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Universidade de
Coimbra – Alta e Sofia
inscrita na Lista do Património
Mundial em 2013



ContextLab.org

Interaction Design

Game Design

Participatory Media Design

Experience Design&Evaluation

Context Engineering



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Achievement

Acoustic Ecology

Address Others

Aesthetics

Affected Hearing

Ambiance

Anticipation

Awareness

Beacon Locator

Breath

Character Soundprint

Chitchat

Consequent Sound

Contextual Music

Cutsscenes

Death

Decay

Dialogue

Diegetic Music

Directionality

Dubbing

Eavesdropping

Echolocation

Emotional Script

Engagement

Entrainment

Failure

Foley

Foley Music

Footsteps

Grunts

Heartbeat

Helper Voice

Hurry Up!

Identification

Imminent Death

In-game Feedback

Levelled Performance

Make Sound not War

Menus

Music

Musical Outcome

Narrative

Narrator

No Can Do

Noise

Ouch!

Pitch Gameplay

Radio

R-A-E-D Iterations

Recordings

Relaxation

Revelation

Rhythm Gameplay

Say that Again

Seeking for PC

Shout and Yell

Signature

Silence

Sing to Act

www.soundinggames.com



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Dynamic Soundscape Composition Engine

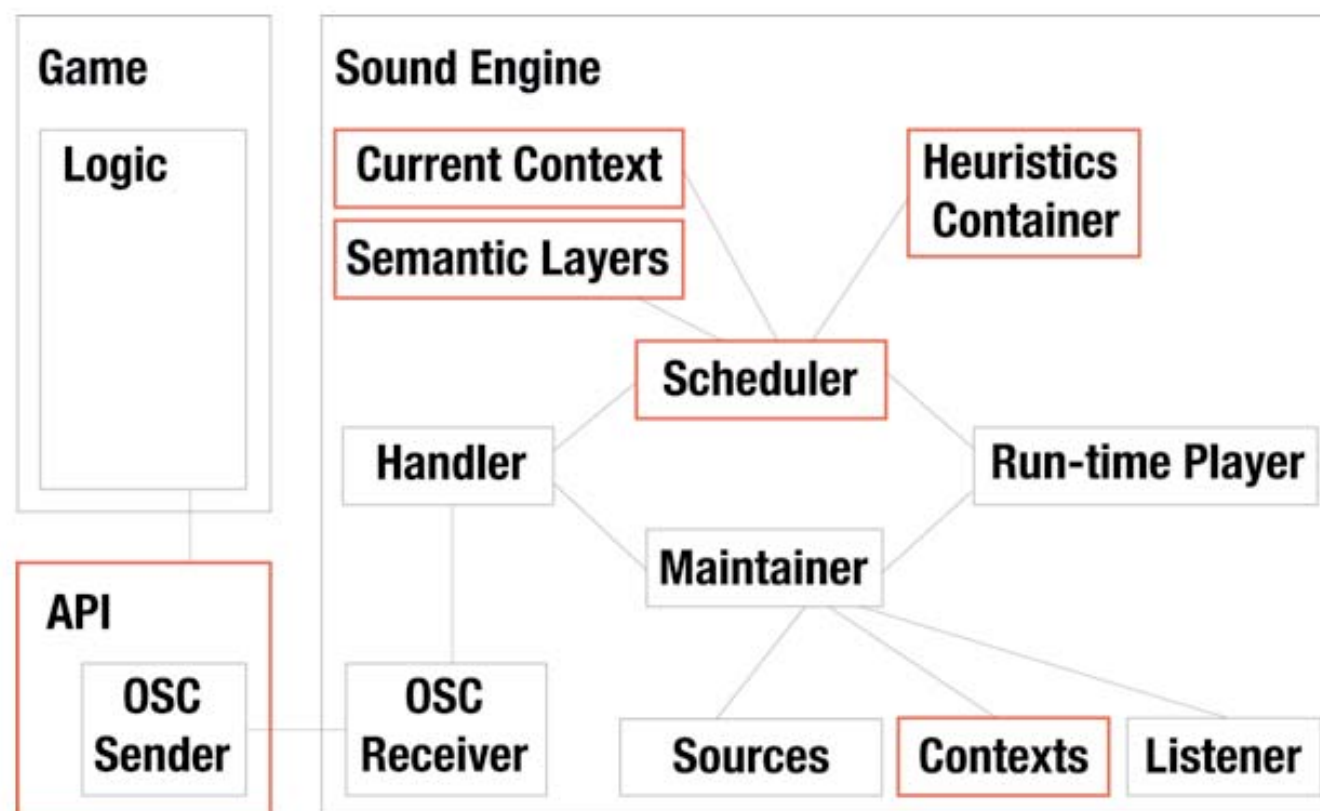
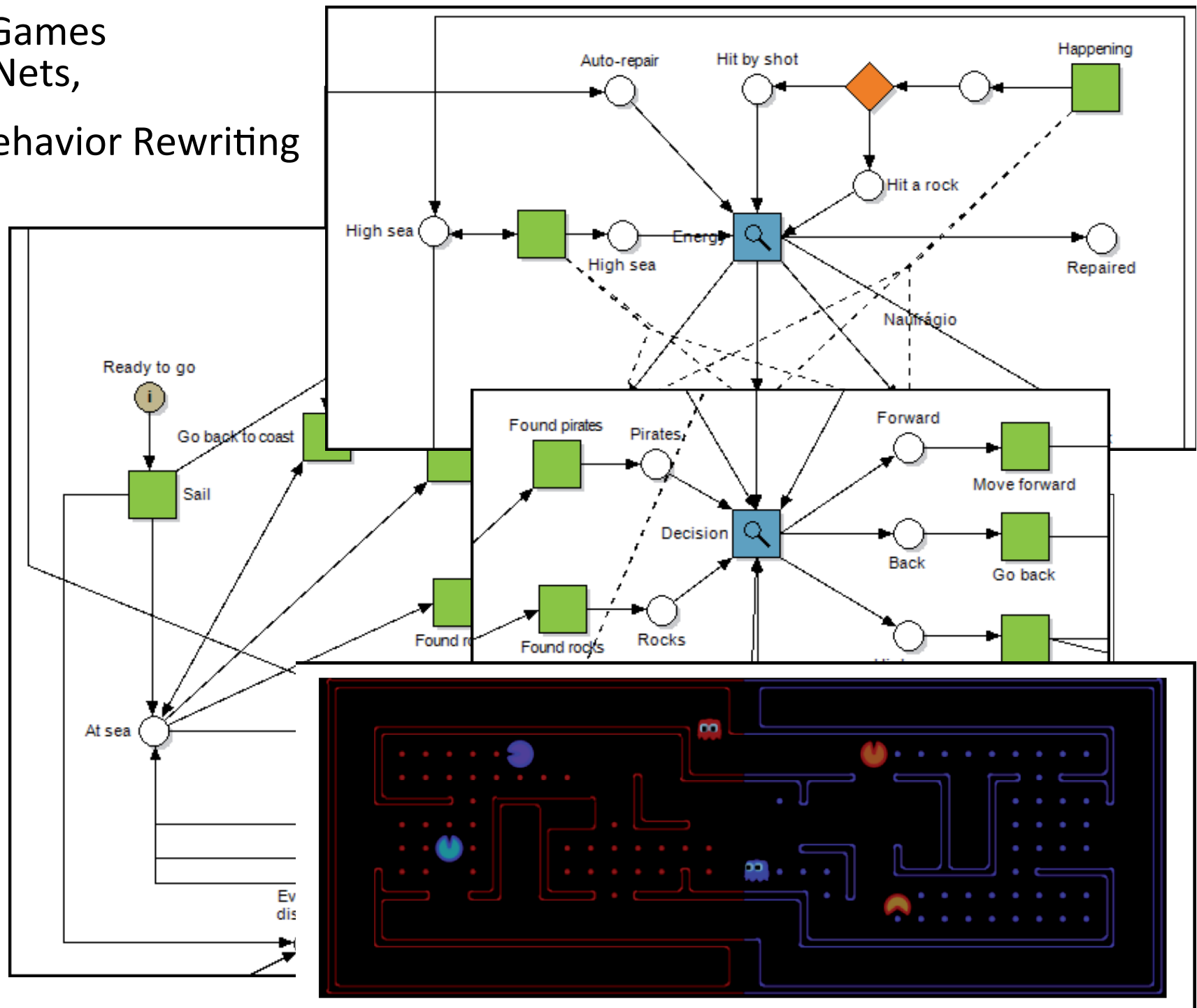


