



Info and resources at <link>
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Sound Design in Games

Title Screen (Tetris)
Menus (World of Goo)
Gameplay (Call of Duty: World at War)
Cut-scenes (Metal Gear Solid 4)

Sound Places

(Uncharted 2)
(Ico)
(Spore Origins)
(Super Mario Bros. 2)

Title Screens

Contextual Ambiance (Half-Life 2)
Sound effects, custom music (Tetris iPhone)
Music, instrument tones (Uncharted)

Menus

(Metal Gear Solid 4)
(Ico)
Take this. And hope you don't have to use it.
(Silent Hill)

Cut-Scenes

Narrative, emotional setting (The Path)
Generative music, action-music sync (Otocky)
You played the Song of Storms.
Performing (LoZ: Ocarina of Time)

Gameplay

Rhythm Game (Guitar Hero)
Pitch Game (SingStar)
Hybrid Game (Rez)
Other (Heavy Rain)

Genre

Onomatopoeia (Cut the Rope)
Pulsating border (Patapon)
Sound waves (Ecco the Dolphin)

Sound Visualization

Menus

Sounds in game menus

Context:
Sound Places

Peers:
Title Screens, Cut-Scenes,
Gameplay

Often uses:
Music, Contextual Music,
Sound Effects

May use:
Foley



Title Screens

Sound during the presentation of
a game product

Contexts:
Sound Places, Signature

Peers:
Menus, Cut-Scenes, Gameplay

Often uses:
Music, Sound Effects



Sound Places

Components of a product where
sound may appear

Context:
Sound Design in Games

Parts may include:
Title Screens, Menus,
Cut-Scenes, Gameplay

Makes use of:
Acoustic Ecology



Sound Design in Games

A deck-based approach to a Pattern
Language for Sound Design in Games,
strongly influenced by Acoustic Ecology
and subject to the principle that Sound
Design in Games benefits from being
embedded in the overall Game Design

Includes:
Genre, Sound Places,
Sound Layers and Semantics,
Acoustic Ecology,
Sound Input, Sound
Visualization,
Signature, Narrative,
Emotional Script



Sound Visualization

Graphical perception of the
occurrence of sound

Context:
Sound Design in Games

Less frequent context:
Play the Beat

May use:
Subtitles and
Captions

May relate to:
Sound Input



Genre

Characteristics of gameplay

Context:
Sound Design in Games

Relates to:
Sound Input, Gameplay,
Musical Outcome, Narrative

May relate to:
Play the Beat, Sing to Act,
Stealth



Gameplay

All kinds of sound happening and
being performed during gameplay

Contexts:
Sound Places, Genre, Narrative,
Emotional Script, Trance

Peers:
Title Screens, Menus, Cut-Scenes

May Include:
Consequent Sound, Awareness,
R-A-E-D Iterations,
Musical Outcome

May need:
Sound Input



Cut-Scenes

Sound of the cut-scenes

Contexts:
Sound Places, Narrative,
Emotional Script

Peers:
Title Screens, Menus, Gameplay

Close to:
Gameplay



Speech (Tom Clancy's End War) Pitch (SingStar)

Buttons (Patapon) Menu of sounds (Aquaria)

Sound Input

Crowd reaction, instrument sounding (Guitar Hero) Facial expressions (Rhythm Paradise)

Match the rhythm!

Acting, intonation and messaging (Patapon)

In-game Feedback

Learning songs one at a time (Patapon) Selectable difficulty levels (Guitar Hero)

PATA PATA PATA PON!

Learning songs (Aquaria)

Levelled Performance

Dialogue (Half-Life 2) Ambiance (Half-Life 2)

Doctor Freeman, I presume?

