

Ugly Paintings, Pretty Eyes

A modern adaptation with affective computing

Roy Jara

rmjara@g.ucla.edu

**What is the effect
of emotion in live
performance?**

Pretty Eyes, Ugly Paintings

by Mario Vargas Llosa (1996)

Summary (Fishburn 195)

Set: Lima, Peru

Themes: Art+Criticism, Death, Sexuality

Sensory images: Paintings, music, the city

Characters: Eduardo, Rubén, **Alicia**



Dir. Luis Alberto Rosas (Venezuela, 2007)



FOTOGRAFÍA: ALEJANDRA CORRALES

Alicia's Appearances (Flashbacks)

1. Optimistic art student decides to become painter
2. Monologue on her anger and frustration after reading the critic's review
3. Last conversation between Rubén and Alicia, where she breaks up with him

Realization

The Idea

Dir. Juan Arce Saavedra (Mexico, 2017)



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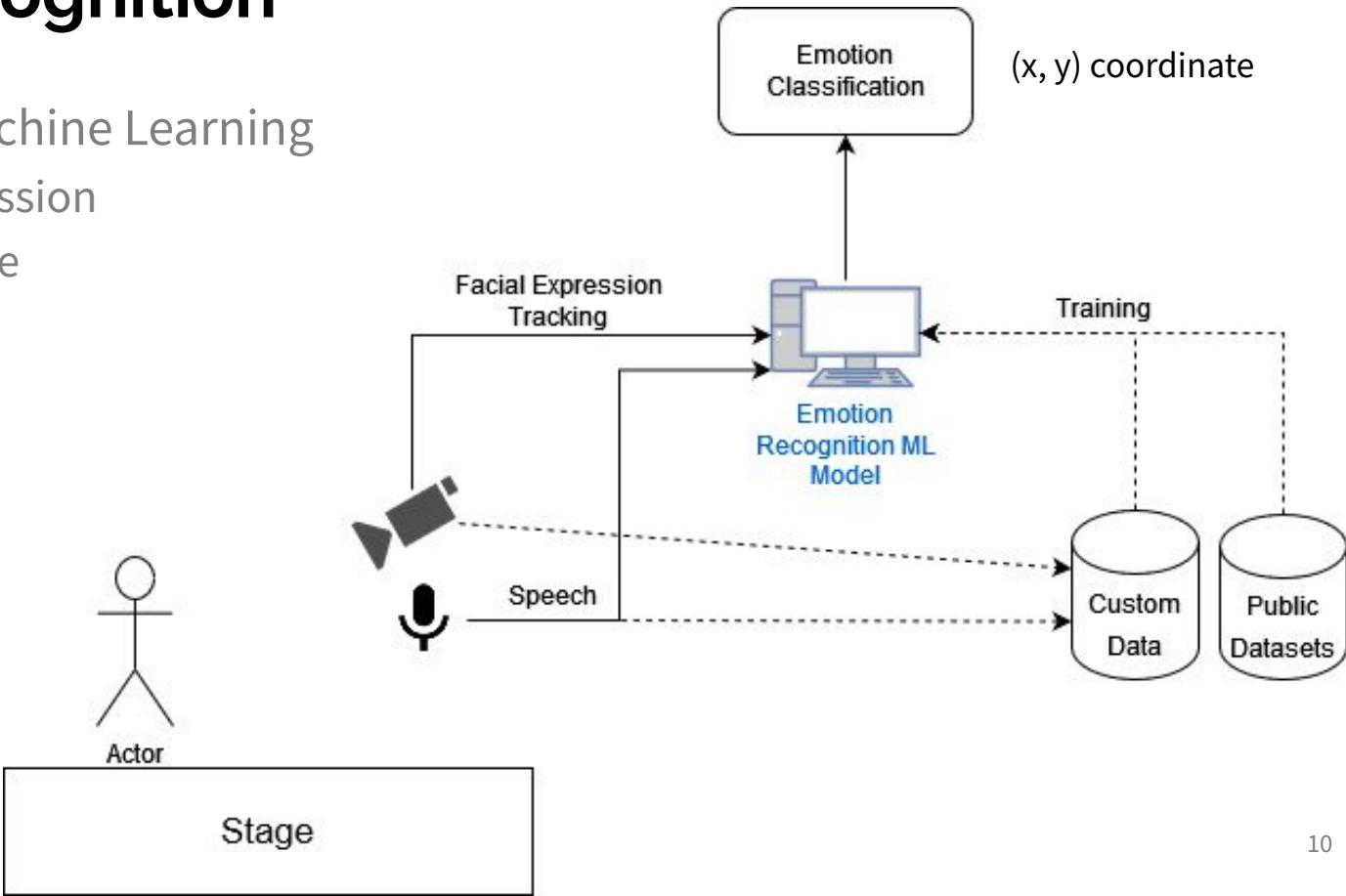


