

From Technical Experimentation to Cultural Legitimacy: The Evolution and Impact of Stop-Motion Animation in Colombia through the Work of Fernando Laverde

Andrea Gaviria Jaramillo¹, Yin Jun^{1*}

¹ School of Digital Technology and Innovation Design, Jiangnan University, Wuxi, China

*Correspondence: Yin Jun

Received: 23 July 2026; **Accepted:** 14 August 2026; **Published:** 21 August 2026

Abstract:

This article develops a critical analysis of the evolution of stop-motion animation in Colombia, centering on the work of Fernando Laverde as a pioneering figure in the consolidation of this technique within the national audiovisual context. Drawing upon a qualitative, historical-interpretive approach based on document review and contextual cultural analysis, this study examines the material, technical, and institutional conditions that have shaped the development of animation in the country. The research addresses Laverde's production not only as a technical antecedent but also as a symbolic referent that contributed to legitimizing animation as a viable artistic practice within an environment characterized by structural and budgetary constraints. The results demonstrate that his oeuvre constitutes a paradigmatic case of situated innovation, in which materiality, technical experimentation, and the construction of cultural identity converge in the configuration of a distinctive animated language. Furthermore, the implications of this study for the academic field are highlighted, particularly regarding the application of methodological approaches for the preservation, analysis, and dissemination of non-hegemonic audiovisual productions within contemporary animation studies, especially within the country's audiovisual heritage, as well as its potential use in future comparative and collaborative studies that contribute to the internationalization of knowledge regarding Colombian animation.

Keywords:

Stop-Motion Animation, Colombian Animation, Fernando Laverde, Cultural Identity, Handcrafted Animation, Audiovisual Studies

1. Introduction

The development of animation as a field of study has historically been conditioned by a tendency to privilege production models and technological advances associated with hegemonic or dominant contexts within the area. From its early systematizations, the history of animation has been narrated primarily through the consolidation of

major studios, the standardization of production processes, and technological developments centered on the United States, Europe, and, subsequently, Japan. As evidenced in *A New History of Animation* [1], a significant portion of historiographical discourse has revolved around technological milestones such as the incorporation of sound, the development of color, or the transition to digital animation, which has contributed to consolidating a linear view of technical progress. Within this framework, animation has frequently been understood as a field dependent on access to industrial infrastructure and technological capital, relegating to the background those practices developed in contexts with a lower degree of industrial development or international recognition. Within this panorama, techniques such as stop-motion have been addressed primarily from their technical evolution or their application in consolidated industries, as observed in studies centered on cinematographic productions. However, studies such as those by Furniss [1] and Wells [2] on the history of animation point out that the understanding of this medium cannot be limited to its technological dimension, but rather requires considering the cultural, social, and material conditions under which it is produced, especially in contexts where production takes place on the margins of formal productive networks and globally recognized industries.

1.1. Materiality and Language in Stop-Motion

In this sense, stop-motion animation is distinguished by its direct dependence on materiality, understood not only as a physical support but as a constitutive element of visual language. Through the frame-by-frame manipulation of real objects, this technique establishes a close relationship between the creative process and the final result, wherein the traces of manual work remain visible in the animated image. This characteristic has been extensively discussed in animation studies, where it is recognized that stop-motion implies a constant interaction between the animator and the materials, which directly influences the construction of the image, as mentioned in *Fundamentos de la animación* [2]. Unlike digital animation, in which the process tends to render manual intervention invisible, stop-motion preserves a tactile dimension that manifests itself in subtle variations, textures, and movements that reveal its handcrafted nature. As Furniss [1] states, this technique allows for a particular exploration of the relationship between object and movement, in which each physical element acquires expressive value within the narrative. This condition has been interpreted as a form of resistance against the standardization of digital processes, by maintaining a production logic based on handcraft, experimentation, and tangibility. Consequently, stop-motion not only constitutes an animation technique but also a mode of production that enables the analysis of the connection between materiality, aesthetics, and context, particularly in environments where the availability of resources directly shapes creative decisions.

1.2. Context of Animation in Colombia

This perspective acquires particular relevance in the Colombian case, where the development of animation has been marked by specific structural conditions. According to *Historia del cine de animación en Colombia 1926-2008* [4], animated production in the country has been characterized by limited access to technical resources, the absence of a consolidated industry, and the scarce institutionalization of the field during much of the twentieth century. Unlike other contexts in which animation developed parallel to the expansion of cultural industries, in Colombia its

progress has been linked to individual initiatives and isolated projects. These conditions have directly influenced the modes of production, distribution, and recognition of animation, restricting its visibility within the national audiovisual landscape. However, as also documented in this source [4], such limitations gave rise to processes of technical experimentation that allowed for the adaptation of available materials and tools, generating creative solutions in response to the lack of funding or technological infrastructure. From this perspective, the development of stop-motion in Colombia cannot be understood through industrial logic, but rather as a practice associated with self-management, empirical learning, and the exploration of accessible resources, thus configuring an alternative production model within the field of animation.

1.3. Fernando Laverde and the Consolidation of a Practice

Within this scenario, the work of Fernando Laverde occupies a central place in the history of animation in Colombia, not only for its pioneering character but also for the manner in which he managed to develop a systematic practice in the absence of industrial conditions. Unlike other cases in which animation emerges within institutional frameworks, his work developed from sustained personal initiatives over time, which implied the progressive construction of knowledge through direct experience. Works such as *La pobre viejecita* (1978), *Cristóbal Colón* (1983), *El país de la bella flor* (1984), and *Martín Fierro* (1989) evidence not only a continuity in production but also an evolution in the resolution of operational challenges related to studio animation, such as the structural design of characters, motion coherence, and other factors inherent to the practice of stop-motion. In this regard, studies such as Montalva's on production in animation under the camera [6] allow us to understand that these processes require meticulous planning and a practical understanding of the relationship between object, camera, and time, aspects which, in Laverde's case, were developed through trial and error. Likewise, research such as that of Silva and Arenas [9] highlights that the construction of armatures, the manipulation of materials, and the sequencing of movement are fundamental elements in stop-motion, which allows for an assessment of the level of technical complexity present in his productions.

Furthermore, his work is situated within a period in which animation in Colombia was still in an early stage of recognition and expansion, characterized by isolated efforts primarily aimed at advertising purposes and limited articulation among creators. As Arce [11] points out, Colombian animation in the twentieth century can be understood as a history in a developmental phase, where progress depends largely on individual initiatives rather than on formalized and standardized processes. In this context, Laverde's production proves particularly significant insofar as it constitutes a sustained project that managed to transcend occasional experimentation to consolidate a body of work. Moreover, Triana in Cuadernos de Cine Colombiano [14] highlights the persistent character of his work, noting that his production remained active thanks to his artistic foundations, his passion for the moving image, and the consolidation of a family-based production team. This process has also been analyzed by Pedraza [15], who describes Laverde as a creator who, through a combination of discipline and experimentation, managed to position animation as a real possibility within the Colombian audiovisual landscape. In this way, his work not only represents a technical advancement but also the consolidation of an artistic practice that expands the possibilities of the medium within a context of organizational and financial constraints.

