



Adding Life to your Level

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MAFIA III



Life in your Level



AI

vs.

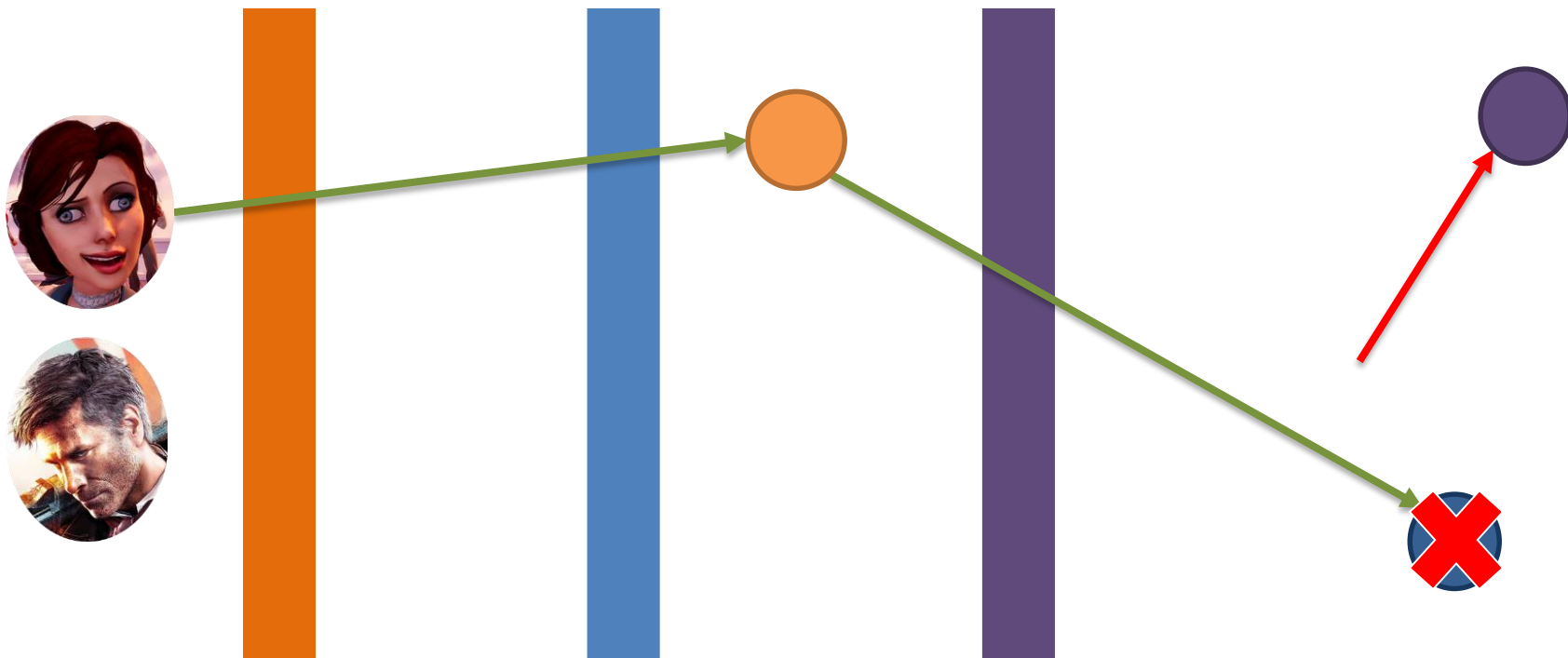


Illusion of Life

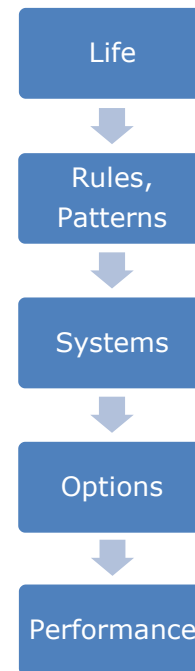
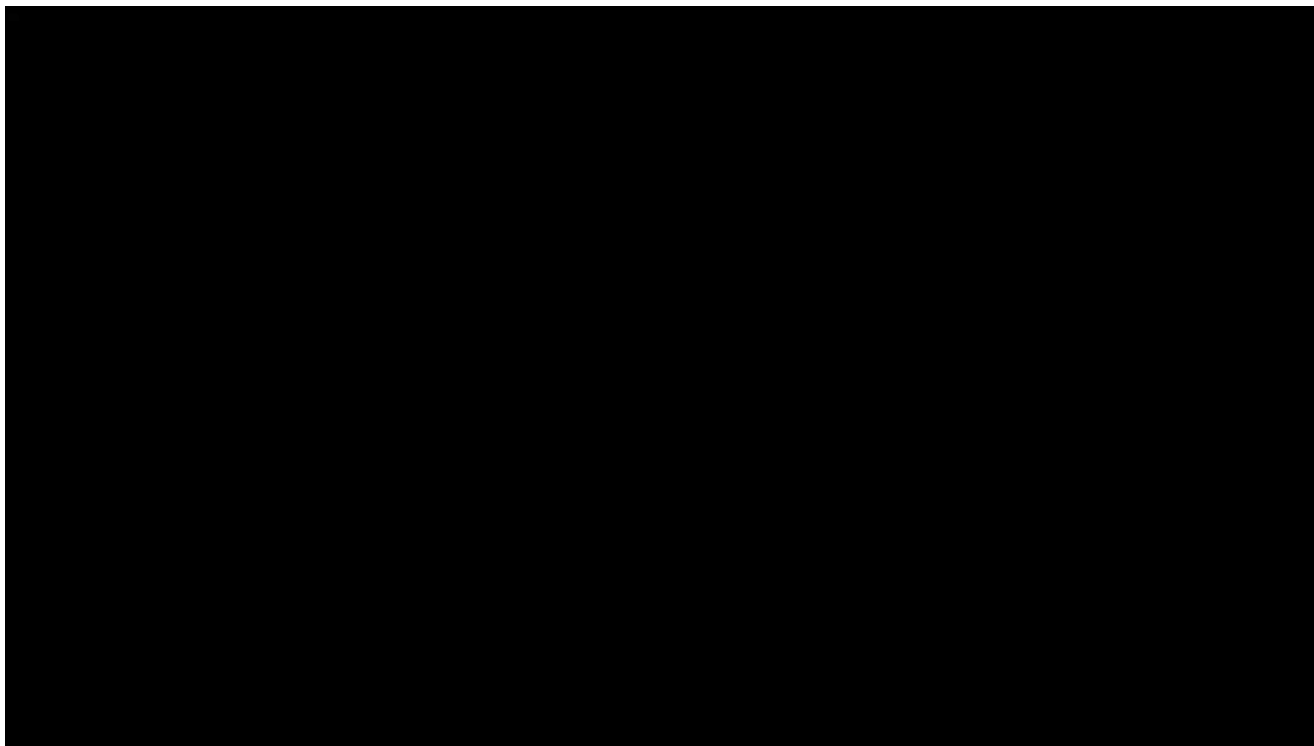
Illusion of Life



