Indigenous Computational Bodies & Settler-Colonial Violence

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Digital Design + Knowledge

"Through countless design decisions large and small—"What counts as valid input data?" or "Who counts as a 'friend'?"—designers and developers of media technology choose

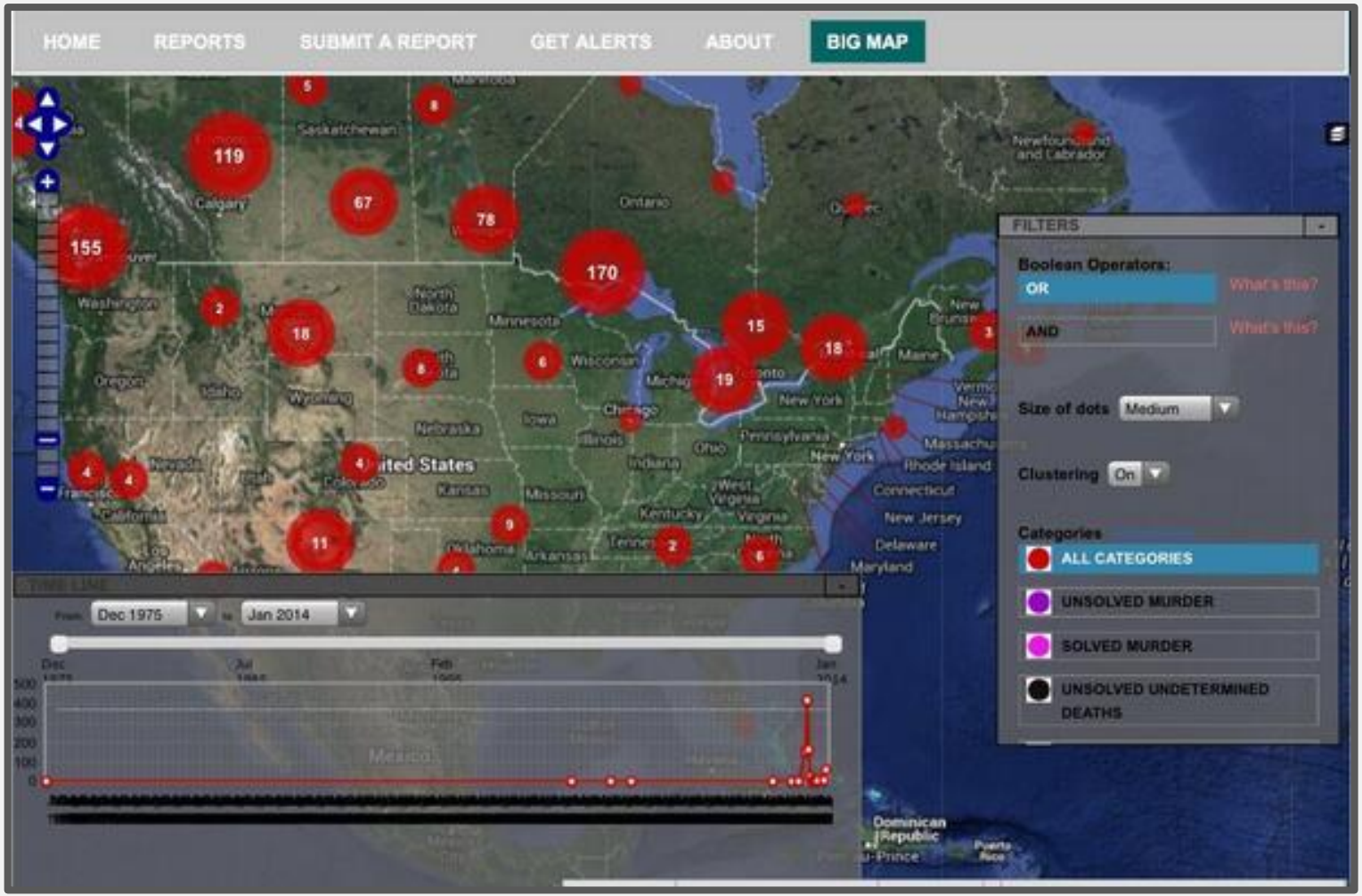
what counts as knowledge,

what sorts of operations we can perform on that knowledge,

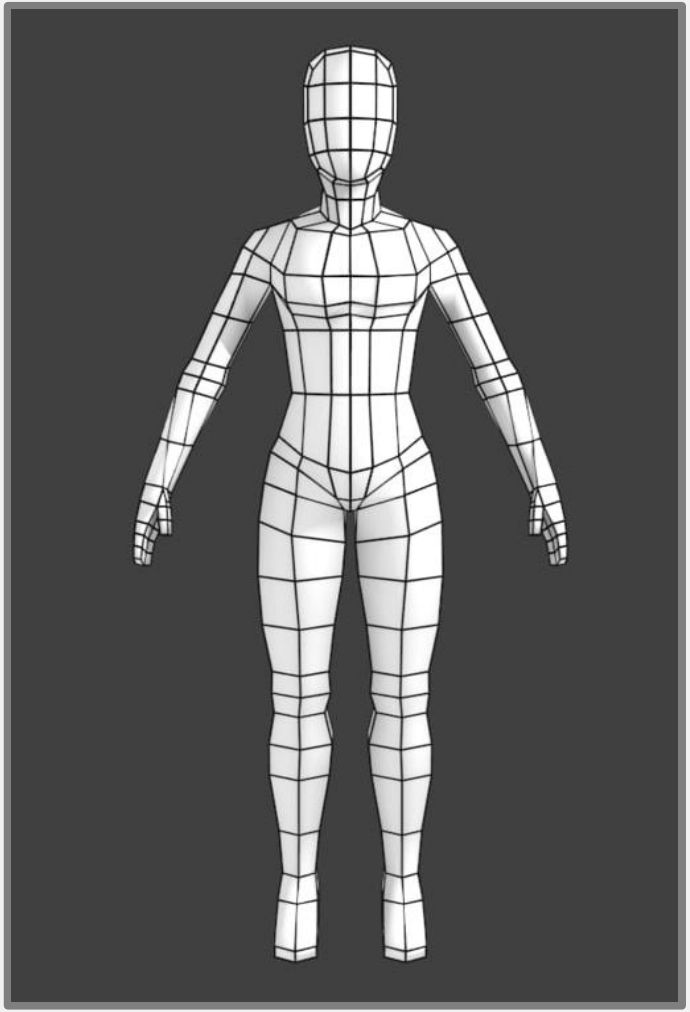
and how that knowledge becomes manifest in the world."

–Jason Lewis (Cherokee/Hawaiian)

What about when we consider these relative to (representations of) the bodies of Indigenous women?



"Missing Sisters" Crowdmap (2013), Save Wiyabi Project



“Me Humba Wumba, best magic person on island.”

—Humba Wumba in *Banjo-Tooie* (2000, Rareware, released on Nintendo 64)

Low poly, short for ”low polygon (count),” the relative number of polygons (or flat planes) in the mesh that constitutes a 3D model.

- Less computationally intensive

- Used esp. in real-time rendering contexts (like video games) to optimize performance

Low Poly

Low poly points to a set of determinants of low-resolution representation relative to digital bodies and spaces.