1.4. Theoretical Approaches and Non-Hegemonic Practices in Animation

From a theoretical perspective, practices of this kind can be understood within a broader framework that acknowledges the diversity of modes of production in contemporary animation, wherein creation does not depend exclusively upon access to advanced technology, but rather upon the capacity to adapt and reinterpret the available media. For this reason, animation must be understood as a "pervasive" phenomenon, that is, present in multiple contexts and not restricted to traditional industries as Buchan explains in *Pervasive Animation* [17]. Likewise, the notion of "situated innovation" emerges in this field, enabling an understanding of how creative processes are configured in direct relation to their context, integrating technical and cultural dimensions as well as available resources. This perspective makes it possible to shift the analysis from production centers toward practices that emerge in specific contexts, where material conditions directly influence the configuration of visual language. Similarly, the evolution of this technique responds not only to technological advances but also to transformations in the ways in which objects and processes are employed for expressive purposes. Along these lines, the innovative use of material language in experimental animation reinforces the idea that materiality is not a secondary element, but rather an active component in the construction of meaning.

In accordance with this, Laverde's work can be interpreted as a case in which innovation emerges from the interaction between limitations and material possibilities, rather than from the incorporation of cutting-edge technological advances. His practice evidences a continuous process of adaptation, wherein each production implies the resolution of problems in different areas through precise and concrete solutions. This approach aligns with the arguments put forward by Cabrera [18] in his analysis of proto-stop-motion, where he points out that the earliest forms of animation are characterized precisely by direct experimentation with the available media. Similarly, studies such as those of Valladares [19] on stop-motion animation in the twenty-first century indicate that, even in contemporary contexts, the technique maintains a strong connection with handcrafted processes, which allows for the establishment of a bridge between historical and current practices. In the Colombian case, authors such as Cruz [20] have pointed out that animation has contributed to the construction of a distinct cultural narrative, in which both the contents and the modes of production reflect specific social conditions. In this sense, Laverde's work can be understood not only as a technical antecedent but also as a point of reference for analyzing how animation articulates with processes of cultural construction, wherein technique, materiality, and narrative operate in an integrated manner within a single creative system.

1.5. Research Objectives

Based on the foregoing, this research aims to comprehensively analyze the relationship between materiality, identity, and animated production in the Colombian context, taking the work of Fernando Laverde as a case study. This purpose is not limited to describing his trajectory or identifying isolated technical contributions, but rather seeks to understand how an animated language is configured under specific production conditions, where material, cultural, and historical factors directly impact formal and narrative decisions. From this perspective, the study is oriented toward examining the way in which stop-motion creative processes articulate with dynamics of adaptation, experimentation, and re-signification of resources, as well as with the construction of symbolic referents linked to the national context. More specifically,

the research proposes to address the following question: how did Laverde's work contribute to the configuration of stop-motion language, considering the material, social, and cultural conditions of Colombia? The answer to this question, which is developed in the following sections, allows us to affirm that Laverde's contribution resides in the articulation of a situated stop-motion language that integrates material scarcity, handcrafted experimentation, and a narrative anchored in Colombian cultural memory. This question implies not only analyzing the formal characteristics of his productions but also situating them within a broader framework that considers the relationship between artistic practice and production context, as well as its impact on the consolidation of animation as a field of expression within the country. Likewise, the objective contemplates identifying the elements that allow interpreting his work as a process of cultural construction, in which technique does not operate in isolation but rather in interaction with social, economic, and symbolic factors that determine both the possibilities and the limits of the medium.

2. Materials and Methods

2.1. Methodological Approach and Research Design

The methodological development of this research is structured upon a qualitative design of a historical-interpretive nature, oriented toward deepening the understanding of the technical, aesthetic, and cultural processes that configure Fernando Laverde's work within the field of stop-motion animation in Colombia. Unlike approaches centered on the general description of the context. addressed previously in the introduction this section focuses on the operational definition of the materials analyzed, the selection criteria for the works, and the specific analytical procedures employed, in order to guarantee a systematic and coherent reading of the object of study. To this end, the research relies on the triangulation of primary and secondary sources, integrating audiovisual materials, historical documentation, production records, interviews, and specialized academic literature. This allows for approaching the phenomenon from multiple dimensions without reducing it to a single analytical perspective. This methodological articulation is complemented by the conception of cinematographic analysis as an integral process, in which the audiovisual work is understood as a complex system wherein interdependent technical, stylistic, and semiotic dimensions converge, as posited by Aristizábal and Pinilla [22]. In this way, the adopted approach not only enables the interpretation of production conditions but also allows for examining how these materialize in the configuration of the image, mise-en-scène, editing, and narrative construction, avoiding a fragmented reading of the object of study and favoring an articulated understanding between context and audiovisual language.

2.2. Analytical Materials and Selection Criteria

Regarding the materials, the primary corpus of analysis consists of a set of representative works from Fernando Laverde's trajectory, selected on the basis of their relevance within the technical and narrative development of stop-motion in Colombia. These include productions such as *La pobre viejecita*, *Cristóbal Colón*, and *El país de la bella flor*, which allow for the observation of different moments of consolidation and transformation in his practice. The selection responds to three fundamental criteria: (1) temporal continuity, in order to identify variations in production processes throughout his trajectory; (2) technical diversity, which enables the identification of

changes in the use of materials, construction systems, and animation strategies; and (3) cultural and narrative significance, insofar as these works establish connections with literary referents and historical-symbolic contexts specific to the Colombian and Latin American environment. Additionally, archival documents, photographic records of production processes, sketches, and testimonies gathered from previous studies are incorporated as analytical materials, which allow for the partial reconstruction of the production conditions and working methods employed by the author. This selection does not seek to define an exhaustive overview of his entire oeuvre, but rather to delimit a coherent corpus that enables the comparative analysis of technical strategies and stylistic decisions in relation to specific production contexts.

2.3. Methodological Strategy: Case Study and Historical-Interpretative Approach

The methodological approach is articulated based on the case study, understood not only as a delimitation of the research object but also as a strategy that enables in-depth analysis of a complex phenomenon within its real-world context, as mentioned by Stake [21] in *The Art of Case Study Research*. Within this framework, Laverde's work is approached as an integral unit of analysis that allows for exploring the relationship between materiality, production, and meaning within the domain of stop-motion. This approach does not seek to establish universal generalizations, but rather to understand the particularities of the case in relation to its environment, identifying how material conditions, technical decisions, and narrative strategies are integrated into the construction of a distinctive language. In turn, the historical-interpretive component makes it possible to situate these dynamics within a broader process, identifying continuities and transformations in the development of animation in Colombia, as well as their impact on the configuration of specific practices within the field. In this way, the methodological design integrates the contextual dimension with formal analysis, avoiding an isolated reading of the object of study and enabling the connection of creative processes with the structural conditions in which they unfold.

2.4. Operational Levels of Audiovisual Analysis

In order to achieve a systematic and replicable analysis of Fernando Laverde's works, three operational levels are established that structure the interpretive process: (1) the technical-material level, (2) the aesthetic-formal level, and (3) the narrative-cultural level. This organization does not imply a rigid separation between dimensions, but rather constitutes an analytical tool that allows for examining how these components interact in the construction of animated language and how their interrelations generate meaning within the work as a whole. Each level corresponds to a specific aspect of the cinematographic fact, yet their comprehensive understanding requires considering the connections and dependencies that are established between them.