Sound Effects (Half-Life 2) Foley (Half-Life 2) Music (Half-Life 2)

Sound Layers and Semantics

(Oblivion) (Silent Hill)

(Grand Theft Auto IV) (Crysis)

Ambiance

(Heavy Rain)

(Red Dead Redemption) (Far Cry 2)

Foley

(Lego Star Wars) (Pac-Man)

642 Next

(FIOw) (Tetris)

Sound Effects

Voiced topics menu (Oblivion) Voiced instructions (Katamari)

Hey! I wasn't done explaining things!

Conversation (Grand Theft Auto 4)

Invented language (Ico)

Dialogue

Sound Layers and Semantics

Grouping design decisions according to their semantics

Context:
Sound Design in Games

Parts:
Ambiance, Foley, Sound Effects, Music, Dialogue

Makes use of:
Acoustic Ecology



Levelled Performance

The progressive sophistication of gameplay performative actions

Context:
Sound Input, Narrative

Less frequent context:
Play the Beat

Relates to:
In-game Feedback



In-game Feedback

In-game feedback on sound input performance

Contexts:
Sound Input, Awareness, Emotional Script

Less frequent context:
Play the Beat

Relates to:
Levelled Performance



Sound Input

The way sound enters the gameworld

Contexts include:
Sound Design in Games, Gameplay, Consequent Sound, Make Sound not War, Address Others, Play the Beat, Sing to Act

Relates to:
Genre

May relate to:
Sound Visualization

May call for:
Levelled Performance, In-game Feedback



Dialogue

All kinds of conversation

Many contexts, including:
Sound Layers and Semantics, Narrative, Emotional Script, Character Soundprint, Seeking for PC, Chitchat, Audio Logs, ...

Peers:
Ambiance, Foley, Sound Effects, Music

Calls for:
Requisite Variety, Acoustic Ecology

May call for:
Subtitles and Captions



Sound Effects

Sounds that make abstract or imaginary objects concrete

Many contexts, including:
Sound Layers and Semantics, Menus, Signature, Engagement, Window of Opportunity, Beacon Locator, ...

Peers:
Ambiance, Foley, Music, Dialogue

Close to:
Foley

Calls for:
Requisite Variety, Acoustic Ecology

May call for:
Subtitles and Captions



Foley

Sounds of ongoing actions

Many contexts, including:
Sound Layers and Semantics, Engagement, Character Soundprint, Footsteps, Grunts, Sound Decoys, ...

Peers:
Ambiance, Sound Effects, Music, Dialogue

Close to:
Sound Effects

Calls for:
Requisite Variety, Acoustic Ecology

May call for:
Subtitles and Captions



Ambiance

Sounds of the environment

Contexts:
Sound Layers and Semantics, Relaxation, Emotional Script, Narrative, Entrainment

Peers:
Foley, Sound Effects, Music, Dialogue

Calls for:
Acoustic Ecology, Requisite Variety



(Cut the Rope) (Half Life 2)

JACK: Hey... you ugly mutt. *laughs softly*

(Dead to Rights: Retribution)

Subtitles and Captions

Nolan North as Nathan Drake (Uncharted)

NOLAN NORTH "DRAKE"

SIR BEN KINGSLEY Sabine

Sir Ben Kingsley as Sabine (Fable III)

Voice Acting

Sérgio Calvino, portuguese voice of Nathan Drake (Uncharted)

Pêpê Rapazote, portuguese voice of Carter Blake (Heavy Rain)

Dubbing

Emblematic (Super Mario Bros.)

MARIO 043950 x35 WORLD 4-2 TIME 295

Emotive, "Live" (LocoRoco)

Procedural (Everyday Shooter)

Music

Singing characters, devices' jingles, performed music (BioShock)

Music box puzzle (Silent Hill 2)

Music as expression of context (Rez)

Diegetic Music

Using urban materials as instruments (inFamous)

Foley Music

Dependent on the area of Hyrule (Legend of Zelda: Ocarina of Time)

Dependent on type of place (Oblivion)

Dependent on level (Locoroco)

Contextual Music

(Rez) (Chime)

(Everyday Shooter)

Musical Outcome

Music

All kinds of music heard during the game

Many contexts, including:
Sound Layers and Semantics,
Entrainment, Relaxation,
Anticipation, Engagement, Decay,
Emotional Script, Trance, Narrative,
Window of Opportunity, Diegetic
Music, Contextual Music, Musical
Outcome, Signature, ...

