



Space XR Webinar Series - I

WEBINAR  
ao vivo

SPACE XR - Series

# Cultural Heritage ➔ and Expanded Reality

Sergio Alex Kugland de Azevedo  
LAPID  
Museu Nacional

15 JUN  
13h30

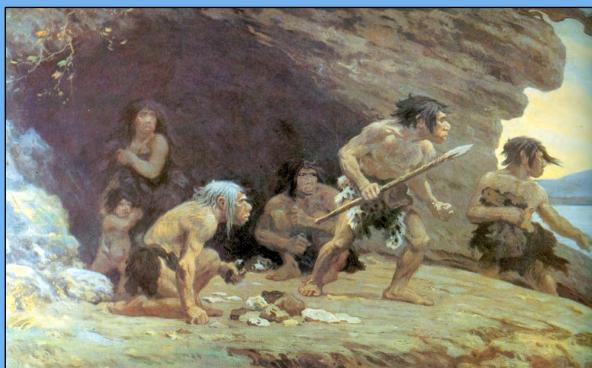
VisgrafLab

Assistir no YouTube

## Cultural Heritage and Expanded Reality



### Considerações Iniciais:



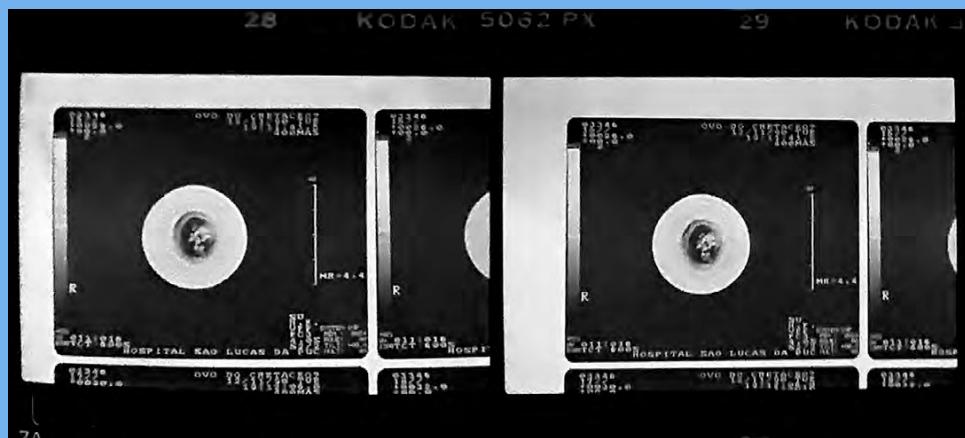
### Origem dos Museus

- \* Acumular para sobreviver: água, alimento, proteção (fogo, abrigo, armas), objetos de troca, outros humanos (sociedade)
- \* Acumular para satisfação pessoal (sem necessidade prática imediata)
- \* Tesouros Reais (ganância e poder) e “**Gabinetes de Curiosidades**”
  - **valioso e curioso**
- \* Museus de hoje: **Ciência, Educação e Cultura: Centros de Difusão do Conhecimento**
- \* Experiências multi-sensoriais compartilhadas

## Cultural Heritage and Expanded Reality



\* início dos anos 90...

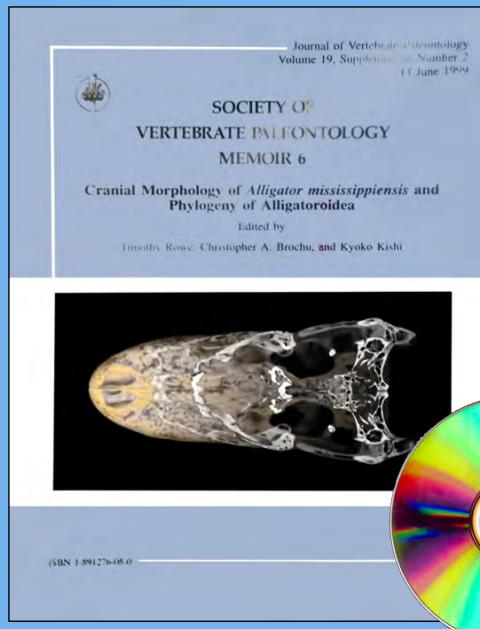


AZEVEDO, S. A. K.; SILVA, J. P. & SILVA, V. G., 1994. O Uso da Tomografia Computadorizada na Paleontologia de Vertebrados. *Anais da Academia Brasileira de Ciências*, Rio de Janeiro, 66(2): 254.