The technical-material level focuses on in-camera production processes and on decisions regarding the materiality of animation. This level addresses aspects such as the construction of armatures or character bodies, the selection and use of materials (clay, wood, fabric, wire, papier-mâché, among others), the articulation systems that enable movement, the structural stability of the figures during prolonged manipulation, and the lighting and photographic recording strategies employed on the animation set. At this level, the understanding of animation as a process that articulates object, camera, and time is deepened [6,9], highlighting the need for rigorous planning and precise technical resolution to guarantee motion coherence and visual continuity

between frames. Likewise, frame-by-frame animation processes are examined, considering variables such as motion fluidity, spatial and temporal continuity, and the relationship between the physical manipulation of objects and the final visual outcome. The analysis at this level allows for identifying the technical solutions adopted by the filmmaker in response to the material and budgetary constraints of his context, as well as the innovations derived from empirical experimentation.

The aesthetic-formal level is oriented toward the study of the visual configuration of the works, addressing elements such as image composition, color treatment, texture, volume, *mise-en-scène*, and the arrangement of elements within the frame. At this level, the analysis focuses on how materiality directly impacts the construction of a particular aesthetic, in which the traces of manual work, such as surface imperfections, variations in character modeling, or the evidence of the handcrafted construction of the sets are not concealed, but rather integrated as a constitutive part of the visual language. Likewise, the relationship between Laverde's training in disciplines such as drawing and sculpture and the formal characteristics of his production is examined, which allows for interpreting the construction of characters and sets from a three-dimensional logic in which movement is incorporated into the very conception of form. This level also considers the use of lighting as an expressive resource, the handling of color and textures, and the organization of shots and depth of field, all of which are elements that contribute to the construction of atmospheres and to the transmission of emotional or symbolic states. This approach allows for understanding the animated image not only as a visual outcome, but rather as the manifestation of a physical and conceptual process in which material decisions, technical knowledge, and compositional criteria converge.

The narrative-cultural level addresses the connection between the works and the symbolic, historical, and sociocultural contexts in which they are inscribed. This level analyzes the selection of stories, the construction of characters, the articulation of cultural elements, and the manner in which the visual narrative dialogues with the concerns and tensions inherent to the Colombian environment. At this level, the analysis examines how the adaptation of literary texts and historical referents is translated into specific narrative structures, as well as the way in which these contents engage with the sociocultural conditions of the country, situated within a historical temporality that can be understood as the context in which the animation process unfolds. The narrative-cultural analysis allows for defining how animation functions as a medium of cultural mediation, in which technique and narrative are integrated into the production of meaning, and how thematic choices and the treatment of characters and spaces reflect or question collective discourses and imaginaries. This level also considers the reception of the works and their circulation among different audiences, as well as their potential to construct cultural memory and social critique through accessible audiovisual formats.

To operationalize the analysis across these three levels, a recording template was designed that allows for systematizing the information gathered from each work and facilitating comparison between productions. This template, which is presented in Table 1, organizes the findings into three major blocks corresponding to the operational levels, each of which includes subcategories that guide observation and data recording. The application of this template to each analyzed work allows for identifying patterns, variations, and recurring strategies in Laverde's practice, as well as establishing relationships between technical decisions, aesthetic configurations, and narrative and symbolic contents. The systematic use of this template guarantees the

coherence of the analysis and facilitates comparison between works, making it possible to recognize both continuities and transformations in the author's visual language and production processes.

Table 1. *Analytical Template by Operational Levels.*

Work	Technical-Material Level	Aesthetic-Formal Level	Narrative-Cultural Level
Title and year	Recording of: materials used (types, provenance, treatment); construction systems (armatures, joints, stability); capture equipment and devices (cameras, lighting systems, rigs); animation processes (movement techniques, timing, planning); technical adaptations and empirical solutions.	Recording of: composition and framing (shot types, angles, camera movements); color treatment (palette, symbolism, emotional function); textures and surfaces (visibility of the handcrafted, roughness, finishes); lighting (schemes, directionality, narrative function); mise-en-scène (arrangement of characters and objects, depth of field, figure-ground relationship).	Recording of: narrative structure (linearity, fragmentation, character arcs); themes and recurring motifs (identity, social conflict, memory, ecology, politics); cultural and literary referents (sources of inspiration, adaptations, symbolisms); character construction (roles, dramatic functions, evolution); relationships between narration and sociocultural context (dialogue with local issues, reception and circulation).

The application of this template is not limited to the mere description of data, but rather seeks to establish relationships between the levels. For example, a technical decision (such as the use of wire armatures covered with fabric) may have aesthetic implications (visible textures, staccato movements) and narrative implications (characterization of characters as fragile or vulnerable). Similarly, the choice of a warm chromatic palette may respond both to technical limitations (availability of pigments) and to narrative intentions (evoking nostalgia or warmth). This relational approach allows for an integrated understanding of the work, transcending analyses that address each dimension in isolation.

The analysis process using this template is carried out in several stages. First, the complete work is viewed in order to obtain a global understanding of its narrative structure and formal characteristics. Next, a segmented viewing is conducted, identifying narrative units (sequences or scenes) and recording, for each one, the data corresponding to the three operational levels. This recording is complemented by the capture of representative frames that illustrate the technical and formal decisions identified. Finally, the collected data are organized and synthesized in the template, identifying recurrences, variations, and relationships between levels. This procedure is applied to each of the selected works, allowing for a comparative analysis that highlights the continuities and transformations in Laverde's visual language throughout his trajectory.

In keeping with the adopted interpretive approach, the analysis is not limited to the identification of formal elements, but rather seeks to understand how these elements contribute to the production of meaning within the context of each work. It is considered that meaning does not reside in a single component, but rather in the dynamic interaction between the various levels that constitute the work, which reinforces the need for a relational analysis that integrates form, content, and context. This methodological approach, which articulates systematic description with critical

interpretation, allows for addressing Laverde's work from an integral perspective, recognizing its technical and aesthetic specificity without losing sight of its cultural and symbolic dimension.

The findings obtained through the application of this template are presented and discussed in Section 3 (Results and Discussion), where the different works are contrasted and relationships are established between technical decisions, formal configurations, and narrative and symbolic contents. The template, given its generic and adaptable nature, can be used not only for the analysis of Laverde's works, but also for the study of other stop-motion animation productions in similar contexts, thus contributing to the construction of a replicable methodological framework for the analysis of animated practices in peripheral settings.

2.5. Technical-Narrative Analysis of the Works: Data Sheets, Scripts, and Tables of Filmic Elements

In order to deepen the understanding of technical decisions and their articulation with the narrative, a complementary microstructural analysis procedure was implemented for each of the three selected works. This procedure, which was applied systematically prior to the comparative interpretation, consisted of the elaboration of the following instruments for each production:

- Technical data sheet: compilation of production data (title, director, screenwriter, production company, year, country, duration, format, animation technique, music, and awards).
- Synopsis: summary of the plot identifying the main narrative axes and character transformations.
- Development context: reconstruction of the sociopolitical, economic, and technical conditions surrounding the making of the work, with emphasis on funding mechanisms (such as the surcharge mechanism or support from Focine), the available infrastructure, and the aesthetic influences of the period.
- Character list: identification of the roles and dramatic functions of the animated figures, as well as their distinguishing traits.
- Literary script: transcription and organization of dialogues and descriptions for each scene, maintaining the sequential structure of the narrative. This instrument allowed for the reconstruction of narrative logic and dramatic progression.
- Technical script: parallel development to the literary script, incorporating an analysis of filmic elements for each scene. This analysis was organized into tables that record, per scene, the following aspects: shot types, camera angles, camera movement, lighting, colorimetry, setting and scenography, as well as sound. Each scene was accompanied by representative frames illustrating the technical decisions indicated.