Figure 1 - Structure of the proposed dynamic soundscape enhancement





Modeling Games with Petri Nets, Design & Behavior Rewriting





“gameplay rehearsal” with prototypes to develop scripts, characters, events...



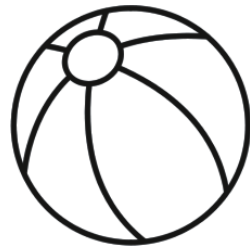
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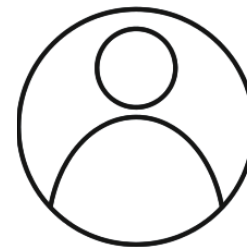
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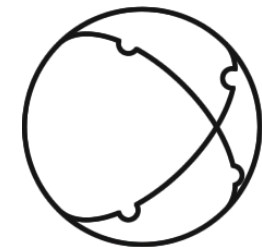
Participation-Centered Gameplay Experience Design Model



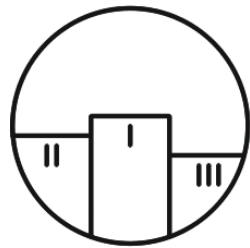
Playfulness



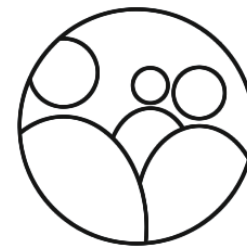
Embodiment



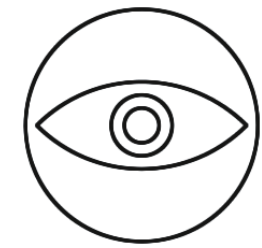
Sensemaking



Challenge



Sociability



Sensoriality



Participation-Centered Gameplay Experience Design Model

PARTICIPATION?	Intention	Artifact	Participation
Playfulness	exploring, discovering, recreating, customizing	the nature of a player's agency, variety of interactive elements (objects, characters, actions, etc.)	degree, variety and tendency for exploration
Challenge	overcoming a challenge, creating a strategy, defeating an opponent, mastering a skill	nature of challenges proposed, type of penalties and rewards, intensity and organization of challenges	control, pace, progress, efficiency in performing tasks
Embodiment	physical involvement, aesthetic performance	representation of the physical game world, player's presence, interpretation of player's movement	control and rhythm of movement, aesthetics of the movement
Sensemaking	interpretation of a role, fantasy, self-expression	theme and underlying narratives, models and representations of phenomena, roles and motives, significant actions	alignment between actions and roles, understanding and or critique of the represented phenomena
Sensoriality	contemplation, wonder, awe, being in the world	style, nature of the stimuli, visual and sonic compositions, synesthetic explorations	degree of exposure and responsiveness to stimuli, interaction or engagement with sources
Sociability	competition, cooperation, friendship, identification, recognition, communication	diversity and nature of social interactions and relationships, models of social structures	the intensity and types of interactions between players, affective bonds