“Augmented Acting”

- Alicia controls ethereal scenography through the emotions embedded in her acting
- Track what the acting represents
- Stanislavski
- **Benefit:** Extending the “Performative medium” (65 S. Dominicus)

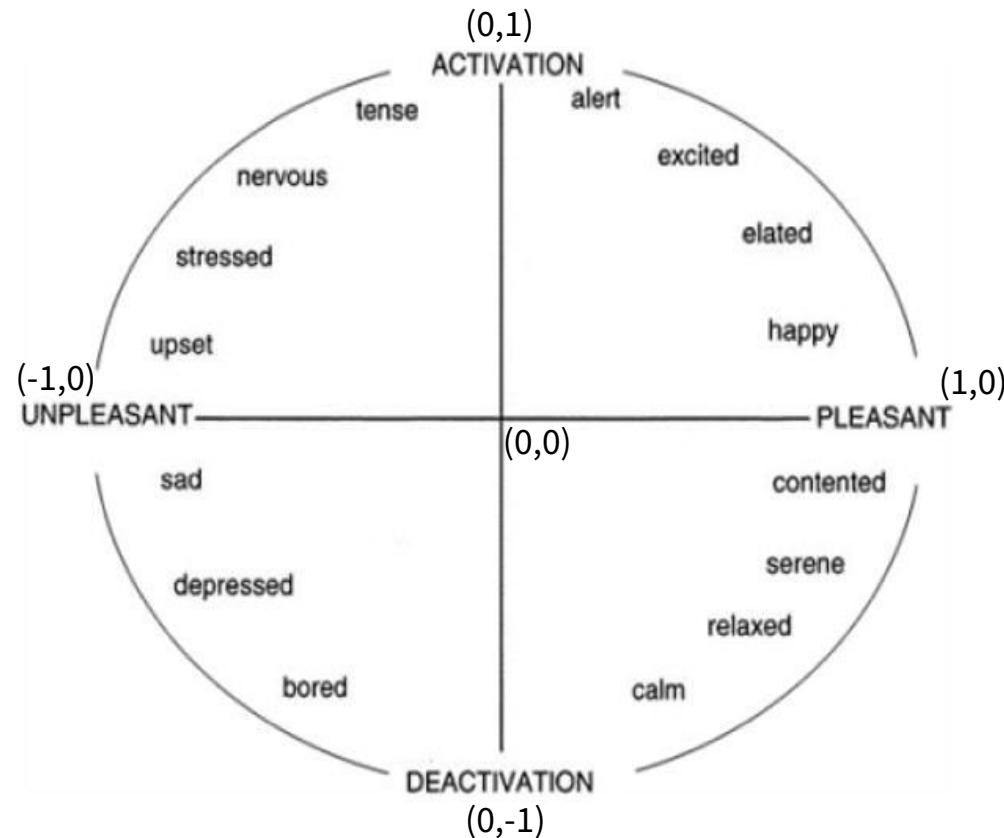
Emotion Recognition

- Multimodal Machine Learning
 - Facial Expression
 - Tone of voice



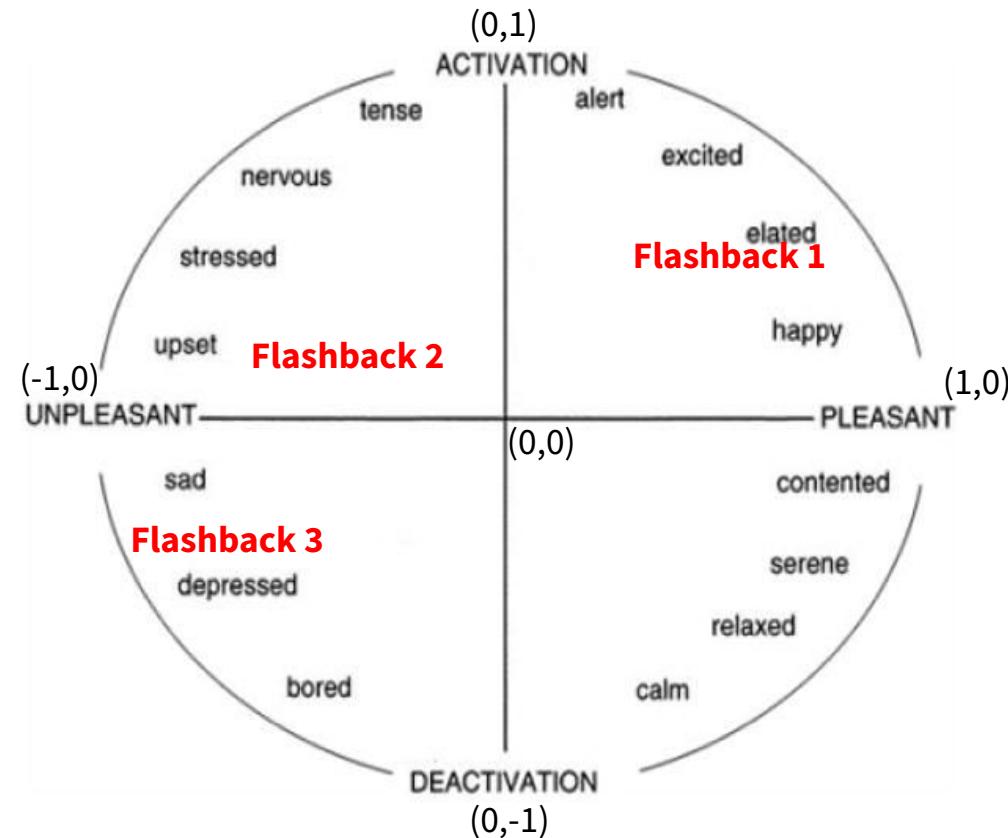
Emotion Model

- 2 Dimensions
 - Activation (energy)
 - Pleasure
- Numerically representing emotions