To ensure the systematicity of the analysis and its applicability to other productions, a standard template was designed to serve as a recording instrument for each scene. This template, which is presented in Table 2, organizes the filmic elements into eight interrelated categories that allow for the breakdown of technical decisions and their connection to narrative and symbolic effects.

Table 2. *Technical-Narrative Analysis Template for Technical Script.*

Scene	Shot Types / Framing	Camera Angles	Camera Movement	Lighting	Colorimetry	Setting / Scenography	Sound
Scene number and/or name according to the literary script	Shot type and size (e.g., LS, MS, CU, BCU, ECU). Include whether it is a long shot, medium shot, close-up, detail, etc.	Camera height and orientation: eye-level, high-angle, low-angle, overhead, nadir. Narrative function of the angle (power, vulnerability, perspective).	Type of movement: tracking, pan, tilt, crane, steadicam, handheld, fixed camera. Function of the movement (following action, creating tension, revealing information).	Lighting scheme (naturalistic, expressionist, chiaroscuro, high-key or low-key). Direction (front, side, backlight, overhead). Color temperature (warm, cold, mixed). Narrative function of light.	Dominant chromatic palette. Use of color as an expressive resource (symbolic, psychological, contrastive). Relationship between color and the narrative or emotional tone of the scene.	Description of the space: interior/exterior, architecture, furniture, objects, decorative elements. Scale and relationship with the characters. Dramatic or symbolic function of the environment.	Soundtrack classification: dialogue (content and function), music (diegetic/extradiegetic; emotional, rhythmic, or atmospheric function), sound effects (verisimilitude, atmosphere, emphasis).

The application of this template to each scene of the analyzed works allowed for precise observation of how technical resources, ranging from the choice of materials to lighting arrangement and shot selection, operate as meaning-making devices that reinforce or nuance narrative and symbolic contents. For example, in *El país de la bella flor*, the technical script analysis evidenced that long shots and diffuse lighting in community scenes contrast with medium shots and hard lighting in the confrontation sequences with the robot, visually reinforcing the opposition between the local and the external. Similarly, in *La pobre viejecita*, the use of detail shots and a warm palette in domestic interiors intensifies the protagonist's sense of opulence and isolation, whereas in *Cristóbal Colón*, the alternation between wide shots at sea and tighter shots in the Spanish courts contributes to constructing the epic nature of the voyage and the political tension.

The application of this procedure not only provided an empirical basis for the operational levels described in Section 2.4 but also allowed for the identification of recurrences and variations in the use of filmic resources throughout Laverde's trajectory, which directly nourished the discussion of results (Section 3) and the final conclusions. Due to their length, the full technical data sheets, literary scripts, and technical scripts are presented as documentary annexes to the research, while the most relevant findings derived from this microstructural analysis are synthesized in the body of the article.

2.6. Analytical Process and Comparative Interpretation

Methodologically, the operational levels (2.4) and the technical-narrative analysis (2.5) are integrated through an interpretative analysis process that prioritizes the understanding of the internal functioning of the works, in accordance with the distinction between instrumental and interpretative approaches proposed by Aristizábal and Pinilla [22]. Rather than using the productions as mere illustrations of a context, the analysis is oriented toward examining how technical, aesthetic, and narrative decisions configure coherent structures of meaning, understanding each work as an “artifact with articulated parts.” To this end, the analysis templates (Tables 1 and 2) were employed, which allow for the systematization of information from each production, identifying patterns, variations, and recurring strategies in Laverde's practice. These instruments facilitate comparison between works, making it possible to recognize both continuities and transformations in his visual language and in his production processes. Finally, the methodological process includes a phase of comparative interpretation, in which the findings obtained from each work are contrasted in order to identify relationships between technical decisions and production conditions. This phase seeks to understand how different solutions emerge in response to specific problems, evidencing the situated nature of creative processes.

3. Results and Discussion

3.1. Historical Development and Production Conditions

The development of stop-motion in Colombia was conditioned by independent production dynamics, limited technical infrastructure, and the need to adapt available resources to the demands of frame-by-frame animation. In this context, Fernando Laverde's work is situated within a period in which animated production depended primarily on handcrafted processes, small collaborative structures, and technical solutions developed through empirical experimentation. During the 1970s and 1980s, these conditions coincided with a broader social and cultural landscape, marked by political transformations and debates on national identity, aspects that influenced the thematic and visual construction of various animated productions. Unlike industrial models based on functional specialization, Laverde's works integrated design, set construction, lighting, and animation within the same working environment, using accessible materials and manual fabrication methods. This production logic allowed for the consolidation of a technical and organizational model characterized by the constant adaptation of resources and by the direct articulation between narrative requirements, constructive processes, and visual representation.

3.1.1. Production Processes and Technical Evolution in the Works

The analysis of the production processes developed by Fernando Laverde allows for the identification of a systematic and articulated work system, which was maintained with minor variations throughout his major feature films. This system, sustained by the integration of production phases, the participation of a family-based team, and the adaptation of technical resources, constitutes one of the most distinctive aspects of his practice and largely explains the continuity and coherence of his production under conditions of structural scarcity. Laverde not only developed his own visual language but also consolidated an operational model that allowed him to sustain long-term projects without relying on industrial infrastructure, as evidenced in the analyzed works and in the testimonies gathered from primary sources [14,15].

To synthesize the complexity of this system, a diagram has been elaborated, as shown in Figure 1, which represents the phases of the productive process, the roles assigned to team members, and the technical adaptations that cut across each stage. This diagram allows for visualizing the interconnection between the preproduction, production, and postproduction phases, as well as the constant feedback that characterized Laverde's working method.

