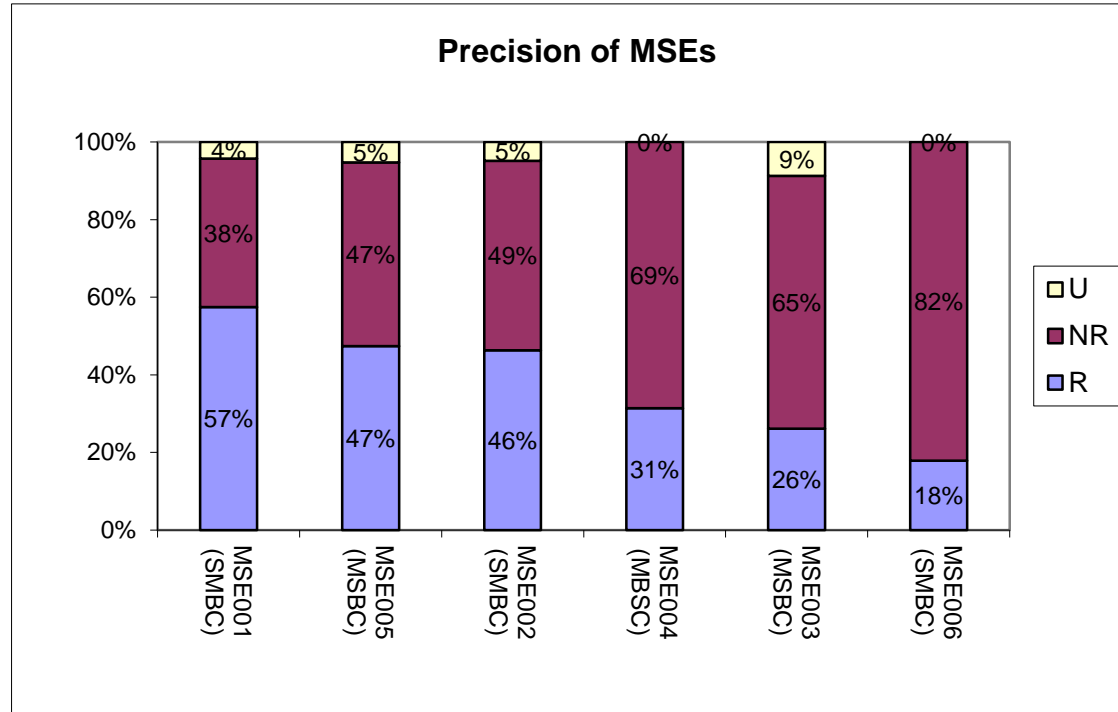
The collage features several music search engine interfaces:

- SONY/ATV MUSIC PUBLISHING:** Includes a "MUSIC SEARCH" section with an "Advanced Search" form for fields like Song, Version, Album, Writer, Artist, and Keyword. It also has a "MUSIC SEARCH" button and a "MUSIC SEARCH" link.
- WARNER CHAPPELL music:** Features a "SONG SEARCH" section with a "SITE SEARCH" bar, "SONG SEARCH & LICENSE" options, and "MY PROJECTS" links. It includes a "SELECT AN AFFILIATE" dropdown menu and a "Warner/Chappell UK" selection.
- EMI MUSIC PUBLISHING:** Displays "THE WORLD'S LEADING MUSIC PUBLISHER" and "WHERE SONGS LIVE" with the EMI logo. It has a "SONG SEARCH" section with a "TOP SONGS ONLY" checkbox and a "SEARCH TIPS" section.
- UNIVERSAL MUSIC PUBLISHING GROUP SYNCHEXPRESS:** Shows a "SEARCH" section with "SEARCH FOR UMPG SONGS" and "ENTER OR SELECT ALL THAT APPLY". It includes fields for Artist, Writer, Song Title, and Subject of Lyrics, along with "DATE RANGE" and "CHART INFO" options.
- ricall music licensing:** Features a "quick search" section with a "creative search" dropdown and a "Featured Artists" section with album covers.

