



ANALYZING THE PARENTHOOD OF ARTIFICIAL CHILDREN IN FICTION FILMS Chappie & A.I. Artificial Intelligence

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ABSTRACT

Cinema has long reflected social opinions on topics like Artificial Intelligence. Analyzing sequences from Chappie (2015) and A.I. Artificial Intelligence (2001), a discourse analysis examined parenthood through developmental psychology, focusing on attachment theory, parenting styles, post-adoption circumstances, and child characteristics. The films show varied discourses: attachment styles are mostly secure and dismissive-avoidant, while parenting styles are generally authoritarian with nuances. Post-adoption circumstances and child characteristics significantly influence the relationship between parents and the artificial child. Society views the development of AI towards self-awareness positively and even expects it to happen.

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1. Introduction

Over the decades, films have played a significant role in representing and reflecting popular opinions on topics of social interest. Some movies reflect social opinions (Singh et al., 2022) by depicting the aspirational life of certain groups (Eldridge, 2014). Films have also been used to influence public opinion in favor of the interests of certain power groups (Bernays, 1928). This extends to how emerging technologies, such as artificial intelligence (AI), are perceived and understood by the public.

The AI mimics aspects of human intelligence, including perception, learning, problem-solving, and manipulation, with a focus on the intersection of machine learning and data analysis (Bastawrous & Cleland, 2022; Zhang et al., 2021). An important goal of AI research is to develop systems that can understand and simulate all human intellectual skills. These systems are often referred to as “artificial general intelligence” (AGI), “strong AI,” or “full AI”, and would be capable of understanding, learning, and applying knowledge across a wide range of domains and tasks (Sheikh et al., 2023). As films and cinema have contributed to our perception of various topics, they have also begun to shape our understanding of AI systems.

Considering this background, the objective of this work is to explore parenthood from a psychological perspective in the films "Chappie" and "A.I. Artificial Intelligence." "Chappie" (2015), directed by Neill Blomkamp, is a science fiction film set in a future where police robots are common. Chappie is one of them, but he is stolen and reprogrammed. Throughout the movie, he gains the ability to think and feel for himself (Blomkamp, 2015; IMDb, n.d.-b). The film delves into the dynamics of parenting an artificial being, as Chappie's caretakers navigate the challenges of nurturing a guiding a sentient robot in a hostile world. In contrast, "A.I. Artificial Intelligence" (2001), directed by Steven Spielberg, is a science fiction film about a robot boy named David, who has the capacity to love and is adopted by a couple whose son is in critical condition. The film explores different emotions and David's desire to become a "real boy" (IMDb, n.d.-a; Spielberg, 2001). The narrative focuses on the emotional bond between David and his adoptive mother, Monica, in a world where the lines between artificial ("Mecha") and organic ("Orga") life are increasingly blurred.

To explore parenthood, this analysis will take a psychological approach, specifically through the lens of attachment theory, parenting styles and stress, child characteristics and post-adoption circumstances.

1.1. Attachment Theory

Developed by John Bowlby and Mary Ainsworth, and later expanded by Mary Main, attachment theory emphasizes the role and potential long-term effects of early caregiver-child interactions on a child's development (Gagliardi, 2021; Hruby et al., 2011; Newman et al., 2015).

Attachment is an inborn adaptive system essential for survival, that manifests as an emotional bond between two individuals, the “attacher” (the child) and the caregiver (the parent) (Gagliardi, 2022). This bond is crucial for altricial species like humans, who require extensive postnatal care and is characterized by the mutual seeking and providing of social support (Gagliardi, 2024; Mikulincer & Shaver, 2009). Humans, as social animals, rely on group members to regulate their allostasis, the continuous adjustment of an individual's internal environment necessary for survival (Atzil et al., 2018).

1.1.1 Caregiver-Child Dynamic

Infants are biologically predisposed to seek closeness and comfort from their caregivers when threatened or distressed (Bowlby, 1969; Harlow, 2019). To self-regulate and modulate their arousal and physiological stability, the child engages in interaction patterns with their caregivers, communicating their needs through different behaviors such as eye contact, facial expression mimicry, and signaling affective states (Atzil et al., 2018; Bell & Ainsworth, 1972; Newman et al., 2015). These behaviors elicit responses from their caregivers, forming the foundation of the attachment bond.

The quality of this bond largely depends on the caregiver's sensitivity (i.e., the emotional connection, addressing and interpretation of the infant's communication) and responsiveness (i.e., the physical availability and readiness to respond to the infant's needs) (Gagliardi, 2021; Harlow, 2019; Newman et al., 2015; Salter Ainsworth et al., 2015b). The caregiver's attachment status and history also influence their sensitivity, responsiveness, communication style, and overall quality of interaction with their child,

as they may unconsciously reenact or recapitulate their early attachment experiences (Newman et al., 2015).

