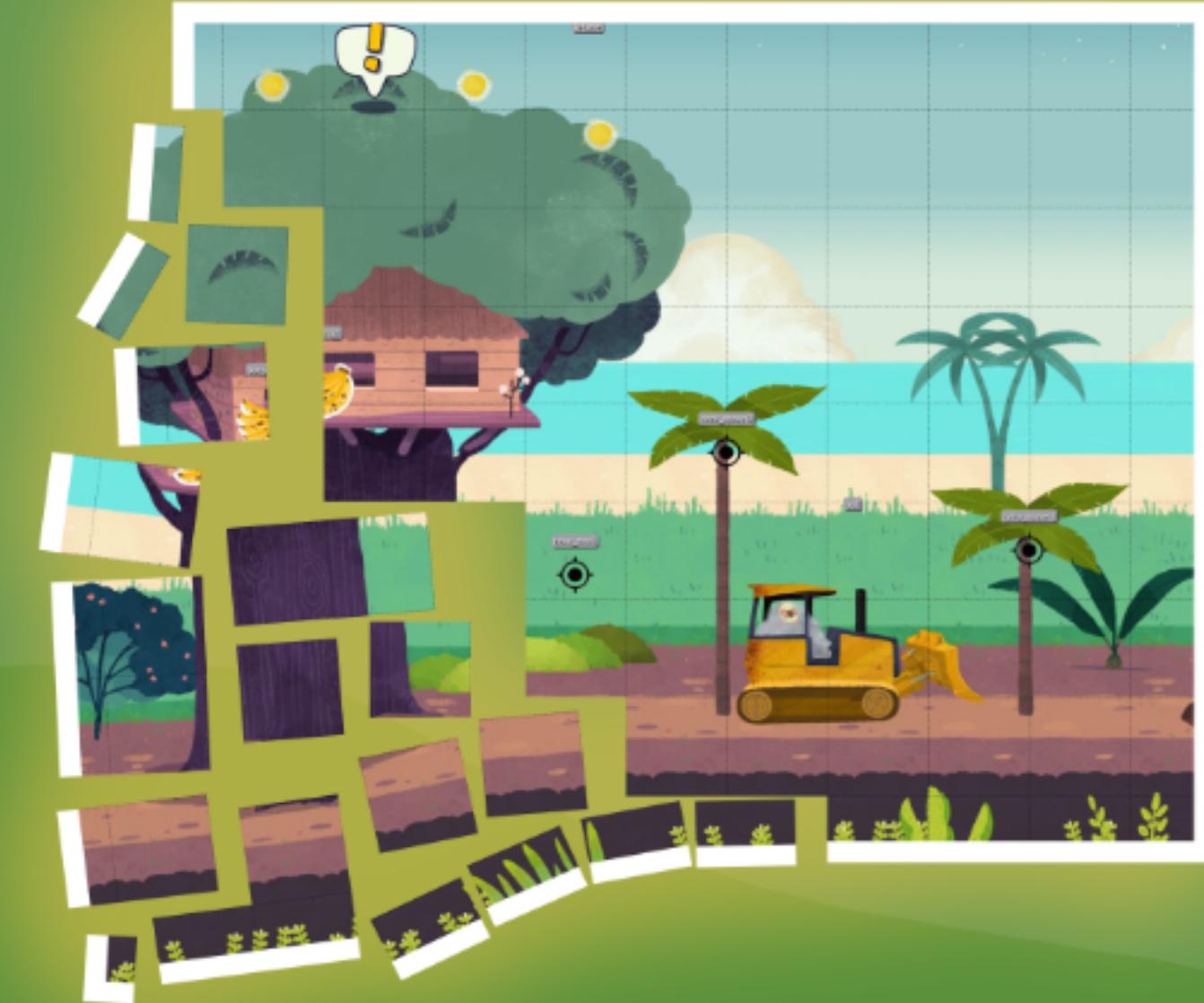


Level Design



Kolja Bopp

What is Level Design?

Level Design

is to „arrange the architecture, props, and challenges in a game in ways that are fun and interesting”

Playtesting & iterations



Level Design

- **Level Design = Gameplay Design**
- **Realization of your game idea in a playable scenario**
- **Coherent and self-enclosed section in your game**