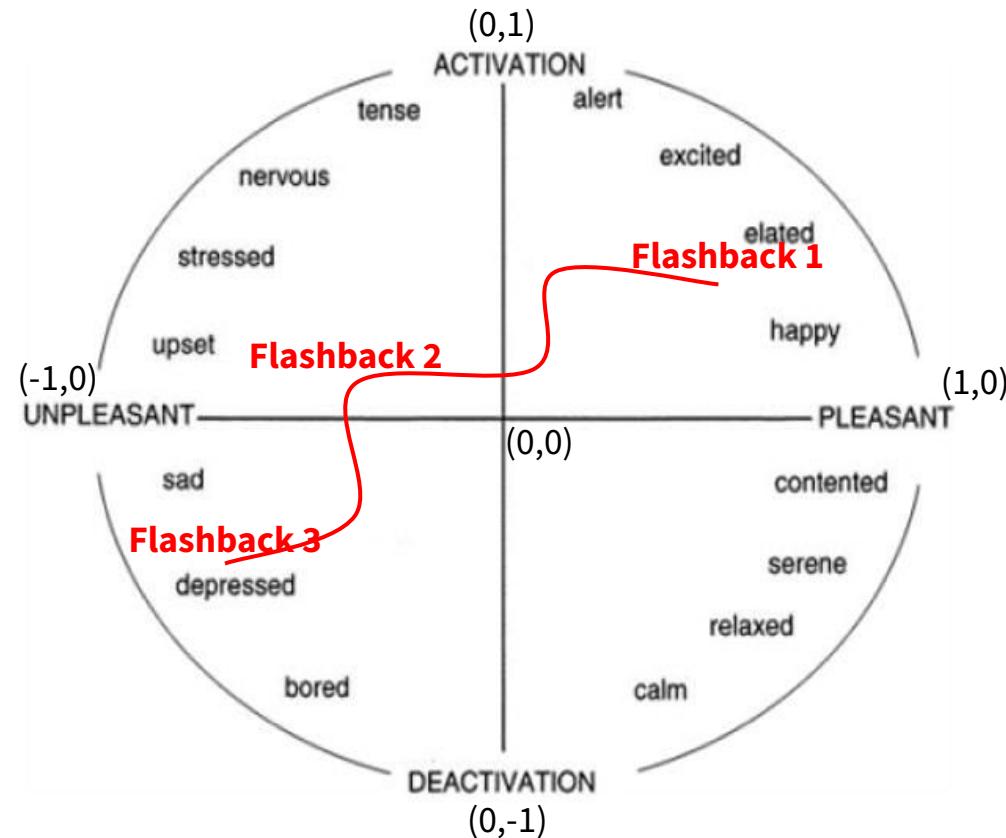
Emotion Tracking

- 2 Dimensions
 - Activation (energy)
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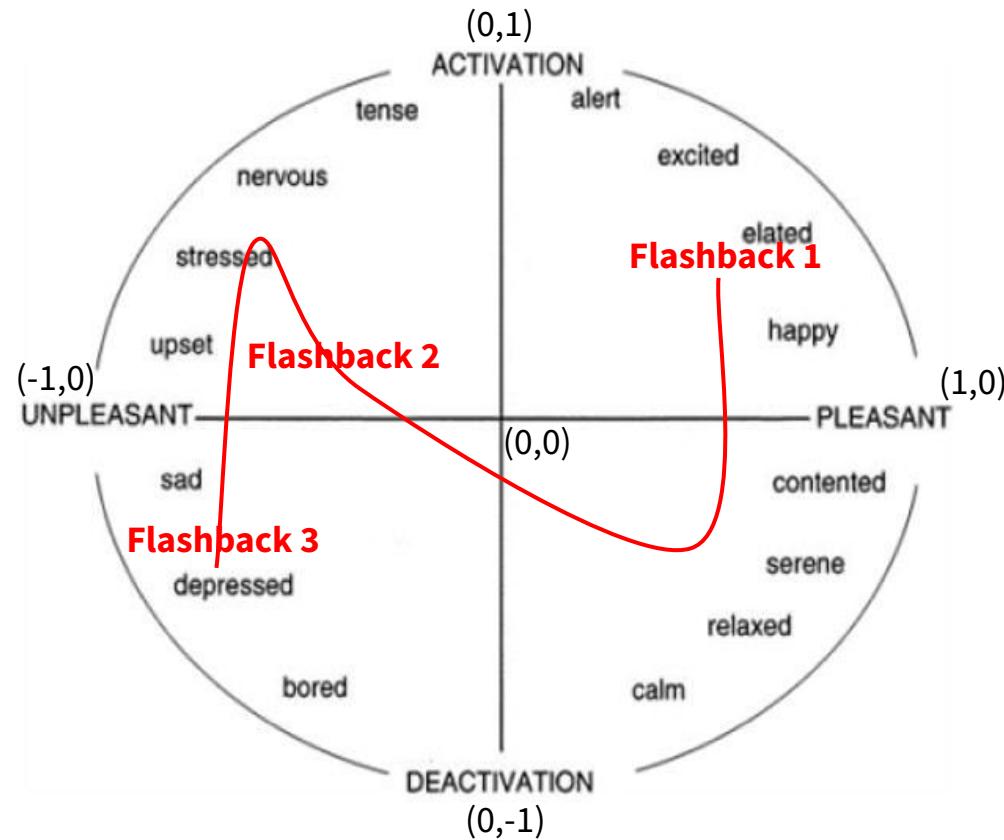
Emotion Tracking