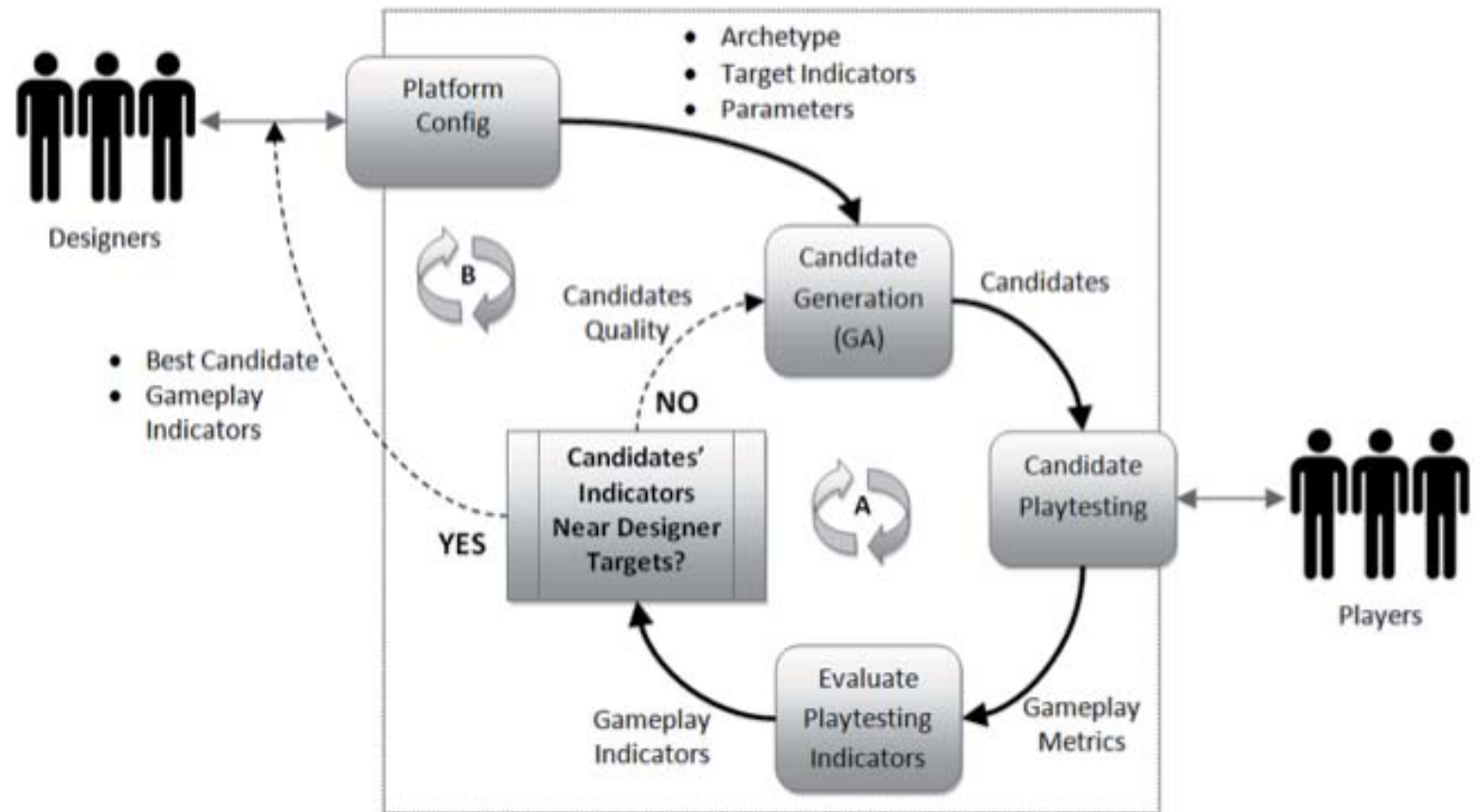
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An Architecture for Author-Centric approach to PCG





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We are currently work on

-> the goal of personalized game-based learning though online “redirecting” of gameplay or “nudging the user experience towards learning utility”

-> study interactivity with PCG techniques (designing creativity support environments)





