VR AUDIO ADAPTATION OF THIRD PERSON GAMEPLAY

Kristian Rømer – Sound designer at IO Interactive

io interactive™

HITMAN™

SYSTEMIC AND SCALABLE

CHANGE OF PERSPECTIVE

LIVING BREATHING WORLD

HITMAN™

AAA-TRILOGY
STEALTH
THRID-PERSON

SANDBOX
GAMEPLAY

19 locations
100+ escalations
live content
....

PORT VS RE-CREATION

DARTMOOR, ENGLAND - SNEAK PEAK

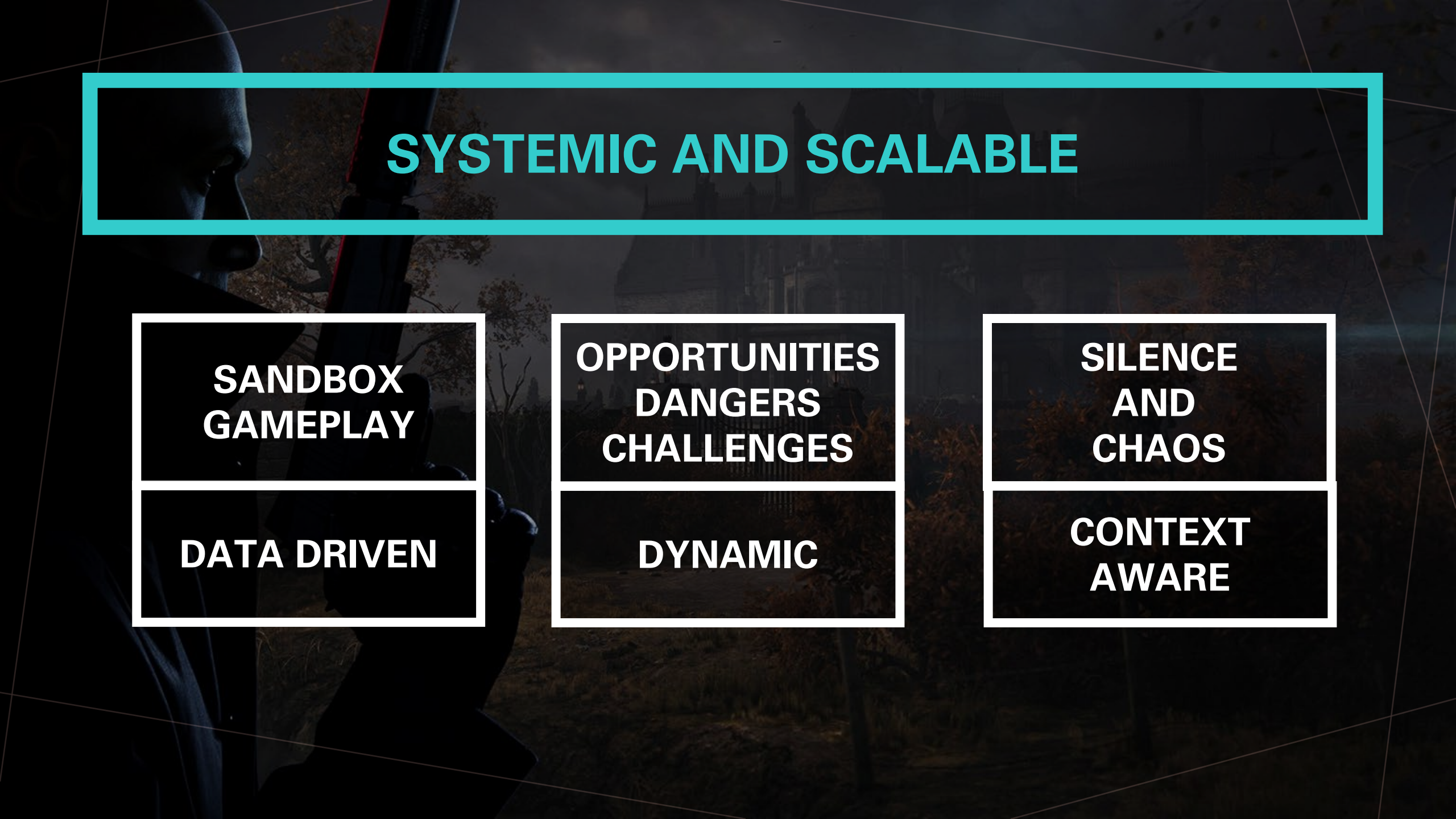
SYSTEMIC AND SCALABLE

SYSTEMIC AND SCALABLE

HITMAN

HITMAN 2

HITMAN III


SYSTEMIC AND SCALABLE
SANDBOX GAMEPLAY
DATA DRIVEN
OPPORTUNITIES DANGERS CHALLENGES
DYNAMIC
SILENCE AND CHAOS
CONTEXT AWARE