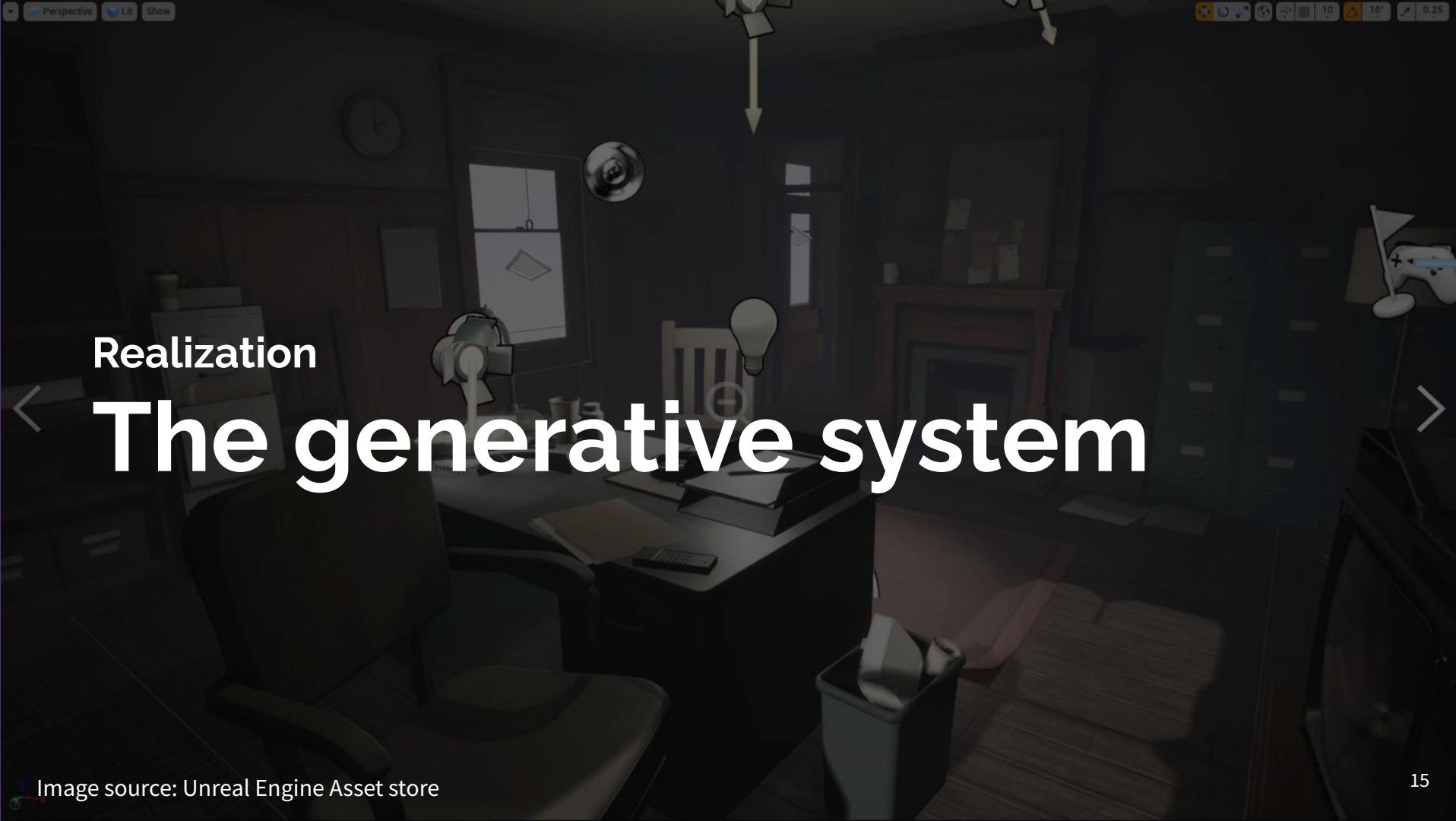
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Emotion Tracking