Scripted Approach



Solution: Systems

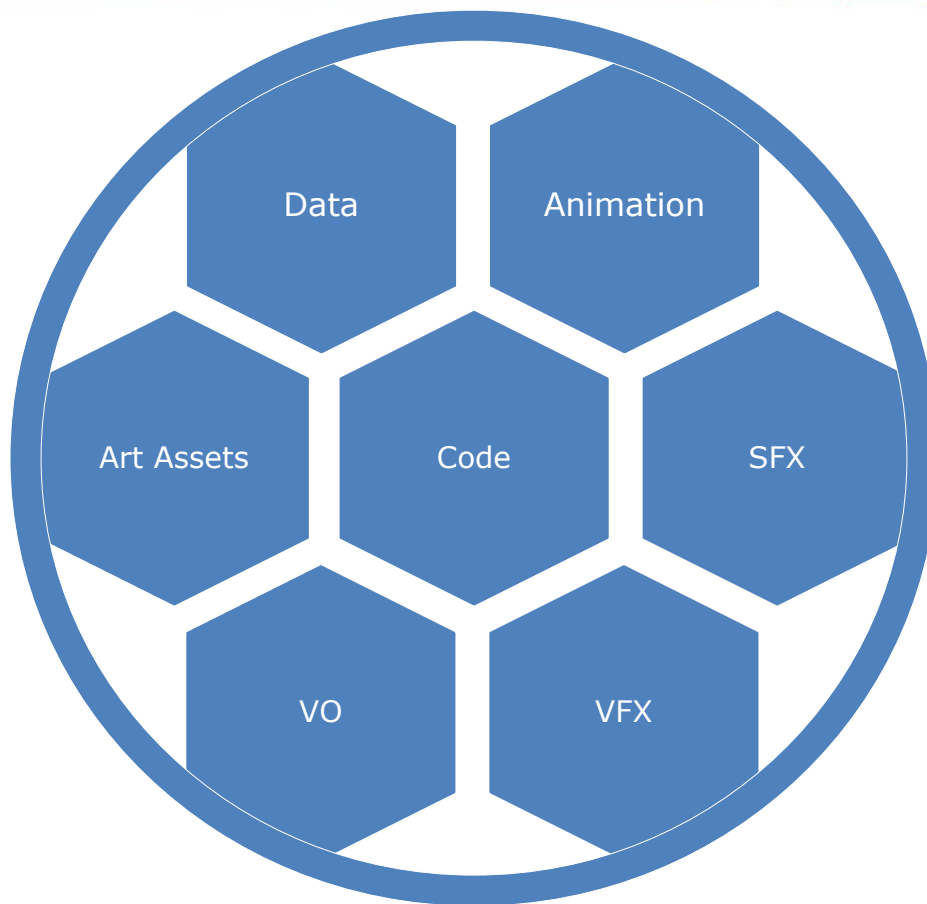


Categories of Behavior

1. Activity
2. Idle
3. Conversation
4. Locomotion
5. Combat

Activity

Smart
Terrain



World
Interactions

Activity



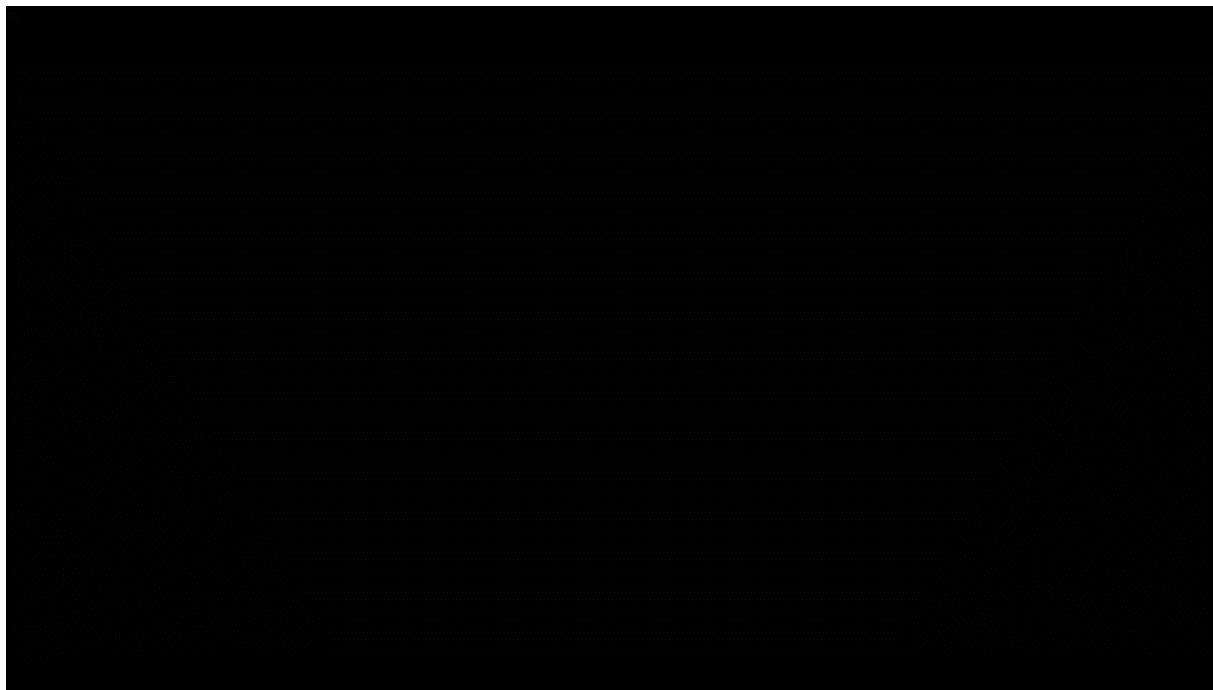
Activity



Activity



Saturation Point



Selection Criteria