Peers:
Ambiance, Foley, Sound Effects,
Dialogue

Calls for:
Requisite Variety,
Acoustic Ecology



Dubbing

Replacing original voices,
to adapt to other language

Context:
Dialogue, Voice Acting, Narrative
Character Soundprint

May call for:
Subtitles and Captions



Voice Acting

Performing and recording voices
for characters and/or narrators

Context:
Dialogue, Narrative,
Character Soundprint

May call for:
Subtitles and Captions, Dubbing



Subtitles and Captions

Text that represents occurring sound

Context:
Sound Visualization, Narrative,
Dialogue, Foley, Sound Effects,
Voice Acting

Relates to:
Dubbing



Musical Outcome

Music generated as a by-product of
in-game actions

Context:
Gameplay

May relate to:
Genre, Contextual Music,
Diegetic Music

Makes use of:
Music



Contextual Music

Music specific to particular
contexts or levels

Contexts:
Narrative, Emotional Script

May relate to:
Diegetic Music

Makes use of:
Music



Foley Music

Music made out of foley sounds

Context:
Music

Makes use of:
Foley, Acoustic Ecology



Diegetic Music

Music happening in the game world

Context:
Narrative, Emotional Script

May relate to:
Contextual Music,
Musical Outcome

Makes use of:
Music, Acoustic Ecology



Variety in recurring events such as death (Uncharted 2)

Variety in foley (Assassin's Creed)

Variety in music composition (Otocky)

Requisite Variety

NPC Soundprint (Bioshock)

Music (Super Mario Bros.)

Sound Effects (Sonic the Hedgehog)

Signature

Music as Narrative (Flower)

Radio Conversation (Bioshock)

Thoughts (Silent Hill)

Narrative

Audio Diaries (Bioshock)

Dead drops (inFamous)

Tapes (Far Cry 2)

Audio Logs (Halo3: ODST)

Audio Logs

(Flower)

(LocoRoco)

(Silent Hill 2)

Emotional Script

Temporary eatable ghosts (Pac-Man)

Fever mode (Patapon)

Speed boost (Sonic the Hedgehog)

Window of Opportunity

(Flower)

(Rez)

(Chime)

Trance

Relaxation (Far Cry 2)

Anticipation (Far Cry 2)

Engagement (Far Cry 2)

Decay (Far Cry 2)

R-A-E-D Iterations

Audio Logs

Dialogue recordings, frequently scattered through the gameworld

Context:
Narrative

Possibly with:
Beacon Locators

Makes use of:
Dialogue



Narrative

The contributions of sound to the narrative

Context:
Sound Design in Games

Relates to:
Genre, Emotional Script

May use many, including:
Dialogue, Cut-Scenes, Gameplay, Acoustic Ecology, Contextual Music, Levelled Performance, Eavesdropping, Audio Logs, Chitchat, Grunts, Footsteps, ...



Signature

Memorable association between sound and source

Contexts:
Sound Design in Games, Identification

May use many, including:
Character Soundprint, Footsteps, Grunts, Music, Sound Effects



Requisite Variety

Triggering alternate sounds not to compromise the experience

Contexts:
Foley, Sound Effects, Ambiance Music, Dialogue, Identification



R-A-E-D Iterations

Iterations of the sequence:
Relaxation
Anticipation
Engagement
Decay

Context:
Gameplay, Emotional Script

Parts:
Relaxation, Anticipation, Engagement, Decay

Makes use of:
Entrainment



Trance

Sound contributing for trance during the experience

Context:
Emotional Script

Often uses:
Music, Entrainment, Gameplay



Window of Opportunity

Enhancing the perception of a short time opportunity

Context:
Awareness, Emotional Script, Narrative

Includes:
Hurry Up!, Imminent Death

Often uses:
Sound Effects, Entrainment



Emotional Script

Sound designed to contribute to the game's emotional script

Context:
Sound Design in Games

Relates to:
Narrative

May use many, including:
Trance, Cut-Scenes, Gameplay, Entrainment, R-A-E-D Iterations, Failure, Achievement, Contextual Music, Grunts, Window of Opportunity, ...