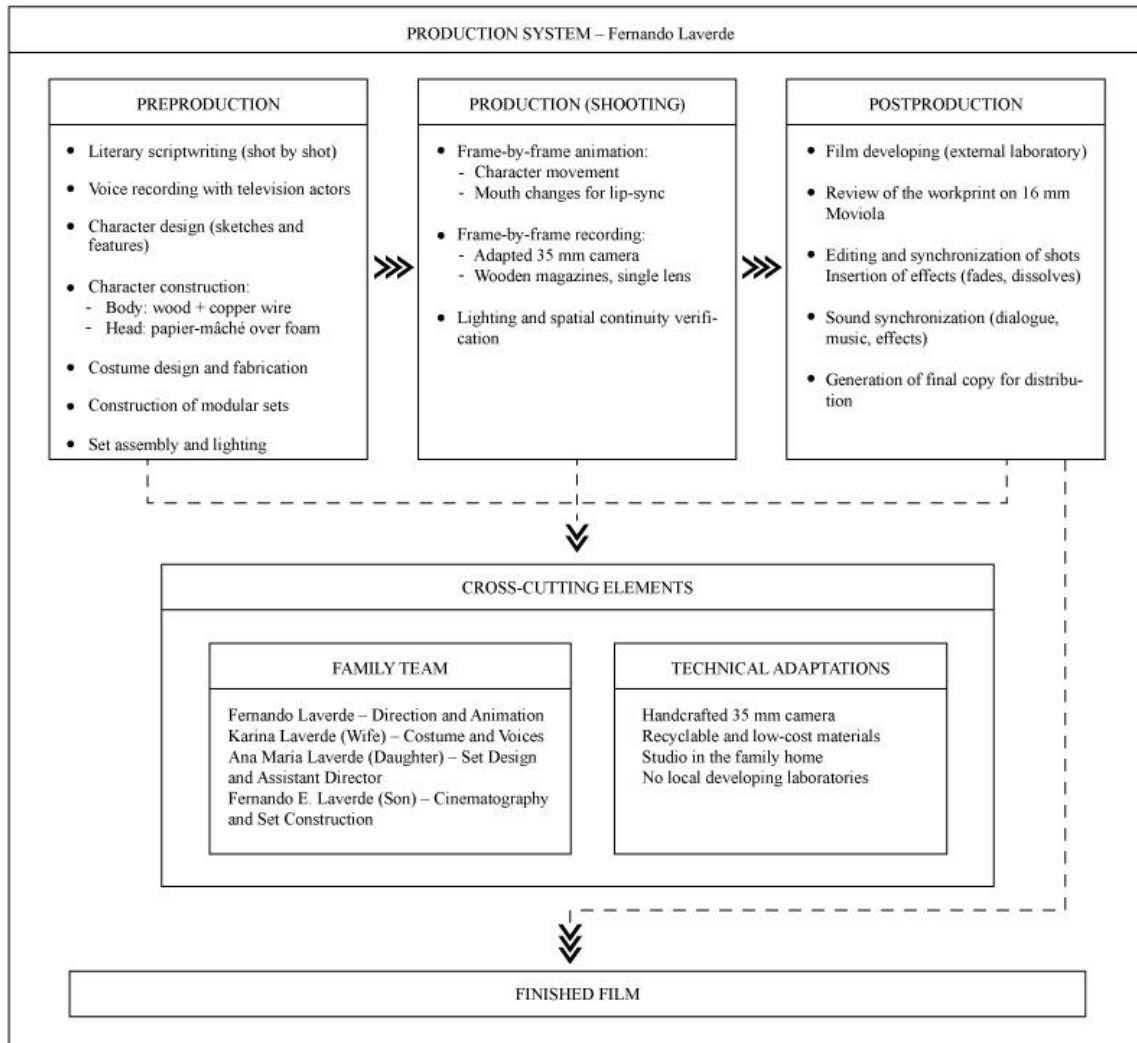


Figure 1. *Fernando Laverde's Production System.*

The process began with a preproduction phase in which Laverde wrote the literary script, defining shot by shot, values, framing, and dialogue, as documented in the analysis of the literary scripts of the selected works (Section 2.5). Subsequently, voice recording was carried out with television actors, many of whom were well-known figures in the national media, who served as a rhythmic reference for the subsequent animation [16]. Character design preceded their physical construction: the bodies were made of wood with copper wire joints, while the heads were made of papier-mâché over an expanded polystyrene base, which allowed for a balance between lightness and stability during prolonged manipulation. The costumes were made by Karina Laverde, and the sets were built in detachable modules that facilitated handling during shooting and allowed for continuous adaptation of the space to the requirements of each scene. Finally, the set was assembled with its corresponding

lighting, an aspect that, as analyzed in Section 3.2.3, acquired a narrative function beyond mere technical visibility.

The production phase (shooting) took place in the studio adapted within the family home, a space that simultaneously housed the fabrication workshop, the animation set, and the material storage area, as shown in Figure 2, where the arrangement of the elements and the *handcrafted* nature of the working environment can be observed. Laverde carried out frame-by-frame animation, moving the characters and changing the paper mouths to achieve lip synchronization, a process that required meticulous planning and a practical understanding of the relationship between object, camera, and time [6,9]. The recording was carried out with a 35 mm camera handcraftedly adapted by the mechanic Daniel Martínez, which included wooden magazines (light-tight containers designed to store 35 mm film rolls) and a single lens, which entailed considerable physical effort to achieve cinematographic framings [15]. Throughout the entire process, lighting and spatial continuity between frames were constantly verified, a task that demanded rigorous discipline and direct communication among team members.



Figure 2. Fernando Laverde's production environment on the animation set of *El país de la bella flor* (1972). Image taken from the journal *Cuadernos de Cine Colombiano - First Series No. 15: Fernando Laverde*. Idartes, 1985.

Postproduction involved sending the developed material to laboratories abroad, since Colombia lacked infrastructure for this purpose. Once the workprint (a working copy of the generated scenes, periodically reviewed to evaluate quality, synchronization, lighting, and continuity) was received, it was reviewed on a 16 mm “Moviola” to identify possible corrections. Editing organized the shots according to the script, effects such as fades or dissolves were inserted, and sound was synchronized with the image. Finally, the final copy for distribution was generated. This phase, which in industrial contexts is usually highly specialized, was executed by Laverde himself with the support of his family team, evidencing a production logic based on versatility and self-management.

Two cross-cutting elements permeate all phases of the process and define the singularity of Laverde's production model. Firstly, the family team constituted the central organizational structure. Fernando Laverde assumed general direction and animation; his wife Karina was in charge of costume and voices; his daughter Ana María designed the sets and served as assistant director; and his son Fernando Enrique was responsible for cinematography and set construction [14,15]. This organization made it possible to sustain complex creative processes without the need to hire external specialists, optimizing human and economic resources, and favoring the

consolidation of a homogeneous visual language resulting from sustained collaboration and a shared understanding of aesthetic objectives. Secondly, the technical adaptations, the construction of handcrafted cameras, the use of recycled or low-cost materials, and the adaptation of domestic spaces as a production studio responded to the absence of industrial infrastructure and resource scarcity, but also defined a particular aesthetic, characterized by the visibility of matter, texture, and imperfection as expressive elements.

The technical evolution throughout Laverde's trajectory did not respond to a linear path of technological substitution, but rather to a process of progressive accumulation of practical knowledge and methodological refinement. While *La pobre viejecita* (1978) involved a high level of empirical experimentation, evidenced in the construction of specific devices, including the camera designed by Daniel Martínez presented in Figure 3, *Cristóbal Colón* (1983) incorporated external financial support that introduced new possibilities in terms of production, which is reflected in greater precision in aspects such as lighting, continuity, and set construction. *El país de la bella flor* (1972), for its part, evidences an earlier stage of exploration in which technical solutions were even more rudimentary, but where the narrative and symbolic principles that would characterize his later work were already consolidated. These variations are synthesized in Table 1 of Section 3.2 and are broken down in the technical scripts within the research, reflecting a conscious and systematic evolution, in which each production involved the resolution of problems in different areas through precise and concrete solutions.



Figure 3. 35 mm camera handcraftedly adapted by Daniel Martínez at the request of Fernando Laverde. Image taken from the interview with Fernando Laverde in *Maestros de la Animación Colombiana – Loop TV*.

3.2. Visual and Narrative Construction in the Work of Fernando Laverde

To systematize and synthesize the analysis of the visual and narrative construction in Laverde's works, a matrix was employed that organizes the findings into three operational levels: Technical-material, aesthetic-formal, and narrative-cultural, as defined in Section 2.4. This matrix (Table 1) allows for observing systematic differences among the three selected works, facilitating the identification of continuities and transformations in the director's visual language. Below, the results derived from the application of this matrix are presented, organized into subsections corresponding to each of the analyzed components.

