

# “Pagan Baby”: A Mobile/Interactive Art App Unveiling Infant Mortality in Early 20th Century Brazilian Northwest

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## Abstract

Infant mortality remains a pressing concern in low- and middle-income countries, with a unique historical narrative in the Brazilian northeast. In the early 20th century, families hurried to baptize infants within minutes of birth due to deep-rooted religious beliefs. The "pagan children" could not be buried in cemeteries believed to wander in purgatory until their souls received a blessing. This narrative, blending history, folklore, and religious practices, has remained largely unexplored in visual and interactive art. Our interdisciplinary project, bridging art, science, and technology, aims to change that. We are developing a mobile app that guides users through this captivating story, covering the journey from birth to burial. After that, app operates in the background, notifying users when they are near significant locations through a locative interface. Users can actively participate by recording a blessing message and making the sign of the cross using smartphone accelerometers. Voice data is securely stored in the "blessarium" database. The app transforms the infant into an angel, offering users a collection of these "angels." Influenced by folklore and medical anthropology, our project preserves this cultural narrative, shedding light on the history, social disparities, and regional traditions of the Brazilian northeast.

## Keywords

Mobile art; interactive, oral tradition, Brazilian popular culture, stillborn, pagan baby, folklore, religiosity, myth, database

## Introduction

Infant mortality remains a significant public health issue in low- and middle-income countries [1]. Although historical trends have shown a decline in these rates, the current economic crises, and the resurgence of hunger in Brazil evoke memories of historical contexts and challenges that the country has grappled with for centuries. The loss of a child has profound effects on the entire family, particularly when the child is stillborn (a term used for a fetus that dies inside the mother or during birth) or survives only for a few minutes.

In the northeast of Brazil, specifically in the Cariri environmental region of the Paraíba state, there are stories of families rushing to baptize a child within minutes in the early 20th century when such events occurred. When baptism wasn't possible, mothers refrained from deep mourning. In Catholic tradition, these 'pagan children' could not be buried in cemeteries. Instead, families prepared rituals for burying them near gates (in reference to the Christ manger) or at crossroads (to facilitate their journey to heaven). Some individuals even reported hearing a crying baby from this liminal space for years. After conducting an improvised baptism, the baby's soul was sent to heaven, transforming the child into a 'little angel' who would protect the home and family, much like a godparent.

This story of the 'pagan baby' is a blend of historical facts, oral traditions, and religious narratives, but it remains vastly undocumented and under-researched, let alone illustrated or transformed into visual or interactive art. This paper presents an experimental approach to researching the 'pagan baby' story, including collecting oral versions of the story and adapting it into an interactive art form accessible via smartphones. In this article, we will describe the initial phase of this project.

## Interactive

In recent years, digital and commercial games for mobile platforms, such as smartphones and tablets, have gained significant popularity. Games like "Pokemon Go" allowed smartphone users to venture into city streets, capturing virtual creatures that were geolocated, offering novel experiences bridging the cyber and physical realms [2, 3]. This game achieved commercial success and popularized locative interfaces, where content utilizes the user's location to mediate the interactive experience [4].

However, it's essential to recognize that many of these digital games are products of foreign tech companies and their narratives are rooted in cultures different from the native culture. For example, "Pokemon GO" is set in the universe of the Pokemon franchise, created in 1995 by Satoshi Tajiri and owned by the Japanese gaming company Nintendo. This game incorporates Japanese cultural elements into its character design and scenarios, drawing inspiration from proverbs and the creators' childhood locations [5]. It's also worth noting that these games serve as tools for data

extraction strategies by companies. As Soshana Zuboff (2020) reminds us, in the case of "Pokemon GO," the company linked to Google devised commercial strategies to enhance marketing efforts. Virtual creatures were strategically placed in front of stores and cafes, attracting users and potentially boosting product consumption.

The popularity of these games, including "Ingress," not only imports foreign narratives but also adheres to a surveillance market logic. Considering this backdrop, we are developing an interactive experience designed for mobile devices (smartphones or tablets). Our primary goal is to transform a story from the Brazilian northeast into a narrative/interactive experience.

This story pertains to the burials of infants born and deceased shortly afterward, often stillborn, and unable to be baptized in time (by a midwife or another). These infants are referred to as 'pagan babies.' This story is linked to a notably high infant mortality rate [7]. According to oral accounts collected during the initial phase of this project, these infants were often buried within homes or near gates and crossroads. It is said, according to popular culture, that some individuals have heard the cries of these children years later. They can perform a symbolic act of baptism on the spot, sending the soul of the deceased to heaven. This story is deeply ingrained in the family history of one of the authors, who hails from Paraíba state, and it possesses the potential for artistic and poetic exploration.