Gameplay Fun

„Create interesting gameplay situations“

Keywords

Pacing & Flow

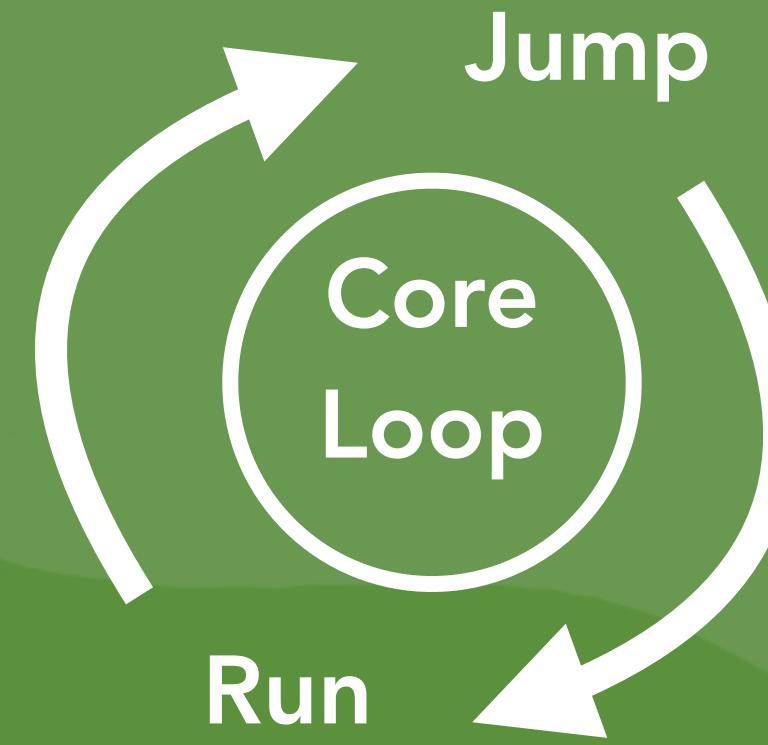
Composition

Dramaturgy

Gameplay Loop

Gameplay Loop

Gameplay Loop



Level design should always support the core mechanics

With goals & challenges = gameplay loop

Pacing & Flow

Pacing & Flow

Pacing

- General order and rhythm of activities in your level
- Level of intensity

Beats and Variation

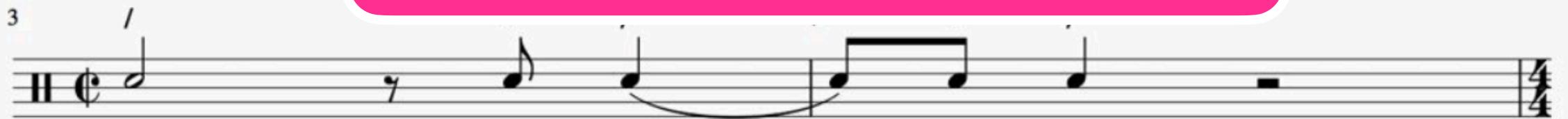


Metric Stress



Rhythmic Stress

fast paced / slow paced?