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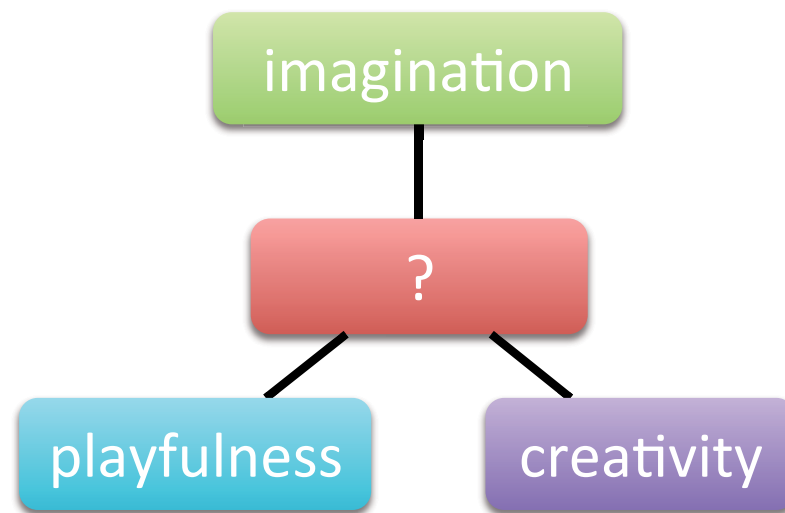


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“Interfacing Imagination”

=> study how these qualities can enable people to create together in domains such as design, engineering, learning...





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Research interests in connection with Computational Creativity:

- Designing New Media for Creativity
or Creativity Support Environments
- Designing Epistemically Flexible Games
- Generating Playful Learning Contexts
- Socio-Technical Engineering



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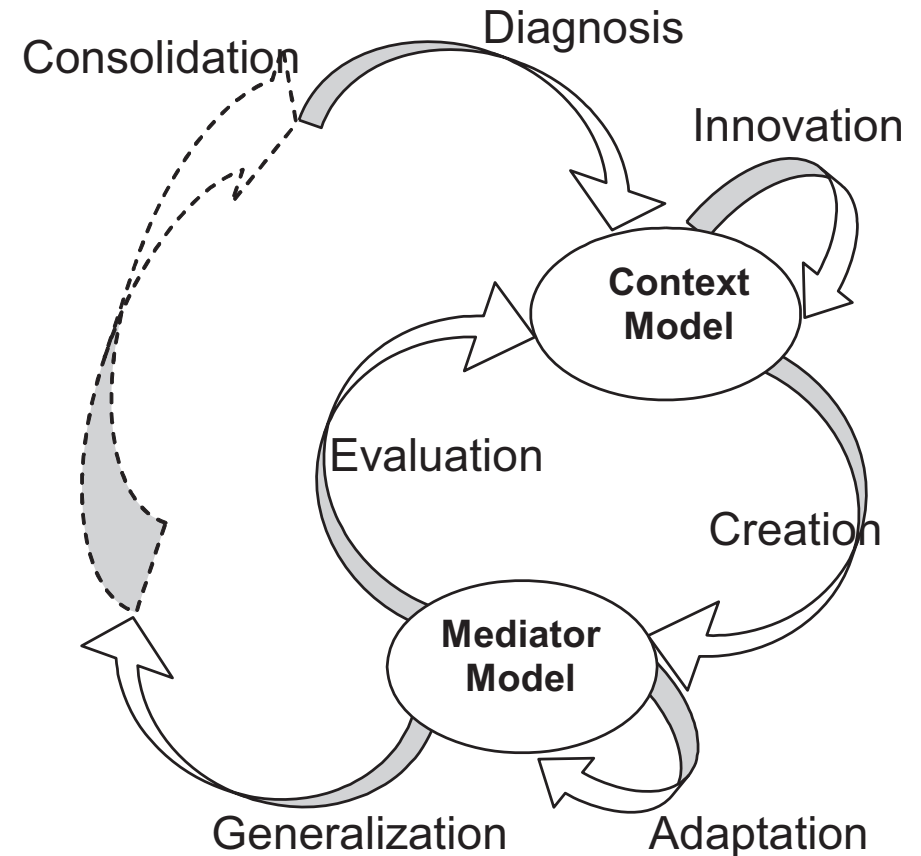


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Context Engineering

- A framework of development activities
- Hermeneutic dynamics in Context-Media relations
- Recognizing the role of context and artifact models in Engineering and Design



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