### First Phase: creation of the narrative

This creative project at the intersection of art, science, and technology draws inspiration from artistic creation processes [8] and is primarily based on the book 'Art, Communication, Mobile: Creativity and Art in the Use of the Smartphone' [9]. The project aims to produce two main artistic products: 1) a mobile app with an interactive interface that conveys a narrative and engages users in various actions, and 2) a sound installation that incorporates voices recorded and shared by smartphone users.

The initial phase of the project started by the collection of oral stories and the sketching of the mobile art app. To guide the aesthetic production of the app, we followed a creative process involving scriptwriting, concept arts, and the development of a storyline. For sound research, we delved into readings about songs and litanies from the northeastern region.

In shaping the narrative, our research drew from sources such as the 'Dictionary of Brazilian Folklore' by Câmara Cascudo [10] and the book 'Corte a Mortalha' by Nations (2009). A significant influence on our work was the medical anthropology research conducted by Marilyn Nations [11] in the 1980s. Her work documented various rites, customs, and practices in the interior of the country, shedding light on the roles of doctors and healers of that era. Nations highlighted the figures who, in the face of challenging circumstances, turned to faith as a solution to afflictions, particularly in cases of infant mortality in northeastern Brazil. She

documented rituals, customs, and treatment measures for sick children, whether they were sacralized or not. Her work, enriched with images, graphs, and tables, provided essential insights into how these practices unfolded at the time. Nations explored the roles of local priests, prayer women, midwives, godmothers, saints' fathers, vendors of votive candles, funeral wreaths, coffin decorations, and shrouds, as well as the child's friends, coffin makers, artisans, and others (Nations, 2009).

In the same book, Nations discussed the practice of burying unbaptized deceased children in symbolic places, such as corrals or crossroads, as a means of ensuring spiritual salvation for their souls. Until someone listened to their cries and blessed and baptized them, they were believed to wander in purgatory (or limbo). The ethnographic and aesthetic research for our project sought to expand upon these concepts introduced by Nations, exploring the symbolism of gates, crossroads, purgatory, and the souls and 'little angels' that inhabit these spaces. This modern mythological composition reflects a national scenario marked by social inequality.

Our project represents a dynamic fusion of art, science, and technology, with the overarching goal of crafting an narrative experience deeply rooted in the rich cultural and historical tapestry of the Brazilian northeast. The visual elements for the introductory segment of our mobile app draw inspiration from sketches (Figure 1). It is worth emphasizing that sketches serve as the foundational building blocks for artistic and creative endeavors, providing the initial spark of creativity and imagination.



Figure 1. Concept Arts of three different moments access on app. A) mother and newborn; b) ritual, c) burial. ©Authors.

### Devising How the app will work

The story within the app will commence with the creation of a user account. The narrative, presented visually with accompanying sound, will depict the life of a baby from birth to its passing. This sequence will continue until the baby's burial.

Once this initial story phase is complete, the app will run in the background. A locative service will notify the user

through the 'crying sound' of a baby when they cross certain locations.

Here's how the user's interaction will work:

- 1) The user will need to pick up their phone and use a button on the app to record a voice message, blessing the young soul by saying with words like, 'If you are Joseph or Mary, I bless you in the name of the Father, Son, and Holy Spirit.' (Figure 2)
- 2) In addition, the user will be required to make the sign of the cross. The smartphone's accelerometer/gyroscope sensor will recognize this movement." (Figure 3)