Ambiance, music (Oblivion)

Breath-driven relaxation (pOnd)

Ambiance, music (Aquanaut's Holiday: HM)

Relaxation

Approaching an enemy position (Far Cry 2)

Exploring the unknown (Silent Hill)

Music and ambiance in caves (Oblivion)

Anticipation

(Killzone 2)

(Patapon)

(Need for Speed: Most Wanted)

Engagement

All pursuers down (Assassin's Creed)

No more hostiles (Far Cry 2)

Cooldown period after chase (NFS: Most Wanted)

Decay

Witness indicator: suspicious guards (Assassin's Creed)

Checkpoint indicator (audio only) (Tomb Raider Underworld)

Equipment status: "Energy Critical" (Crysis)

Awareness

Celebrating victory (Patapon)

Picking items (Super Mario Bros.)

Horizontal line (Tetris)

Achievement

Loosing rings on enemy attack (Sonic the Hedgehog)

Wrong answer (Buzz! Quiz TV Show)

Falling out (Edge)

Failure

PC reaction to impossible actions (Thief)

Hired mercenaries refusing to climb (Assassin's Creed 2)

Non-usable items (Half-Life 2)

Pushing a wall without secret (Wolfenstein 3D)

No Can Do

Decay

A phase of gameplay of reestablishment after an engagement

Context:
R-A-E-D Iterations, Gameplay
Emotional Script

Peers:
Relaxation, Anticipation,
Engagement

May use:
Music, Dialogue,
Entrainment



Engagement

A phase of gameplay of explicit conflict

Context:
R-A-E-D Iterations, Gameplay,
Emotional Script

Peers:
Relaxation, Anticipation, Decay
Decay

May use many, including:
Foley, Special Effects, Music,
Dialogue, Entrainment, Seeking
for PC, Shout and Yell, Sonic Weapon,
Make Sound not War