- 2 Dimensions
 - Activation (energy)
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Realization

The generative system



Lima through a window *(1 dimension)*

Synthetic rain



Heavy Rain

No Rain



(-1,0)
UNPLEASANT

(0,0)

(1,0)
PLEASANT

Image Sources:

<https://pxhere.com/en/photo/921465>
<https://pxhere.com/en/photo/971441>
<https://pxhere.com/en/photo/648001>



Mondrian Paintings *(2 dimensions)*

Image source: <https://www.cbsnews.com/news/the-art-of-piet-mondrian/>

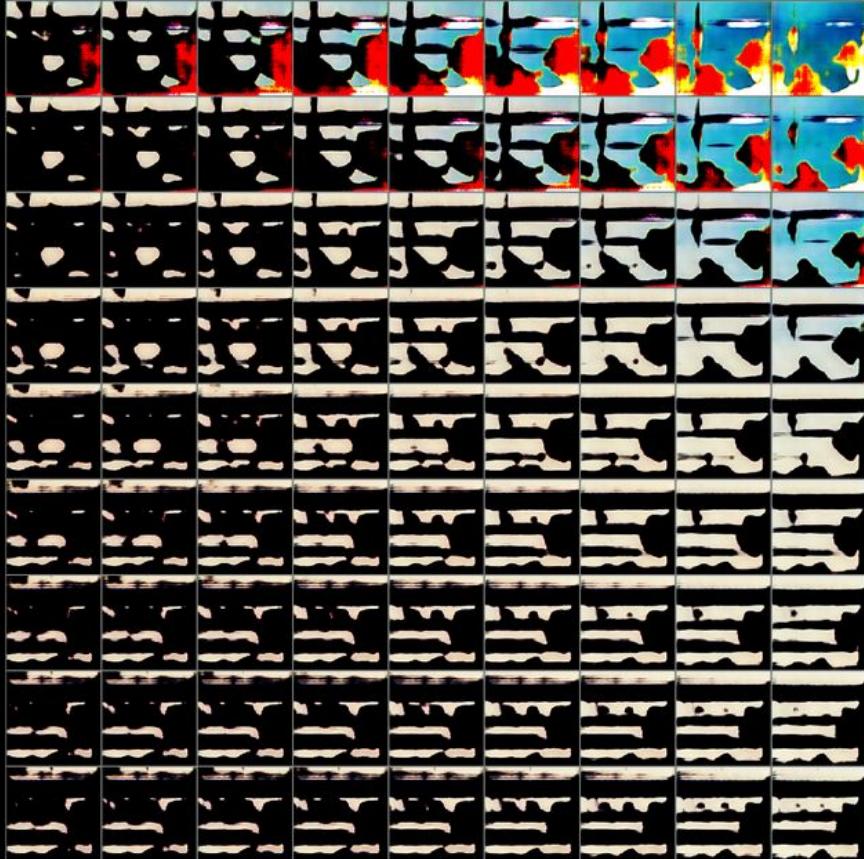
Mondrian Latent Space

StyleGAN - Image Synthesis

Activation



Deactivation



From: Gao, Kaihong. GSD J-Term Exploring AI and
Neural Networks in Design. 2021.
<https://peitongchen.com/latent-space>