Identified Repertoires

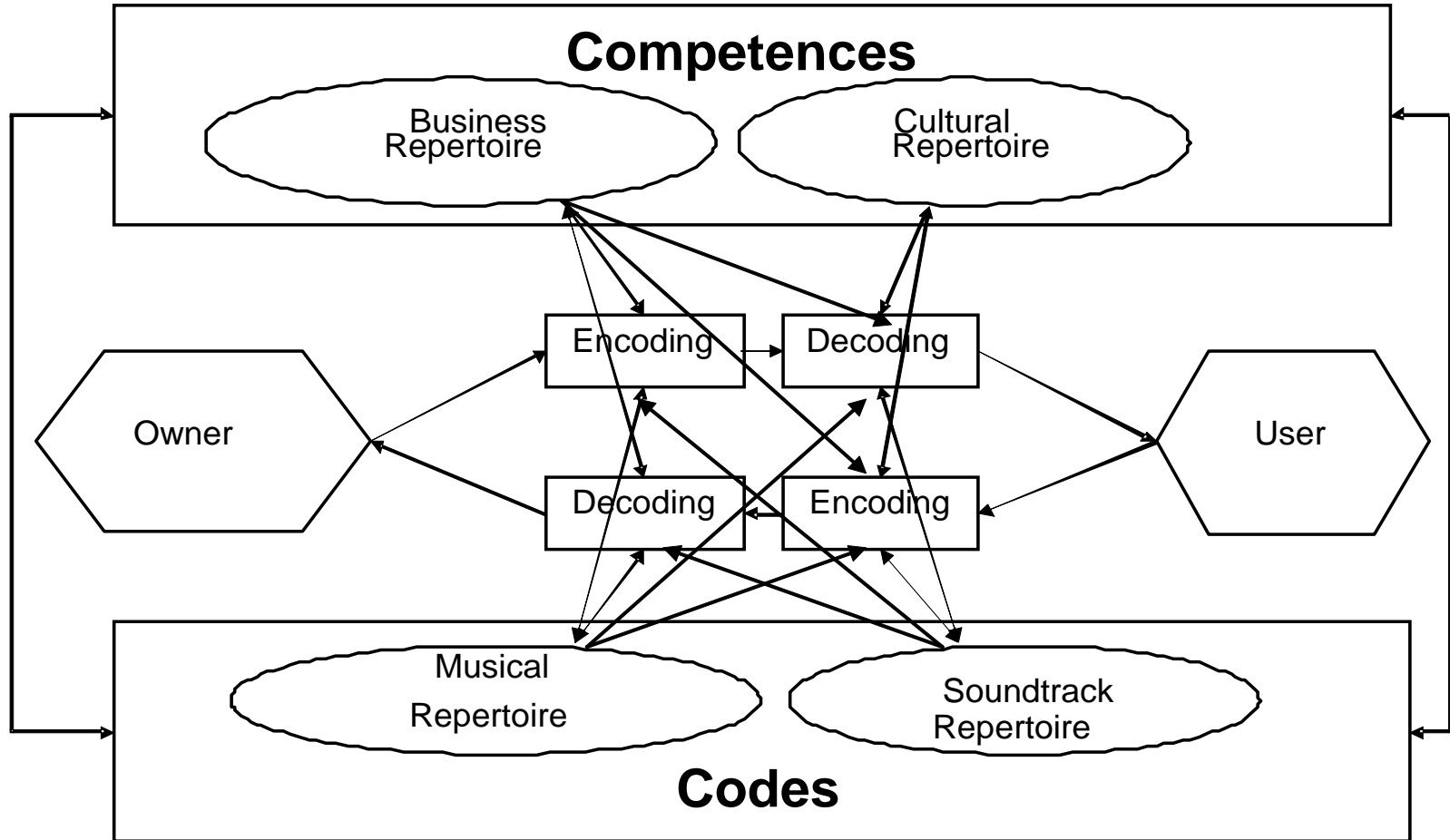
Repertoire	Keywords
<p>Musical Repertoire Music is an asset which is created, and has identifiable characteristics.</p>	<p>Artist, song title, writer, year, album title, chart position, genre, keyword, tempo, lyrics, mood, subject, vocal mix / instrumental</p>
<p>Business Repertoire: Music is a large collection of recordings which are marketable, contractual and negotiable and have monetary value to the Owner.</p>	<p>Brand new, cool, big catalogue, comprehensive, demographic, one stop, originating territory, physical</p>
<p>Soundtrack Repertoire: Music is a mood enhancing ingredient inextricably linked to User's message being conveyed by moving image to viewer / listener.</p>	<p>Effervescent, uplifting, recessive, theme, build, quirky, unexpected, familiar, theme, background, match the music to the picture</p>
<p>Cultural Repertoire: Music is a subjective appealing distraction which is personal and emotive</p>	<p>Like it, opinion, brilliant, great, hate it, it just works, gut feeling, instinct</p>