AZEVEDO, S. A.; SILVA, V. G. & FERIGOLO, J., 1994. Um Ovo de Quelônio do Neocretáceo do Brasil. *Anais da Academia Brasileira de Ciências*, Rio de Janeiro, 66(2): 255.

AZEVEDO, S. A. K.; SILVA, V. G. & FERIGOLO, J., 2000 - A possible Chelonian egg from the Brazilian Late Cretaceous. *Anais da Academia Brasileira de Ciências*, 72 (2):187-93.

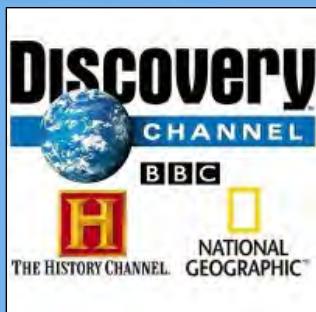
## Cultural Heritage and Expanded Reality



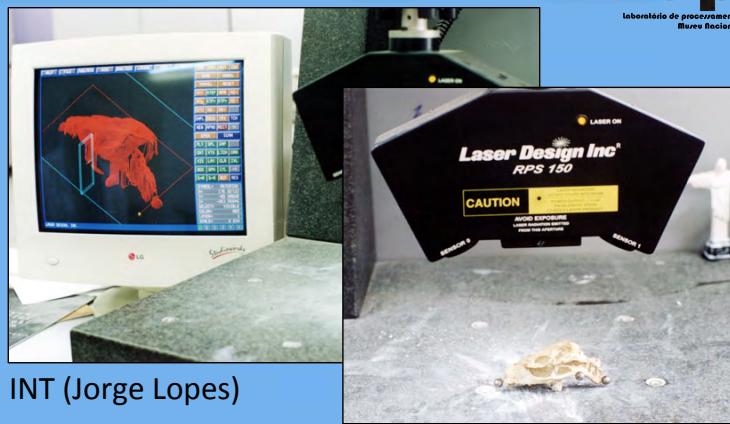
ROWE, T.; BROCHU, C.A. & KISHI, K., 1999. Cranial morphology of *Alligator mississippiensis* and Phylogeny of Alligatoroidea tomography. *Journal of Vertebrate Paleontology* – Memoir 6. Vol. 16 (Suppl.2), 100p.

BROCHU, C.A., 2000. A digitally-rendered endocast for *Tyrannosaurus rex*. *Journal of Vertebrate Paleontology*, 20(1): 1-6.

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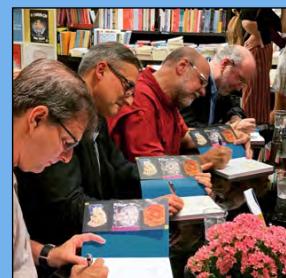
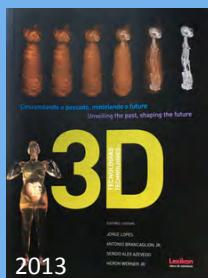


“Ciência do Futuro” (2003)



2005: III Simpósio Brasileiro de Paleontologia de Vertebrados (diversos trabalhos)