Syncopation Example



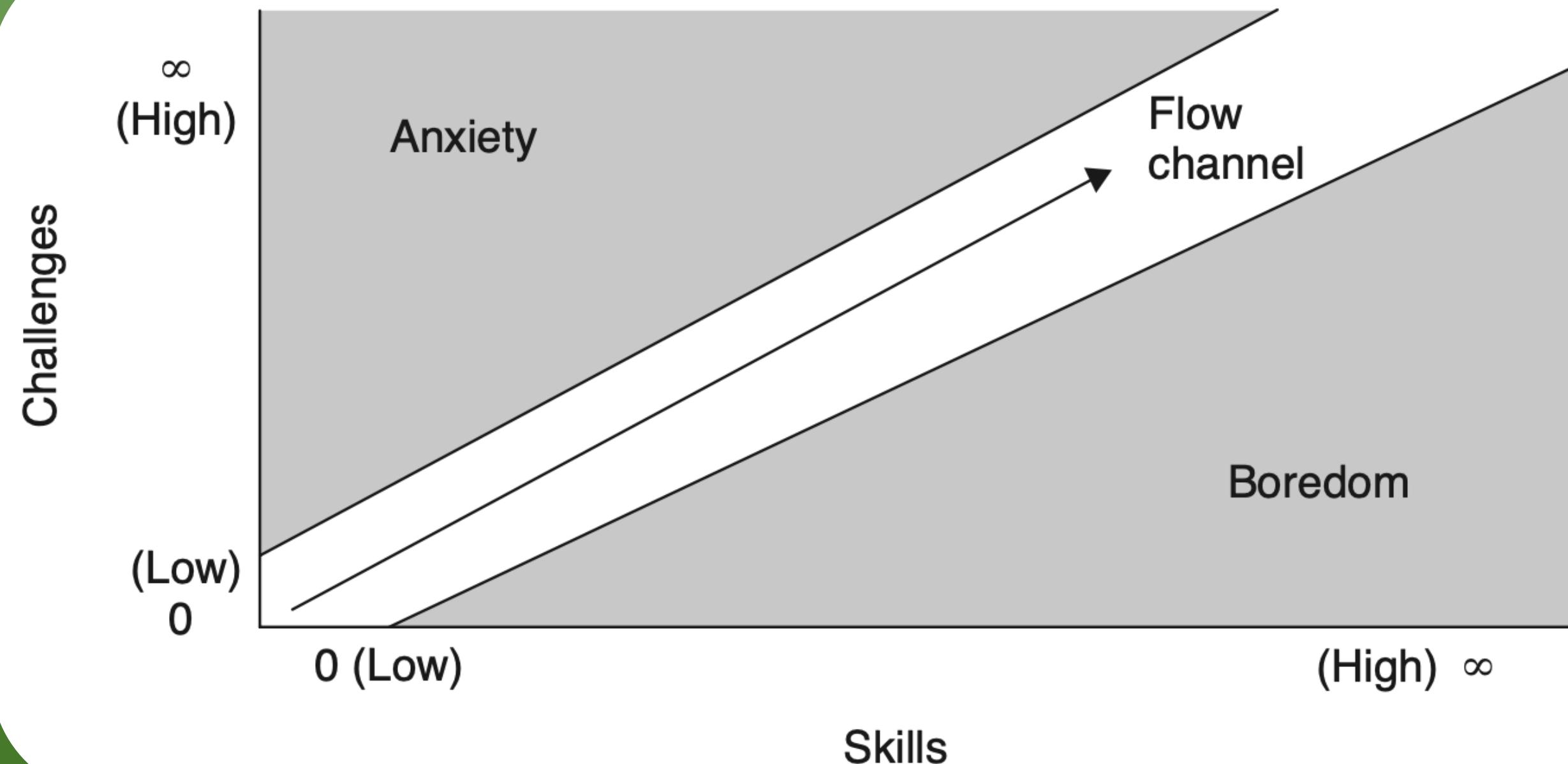
Anticipation Example

Gameplay Flow

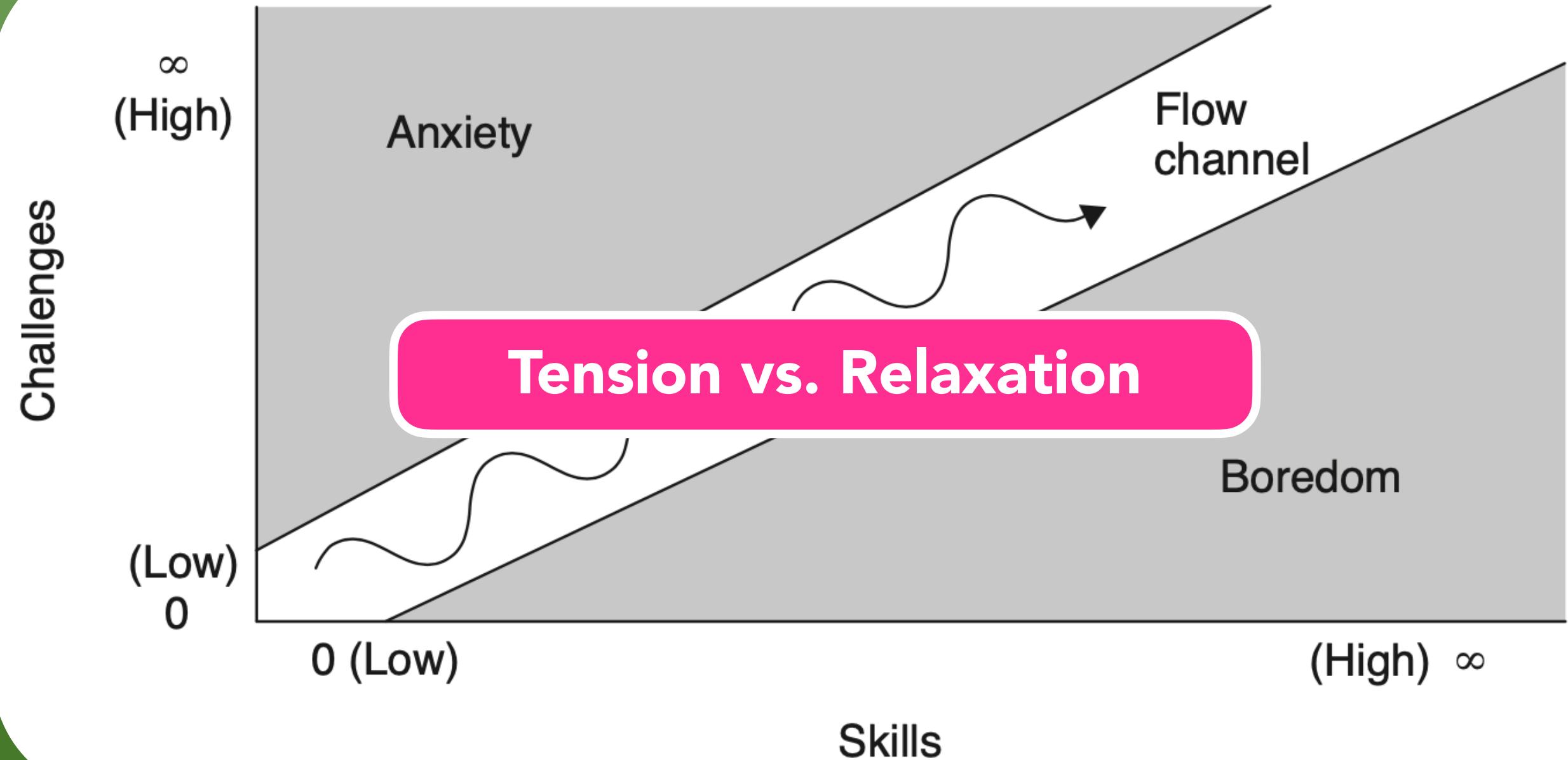
- „Autotelic“ (internally enriching and enjoyable regardless of external rewards)
- Neither over- nor under-challenging
- Complete involvement in the game plot
- sense of control & distortion of time
- Immersion