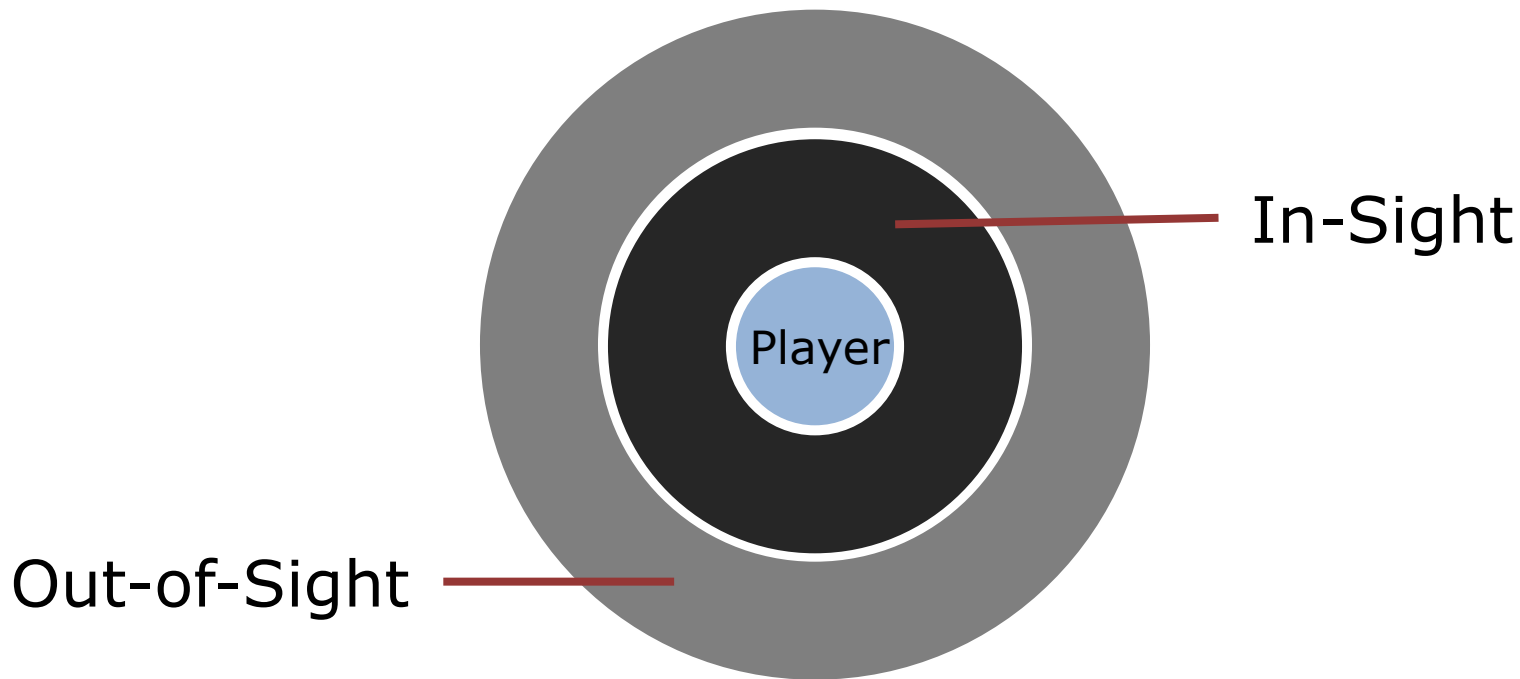
- Priority
- Position
- Direction
- Cooldown



Interaction Manager



Interaction Manager











Drawing Attention



Meanwhile...



Drawing Attention



Idle



Looking Around



- Proximity
- Minimal adjustment of body
- People (living things)
- Don't stare!
- Talkers (sound makers)
- Emotional things
- New things
- Motion