Table 1. *Comparative Analysis Matrix of the Selected Works of Fernando Laverde.*

Work	Technical-Material Level	Aesthetic-Formal Level	Narrative-Cultural Level
El país de la bella flor (1972)	Construction of a handcrafted camera prior to that of <i>La pobre viejecita</i> ; symbolic sets with recyclable materials; characters with rounded forms vs. rigid metallic structures; visual differentiation through bodily features and color	Open vs. closed spaces as a metaphor for the communal versus the external; warm and organic colors for the local vs. cold and geometric tones for the external; soft textures vs. hard surfaces; characters with expressive eyes vs. eyes reduced to black dots	Political allegory of foreign domination and collective resistance; critique of resource exploitation and inequality; representation of tensions between the local and the external; symbolic construction of social conflict
La pobre viejecita (1978)	Handcrafted camera built by Daniel Martínez; wooden and fabric bodies over wire armatures; modular, detachable sets; recyclable materials and matte paint	Composition centered on enclosed spaces; lighting that shifts between warm schemes in domestic interiors and cold schemes according to the narrative tone	Expanded adaptation of Rafael Pombo's poem; critique of greed and social inequality; introduction of animal characters as moral mediators; children and family audiences
Cristóbal Colón (1983)	Financial support from Focine; greater precision in lighting and continuity; maritime and architectural sets with controlled simplification; puppets with interchangeable paper mouths for voice synchronization	High-contrast lighting to differentiate spaces and historical moments; use of chromatic contrasts; open scenarios that facilitate visual legibility; depth achieved through directional lighting	Didactic historical narrative; construction of national identity from a traditional vision of the discovery; adaptation for children and youth audiences; subversion of the hero through grotesque representation (technique of exaggeration and disproportion)

3.2.1. Visual Construction and Differentiation of Characters

The analysis of the characters in Laverde's works, based on the data recorded in the technical-material and aesthetic-formal levels of Table 1, reveals a construction system that responds to the needs of stability, manipulability, and visual differentiation within the frame. The internal wire armatures covered with fabric or wood, documented in all three works, allowed for maintaining volumetric consistency during extended sequences of manipulation, evidencing a structural planning oriented toward guaranteeing repeatability and technical control without compromising motion continuity.

Differentiation between characters was achieved through visible variations in physical traits and specific plastic elements. In *Cristóbal Colón*, the distinction between figures was constructed based on hair density and color, eye placement, facial volume, and costume accessories, which made it possible to establish hierarchies and roles without the need for constant verbal reinforcement. In *El país de la bella flor*, differentiation was intensified through more pronounced formal contrasts: characters associated with empathy and community featured rounded forms, smooth surfaces, and a broad chromatic palette, while figures linked to authority or narrative tension employed rigid, monochromatic designs and volumetric configurations

approaching the metallic. Eye construction also varied: some characters incorporated sclera and pupil to reinforce emotional expressiveness, while others featured eyes reduced to black dots that limited expression and reinforced relationships of obedience. These formal and plastic differentiation strategies integrated physical structure, costume, accessories, and distinctive chromatic traits, maintaining visual clarity within the animated sequence without resorting to additional verbal resources.

3.2.2. Set Design and Symbolic Representation of Space

The analysis of the scenography, based on the data from the aesthetic-formal and narrative-cultural levels of Table 1, shows a tendency toward the construction of modular environments that facilitated manipulation during shooting and allowed for continuous adaptation of the space to the requirements of each scene. The organization of the sets in detachable layers, documented in all three works, made it possible to intervene in specific elements without altering the entirety of the set, optimizing production times and reducing cumulative errors between frames. This work logic, oriented toward operational efficiency, is particularly visible in *La pobre viejecita*, where the domestic interiors feature multiple levels of depth and an arrangement of objects that reinforces the protagonist's sense of opulence and isolation.

In *El país de la bella flor*, the scenographic spaces operate as symbolic structures laden with social meaning. The spatial organization reveals contrasts between open, colorful, and organic areas associated with the communal and the local, as opposed to more rigid, geometric, and enclosed structures that refer to external intervention and logics of control. This treatment of space translates social issues into concrete visual configurations, such as the presence of balconies and roofs of traditional style that reinforce the reading of these spaces as metaphorical representations of social processes linked to rural life and the tensions between the local and the invasive. In *Cristóbal Colón*, the open scenarios, such as maritime or architectural landscapes, exhibit a controlled simplification that facilitates legibility and temporal identification, coinciding with the need to adapt the space to the available technical capabilities and to the didactic function of the historical narrative.

3.2.3. Lighting as a Narrative Resource

The analysis of the lighting treatment, based on the data from the aesthetic-formal level of Table 1, reveals that the lighting in Laverde's works did not seek to replicate complex naturalistic schemes, but rather to generate stable conditions that guaranteed visual coherence between shots, while introducing an additional dimension in narrative construction. In *La pobre viejecita*, a transition between warm and cold lighting schemes is observed that accompanies changes in narrative tone, establishing contrasts between moments of intimacy, tension, or spatial openness. In *Cristóbal Colón*, more pronounced contrasts are employed to differentiate spaces and historical moments, as evidenced in the nocturnal scenes or in the representation of the maritime voyage, where directional lighting emphasizes volumes and textures, generating depth in the scaled constructed sets.

Lighting also establishes relationships between characters and their environment, creating visual emphasis at key moments of narrative development. The use of point light sources in interiors generates contrast zones that direct the viewer's gaze toward specific actions, while in exteriors more diffuse schemes are employed that expand spatial perception. In *El país de la bella flor*, the lighting contrast between the interior

of the governor's balcony and the exterior where Picofino (The bird) is situated reinforces the separation between enclosed power and the voice of the people, operating as a resource that organizes spatial perception and guides the interpretation of actions. This handling of light contributes to the construction of visual rhythms within the work, alternating between scenes of greater dramatic intensity and moments of narrative transition.

3.2.4. Visual Resources and Thematic Construction

The analysis of the narrative-cultural level of Table 1 allows for the identification of how the visual resources in Laverde's works are articulated with thematic construction, establishing links with literary, historical, educational, and sociocultural dimensions of the Colombian context. In *El país de la bella flor*, the allegorical narrative centered on tensions between domination, exploitation, and collective resistance is constructed through contrasts between caricatured characters and transformations of the scenographic spaces, configuring a symbolic representation of social conflicts and power relations. The visual organization of the characters, the arrangement of objects within the frame, and the changes in the configuration of the environment reinforce the political dimension of the narrative without abandoning a structure accessible to audiences of all ages.

In *La pobre viejecita*, the audiovisual adaptation of Rafael Pombo's poem incorporates visual, spatial, and expressive resources that translate the literary text into an audiovisual format oriented toward children and family audiences. The construction of domestic environments, the caricatured design of the characters, and the use of intense chromatic compositions maintain the general structure of the original narrative, while the articulation between characters, scenarios, and expressive resources transforms the literary content into a visual experience in which the narrative is sustained by gesture, movement, and image composition. In *Cristóbal Colón*, the thematic dimension is articulated through the representation of historical events related to colonization processes and the construction of national identity, employing differentiated character designs, chromatic contrasts, and linear narrative structures that simplify historical processes and adapt them to a language accessible to children and youth audiences. The visual organization of the characters and their differentiation into groups through costumes, accessories, and scenographic composition contribute to reinforcing narrative relationships and hierarchies within the story.

3.3. Impact and Legacy of Fernando Laverde's Work

3.3.1. Contemporary Projection and Continuity of Animated Practice

The review of the influence of these productions on the current audiovisual landscape shows that stop-motion has maintained its relevance not only due to its operational viability, but also due to its consolidation as an identity referent within Colombian animation. Various contemporary studies and productions have taken up this technique as a means to address social, environmental, cultural, and political issues, integrating new technologies without losing the direct relationship with materiality. The practice consolidated in Colombia by Laverde has contributed to redefining the modes of representation within the medium, allowing animation to function as a space for narrative exploration connected to local contexts and experiences. The continued presence of stop-motion in national audiovisual

production demonstrates that its significance is not limited to a specific historical period, but rather continues to project itself as an aesthetic form capable of engaging with contemporary concerns.