STATE DEFINED MIX – FOOTSTEP PREVIEW

APPROACH DIANA BURNWOOD
CHANGE OF PERSPECTIVE
HXR 003
N

CHANGE OF PERSPECTIVE

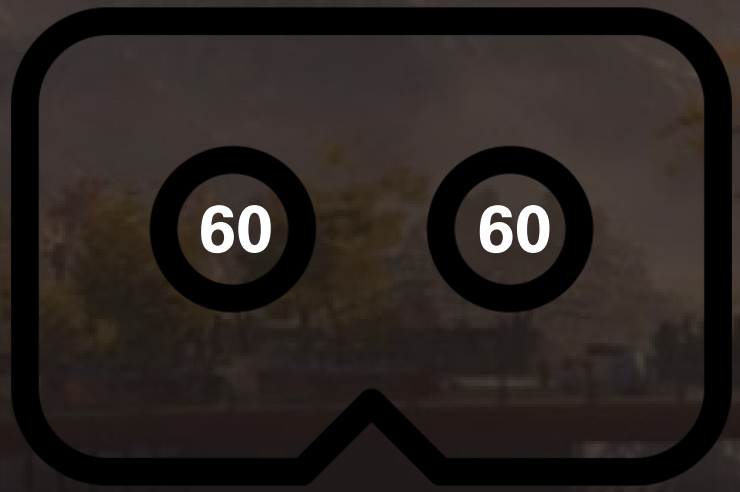
HEAD RELATED TRANSFER FUNCTION

HRTF
SPATIALIZATION CALCULATIONS OBJECT BASED

HRTF AND 3D AUDIO EXPLORATION

CONSTRAINS
DESIGN
IMPLEMENTATION
RESOURCES

Created by buheicon
from Noun Project

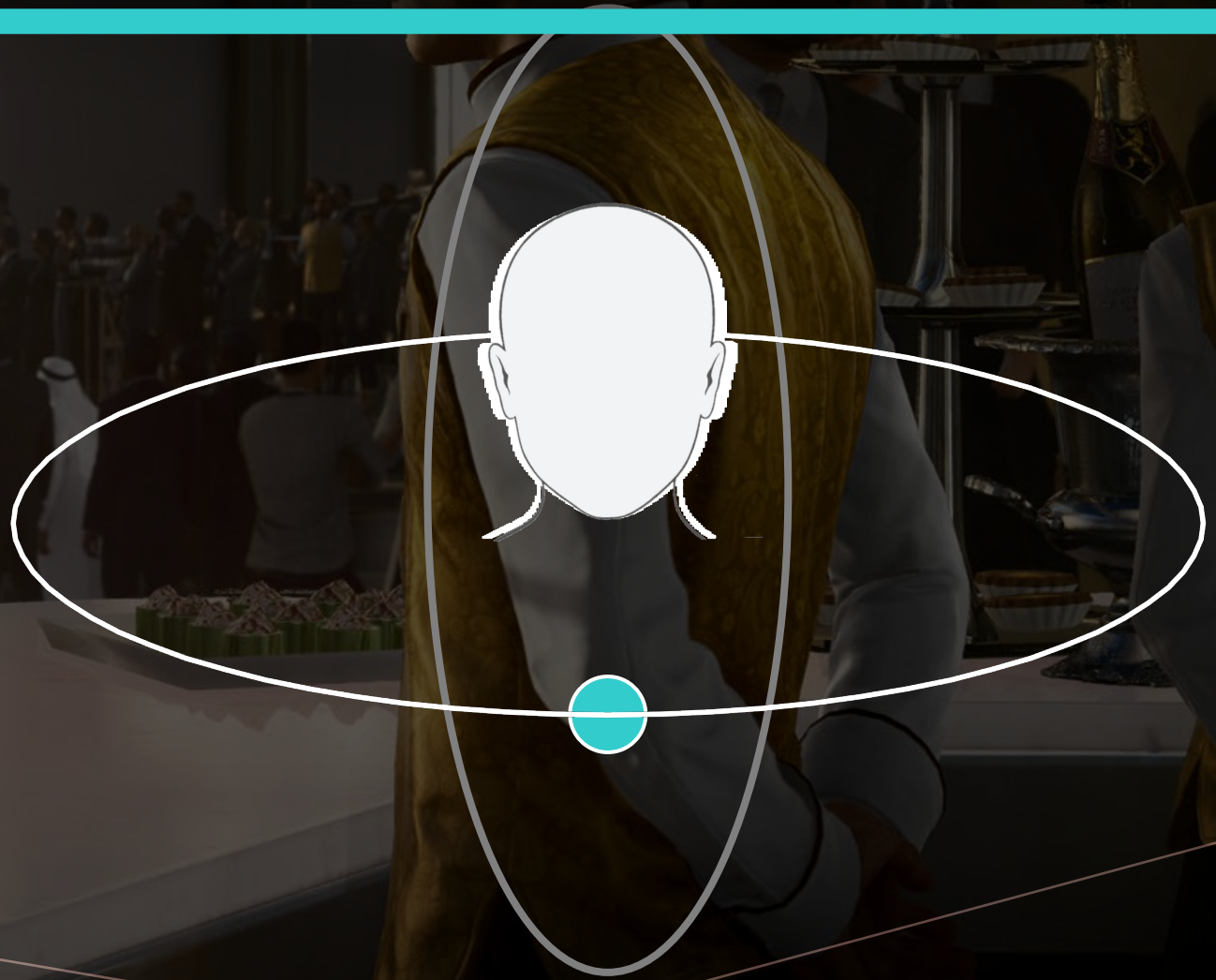


Created by Erik Sigblad
from Noun Project

CHANGE OF PERSPECTIVE

AZIMUTH
“Change in horizontal angle”