2005 em diante: projetos, artigos, dissertações, teses e livros



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Setembro de 2018



Área do LAPID



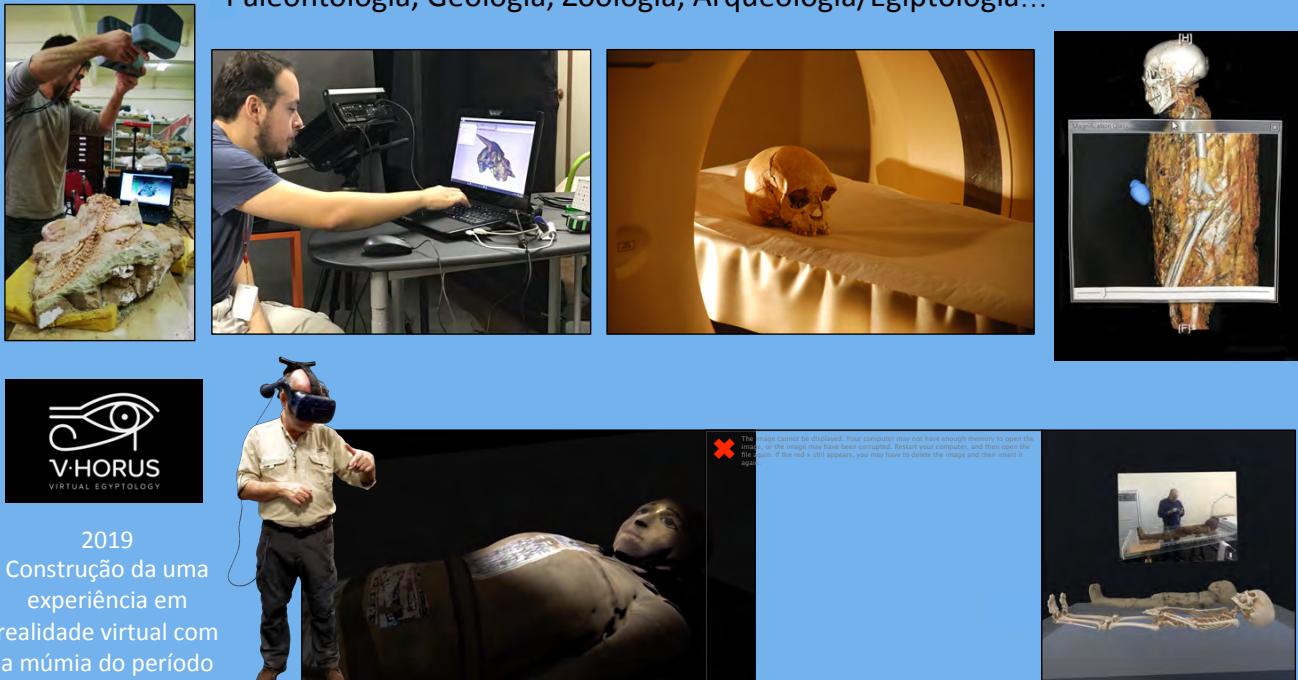
LAPID e a “Bola de Cristal”

## Cultural Heritage and Expanded Reality



Objetivo: digitalização do acervo do Museu Nacional como ferramenta de apoio à pesquisa Científica através de tomografias, scans de superfície, fotogrametria, prototipagem física, etc...

Paleontologia, Geologia, Zoologia, Arqueologia/Egiptologia...



## Cultural Heritage and Expanded Reality



### Exposições



- 43 exposições

## Cultural Heritage and Expanded Reality



Projetos Dinos Virtuais (2009)

## Cultural Heritage and Expanded Reality

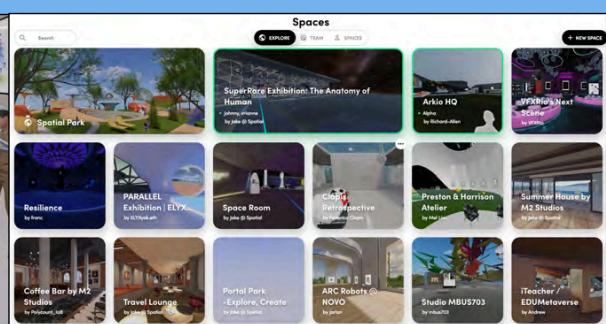


**Projeto FAPERJ: CENTRO PI/VISGRAF – IMPA: UM LOCUS DE EXPERIMENTAÇÃO  
PARA REALIDADE EXPANDIDA EM ESPAÇOS MIDIÁTICOS COMPARTILHADOS**  
Visgraf (IMPA) – Biodesign (PUCRIO) – Lapid (MUSEU NACIONAL/UFRJ)



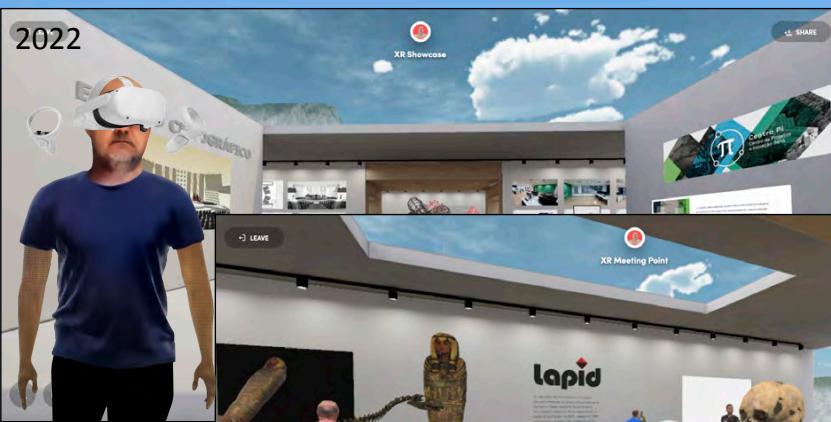
SPACE **XR** MÍDIA  
EXPANDIDA

<https://space-xr.com/>



A “Realidade Virtual” como ferramenta de difusão e compartilhamento do patrimônio cultural