Looking Around



Happy



Concerned



Upset



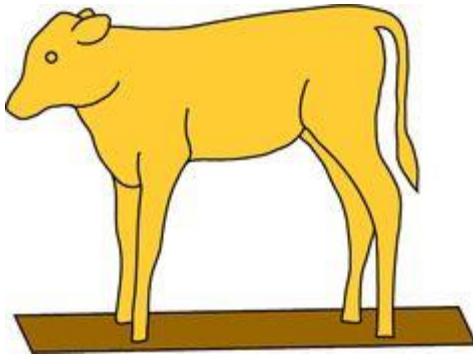
Happy Sit



Angry Sit



False Idles



False Idles



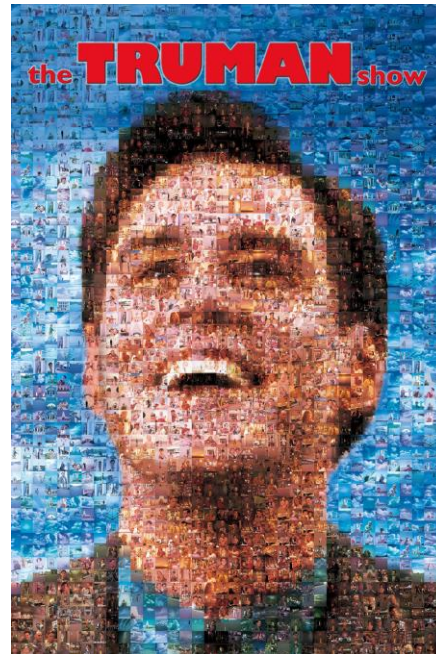
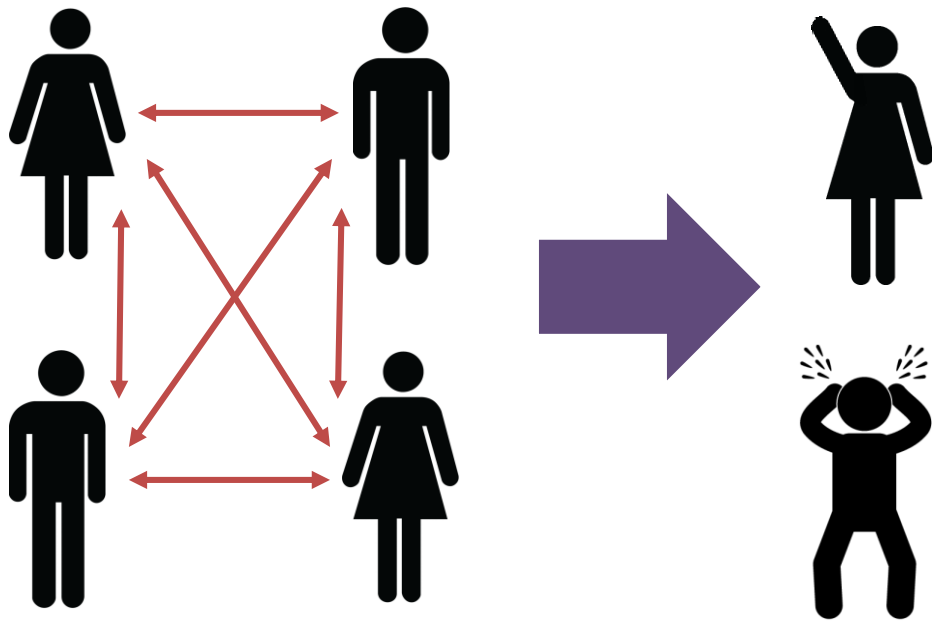
False Idles



Idle Neighbors

- Demographics of population
- Pedestrian density and type
- Props for pedestrians
- World Interaction density and type
- Drunk? (important video game feature)