Music search engine evaluations

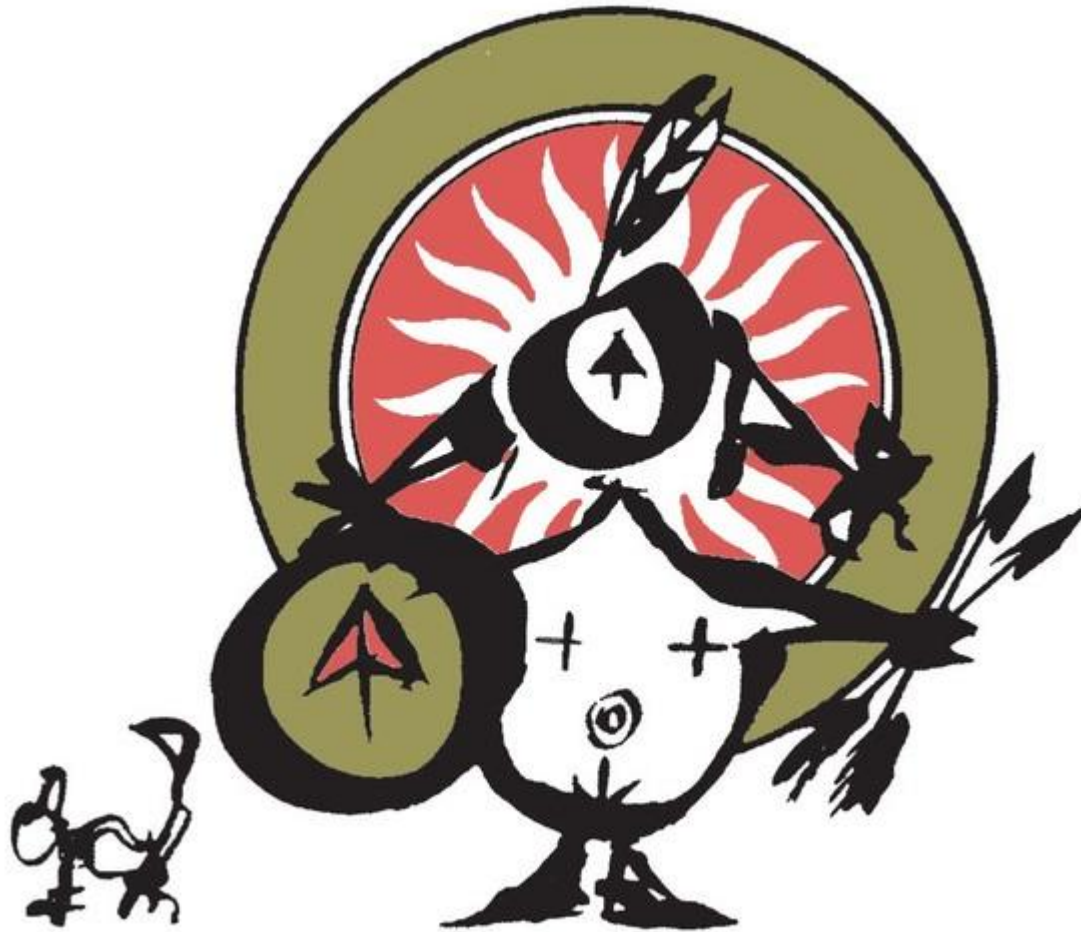


- It appears from user evaluations that music search engines which provide more relevant results emphasise the Soundtrack and Music Repertoires over the Business and Cultural Repertoires.