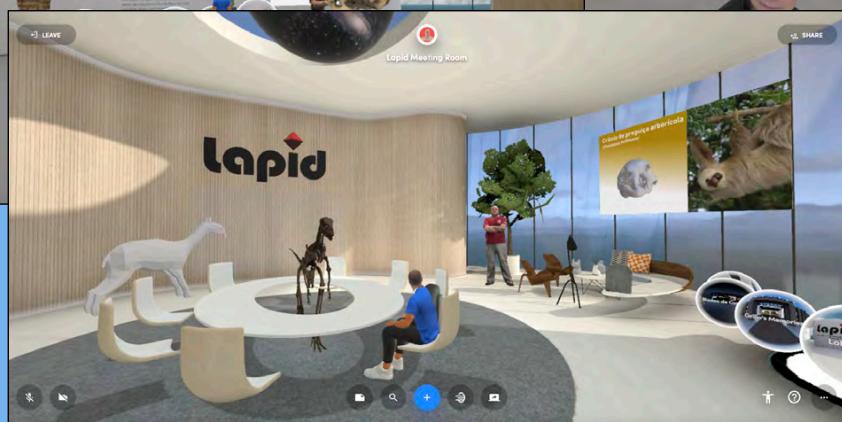
## Cultural Heritage and Expanded Reality



XR Showcase

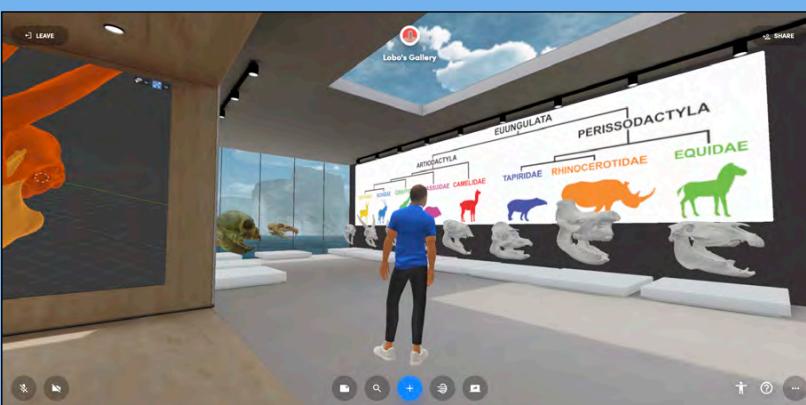


XR Meeting Room



LAPID Meeting Room

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Geologia e Paleontologia

Lobo's Gallery

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Megafauna do Quaternário da Bahia

[https://spatial.io/s/Megafauna-do-Quaternario-da-Bahia-por-Leonardo-Lobo-62615ef24e23b000012e9b642?  
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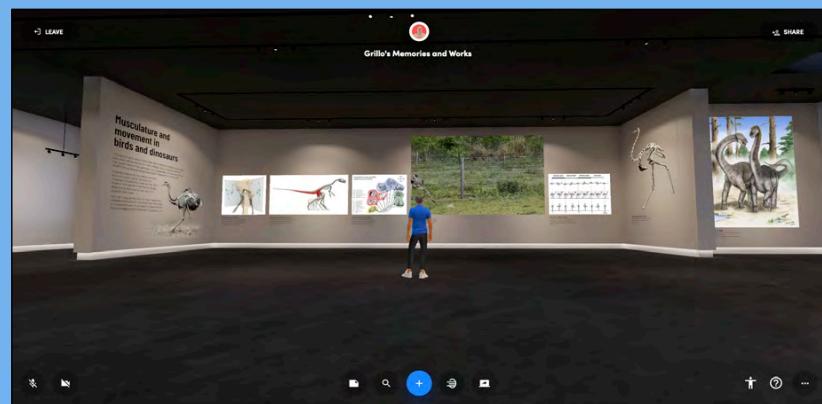
## Geologia e Paleontologia