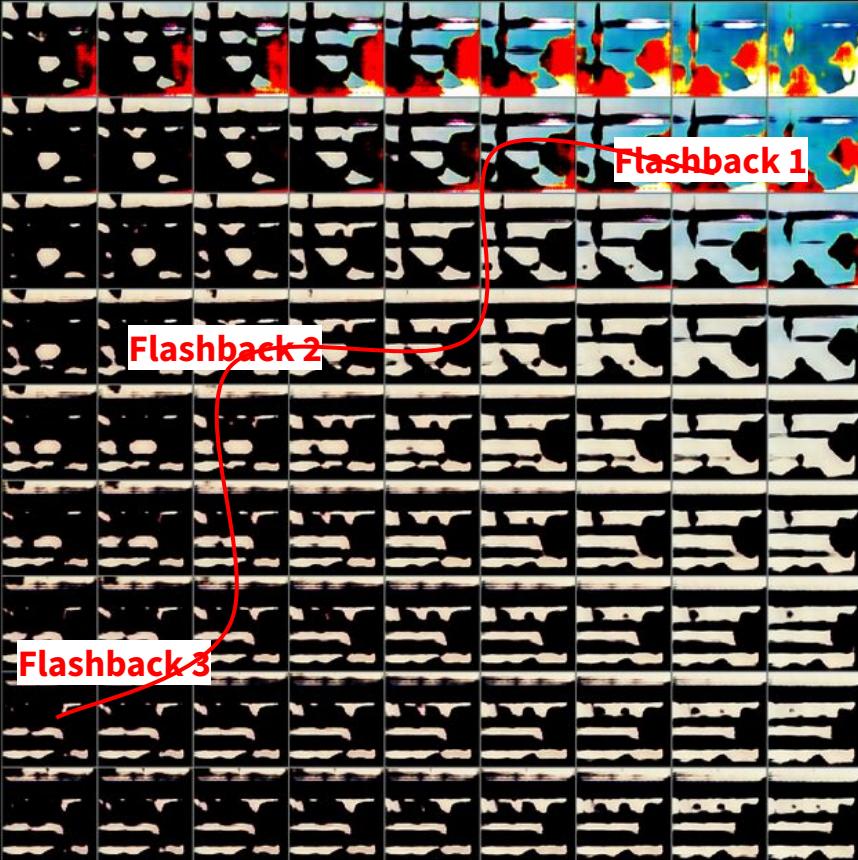
Mondrian Latent Space

StyleGAN - Image Synthesis