It reflects a techno-cultural constraint—

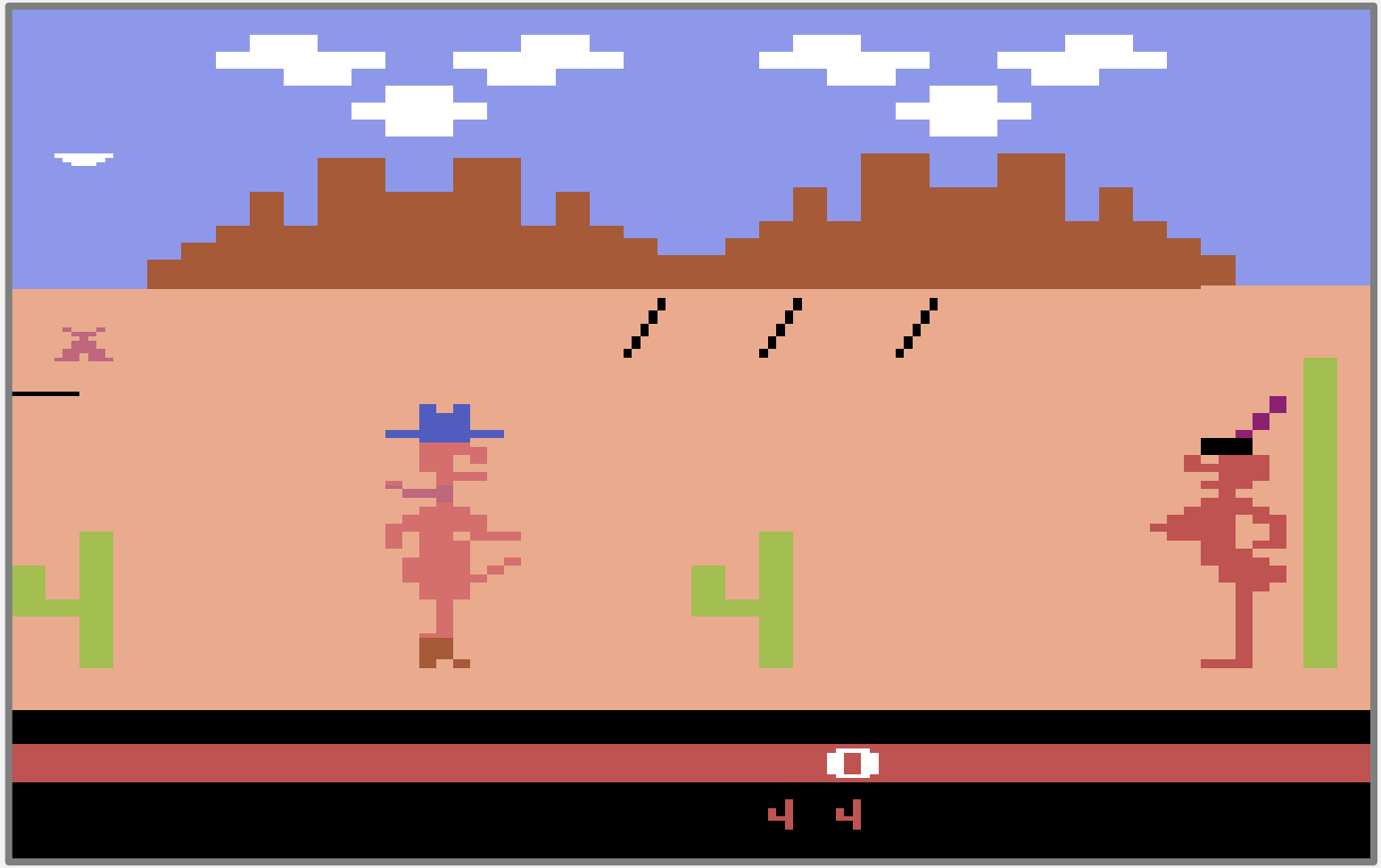
where technical limitations meet culturally-situated misconceptions + aesthetics—

embedded in affirmative design principles

to determine the resolvable detail or "resolution" communicated by a figure, in its degree of **particularity** (fullness of detail), **granularity** (degree of detail), and **precision** (accuracy).

*Increased **resolution** ≠ increased graphical **fidelity**, which is always situated relative to affirmative aesthetics.

Humba Wumba in *Banjo-Kazooie: Nuts & Bolts* (2008, Rare Ltd., released on Xbox 360)