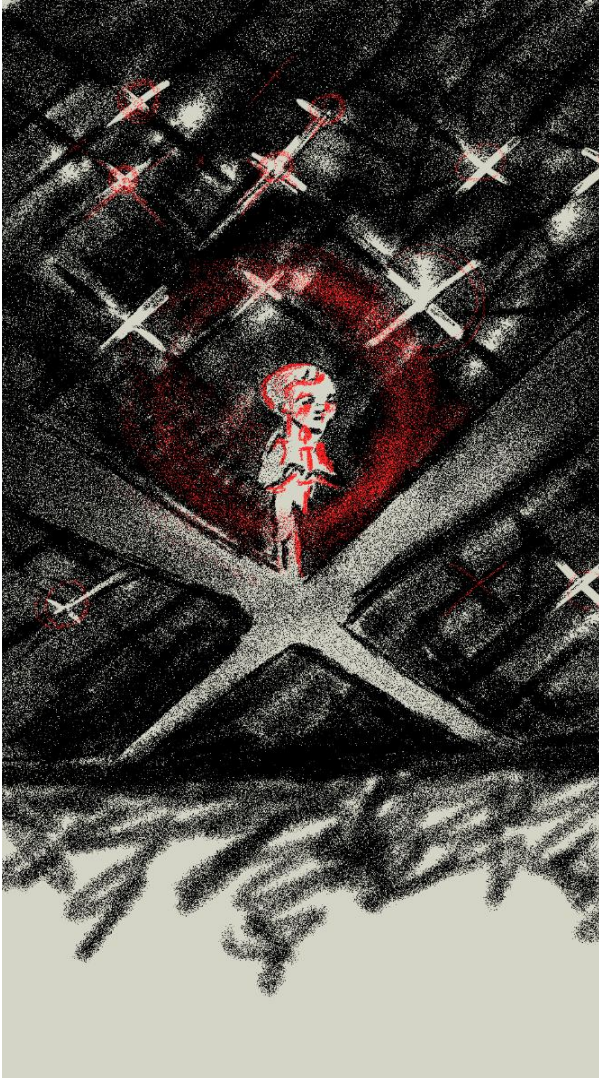


Figure 2: This illustration portrays the moment when the 'baby' cries on the interface, and a button will be provided for users to 'accept' the call of the little soul ©Authors.

- 3) The voice data will be recorded and transmitted to a database named "blessarium."

- 4) The app will present the narrative of the baby's transformation into an angel, becoming a protector for the user. A collection of "angels" will be accessible through the interface.
- 5) With the database containing blessing voices from various users, there is also an intention to create a sound installation.



Figure 3: This illustration depicts the pivotal moment when the user initiates a movement with their device to perform the baptism of the pagan baby. The baby start to become an angel ©Authors.

## Conclusion

As a work in progress, we have conducted interviews with various individuals familiar with the story and who have lived in the locations where the tradition originated. At this stage, we are actively developing the mobile interface and



building the technical infrastructure to record and collect user voices and data.

## References

1. Justino DCP, Lopes M da S, Santos CDP, Andrade FB de (2019) Avaliação histórica das políticas públicas de saúde infantil no Brasil: uma revisão integrativa. *Rev Ciência Plur* 5:71–88. <https://doi.org/10.21680/2446-7286.2019v5n1ID17946>
2. Rodrigues Lucena TF (2011) Ubicompucionalat: urban environment and emergent narratives. In: Aceti L, Sahin O (eds) ISEA2011 - the 17th International Symposium on Electronic Art. Sabanci University, Leonardo/ISAST, Istanbul - Turkey, pp 1594–1599
3. Anders P (1999) The cybrid condition: implementing hybrids of electronic and physical space. In: Ascott R (ed) *Reframing consciousness*. Intellect, Exter and Portland
4. Townsend A (2006) Locative-Media Artists in the Contested-Aware City. *Leonardo* 39:345–347. <https://doi.org/10.1162/leon.2006.39.4.345>
5. Carmo JP de O, Gushiken Y, Hirata T (2013) Os preceitos imagéticos de Pokémon como difusores da cultura japonesa. In: XV Congresso de Ciências da Comunicação na Região Centro-Oeste. Intercom – Sociedade Brasileira de Estudos Interdisciplinares da Comunicação, Rio Verde - GO, pp 1–15
6. Zuboff S (2020) *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. Profile Books, London
7. Souza CDF de, Albuquerque AR de, Cunha EJO da, et al (2021) New century, old problems: infant mortality trend and its components in the northeast region of Brazil / Novo século, velho problema: tendência da mortalidade infantil e seus componentes no Nordeste brasileiro. *Cad Saúde Coletiva* 29:133–142. <https://doi.org/10.1590/1414-462x202129010340>
8. Zamboni S (2006) *A pesquisa em arte: um paralelo entre arte e ciência*. Autores Associados, Campinas
9. Lucena TFR (2017) *Arte\_Comunicação\_Móvel: Criatividade e Arte no uso do smartphone*, 1st ed. Appris, Curitiba-PR
10. Cascudo L da C (2012) *Dicionário do Folclore Brasileiro*, 12th ed. Global, São Paulo - SP
11. Nations M (2009) *Corte e Mortalha: o cálculo humano da morte infantil no Ceará*. Editora FIOCRUZ, Rio de Janeiro