Communications model



One Little Indian



One Little Indian

- Existing metadata:
 - content_item_type
 - asset_id, isrc_code
 - track_name
 - track_version
 - asset_primary_artist
 - asset_display_artist
 - volume
 - sequence_number
 - product_id
 - label
 - catalog_number
 - upc_code
 - product_name
 - product_primary_artist
 - product_display_artist
 - release_date
 - state

Additional new metadata

Chart position
(USA)

Chart position
(Other)

Publisher

Composer

Territory

Approval
required

Sync history

Timings

Guests

New searchable fields

Genre

Tempo

Density

Rhythm

Vocal

Instrumental

Mood

Sounds Like

Keywords

A circumplex model of affect

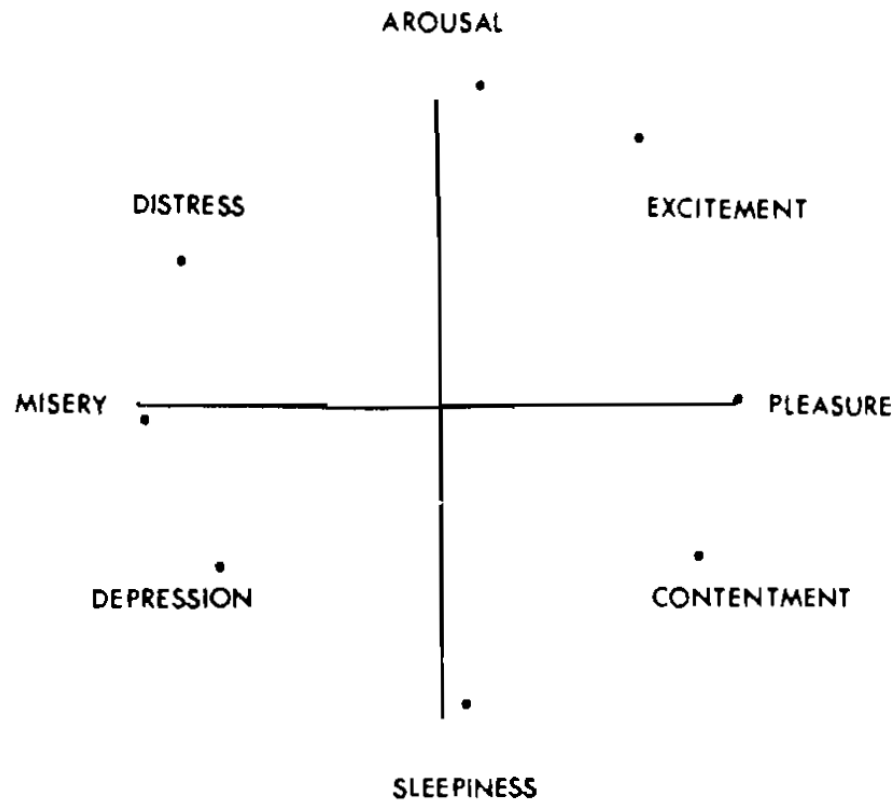


Figure 1. Eight affect concepts in a circular order.

J. A. Russell, "A circumplex model of affect," *Journal of Psychology and Social Psychology*, vol. 39, no. 6, p. 1161, 1980.