**lapidVR**  
laboratório de processamento de imagem digital  
Museu Nacional/UFRJ

## Grillo's Memories and Works

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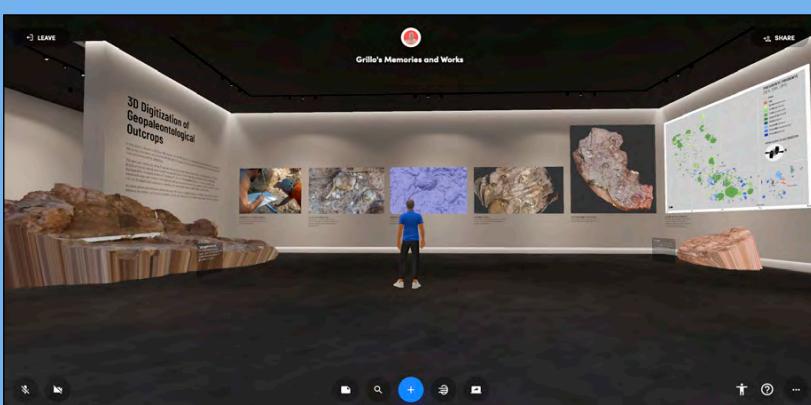


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## Geologia e Paleontologia



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Museu Nacional/UFRJ

## Grillo's Memories and Works



## Grillo's Memories and Works

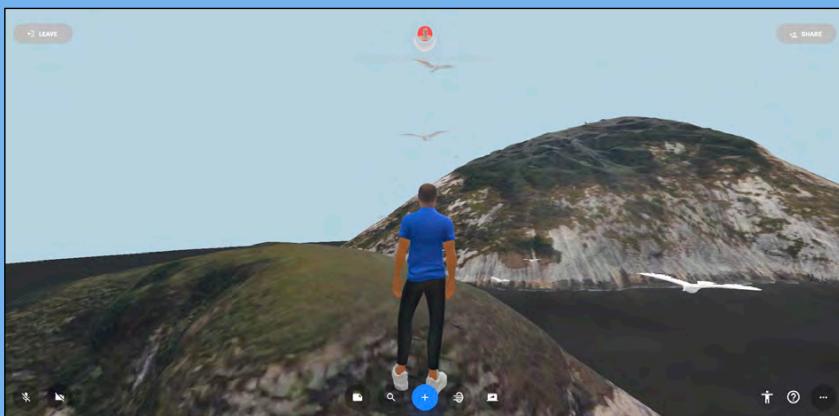


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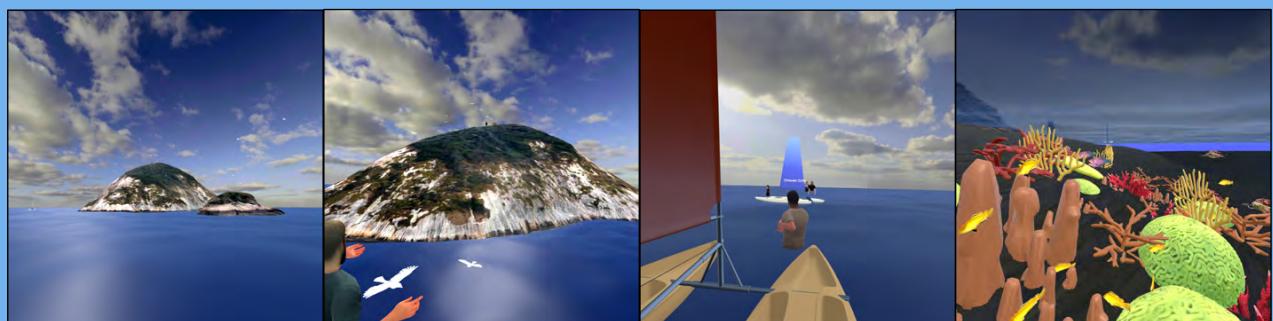
## Zoologia/Botânica/Ecologia



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laboratório de processamento de imagem digital  
Museu Nacional/UFRJ

### Ilhas do Rio: MoNa Ilhas Cagarras

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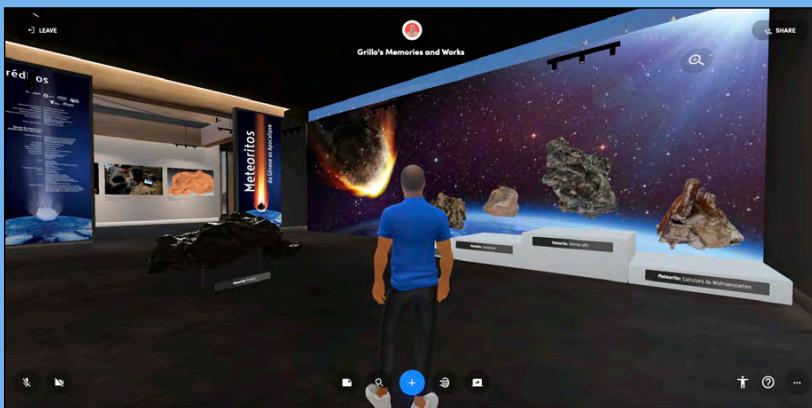