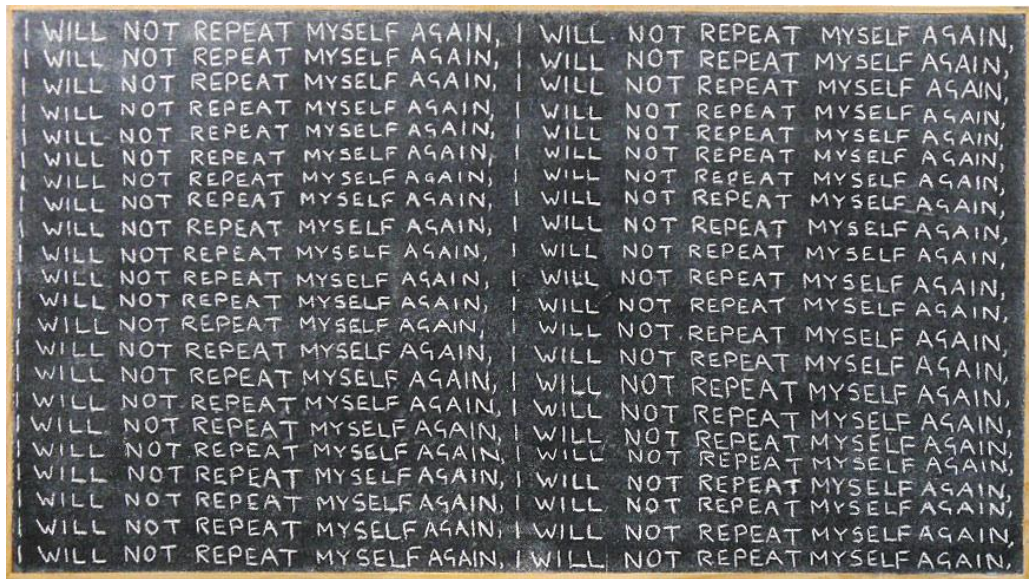
Reactions



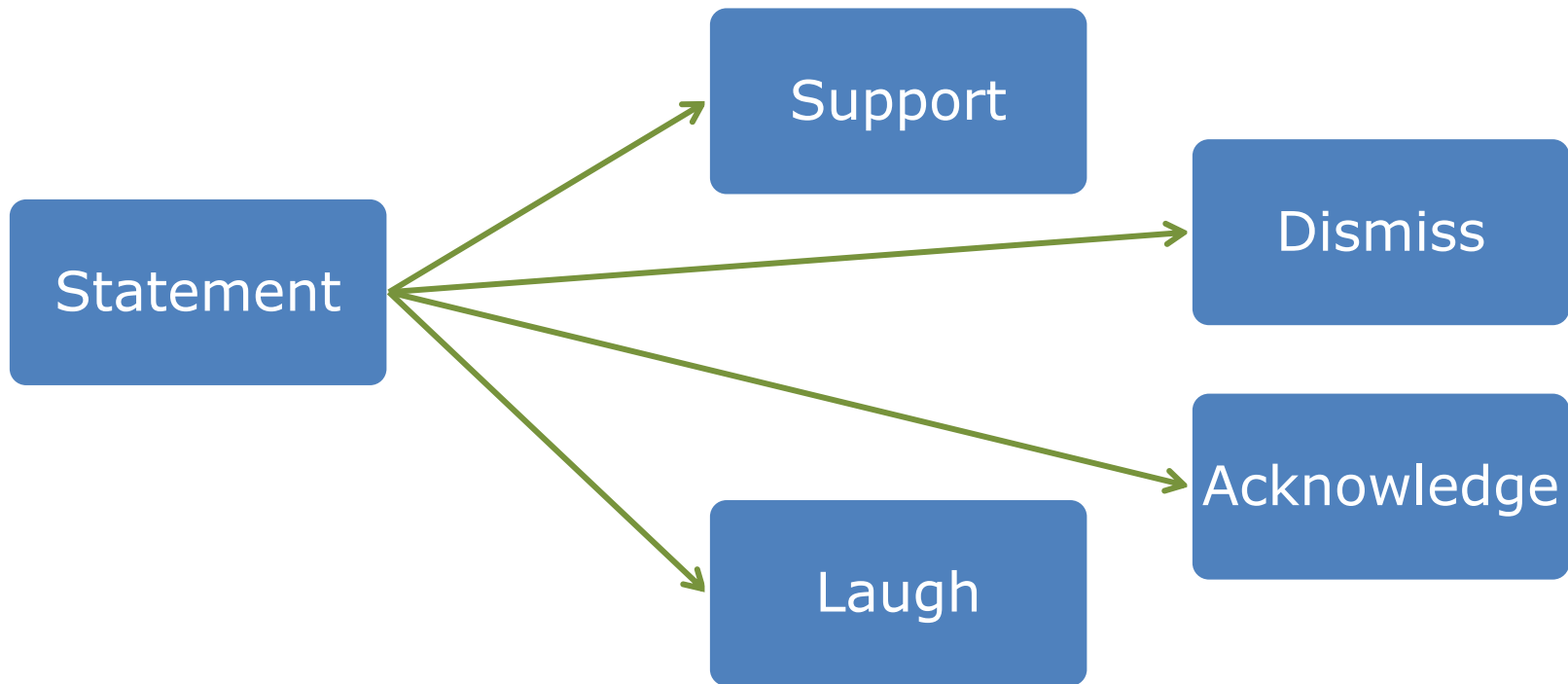
Conversation



Words, Words, Words



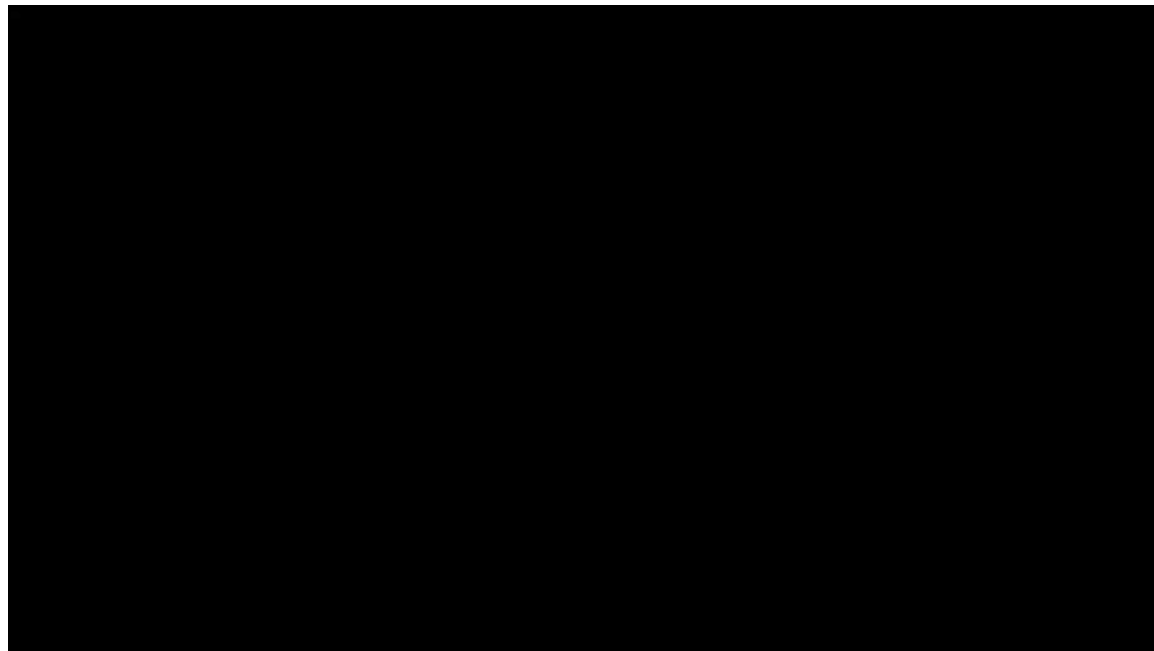
Words, Words, Words