Anticipation

A phase of gameplay anticipating an engagement

Context:
R-A-E-D Iterations, Gameplay,
Emotional Script

Peers:
Relaxation, Engagement, Decay

May call for:
Stealth

May use:
Music, Entrainment,
Heartbeat



Relaxation

A phase of gameplay promoting relaxation

Context:
R-A-E-D Iterations, Gameplay,
Emotional Script

Peers:
Anticipation, Engagement,
Decay

Often uses:
Ambiance, Music,
Entrainment



No Can Do

Signalling something impossible

Context:
Awareness

Close to:
Failure

Makes use of:
Sound Effects, Foley,
Dialogue



Failure

Signalling something negative

Context:
Awareness, Emotional Script

Includes the parts:
Ouch!, Imminent Death, Death

Contrasts with:
Achievement



Achievement

Signalling something positive

Context:
Awareness, Emotional Script

Contrasts with:
Failure



Awareness

Sound promoting awareness for some gameplay aspect

Context:
Gameplay

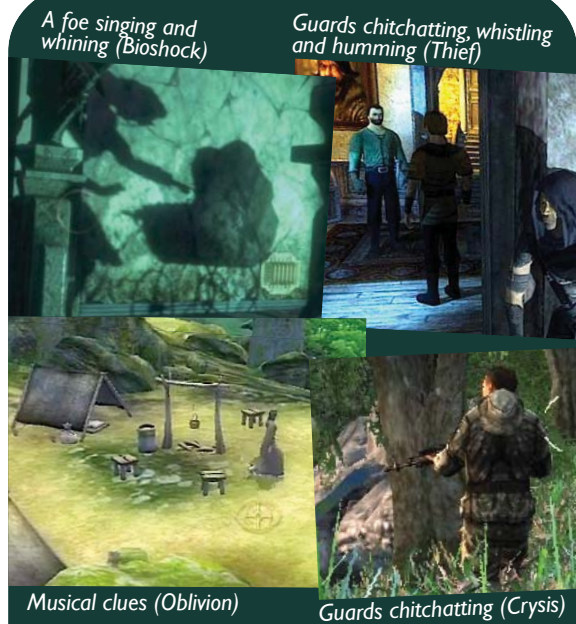
Relates to:
Emotional Script, Narrative

May use many, including:
Character Soundprint, Failure,
Achievement, No Can Do, Hurry
Up!, Window of Opportunity,
Beacon Locator,
Identification, Ouch!,
Imminent Death,
Seeking for PC,
Unaware NPC, ...





Identificati



Unaware NPC



Seeking for PC



Hurry Up!



Ouch!



Imminent Death



Death



Breath

Hurry Up!

Contributing for the sense of urge in completing something

Context:
Emotional Script, Awareness, Window of Opportunity

May relate to:
Imminent Death

Often uses:
Special Effects, Music, Entrainment



Seeking for PC

NPC's manifestations of active chasing of the PC

Contexts:
Awareness, Engagement, Anticipation

May use:
Dialogue, Shout and Yell, Grunts

May relate to:
Stealth, Character Soundprint, Sound Decoys

Contrasts with:
Unaware PC



Unaware NPC

NPC's behaviours evidencing unawareness of PC's presence

Context:
Awareness, Anticipation

May use:
Chitchat, Grunts

Relates to:
Stealth, Character Soundprint, Sound Suppressing, Sound Decoys

Contrasts with:
Seeking for PC



Identification

Promoting the recognition of entities through their distinctive soundprints

Context:
Awareness

May call for:
Signature, Character Soundprint, Beacon Locator, Requisite Variety, Acoustic Ecology

Should not compromise:
Requisite Variety



Breath

Perceptible sound of breathing

Contexts:
Character Soundprint, Awareness, Emotional Script, Entrainment

Relates to:
Grunts

Makes use of:
Foley



Death

Portraying death

Context:
Failure, Emotional Script, Awareness

Peers:
Imminent Death, Ouch!

May use:
Grunts, Foley, Sound Effects, Dialogue



Imminent Death

Urging a change of behaviour to avoid death

Context:
Failure, Awareness, Emotional Script, Window of Opportunity

Peers:
Death, Ouch!

May relate to:
Hurry Up!

May use:
Heartbeat, Grunts, Foley, Sound Effects, Dialogue



Ouch!

Signalling a painful or damaging interaction

Contexts:
Failure, Awareness, Emotional Script, Narrative

Peers:
Imminent Death, Death

May use:
Grunts



Dead drops (inFamous)
Collect Dead Drop
Nirnroot (Oblivion)
Chests and feathers (Assassin's Creed 2)

Beacon Locator

GLaDOS (Portal)
Suzume (Mini Ninjas)
Scrat (Ice Age: Dawn of the Dinosaurs)

Character Soundprint

People and horses (Assassin's Creed)
Big Daddy (BioShock)
Emphasized footsteps (Limbo)

Footsteps

(Ice Age: Dawn of the Dinosaurs)
(Tomb Raider)
(Mirror's Edge)

Grunts

Perceiving imminent death (inFamous)
Evaluating enemies' heartbeat (Dead to Rights: Retribution)
PC's arousal state (Fear Effect)

Heartbeat

(Assassin's Creed 2)
(Oblivion)
(Far Cry 2)

Chitchat

"Achtung", "Schutzstaffel" (Wolfenstein 3D)
Exuberant opponents (inFamous)
Kung-fu kiai (Mini Ninjas)

Shout and Yell

"Uhm?! Who's there?" (Thief)
Realistic response to noise (Penumbra Overture)
Pedestrians react to car honk (Grand Theft Auto 4)

Consequent Sound

Grunts

Utterances associated to physical actions or conditions

Many contexts, including:
Character Soundprint, Awareness, Ouch!, Shout and Yell, Emotional Script, Narrative, Signature, ...