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## Geologia e Paleontologia

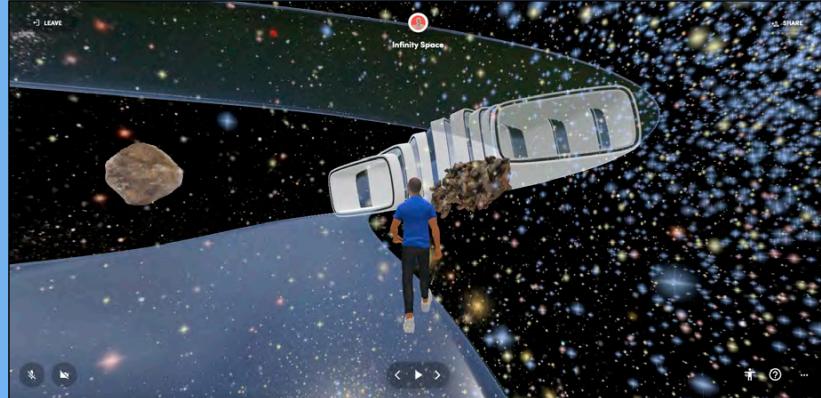


**lapidVR**  
laboratório de processamento de imagem digital  
Museu Nacional/UFRJ

### Grillo's Memories and Works

### Infinity Space

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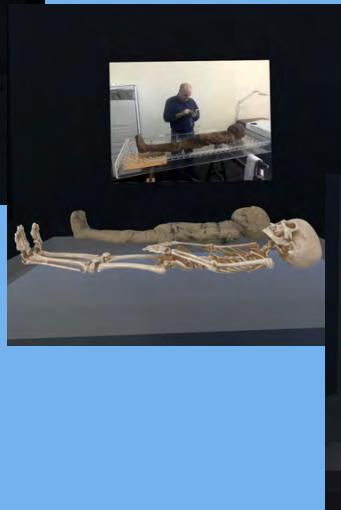
## Arqueologia e Egiptologia



**lapidVR**  
laboratório de processamento de imagem digital  
Museu Nacional/UFRJ

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### V-Horus I e II

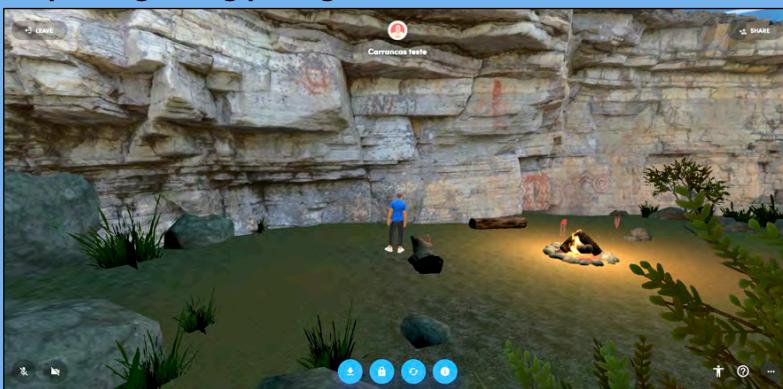


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## Arqueologia e Egiptologia



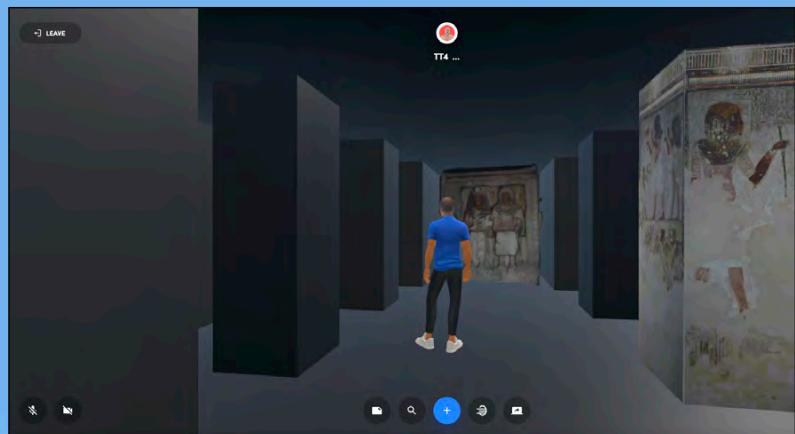
**lapidVR**  
laboratório de processamento de imagem digital  
Museu Nacional/UFRJ