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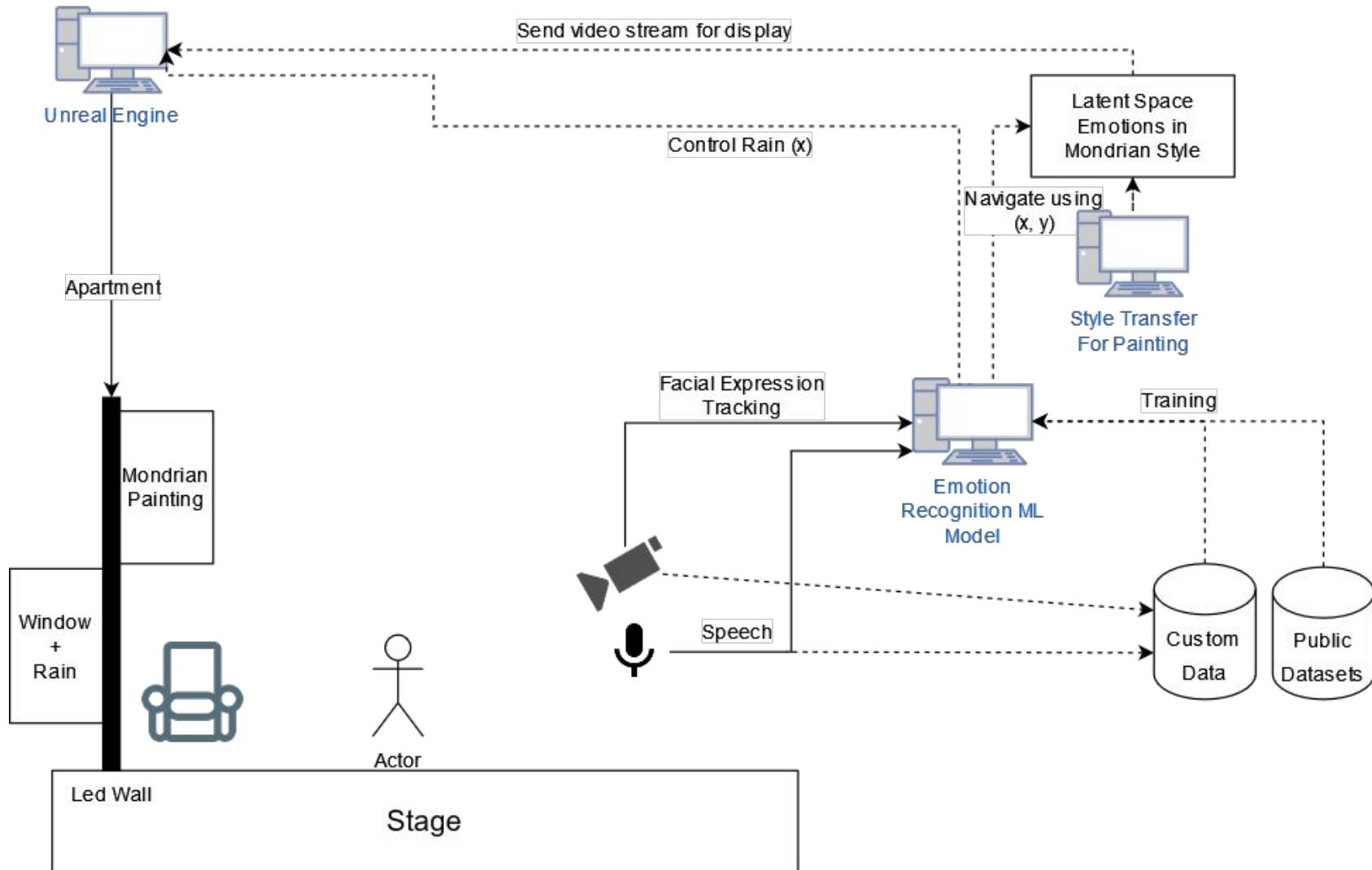
Deactivation