Stress / Mood table

Angry	Terror	Glorious	Vigorous	Awe-inspiring	STRESS	5	Vibrant	Feelgood	Exciting	Energetic	Ecstatic
Dangerous	Anxious	Triumphant	Powerful	Dignified	STRESS	4	Friendly	Motivational	Inspiring	Sexy	Uplifting
Hate	Fear	Dramatic	Epic	Cinematic	STRESS	3	Childlike	Positive	Comedic	Happy	Fun
Contempt	Tense	Rousing	Determined	Raw	STRESS	2	Optimistic	Sweet	Romantic	Jaunty	Quirky
Disdain	Nervous	Control	Cool	Sophisticated	STRESS	1	Simple	Content	Carefree	Charming	Upbeat
-5	-4	-3	-2	-1	STRESS	0	1	2	3	4	5
MOOD	MOOD	MOOD	MOOD	MOOD			MOOD	MOOD	MOOD	MOOD	MOOD
Worry	Mysterious	Serious	Doubt	Mushy	STRESS	-1	Warm	Calm	Intimate	Fragile	Peace
Remorse	Blue	Sentimental	Cold	Tender	STRESS	-2	Schmaltzy	Atmospheric	Sincere	Ethereal	Bliss
Self pity	Dark	Sad	Down	Coy	STRESS	-3	Loving	Dreamy	Floating	Sensual	Rapture
Depression	Sinister	Earnest	Guilt	Yearning	STRESS	-4	Quiet	Mellow	Downbeat	Kind	Sublime
Suicidal	Evil	Gloomy	Sorrow	Pleading	STRESS	-5	Soothing	Relaxed	Tranquil	Gentle	Serene

Inspired by widespread use in MIR of Valence / Arousal theory from oft-cited paper:
 J. A. Russell, "A circumplex model of affect," Journal of Psychology and Social Psychology, vol. 39,
 no. 6, p. 1161, 1980.

Stress / Mood table

(-5,5)	(-4,5)	(-3,5)	(-2,5)	(-1,5)	STRESS	5	(1,5)	(2,5)	(3,5)	(4,5)	(5,5)
(-5,4)	Dramatic				STRESS	4	(1,4)	Upbeat			
(-5,3)					STRESS	3	(1,3)				
(-5,2)					STRESS	2	(1,2)				
(-5,1)					STRESS	1	(1,1)				
(-4,1)	(-3,1)	(-2,1)	(-1,1)	STRESS	0	1	2	3	4	5	
-5	-4	-3	-2	-1	STRESS	0	1	2	3	4	5
MOOD	MOOD	MOOD	MOOD	MOOD			MOOD	MOOD	MOOD	MOOD	MOOD
(-5,-1)	(-4,-1)	(-3,-1)	(-2,-1)	(-1,-1)	STRESS	-1	(1,-1)	(2,-1)	(3,-1)	(4,-1)	(5,-1)
(-5,-2)	(-4,-2)	Sad		(-1,-2)	STRESS	-2	(1,-2)	Calm			
(-5,-3)	(-4,-3)			(-1,-3)	STRESS	-3	(1,-3)				
(-5,-4)	(-4,-4)			(-1,-4)	STRESS	-4	(1,-4)				
(-5,-5)	(-4,-5)			(-3,-5)	(-2,-5)	(-1,-5)	STRESS				

Inspired by widespread use in MIR of Valence / Arousal theory from oft-cited paper:
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(5,5) = UPBEAT = ecstatic =

Ain't Goin' to Goa (Utah Saints Mix)		Alabama 3
Ain't Goin' to Goa (Kris Needs' Rozzers Dog Mix)		Alabama 3
Shut Your Mouth		Astrid Williamson
Shut Your Mouth		Astrid Williamson
Shut Your Mouth		Astrid Williamson
Smile To Shine	Ambassador Club Mix	Baz
Here Comes the Rain Again		Billy Mackenzie
Big Time Sensuality (The Fluke Magimix - 125BPM)		Björk
Big Time Sensuality (Justin Robertson's Prankster's Joyride)		Björk
Big Time Sensuality (The Fluke Moulimix - 117BPM)		Björk
Violently Happy (Fluke - Well Tempered)		Björk
Dull Flame Of Desire	Modeselektor Remix for Girls	Björk
Violently Happy		Björk
Violently Happy		Björk
Dull Flame Of Desire	Modeselektor Remix for Girls	Björk
South Central L.A.		Eskimos & Egypt
C'est La Via	David E. Sugar Edit	HK119
C'est La Via	Armageddon Turk Mix	HK119
Seagull		K.U.K.L
Nothing Without Me (Rocco and Heist) [The Karma Mekanik Remix]		Manchild
Only Baby (move for me)	NULL	No Man
Only Baby (breathe for me)	NULL	No Man
Calling	Jerry Ropero Radio Mix	Rairbirds
Re: Evolution (BTP Fixed Tempo Instrumental) [Edit]		Shamen
Ebeneezer Goode	Beat Edit	Shamen
Boss Drum (Shamen 7 Inch Edit)		Shamen
Ebenezar Goode (Beatmasters Mix)		Shamen
Secretly	Armand Van Helden Mix	Skunk Anansie