Csikszentmihalyi, Mihaly. (1990). Flow: The Psychology of Optimal Experience. Journal of Leisure Research, 24(1), 93–94

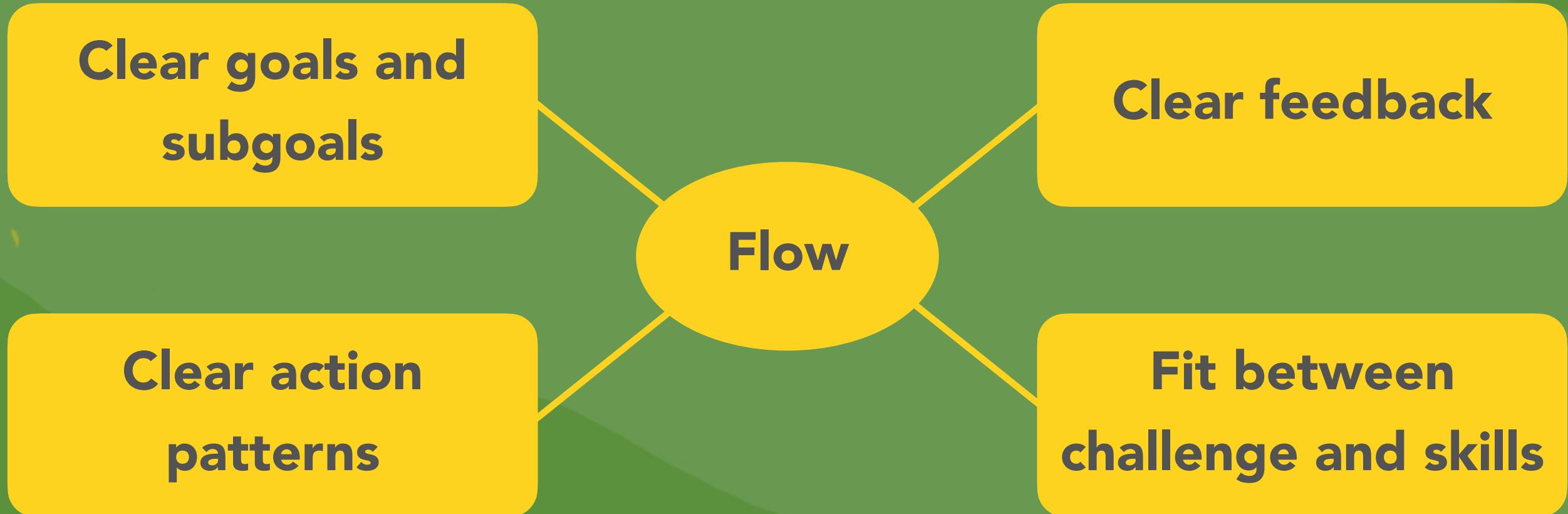
Pacing & Flow



Pacing & Flow



Pacing & Flow



Rheinberg, F., & Engeser, S. (2018). Intrinsic Motivation and Flow. In J. Heckhausen & H. Heckhausen (Eds.), Motivation and Action (pp. 579–622). Springer