EQUALIZATION
VOLUME CONTROL



CHANGE OF PERSPECTIVE

FLAT SCREEN AZIMUTH
GAMIFIED
VISUALS IN FOCUS
MACRO CATEGORIES
IGNORE CASES

CHANGE OF PERSPECTIVE

FLAT SCREEN AZIMUTH
GAMIFIED
VISUALS IN FOCUS
MACRO CATEGORIES
IGNORE CASES

ADAPTATION FOR VR
GAMIFIED HRTF
EASE OF ORIENTATION
SURROUNDINGS IN FOCUS

CHANGE OF PERSPECTIVE

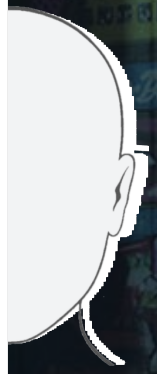
ADAPTATION FOR VR

MONO OR NARROW SPREAD
DOMINANT EAR APPROACH
EXPERIENCE > SCIENCE
ELEVATION SYSTEM

DIALOGUE - PREVIEW

CHANGE OF PERSPECTIVE

DIALOGUE
AUDIBLE DISTANCE
AZIMUTH
SMOOTHING
ITERATIVE APPROACH



LIVING BREATHING WORLD

Keeping immersion without interfering with gameplay