May Relate to:
Breath, Footsteps

Compromises with:
Stealth

Makes use of:
Foley, Dialogue



Footsteps

The sound of footsteps
(extensible to any kind of being)

Contexts:
Character Soundprint, Awareness, Signature, Emotional Script, Stealth, Narrative, Entrainment

May Relate to:
Breath, Grunts

Makes use of:
Foley



Character Soundprint

The set of sounds of a PC or NPC

Context:
Awareness, Identification, Signature, Emotional Script

May Use:
Footsteps, Grunts, Breath, Heartbeat, Chitchat, Dialogue, Foley, Sound Effects, Acoustic Ecology

May Relate:
Stealth, Unaware NPC, Seeking for PC



Beacon Locator

Items that emit sound to ease their location

Contexts:
Awareness, Identification

Less frequent contexts:
Audio Logs

Often uses:
Sound Effects



Consequent Sound

Sound that matters to the gameworld

Context:
Gameplay

May use many, including:
Make Sound not War, Sing to Act, Play the Beat, Echolocation, Stealth, Sound Decoys, Sound Suppressing, Sonic Weapon, Address Others, Eavesdropping, ...

May imply:
Sound Input



Shout and Yell

NPC's loud utterances during engagement

Contexts:
Awareness, Engagement, Emotional Script, Character Soundprint, Seeking for PC

Makes use of:
Dialogue, Grunts



Chitchat

NPC's Dialogue that is not central to the course of action

Contexts:
Character Soundprint, Narrative, Emotional Script, Unaware NPC

Possibly with:
Grunts

Makes use of:
Dialogue, Acoustic Ecology



Heartbeat

Perceptible sound of heartbeating

Contexts:
Character Soundprint, Awareness, Emotional Script, Entrainment, Anticipation, Imminent Death, Engagement

Makes use of:
Foley



Resonating with creatures (Aquaria)

Enchanting opponents (Mini Ninjas)

Unlocking items (Legend of Zelda: Ocarina of Time)

Waking up creatures (LocoRoco)

Make Sound not War

Spatial perception (Devil's Tuning Fork)

Alien locator (Enemy Zero)

Monsters interfering with radio (Silent Hill)

Echolocation

Invoking miracles (Patapon)

Collecting strips of fabric [announced] (Journey)

Activating a shield (Aquaria)

Awakening obstacles (LocoRoco)

Sing to Act

(Patapon)

(Rhythm Paradise)

(Guitar Hero)

Play the Beat

Ico inciting Yorda (Ico)

Commanding hired personnel (Assassin's Creed 2)

Commanding the dog (Dead to Rights)

Seeking a lost son (Heavy Rain)

Address Others

Replayable audio pieces (BioShock)

Get in the airboat, sir

Repeatable last line (Mini Ninjas)

Corrupt Imperial Watchman

Directions

Gray Fox

Rumors

Repeatable dialogue topics (Oblivion)

Say that Again

Sindel's Banshee Scream (Mortal Kombat: Deception)

Sonic Tank (Dune 2000)

Horns played by Megapons (Patapon)

Sonic Weapon

(Tom Clancy's Splinter Cell: Chaos Theory)

(Thief)

(Dead to Rights: Retribution)

Stealth

Play the Beat

Acting in sync with a rhythm

Contexts:

Consequent Sound, Entrainment
Make Sound not War

May relate to:
Genre

May call for:
Sound Visualization,
Sound Input,
In-game Feedback
Levelled Performance