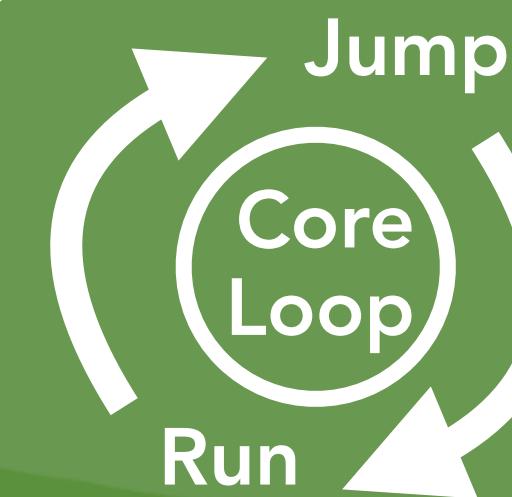
Dramaturgy

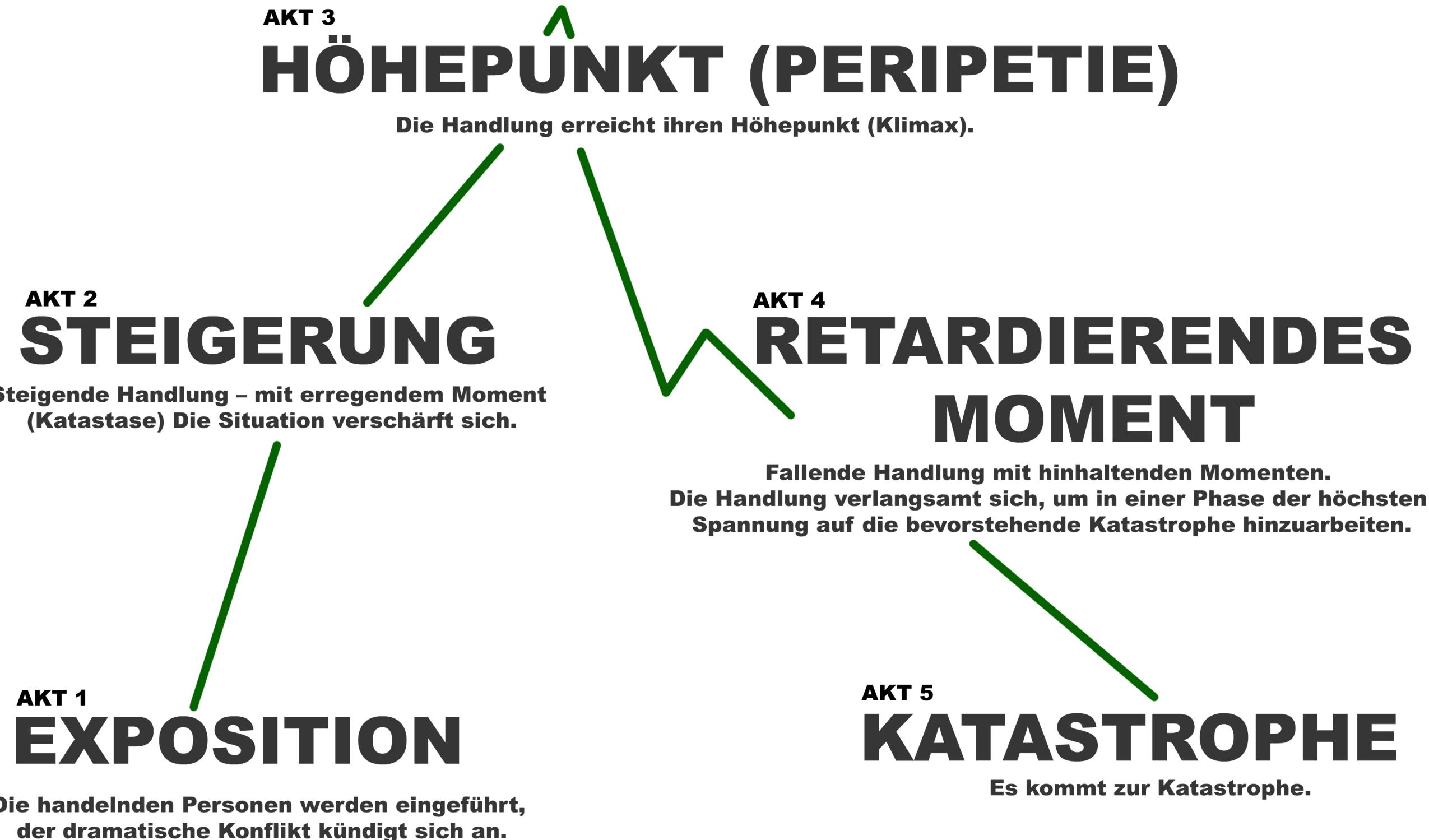
Dramaturgy