### Carrancas

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### TT49Q

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## Arqueologia e Egiptologia



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laboratório de processamento de imagem digital  
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## Pedro Von Seehausen Virtual Hangout

<https://spatial.io/s/Pedro-Von-Seehausens-Virtual-Hangout-6201718b730071000125f13d?share=8959714519862437327>

## Sala de análises Bés

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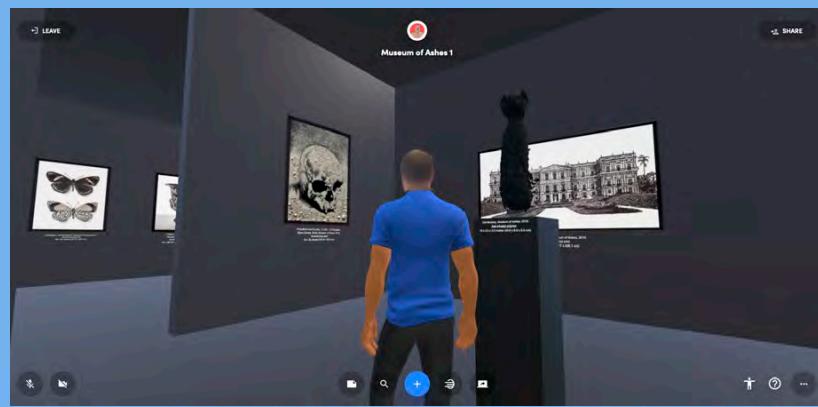
## Resgate de Acervos



**lapid** VR  
laboratório de processamento de imagem digital  
Museu Nacional/UFRJ

## Vik Muniz's Museum of Ashes

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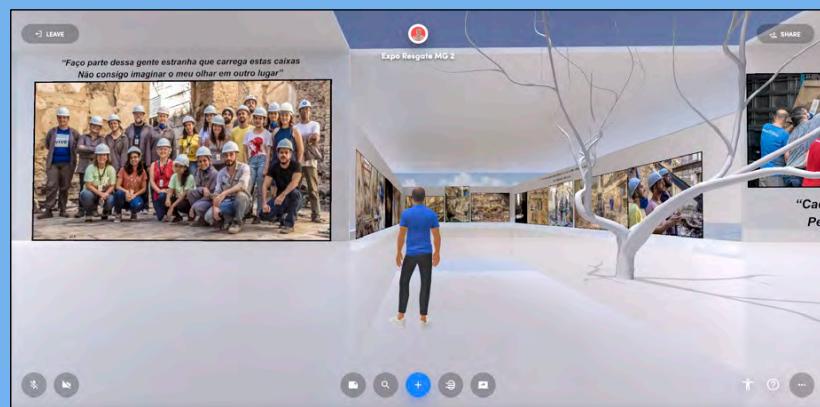


## Resgate de Acervos



Resgate  
Fotos de Marcos Gusmão

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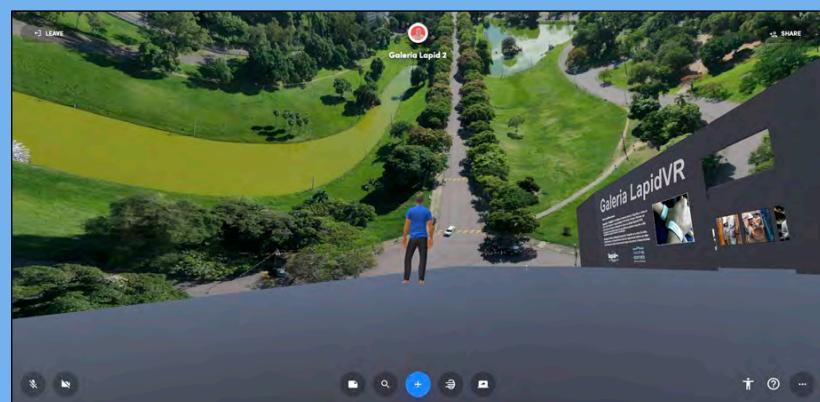