Sing to Act

Performing songs to achieve a purpose

Context:

Consequent Sound,
Make Sound not War

May relate to:
Genre

May imply:
Sound Input



Echolocation

Using sound to perceive the environment

Context:

Consequent Sound, Awareness,
Emotional Script,
Make sound not War

May imply:
Sound Input



Make Sound not War

Sound supporting creative alternatives to conflict

Context:

Consequent Sound,
Engagement, Emotional Script

Includes:

Sing to Act, Play the Beat,
Sound Decoys, Echolocation,
Address Others

Contrasts with:
Sonic Weapon

May imply:
Sound Input



Stealth

Low profile behaviours that include adopting a small soundprint

Context:

Consequent Sound,
Anticipation, Emotional Script

Includes:

Sound Suppressing,
Sound Decoys, Eavesdropping

May relate:
Genre

Relates to:

Footsteps, Character
Soundprint, Unaware
NPC, Seeking for PC



Sonic Weapon

Using sound as a weapon

Context:

Consequent Sound,
Engagement

Contrasts with:

Make Sound not War

Relates to:

Sound Decoys,
Sound Suppressor



Say that Again

Allowing the PC/player to request to hear again

Context:

Dialogue

May call for:

Address Others,
Requisite Variety

Makes use of:
Dialogue



Address Others

Enabling the PC to use sound to address NPCs

Context:

Consequent Sound,
Make Sound not War

May imply:

Sound Input

Often uses:

Dialogue, Foley



Acoustic lure (Spore Origins)

Acoustic Device, stones (Commandos BCD)

Noisemaker arrows (Thief: Deadly Shadows)

Knocking on objects, throwing empty magazines (Metal Gear Solid 4)

Sound Decoys

Suppressor (Metal Gear Solid 4)

Moss Arrow (Thief: Deadly Shadows)

Low soundprint behaviour (Splinter Cell)

Sound Suppressing

A form of Investigation (Assassin's Creed)

A mission (Thief II: The Metal Age)

Nanosuit 2 feature [announced] (Crysis 2)

Eavesdropping

Action-dependent music tempo (Far Cry 2)

Scuba breathing inducing pace (Endless Ocean)

Accelerating drowning music (Sonic the Hedgehog)

Lively pace (Patapon)

Entrainment

Gunfire affects nearby animal sounds (Crysis)

Coupled and evolutive sound layers (inFamous)

Ambient as inhabitants' emotional state (Prototype)

Acoustic Ecology

Entrainment

Changing the player's internal rhythms through acoustic stimulation, eventually inducing emotions and behaviour

Contexts:

Emotional Script, Trance, R-A-E-D Iterations, Relaxation, Anticipation, Engagement, Decay, Window of Opportunity, Hurry Up!

May use:

Music, Play the Beat, Heartbeat, Breath, Footsteps, Foley, Ambiance



Eavesdropping

Adopting behaviours with intention of gaining knowledge by listening to others' conversations

Context:

Stealth, Narrative, Emotional Script

Relates to:

Unaware NPC

Makes use of:
Dialogue



Sound Suppressing

Enabling the reduction of PC generated sounds

Context:

Stealth, Consequent Sound

Relates to:

Unaware NPC, Sonic Weapon

Makes use of:
Foley



Sound Decoys

Using sound to fool NPCs

Context:

Stealth, Consequent Sound, Make sound not War, Emotional Script

Relates to:

Unaware NPC, Seeking for PC, Sonic Weapon

Often uses:

Foley, Sound Effects



Acoustic Ecology

Designing sound in a holistic way, as influenced by Acoustic Ecology

Contexts:

Sound Design in Games, Sound Places, Sound Layers and Semantics, Narrative, Identification, Character Soundprint, Ambiance, Foley, Sound Effects, Chitchat, Dialogue, Foley Music, Diegetic Music, Music