Level Arc

Gameplay

Level Dramaturgy







Dramaturgy



Dramaturgy

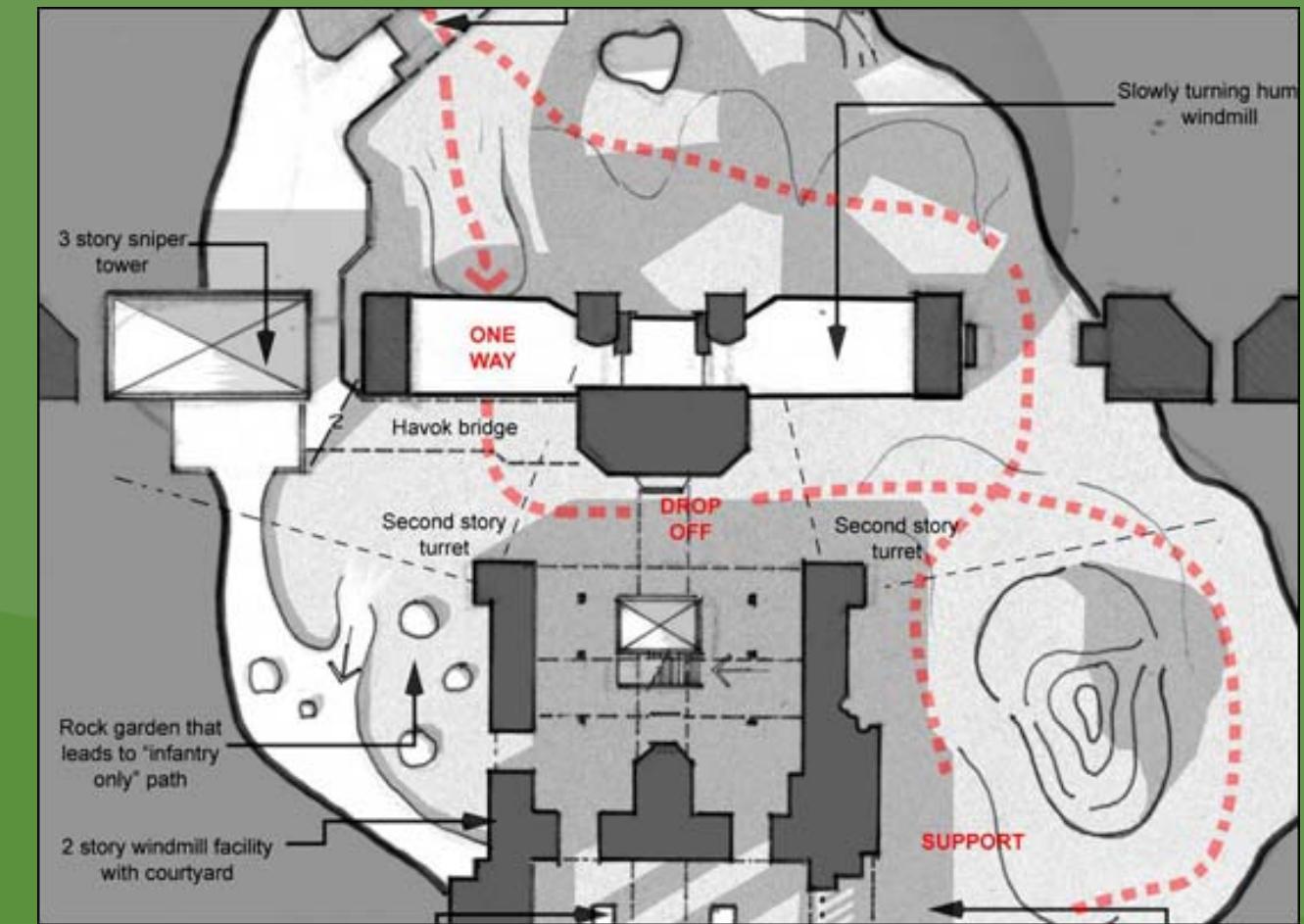
