Time Propagation Experiment: Capturing Dynamic Changes in a Block Universe

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Introduction to the Dynamic Block Universe (DBU)

The Dynamic Block Universe (DBU) is an advanced theoretical framework that reconciles the existence of free will with the concept of a four-dimensional block universe. Unlike the traditional static block universe where all moments in time exist simultaneously in a fixed structure, the DBU posits that the state of the universe is continuously influenced by causal interactions. These interactions allow for the propagation of changes through time, meaning that any event can affect both the past and the future.

Video

Here is a link to a video about this experiment: https://www.youtube.com/watch?v=ruaEIPFaTx0

Theoretical Background

The DBU theory suggests that changes in the state of the universe are not limited to the forward flow of time. Instead, events and decisions made at any point can propagate through the entire temporal structure, altering both past and future states. This dynamic nature supports the existence of free will, as the actions of individuals can reshape the history and future of the universe, maintaining causal consistency.

Experiment Objective

The objective of this ongoing experiment is to capture a propagating change within the DBU framework. Specifically, we aim to record a change in the form of JPEG images, comparing an image from the present with an image from just before the propagated change reaches the present. This will provide empirical evidence of the DBU's hypothesis that changes can propagate through time.

Experimental Setup

Equipment

- **USB Camera**: To capture high-resolution images of the tree rings.
- **Lighting System**: Ensures consistent lighting conditions for each image.
- **Block of Wood**: Selected to display tree rings that clearly record weather conditions over a 30-year period.
- **Metal Container**: Houses the camera, lighting system, and block of wood to maintain a controlled environment.
- **Raspberry Pi 5**: Serves as the control unit for the camera and lighting system, programmed to take periodic images. Note: Upgraded to Geekom Mini-air12.

Procedure

1. **Mounting and Calibration**:
    - The USB camera, lighting system, and block of wood are securely mounted inside the metal container.
    - The setup is calibrated to ensure that the tree rings are clearly visible in the images, with consistent lighting and focus.
2. **Image Capture**:
    - The Raspberry Pi 5 is programmed to take a new image every 10 seconds. This high-frequency capture rate ensures that any changes in the tree rings are promptly recorded.
3. **Comparison and Logging**:
    - Each new image is compared with the image from the last detected change using a predefined threshold for significant differences.
    - Changes greater than the fixed threshold are recorded as separate images and logged into a text file with the timestamp of the change.

Analysis

The analysis involves reviewing the recorded images and logs to identify any instances where changes propagate through time.

Expected Results

Based on the DBU framework, we expect to observe the following:

- Images from before a significant change will show alterations consistent with the propagated effects of the change.
- The logging system will record these alterations, providing empirical evidence that supports the dynamic nature of the DBU.

Actual Results

The most compelling captured differences can be downloaded from:
www.rhwebco.com/capture_results.zip

Implications

The successful capture of a propagating change would have profound implications for our understanding of time and causality. It would provide empirical support for the DBU theory, demonstrating that the past, present, and future are dynamically interconnected and continuously evolving based on causal interactions.

Conclusion

This experiment aims to provide empirical evidence for the Dynamic Block Universe theory by capturing and recording propagating changes in the state of tree rings over time. By leveraging modern

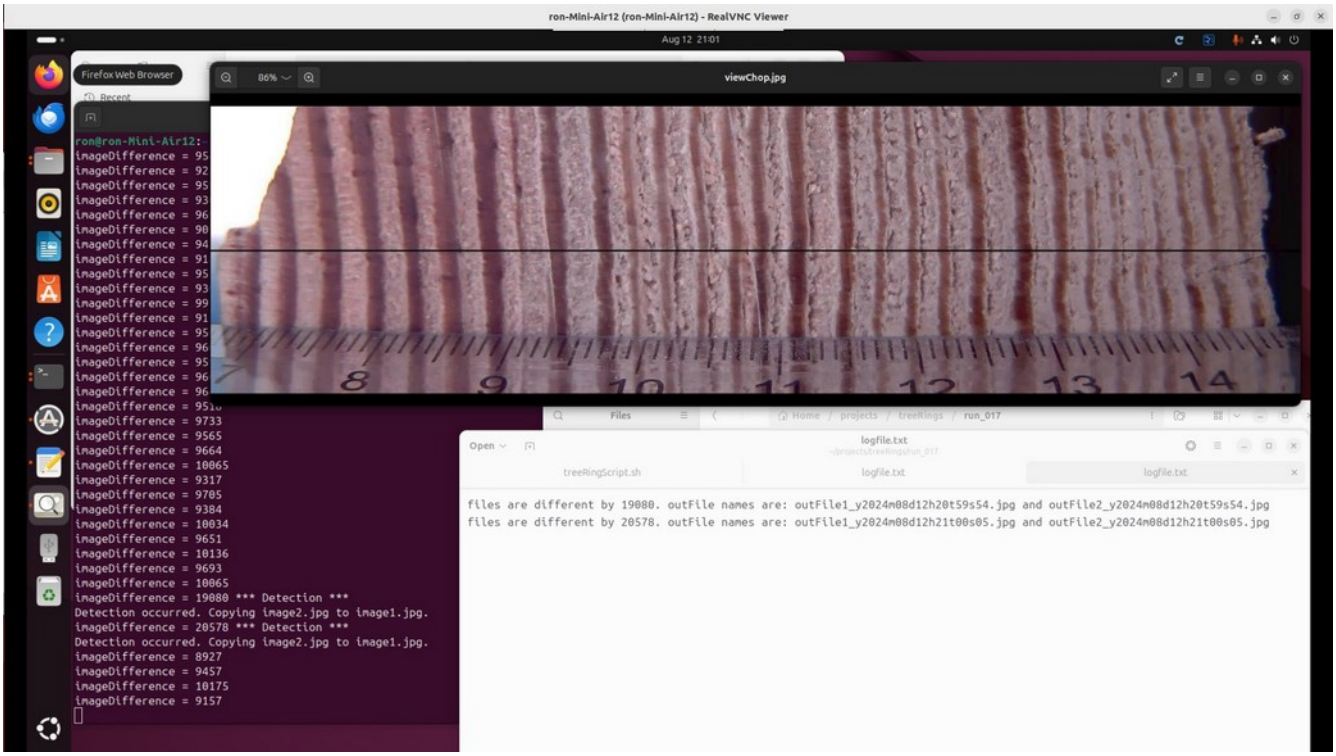
technology and rigorous scientific methods, we hope to advance our understanding of time, free will, and the dynamic nature of the universe.

Future Work

Future experiments could expand on this setup by exploring different environmental conditions and their impacts on other biological or physical systems. Additionally, more sophisticated algorithms for detecting and analyzing changes could further enhance the accuracy and depth of our findings.

Detailed Experimental Setup

The files are available at www.rhwebco.com/timePropigationFiles.zip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