Locomotion

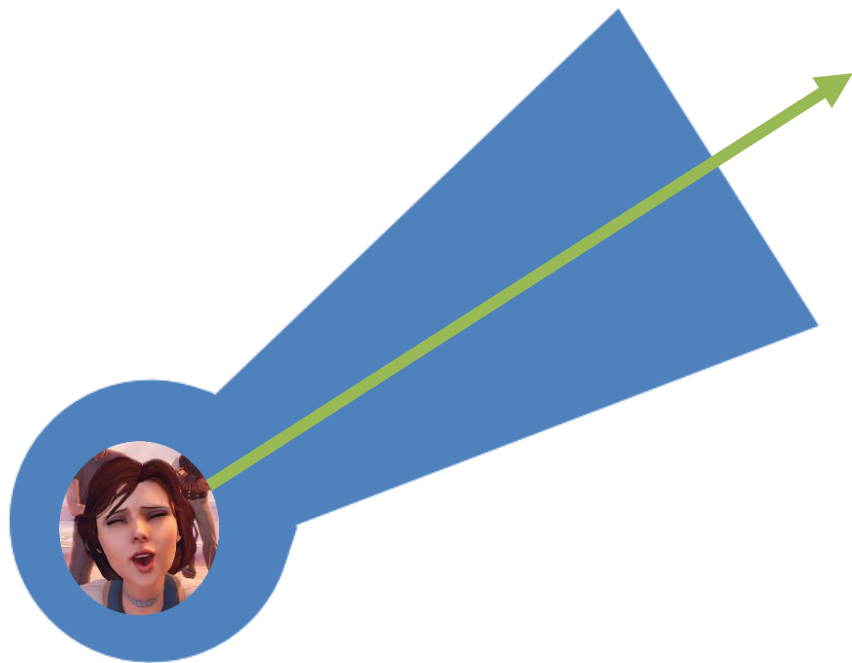


Not this.



Creepy Watson: <https://www.youtube.com/watch?v=13YIEPwOfmk>

Goal Side and Smart Terrain



Combat



(Yes.)