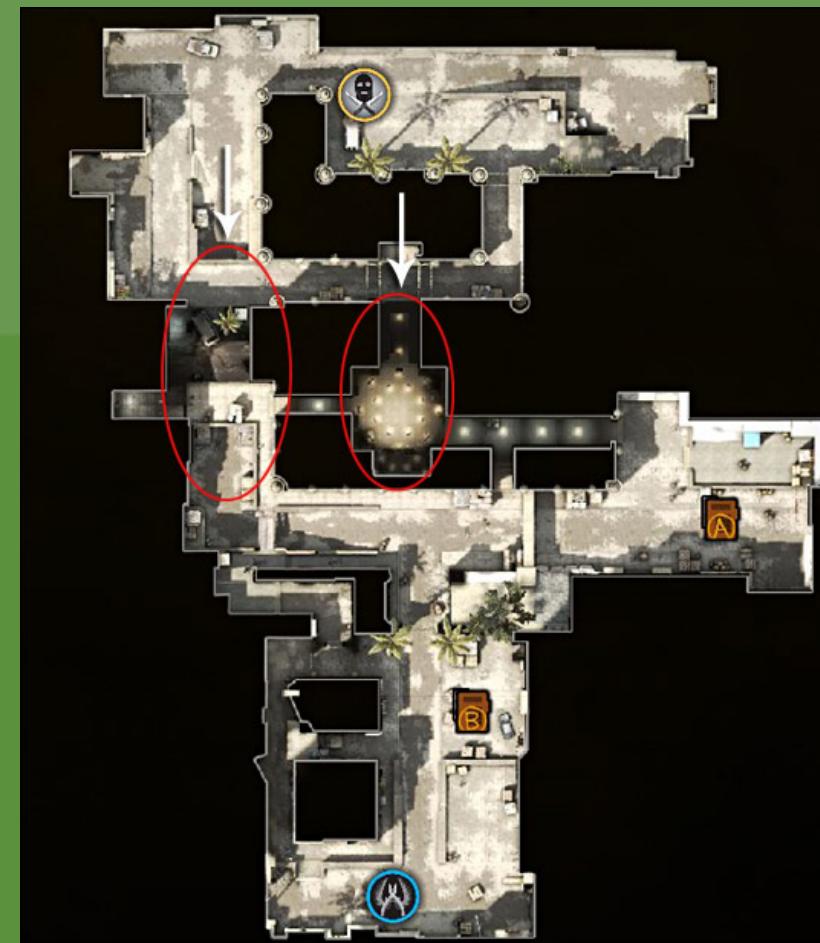
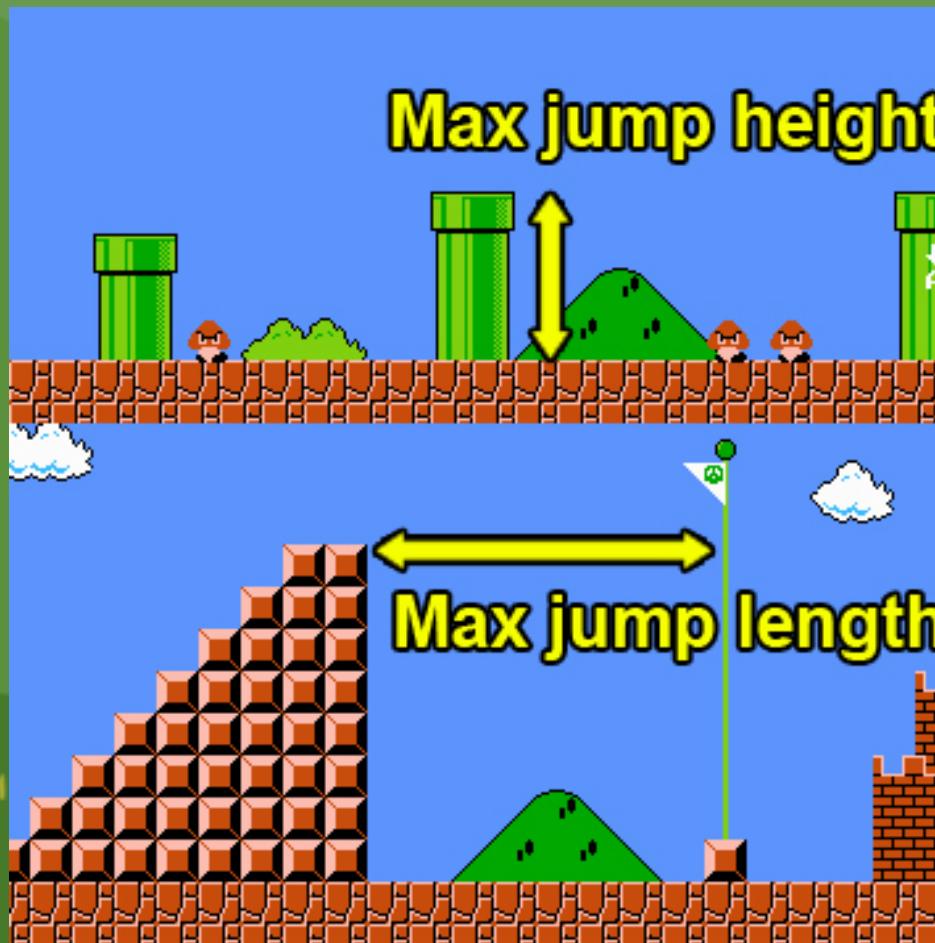