## Resgate de Acervos



Galeria LapidVR

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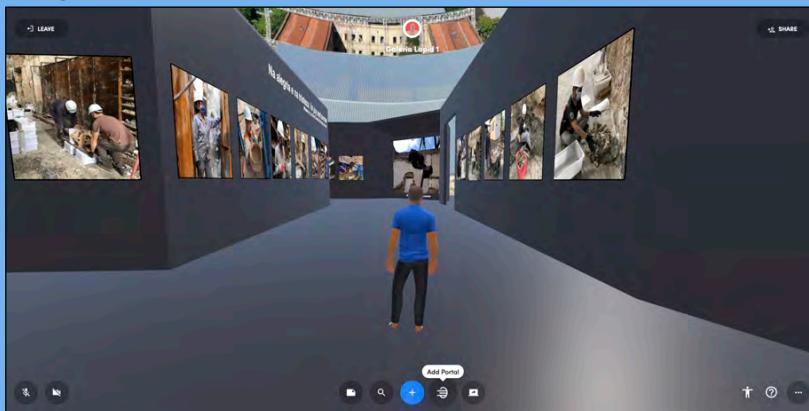


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## Resgate de Acervos



**lapidVR**  
laboratório de processamento de imagem digital  
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Na alegria e na tristeza

Mãos do Resgate



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## Resgate de Acervos/Arte



**lapidVR**  
laboratório de processamento de imagem digital  
Museu Nacional/UFRJ

*Formatae ignem*

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## Lapid Cine Clube



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laboratório de processamento de imagem digital  
Museu Nacional/UFRJ

## Sala Lapid Cine Clube

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## Cultural Heritage and Expanded Reality



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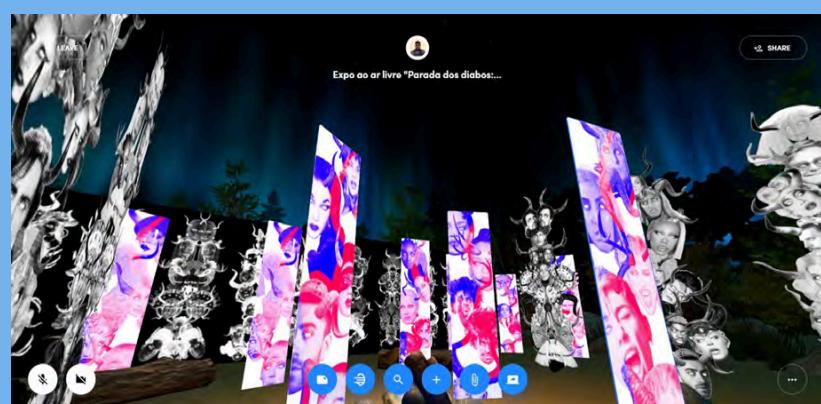
## Outras experiências:



**lapid**vr  
laboratório de processamento de imagem digital  
Museu Nacional/UFRJ

Parada dos diabos: a dança das máscaras dos diabos e dos queers

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## Cultural Heritage and Expanded Reality



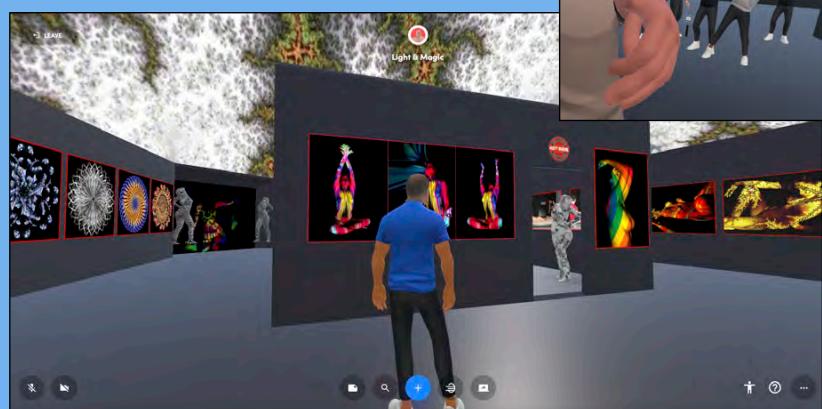
## Outras experiências:



Light & Magic



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Cultural Heritage and Expanded Reality



## Reflexões Finais:

- \* Os Museus e a Internet; imagens 3D.
- \* Pandemia ("second life")
- \* Metaverso: experiências compartilhadas; arquivos 3D
- \* Futuro?: experiências sensoriais múltiplas no metaverso (?).  
“da ficção científica para a realidade”.
- \* **Museus x Metaverso**



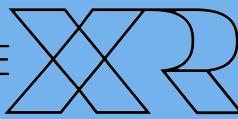
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Obrigado pela atenção!

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SPACE  MÍDIA EXPANDIDA



DASA

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