This process of continuity manifests itself in the way in which new generations of creators integrate traditional elements with contemporary tools, establishing a dialogue between different moments in the development of animation. The incorporation of digital technologies does not replace manual processes, but rather complements them, expanding the possibilities for experimentation within the medium. Technological evolution has made it possible to optimize capture, editing, and composition processes through the incorporation of digital software, high-resolution cameras, and hybrid postproduction systems, expanding the expressive possibilities of the technique without eliminating its tactile dimension. This combination of analog procedures and digital resources reveals a conceptual continuity with the principles developed in Laverde's productions, particularly in the emphasis on the physical construction of characters, the expressiveness of materials, and the connection between objects and their narrative function or historical context. Contemporary productions continue to employ this technique to develop narratives related to historical memory, environmental issues, and community dynamics, establishing a thematic continuity with the approaches present in works such as *El país de la bella flor*.

3.4. Implications for the Academic Field

3.4.1. Theoretical Discussion and Articulation with Contemporary Studies

The review of Fernando Laverde's work within the framework of contemporary animation studies allows for the identification of a direct relationship between current discussions on materiality, authorship, and alternative audiovisual practices and the processes historically developed in Colombian stop-motion animation. In contrast to historiographical approaches centered on the technological evolution of major animation industries, the findings of this research demonstrate that the consolidation of an animated language can also emerge from production dynamics based on handcrafted experimentation, the appropriation of materials, and the contextual adaptation of technical resources. This perspective coincides with Buchan's notion of Pervasive Animation [17], where animation is understood as an expanded phenomenon that transcends major industrial centers and acquires particular forms according to the cultural and productive conditions of each environment.

Laverde's experience constitutes a representative example of animation developed in a peripheral context that laid the foundations for subsequent productions shaped by their own models of production and visual representation. The research allows for the recognition that many of the principles currently discussed around the materiality of stop-motion were already present in his productions, particularly in the visible persistence of textures and the manual construction of characters under a style determined by the author's skills and possibilities. Laverde's work engages with contemporary perspectives that understand animation as a process of cultural construction and not merely as a technique of visual representation. Authors such as Wells [2] and Furniss [1] have pointed out that stop-motion possesses a singular capacity to integrate plastic, narrative, and symbolic dimensions within the same expressive structure, an aspect that is corroborated in the analyzed productions. In *La pobre viejecita*, the adaptation of Rafael Pombo's literary work does not function

merely as a translation of the text into audiovisual language, but rather as a visual reinterpretation that reorganizes temporality, gesture, and spatial construction. Likewise, in Cristóbal Colón, animation operates as a tool for narrating historical events from a particular perspective, employing visual resources and a simplified sound design to communicate the content effectively.

The research also allows for linking the concept of “situated innovation” with the technical dynamics identified in Laverde’s production. The transformations and improvements in experimental animation, particularly in stop-motion, do not depend exclusively on the incorporation of advanced technologies, but rather on the capacity to reinterpret materials and procedures according to the expressive needs of each context. The construction of adapted cameras, the physical design of characters, and the intentional simplification of sets demonstrate that the technical evolution of his works responded to a logic of continuous adjustment between narrative requirements, material availability, and technical solutions. These procedures not only addressed functional aspects of frame-by-frame movement but also directly influenced the final aesthetic outcomes. Decisions regarding character materials, the development of sets, and the limited fluidity of movement contributed to the formation of a specific visual identity that distinguished his works from other animated productions in international circulation, consolidating a recognizable language within the Colombian context.

4. Conclusions

The analytical trajectory developed throughout this research allows for formulating a response to the question posed in Section 1.5. Fernando Laverde’s contribution to the configuration of stop-motion language in Colombia lies in the articulation of a situated production model that integrates material scarcity, handcrafted experimentation, and narrative construction anchored in Colombian cultural memory as interdependent components of a single creative system. This contribution is not limited to the introduction of the technique in the country, but rather extends to the consolidation of a production system in which the adaptation of resources, the development of cameras, the use of wire and fabric armatures, and the modular planning of sets not only resolve operational limitations but also constitute a specific visual poetics. In this sense, Laverde’s stop-motion language is configured as an expressive device in which visible materiality, limited gesture, and the symbolic construction of space integrate a form of situated innovation, directly derived from the social, technical, and cultural conditions of his productive environment.

The analysis of production processes, synthesized in the production system flowchart (Figure 1), allows us to affirm that Laverde established an alternative production model for stop-motion in Colombia, grounded in self-management, the familial integration of labor, and the resolution of technical problems through adaptation to available resources. This model distances itself from hegemonic industrial paradigms in several aspects: the absence of departmental fragmentation, the versatility of roles, the integration of fabrication and shooting spaces within the same domestic environment, and the reliance on empirically developed technical solutions. The permanence of the family team throughout his trajectory not only guaranteed the technical viability of the projects but also shaped a particular way of understanding animation as a collective process, in which specialization does not fragment the creative experience but rather organizes it around common objectives. This model, documented through primary and secondary sources, evidences that animated production in peripheral contexts can be sustained through alternative

organizational logics that do not depend on industrial infrastructure or continuous funding.

The application of the operational levels analysis matrix (Table 1) and its development in the corresponding subsections allows for the verification that Laverde's work achieves a systemic integration of the technical, the aesthetic, and the narrative, wherein each material decision entails expressive implications and each narrative choice materializes through specific plastic resources. The visual differentiation of characters through volumetric and chromatic contrasts, the construction of settings as symbolic devices of social organization, and the treatment of lighting as a structuring element of narrative emotion operate as components of an integrated system of signification. This integration is neither accidental nor merely functional, but rather responds to a work logic in which planning, construction, and animation are conceived as parts of the same creative process. The coherence between the production phases and the final aesthetic outcomes, observable throughout the three analyzed works, indicates that Laverde developed a method in which technical limitations are not resolved in isolation, but rather are incorporated as constitutive elements of the visual language, generating a recognizable aesthetic identity that transcends the precarious conditions of production.

Family collaboration and the adaptation of materials emerge as key mechanisms in the configuration of Laverde's language. The production model rests upon an organizational structure in which each member of the family nucleus assumes specific functions, such as direction and animation, costume and voices, set design and assistant direction, cinematography and set construction, which, maintained over time, generate methodological continuity and aesthetic coherence that permeates his entire filmography. This structure not only optimizes human and economic resources but also establishes direct communication channels that facilitate problem-solving during shooting and allow for immediate adjustments without the need to resort to external instances. Concomitantly, the adaptation of materials and devices, the use of recyclable or low-cost materials, and the adaptation of domestic spaces as a production studio respond to the absence of industrial infrastructure, but also define a particular aesthetic characterized by the visibility of matter, texture, and imperfection as expressive elements. This dual function of adaptation, linking technique and aesthetics, constitutes one of Laverde's most significant contributions to the field of animation in peripheral contexts, by demonstrating that scarcity is not necessarily an obstacle to innovation, but rather can operate as a catalyst for creative solutions that enrich the visual language.