Custer's Revenge (Mystique, 1982) + reboot with updated graphics

Low Poly: Shape and Movement

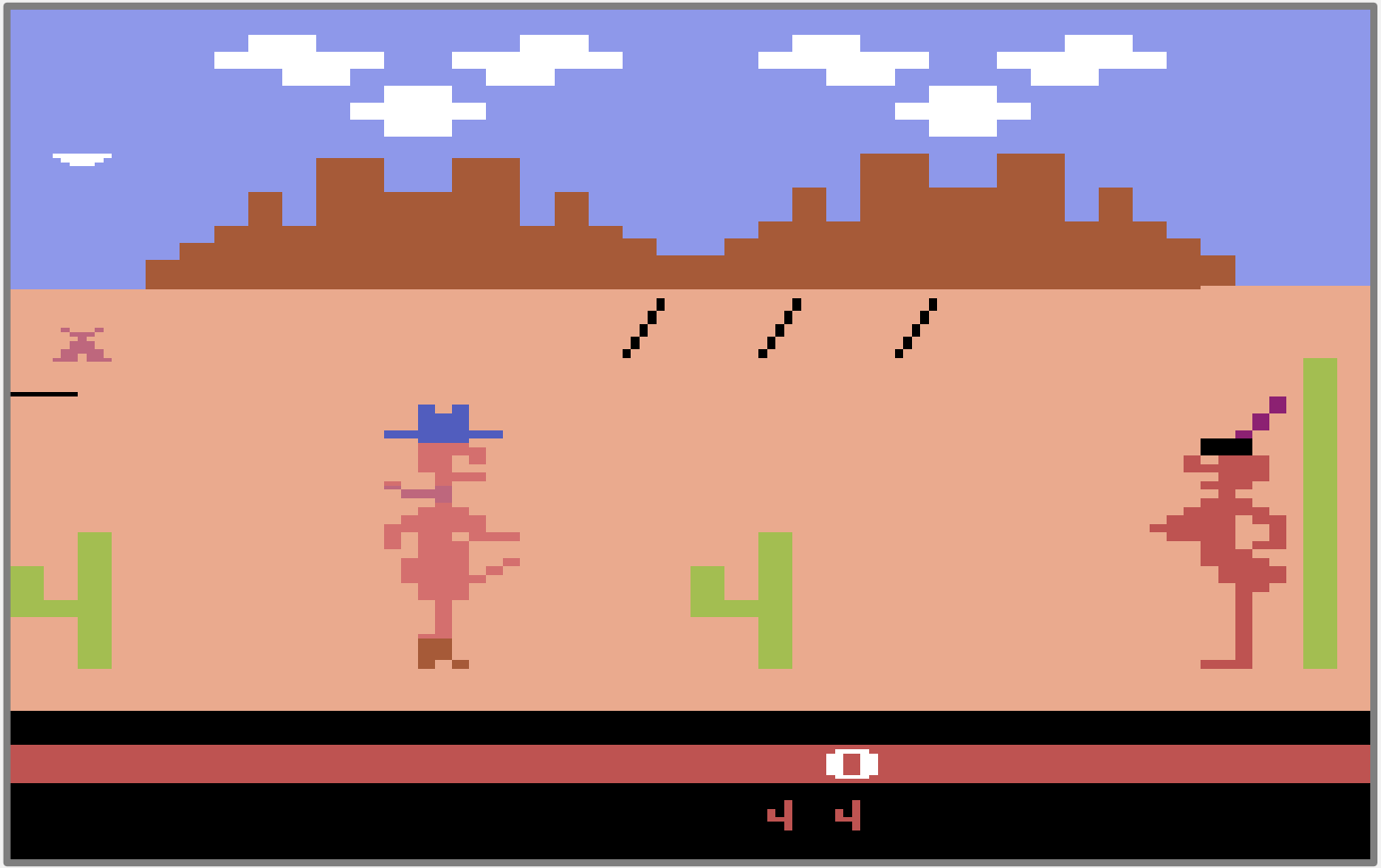
Shape and movement become key axes upon which to explore low poly bodies.

- Low poly *shape* reflects the granularity of the image itself—2D or 3D figures. *Rigid-body dynamics* and *collision detection* make meshes important for interaction between figures.

- Low poly *movement* may be understood to limit and distill body motion toward stereotypes of action.

Keyframes, especially present in 2D sprite animation in videogames, often carry this “low resolution” quality.

These comprise a low poly body, which may signal narrative positionality through its shape or movement.



Custer's Revenge (1982, Mystique, released on the Atari 2600) + reboot with updated graphics

Low Poly, Violence, & Indigenous Protocols

Indigenous bodies—especially Indigenous women's bodies—are reduced to low-resolution representations and encoded with narrative patterns,

they establish a procedural rhetoric of violence in interactive, dynamic digital media such as videogames.