Composition

Composition

Architecture / world geometry

- support the gameplay mechanics
- evoke interesting experiences (large spaces, narrow passages)



Composition

Interesting challenges

- encounters with obstacles
- choices with meaningful consequences
- in relation to the world geometry or story narrative



Let's design

Text sheet method



Lee, Steve (21.06.2022). How I design levels in text first, and why (HL2 level Part 1). YouTube. https://youtu.be/0FSssDWEFLc?si=p47nx9VyMP_bW9a6

Text sheet method

Write down all

A) Elements

B) Decisions / Challenges

```
2 GOALS - what am I trying to do, why, and how
3 Make a Half Life 2 level
4 Make something that anyone could make as a portfolio piece
5 Show textbook LD skills, like 3D layout design, gameplay ideas and implementation, scripting, light narrative and puzzles, etc etc
6 Short level (3 minutes? 5 at most?!!)
7 THEME: Escape (the Combine)
8
9 ELEMENTS
10 Combine metropolice and soldiers etc
11 Headcrabs and zombies
12 AI civilians (rescue, fight alongside, heal the player, etc)
13 Explosive barrel
14 Combine forcefields
15 Vehicles (Car, hovercraft)
16 Combine helicopter?
17 Strider?
18 Alyx NPC
19 Gravity
20 Crossbow
21 Shotgun, SMG etc
22
23 GAMEPLAY BEATS
24 Sneakyness w/ nearby guards (watching, being quiet, finding clever routes, etc)
25 Starting with just a melee weapon
26 Gets a proper weapon (pistol, shotgun)
```

Text sheet method

Write down

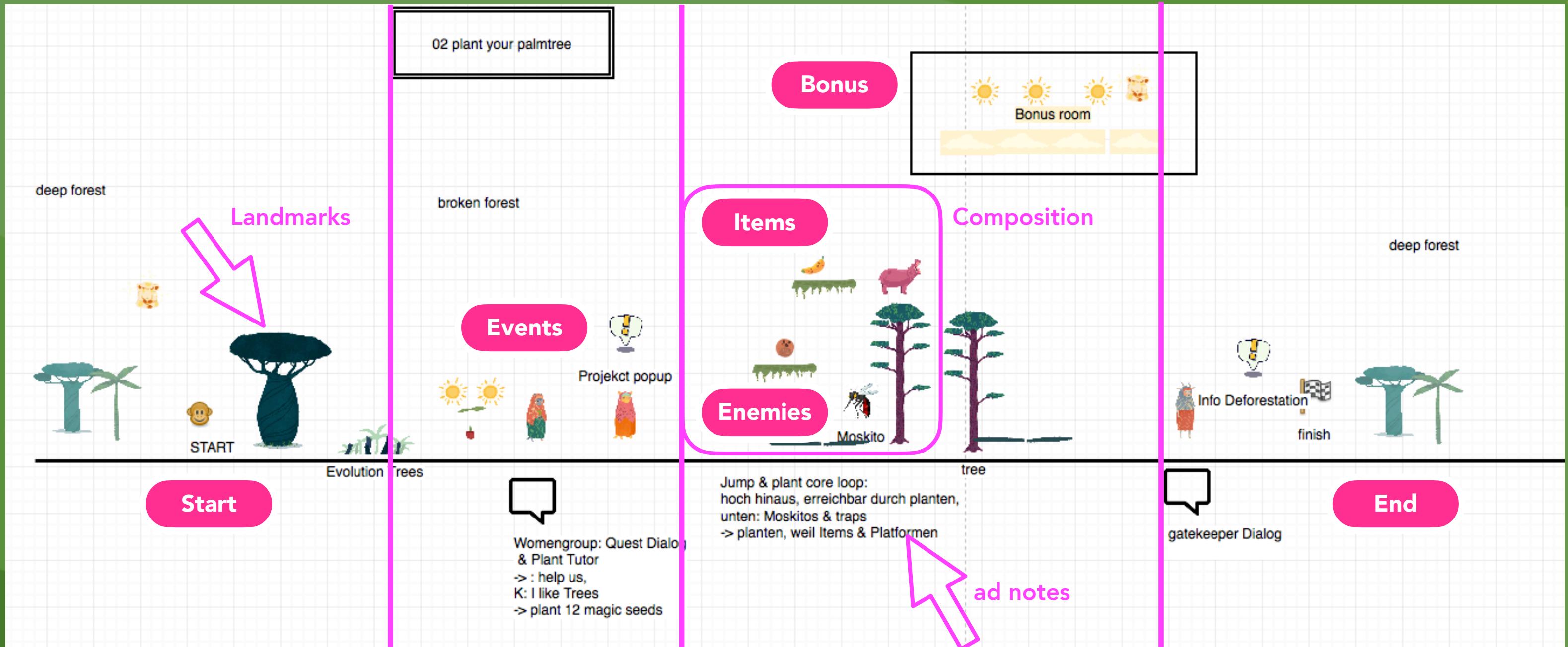
-> What makes the first 2 min
of gameplay catchy?

```
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Bubble diagram



Level Outline



Level Outline, own presentation