In the domain of heritage preservation and academic research, the findings of this study evidence the need to reinforce the processes of documentation, archiving, and critical analysis of non-hegemonic animated productions. The fragmentation of historical records, the scarce systematization of technical processes, and the limited circulation of works outside specialized circuits constitute significant obstacles to the integration of these experiences into international historiographical debates. The methodology proposed in this research, based on the triangulation of primary and secondary sources, the operational levels of analysis through the template in Table 1, and the technical-narrative breakdown through the technical script template in Table 2, offers a replicable framework for future studies on stop-motion practices in peripheral contexts. The application of this framework to the case of Laverde demonstrates that it is possible to approach the analysis of animated productions with documentary limitations through the construction of methodological instruments adapted to the

characteristics of the object of study, overcoming the dependence on secondary sources and generating knowledge from the direct analysis of the works and their production processes. The systematization of these instruments contributes to the consolidation of a field of animation studies in Colombia that integrates the technical, aesthetic, and cultural dimensions, and that allows for the articulation of local experiences with global debates on auteur animation and non-hegemonic practices.

Finally, the results of this research suggest lines of future work oriented toward the expansion of knowledge on stop-motion animation in Latin America. The comparative analysis of animated practices in peripheral contexts, considering cases from other countries in the region with similar productive conditions, would allow for the identification of patterns, recurrences, and divergences in production models, developed aesthetics, and cultural legitimation strategies. Laverde's work, when contrasted with the productions of other Latin American pioneers, could be situated within a broader map of animated practices that share features such as material reinterpretation, self-management, collaborative work, and commitment to local narratives. This type of comparative study would not only contribute to making visible the diversity of animated traditions in the region, but would also enable the establishment of academic and artistic networks that favor the exchange of knowledge, the preservation of archives, and the training of new generations of creators and researchers interested in animation as a situated cultural practice.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Funding

This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

References

- [1] Furniss, M. *A New History of Animation*, 1st ed.; Thames & Hudson: New York, USA, 2016; ISBN 9780500292099.
- [2] Wells, P. *Fundamentos de la animación*, 1st ed.; Parramón Ediciones S.A.: Barcelona, Spain, 2007; ISBN 9788434229419.
- [3] Purves, B.J.C. *Stop Motion: Passion, Process and Performance*, 1st ed.; Focal Press: Oxford, UK, 2008; ISBN 9780240520605.
- [4] Pedraza, J.M.; Andrade, Ó. Historia del cine de animación en Colombia 1926 – 2008. *Cinémas d' Amerique Latine*, 2008, 16, 149-159. DOI: 10.4000/cinelatino.2246.
- [5] Costa, J. La stop-motion como ejército de resistencia. La tardía edad de oro de una técnica anacrónica. *Con A de animación*. 2014; pp. 24-31. DOI: <https://doi.org/10.4995/caa.2014.2157>.
- [6] Montalva, P. Estudio de la preproducción en la animación bajo cámara. Técnica y legado de la stop-motion. Master's Thesis. Universidad Politécnica de Valencia. Valencia, Spain. 2020.

- [7] Maselli, V. The Evolution of Stop-motion Animation Technique Through 120 Years of Technological Innovations. *International Journal of Literature and Arts*, 2018, 6(3), 54-62. DOI: 10.11648/j.ijla.20180603.12.
- [8] Melo, J. B. Panorama de la industria de la animación en Colombia para nuevos realizadores. Bachelor's thesis, Pontificia Universidad Javeriana, Bogotá, Colombia, 2010.
- [9] Silva, J.; Arenas, L.Y. Técnicas y procedimientos para la creación de productos de Stop Motion a nivel nacional: una revisión bibliográfica. *Revista Loginn*, 2018, 2(1), 53-59. DOI: 10.23850/25907441.1666
- [10] Guzmán, J.A. Hacia una poética de la animación colombiana. *AISTHESIS N° 76*. 2024, pp. 289-319. DOI: 10.7764/Aisth.76.14.
- [11] Arce, R. La animación colombiana durante el siglo XX: Una historia en construcción. *Cuadernos de cine colombiano No. 20 Animación en Colombia: Una historia en movimiento*. 2014; pp. 21-33.
- [12] Cogua, R.C. Apuntes hacia una tendencia de la animación colombiana. In *Estudios sobre animación en Colombia*, 1st ed. Editorial Pontificia Universidad Javeriana, Bogotá, Colombia 2017; pp. 15-33. ISBN 9587810910
- [13] Pedraza, J.M. Las técnicas de animación en Colombia: oportunidades y limitantes. *Estudios sobre animación en Colombia*, 1st ed. Editorial Pontificia Universidad Javeriana, Bogotá, Colombia 2017; pp. 81-99. ISBN 9587810910
- [14] Triana, C. Cuadernos de Cine Colombiano - Primera Época No. 15: Fernando Laverde. *idartesencasa*. Bogotá. 1985. Available online: <https://idartesencasa.gov.co/artes-audiovisuales/libros/cuadernos-de-cine-colombiano-primera-epoca-no-15-fernando-laverde> (accessed on 15 August 2026).
- [15] Pedraza, J.M. Producir animación en Colombia. Fernando Laverde: valiente, terco y soñador. *Cuadernos de cine colombiano No. 20 Animación en Colombia: Una historia en movimiento*. 2014; pp. 46-57.
- [16] Zuluaga, P.A. El cine de animación de Fernando Laverde: ¡ahí está el detalle!. In *Estudios sobre animación en Colombia*, 1st ed. Editorial Pontificia Universidad Javeriana, Bogotá, Colombia 2017; pp. 101-125. ISBN 9587810910.
- [17] Buchan, S. *Pervasive Animation*. Routledge, New York, USA. 2013. ISBN: 9780415807234.
- [18] Cabrera, B.I. Proto stop-motion: Análisis de las primeras apariciones del stop motion en el cine de acción real. in *IV Congreso Internacional de Investigación en Artes Visuales. ANIAV. Imagen [N]Visible*. 2019. DOI: 10.4995/ANIAV.2019.8931.
- [19] Valladares, J.J. Animación stop-motion en el siglo 21. *INMÓVIL, Revista del Instituto Tecnológico Universitario INCINE*. 2019, 5, pp. 28-33. Available online: <https://inmovil.org/index.php/inmovil/article/view/56> (accessed on 15 August 2026).
- [20] Cruz, A.E. Animando a Colombia: Hacia una historia cultural de la animación colombiana (1950 – 2000), Doctoral Thesis. Universidad de Salamanca. Salamanca. Spain, 2022.

- [21] Stake, R.E. *The art of case study research*. Sage Publications, Inc. CA, USA. 1995. ISBN 9780803957671.
- [22] Aristizábal, S.J.; Pinilla, R.Ó. Una propuesta de análisis cinematográfico integral. *Revista KEPES*. 2017; pp. 11-32. DOI: 10.17151/kepes.2017.14.16.2.
- [23] Smith, R.C.E. La Realidad Animada. *Estudios sobre animación en Colombia*, 1st ed. Editorial Pontificia Universidad Javeriana, Bogotá, Colombia 2017; pp. 57-80. ISBN 9587810910.
- [24] Arce, L.R. *La animación en Colombia hasta finales de los años 80*, 1st ed. Universidad de Bogotá Jorge Tadeo Lozano, Bogotá, Colombia. 2013. ISBN: 9789587251166.
- [25] Guzmán, R.A. Rastreo de la producción intelectual del diseño de animación en Colombia. in *XIV Foro Académico Arte y Diseño Latinoamericano*. Manizales, Colombia 2017.



© 2026 by the author(s); licensee International Technology and Science Publications (ITS), this work for open access publication is under the Creative Commons Attribution International License (CC BY 4.0). (<http://creativecommons.org/licenses/by/4.0/>)