Indigenous protocols govern our relationships with each other and with the environment. **Respect is a reciprocal, shared, constantly interchanging principle expressed through all aspects of social conduct**.

—Linda Tuhiwai Smith (Māori)

Danielle Fireseed, co-protagonist in *Turok 3: Shadow of Oblivion*
(Acclaim Entertainment 2000, released for the Nintendo 64)

Tala, in *Darkwatch: Curse of the West*
(2005, High Moon Studies, PlayStation2/Xbox)

Kaniehtí:io, in *Assassin's Creed III* (2012, Ubisoft, PlayStation3/Xbox 360)

Nuna, in *Never Alone (Kisima Inŋitchuŋa)* (2014, E-Line Media + UpperOne Games)

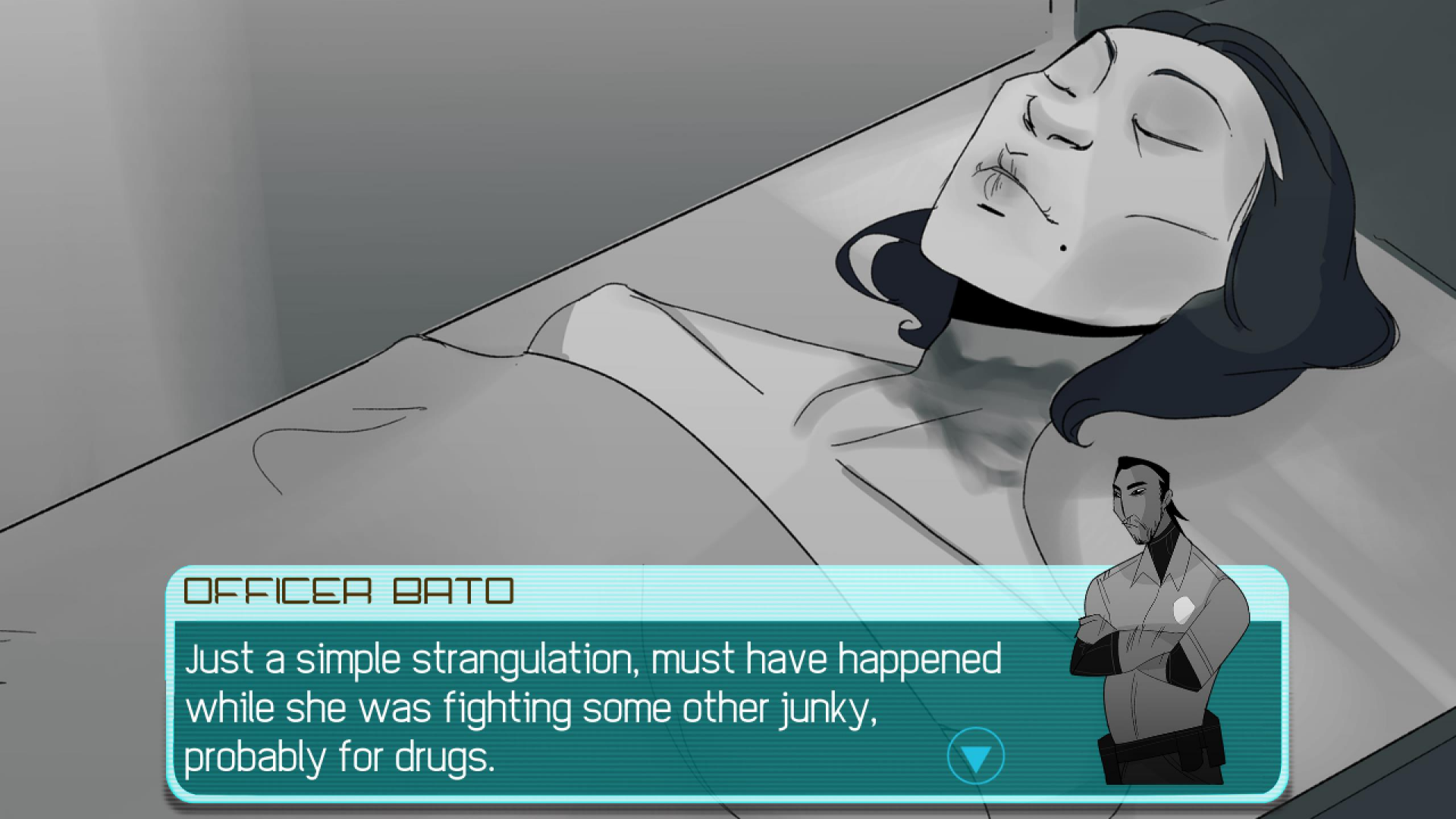
TimeTraveller, Episode 4: 2121 A.D. (2009), Skawennati & Initiative for Indigenous Futures