(-5,5) = DRAMATIC = angry =

The Ending Is the Greater	Afterhours
Army Of Me (Featuring Skunk Anansie)	Björk
Isobel	Björk
Bachelorette (Alec Empire "The Ice Princess and the Killer Whale" Remix)	Björk
Bachelorette	Björk
Declare Independence	Björk
Declare Independence	Björk
Declare Independence	Björk
Earth Intruders	Björk
Declare Independence	Björk
Army of Me	Björk
Earth Intruders	Björk
Declare Independence	Björk
Declare Independence	Björk
Ugh! Your Ugly Houses!	Chumbawamba
Mouthful of Shit	Chumbawamba
Brother With An Ego	Cody ChesnuTT
War Between The Sexes	Cody ChesnuTT
Yancy Dangerfield's Delusions	Compulsion
Hear No Bullshit Se No Bullshit Say No Bullshit	Credit to the Nation
Black and Loud	Credit to the Nation
Eurodubulous	Eskimos & Egypt
Heave	Fifth Amendment
Reason for My Existence	Fifth Amendment
Camera Shy	Fifth Amendment
Charity Hilarity	Flux of Pink Indians
Some of Us Scream, Some of Us Shout	Flux of Pink Indians
Take Heed	Flux of Pink Indians
T.V. Dinners	Flux of Pink Indians
Tapioca Sunrise	Flux of Pink Indians
Progress	Flux of Pink Indians
They Lie We Die	Flux of Pink Indians
Blinded By Science	Flux of Pink Indians
Myxomatosis	Flux of Pink Indians
Is There Anybody There?	Flux of Pink Indians
The Fun Is Over	Flux of Pink Indians
Neu Smell	Flux of Pink Indians
Tube Disaster	Flux of Pink Indians
Poem: Sick Butchers	Flux of Pink Indians
Background of Malfunction	Flux of Pink Indians
Poem: End	Flux of Pink Indians
The Fucking Pricks Treat Us Like Cunts	Flux of Pink Indians

Neurotica	HK 119
Excess	HK 119
Night (Mr O's RSI Remix)	HK119 vs. Bit-Phalanx
Dismembered	K.U.K.L
Ideal	Kelli Ali
See Saw	Levy
Psychotic Machine	Loudspeaker
Stone the Memory Palace	Mackenzie
Listen Again	Mackenzie
Stone the Memory Palace	Mackenzie
Ready Or Not	Manbreak
Hangin' Around	Manbreak
Rehab	Manchild
Bring the Tune Down	Manchild
Rehab	Manchild featuring Andy Cairns from Therapy?
Rehab	Manchild featuring Andy Cairns from Therapy?
Discipline Punish	Nou
Terrorist	Nou
Hymn For Shedding Rust	Plate Six
Concrete Mouth Of Safety	Plate Six
F.M. Doll	Queenadreena
In Red	Queenadreena
FM Doll	Queenadreena
In Red	Queenadreena
Fuck Me Doll	Queenadreena
I Know	Rocket From The Crypt
Back In the State	Rocket From The Crypt
Formula Milk	Senser
Crucible	Senser
The Brunt	Senser
Aesthetic Anarchist	Skunk Anansie
Little Baby Swastikkka	Skunk Anansie
Selling Jesus	Skunk Anansie
Intellectualise My Blackness	Skunk Anansie
Selling Jesus	Skunk Anansie
Intellectualise My Blackness	Skunk Anansie
Little Baby Swastikkka	Skunk Anansie
Testify	The Dawn