Unpleasant

Pleasant

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Next Steps

- “Minor Science” (Deleuze and Guattari)
 - Used by Seth Thorn in his development of an augmented violin
- Measures of Success
- Reflection and Impact
 - Feasibility and use of technology
 - Effects in performance
 - Audience’s impression

References

- Johnson, Colin. "Aesthetics, Artificial Intelligence, and Search-Based Art." *Artificial Intelligence and the Arts*, edited by Penousal Machado, Juan Romero, Gary Greenfield, Springer, 2021, Pages 27-60.
- Lu, X., Sawant, N., Newman, M. G., Adams, R. B., Wang, J. Z., & Li, J. "Identifying emotions aroused from paintings." *Computer Vision - ECCV 2016 Workshops, Proceedings*, edited by G. Hua, & H. Jégou, Springer Verlag, 2016, pp. 48-63.
- Luna-Escudero-Alie, Maria Elvira. "Eros y Tánatos en Ojos bonitos, cuadros feos, de Mario Vargas Llosa." *Letralia, Tierra de Letras*, <https://letralia.com/sala-de-ensayo/2017/12/04/eros-y-tanatos-en-ojos-bonitos-cuadros-feos-de-mario-vargas-llosa>. Accessed 12 November 2021.
- Picard, Rosalind. Affective Computing. *MIT Media Laboratory Perceptual Computing Section Technical Report*, No. 321. 1995.
- Posner, Jonathan et al. "The circumplex model of affect: an integrative approach to affective neuroscience, cognitive development, and psychopathology." *Development and psychopathology* vol. 17,3 (2005): 715-34.
- Schedel, Margaret and Alison Rootberg. "Generative Techniques in Hypermedia Performance." *Contemporary Music Review*, Vol. 28, No. 1, 2009, pages 57-73.
- Senecal, S., Cuel, L., Aristidou, A., and Magnenat-Thalmann, N. "Continuous body emotion recognition system during theater performances." *Comp. Anim. Virtual Worlds*. 2016, 27: 311– 320.
- Thorn, Seth. "Flows of Inhomogeneous Matter: Improvising an augmented violin." *Organised Sound*, edited by Leigh Landy, Cambridge University Press, 2021, Pages 65-77.