Purity & Decay (2017-'20, Meagan Byrne / Tara Miller): Created at Dames Making Games's "Feb Fatale" game jam by two Indigenous women.

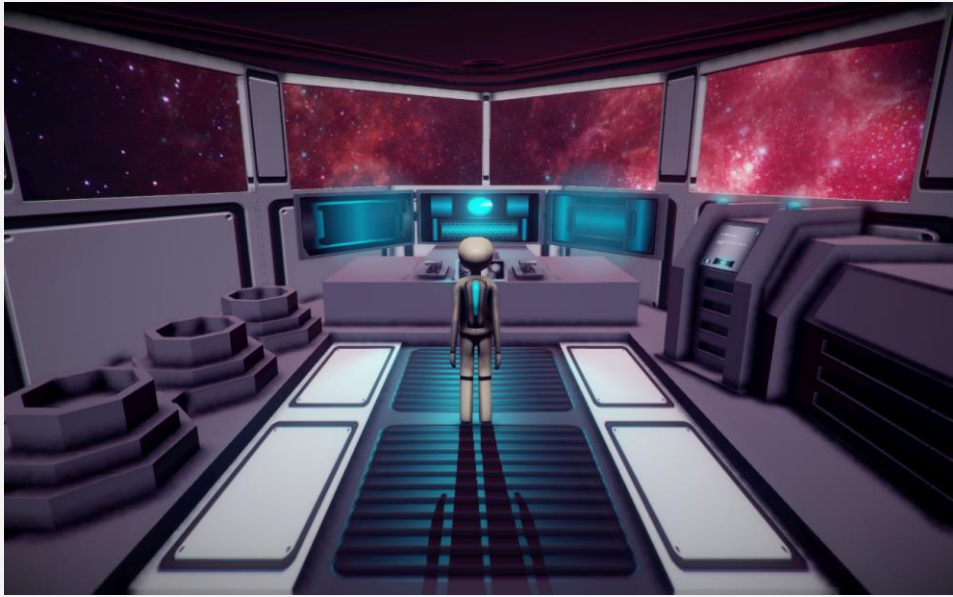
"The year is 2262 and you're a tough-as-nails P.I. working in the slums of one of the last major cities in North America. Murdered sisters and flying cities, this case goes way farther than the banks of this one detective's little slum in this **Indigenous cybernoir**. A **narrative (choose your own adventure) detective game** that lets you solve who did it."

MARY LAPENSEE
Anyways, she had been Jane Doe until I started going to the police.

Isn't this the police's job?
I don't do murders. Too much paper work.

