Audio Design and Implementation – Two Sides of the Same Coin

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Composer and Sound Designer, Playdead
About me

- Classically trained composer at conservatory
- Studying electroacoustic composition at City University, London
- Electroacoustic composer and sound artist
- Composer and sound designer at Playdead since 2009
Audio ideas

- Bleak sound
- Economizing on sources
- Music from the environment
- A “silent” game
- Anticipation and subjective mixing
Audio production

- Content creation
- Implementation using authoring tool (Wwise designer)
- Implementation in the game engine (LIMBO editor)
Audio production

Content creation

Authoring tool (Wwise) ↔ Game engine (LIMBO editor)
Bleak sound

- Ambiguity in sound
- Distinct sound gives a sense of “wholeness”
- Consistent processing is the glue that binds the sounds together
Bleak sound

Original frog sound

Re-recorded frog sound
Bleak sound

Original bird sound

Re-recorded bird sound
Bleak sound

Wire-recorder idle = Spider idle
Bleak sound

Tape wobbling sounds for spider breath and pulse
Economizing on sources

- 50 MB (!?!)  
- Avoid “asset thinking”  
- Creative potentials of limitations
A “silent” game

- Relative dynamics
- Using the boy as point of reference
Boy-mix parameters

- Activity (RTPC_BOY_EXHAUST)
- Change ground material (RTPC_MATERIAL_ATTENUATE)
- Attenuation - distance to listener/”microphone”
- States (BOY_AMB_LEVEL)
- Blend boxes on playground (RTPC_BOY_LEVEL)
Anticipation and subjective mixing

- Guide the attention of the player
- Support game objects and mechanisms only as long as they are important to the player
- Focusing on approaching objects
Focusing on approaching objects

Aural field of attention
Anticipation and subjective mixing

- Guide the attention of the player
- Support game objects and mechanisms - as long as they are important to the player
- Focusing on approaching objects
- Whose perspective?
Whose perspective?

Left       Center       Right
Whose perspective?
Ambience design for the spider encounter

(Spider hide)
Ambience design for the spider encounter

Sound scheme 1: Approaching the spider

- Woods
- Frozen wind
Ambience design for the spider encounter

Sound scheme 1: Approaching the spider

- Woods
- Frozen wind

Sound scheme 2: Fighting the spider

- Woods
- Spider buzzing
Ambience design for the spider encounter

Sound scheme 1: Approaching the spider
Woods  Frozen wind

Sound scheme 2: Fighting the spider
Woods  Spider buzzing

Sound scheme 3: Defeating the spider
Woods
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