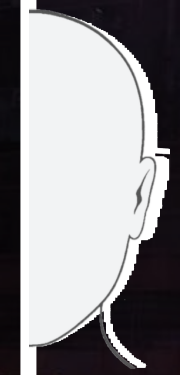
LIVING BREATHING WORLD

Emptiness is not the same as silence

LIVING BREATHING WORLD

Sparse and noisy environments feel flat

Multiple sources creating perspective



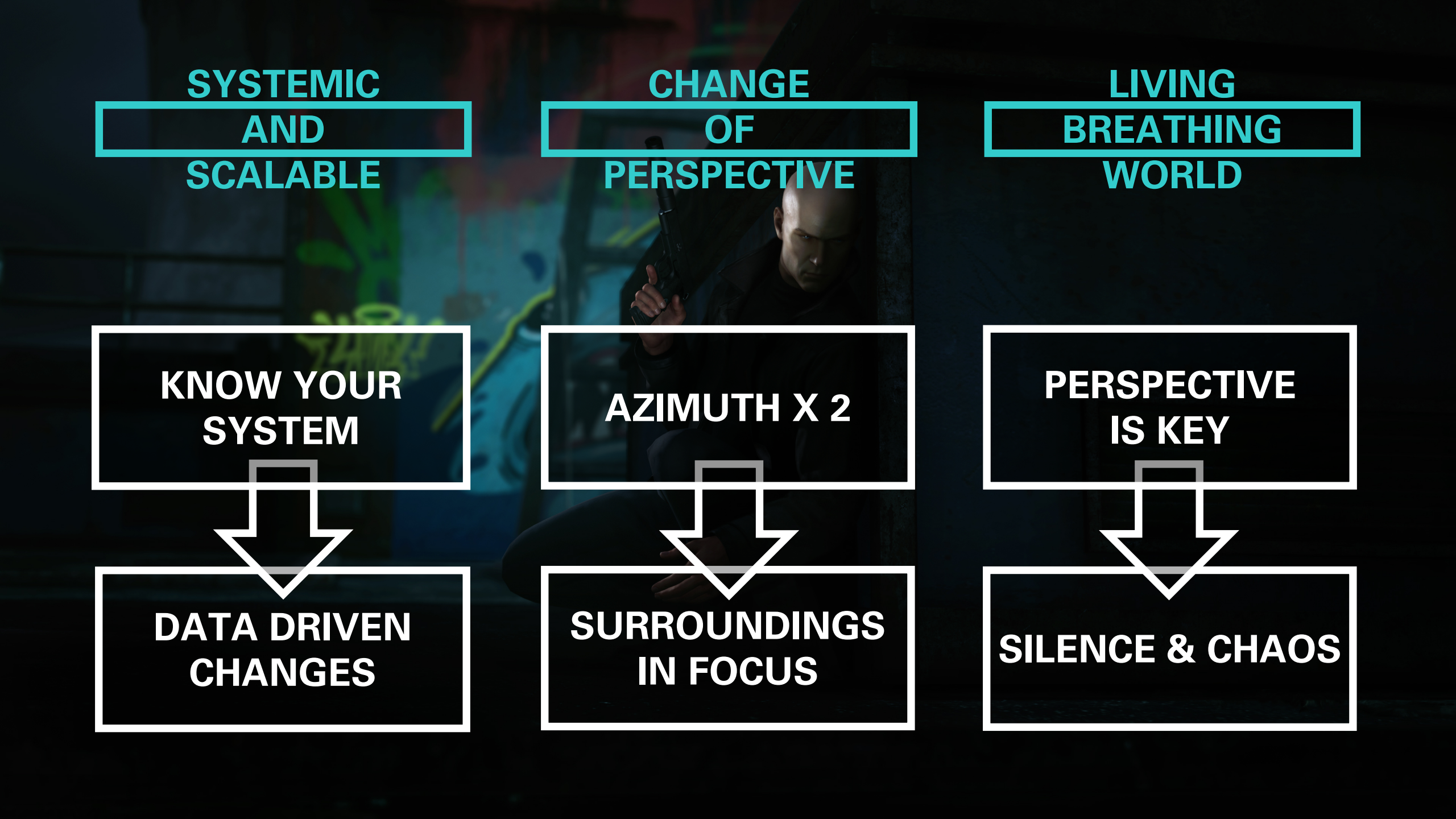
CHONGQING CHINA

RAIN

PERSPECTIVE IS KEY

AMBIENT VS DYNAMIC

CHONGQING CHINA - PREVIEW



SYSTEMIC AND SCALABLE

KNOW YOUR SYSTEM

DATA DRIVEN CHANGES

CHANGE OF PERSPECTIVE

AZIMUTH X 2

SURROUNDINGS IN FOCUS

LIVING BREATHING WORLD

PERSPECTIVE IS KEY

SILENCE & CHAOS

DARTMOOR, ENGLAND - SNEAK PEAK

THANK YOU!
VR AUDIO ADAPTATION OF THIRD PERSON GAMEPLAY
Kristian_Romer # IOInteractive
io interactive™