(5,-5) = CALM = serene =

Grey Young Amelia		B.C. Camplight
Violently Happy (Domestic Mix)		Björk
Sweet Sweet Intuition		Björk
All Is Full of Love	Choice Mix	Björk
All Is Full of Love	Choice Mix	Björk
All Is Full Of Love	Plaid Mix	Björk
Vökuró		Björk
All is full of love	Howie's version	Björk
Bath		Björk
Cetacea		Björk
Antartic Return		Björk
All is full of love	Howie's version	Björk
All Is Full of Love	Choice Mix	Björk
Mr. Wonderful		Chocolate Genius Incorporated
Love and Respect		Daníel Ágúst
Nebulus		Fluke
SPACE PT 2		HK 119
Blow The Wind		Jocelyn Pook
September Sky		Kelli Ali
Her Last Day In Bed		Kitchens Of Distinction
Sunstroke		Lise Westzynthius
Long Walk		Lori Carson
Grey World		Lori Carson
Chickering Angel		Matthew Ryan
Emergency Room Machines Say Breathe		Matthew Ryan
10 Ævagömul orkuþula		Ólóf Arnalds
Ævagömul Orkuþula		Ólóf Arnalds
Surrender		Ólóf Arnalds
Surrender		Ólóf Arnalds
Shipwrecked		Polak
Fingers And Thumbs		Polly Paulusma
Reprise		Rairbirds
My Dying Bed		Robert Love
Sister Sleep		Rose Kemp
Enter the Flame		Sandy Dillon
Who's Answering		Sandy Dillon
Beamheart		Shelleyan Orphan
Gene Autry's Ghost		Songdog
Swimming in Galapagos		Surrounded

(-5,-5) = SAD = suicidal =

Abortion	Airlock
Turtle Dove	Belshazzar's Feast
Nocturne Seven	Billy Mackenzie
Wild Is the Wind	Billy Mackenzie
Absolutely No Point In Anything Anymore	Cheapglue
	Chocolate Genius
Ready Now	Incorporated
Last Thing	Polak

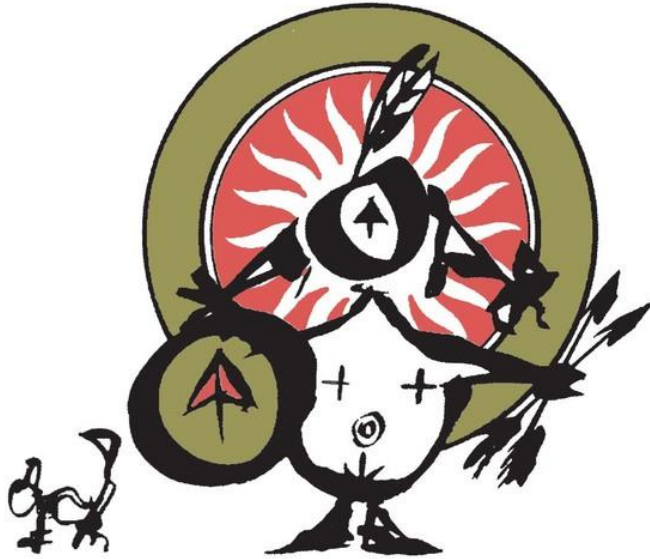
Key issues

- Problems
 - Very time consuming
 - Scalability
 - Subjective
 - Consistency
 - Lack of integration with back-office systems
- However
 - Grid helps maintain consistency
 - Flexibility of mood taxonomy
 - Manageable catalogue size
 - Links and existing metadata errors are checked during process
 - Proof of concept

Further work

- Integration into Web-interface
- Testing and evaluation
- Launch
- Continue populating database with new releases
- MIREX ground truth

Acknowledgments



<http://www.indian.co.uk/>



Arts & Humanities
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LONDON**

Thank you

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