Combat



Combat

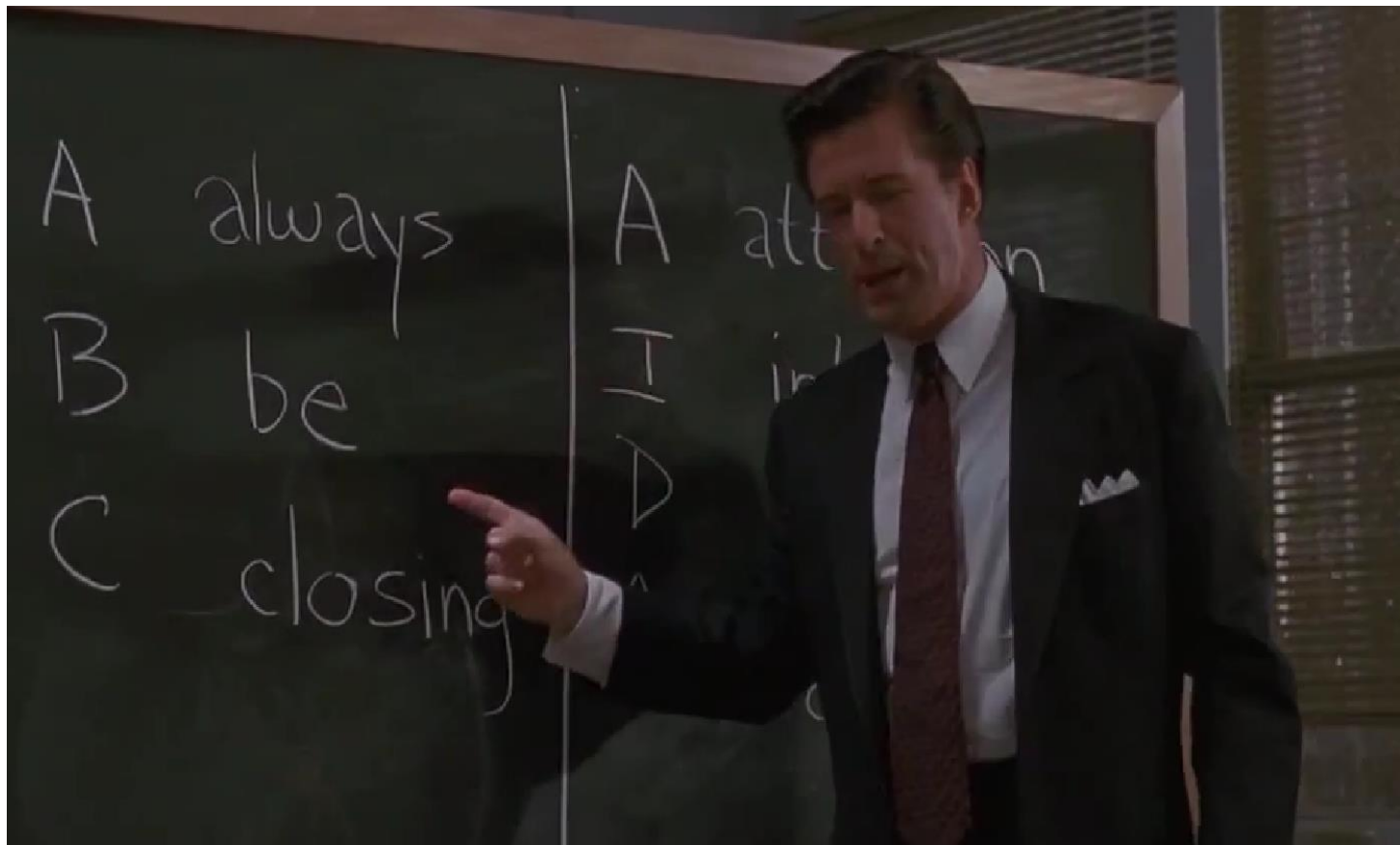


Combat



Recap

- World is dead without AI or with bad AI
- Humanity not a declaration
- Best resource is your daily life
- Systems describe rules, patterns of life
- Humanity is communicated, bit by bit
- If performance ever falters, AI dies



Thanks!

- Bringing BioShock Infinite's Elizabeth to Life (John Abercrombie)
<http://www.gdcvault.com/play/1020831/Bringing-BioShock-Infinite-s-Elizabeth>
- Creating BioShock Infinite's Elizabeth (Shawn Robertson)
<http://www.gdcvault.com/play/1020545/Creating-BioShock-Infinite-s>
- Ellie: Buddy AI in The Last of Us (Max Dyckhoff)
<http://www.gdcvault.com/play/1020364/Ellie-Buddy-AI-in-The>



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