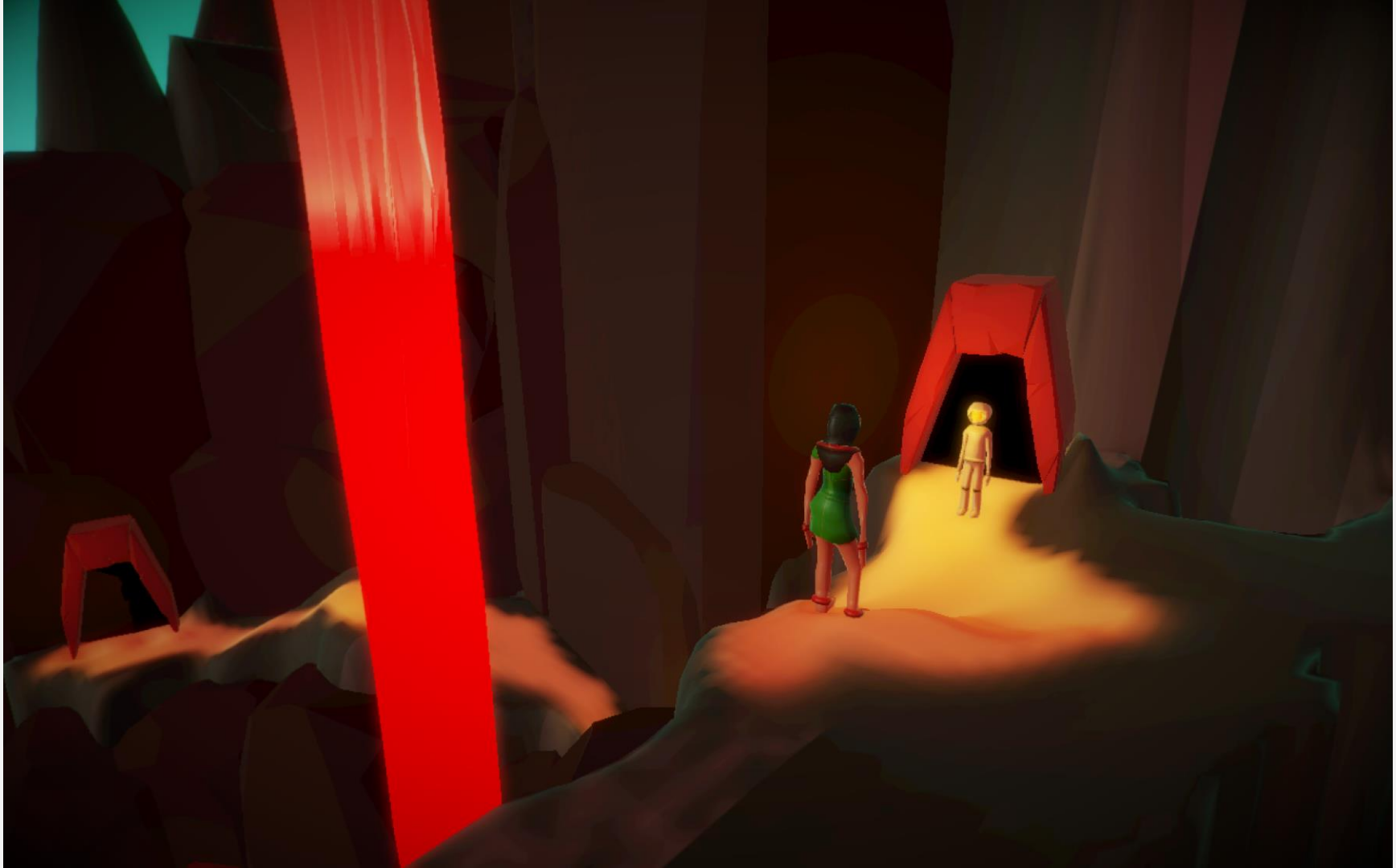

OFFICER BATO
Just a simple strangulation, must have happened while she was fighting some other junky, probably for drugs.

OFFICER BATO
All our girl's worldly posessions.



He Au Hou (A New World) (2017): Created at the Skins 5.0 workshop at the IIF by a team of Indigenous students, half of whom are young women.

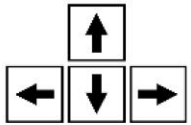
He Ao Hou is a point-and-click **adventure game** based on kānaka maoli (Native Hawaiian) stories and knowledge. It is set in the far future, when kānaka maoli have attained the next level of navigation: space travel. **Entrusted with your grandfather's space canoe, you set out to find you missing sister**.



I heard you are looking for your sister; my sister Pele should know where she has gone, follow me.

X

Hi'iaka needs your help to revitalize the planet. Match her hula steps in order to help her bring life to the world.



Hula Steps

That tattoo you have--there was a girl that passed through here who had one just like it.

Thank you.

Intelligent Agent
Find-A-Date™
Location
Winnipeg, Canada
Time
14:10
Date
07-23-2112