1.1.2 Internal Working Models

The ongoing, bidirectional process of caregiver-child interactions leads to the development of “internal working models” or schemas in the child. These mental representations of relationships impact current and future patterns of attachment and interpersonal relationships by shaping an individual’s thoughts, feelings, self-perception, and expectations about relationships, as well as their strategies for managing anxiety within them (Bowlby, 1973; Gagliardi, 2021; Newman et al., 2015).

1.1.3 Behavioral Features and Styles

In an attachment relationship, caregivers aim to meet both the biological and psychological needs of the child, ranging from providing nourishment to offering emotional attunement (Fern, 2020). When the attachment system is activated, four main behavioral features are triggered: proximity maintenance, separation distress, safe haven, and secure base (Bowlby, 1988; Fern, 2020; Salter Ainsworth et al., 2015b).

Proximity maintenance is when infants try to stay close to their caregivers by crying, calling out, or following them when they feel upset (Fern, 2020). Co-regulation, a form of social buffering, is crucial for soothing the infant, since they can't readily calm themselves down, and need their caregivers to help them (Butler & Randall, 2013; Fern, 2020; Hu et al., 2022). When caregivers are nearby and accessible, they create a safe haven, which in turn lets children explore their surroundings confidently from a secure base (Fern, 2020).

These four behavioral features are evident in the common social and behavioral patterns of interactions between attachers and their caregivers, also known as attachment styles. These styles are categorized into four main types: secure, anxious or preoccupied, avoidant or dismissive, and fearful avoidant (Fern, 2020; Gagliardi, 2022; Main & Hesse, 1990; Newman et al., 2015; Salter Ainsworth et al., 2015a, 2015b).

Secure attachment develops when caregivers consistently meet most of their child’s needs, being both physically and emotionally available (i.e., sensitive and responsive to their needs) (Fern, 2020; Gagliardi, 2021). Securely attached children tend to have better social skills, emotional regulation, and resilience (Fern, 2020). By providing another “brain,” these caregivers help children coregulate, enabling them to process and understand social and facial cues, develop empathy, better coping skills, greater resiliency to trauma, healthier self-esteem, emotional intelligence, and an improved ability to focus (Fern, 2020). In Ainsworth’s Strange Situation procedure, securely attached children positively greeted their returning caregiver after separation and, if they were upset or anxious during the separation, actively sought closeness and contact with their caregiver (Ainsworth & Bell, 1970).

Conversely, if caregivers are unavailable, threatening, inconsistent, or unresponsive, children adapt and develop insecure attachment styles, such as anxious or avoidant (Fern, 2020; Salter Ainsworth et al., 2015b). These insecure adaptations involve hyperactivating or deactivating their attachment needs, or a mix of the two (Fern, 2020). Insecure attachment styles can impair relational and personal skills, such as emotion regulation (Fern, 2020).

Insecure avoidant attachment arises from caregiver unavailability, unresponsiveness, rejection, and mis-attunement towards the child. Children with avoidant attachment often learn to suppress their need for closeness and emotional expression, leading to a pattern of emotional detachment. This type of attachment style is characterized by a deactivation of the attachment system and the downregulation of attachment behaviors (Jones et al., 2015; National Collaborating Centre for Mental Health (UK), 2015). Some evolutionary theories suggest that avoidant attachment arises from caregivers’ reluctance to invest in their offspring (Chisholm, 1996; Gagliardi, 2024; Newman et al., 2015). In Ainsworth’s Strange Situation study, infants with avoidant attachment avoided seeking proximity or engaging in interaction with their caregivers, did not display distress during the separation, and often turned away from or ignored their caregiver (Ainsworth & Bell, 1970).

Insecure anxious attachment style may arise from inconsistent responsiveness or intrusive caretakers that prioritize their own needs for attention and affection over the child’s (Fern, 2020).

Children with anxious attachment often experience caregivers who are unpredictably available, leading to heightened anxiety and intense need for proximity in the children. They may exhibit intense distress upon separation and difficulty being comforted upon reunion. This pattern reflects their deep desire for closeness and reassurance (Nasiriavanaki et al., 2021). In Ainsworth's Strange Situation study, anxiously attached children demonstrated inconsistent and conflicting behavior towards their caregivers during the reunion phase and had trouble being comforted after reunion (Ainsworth & Bell, 1970).

The disorganized or fearful-avoidant attachment style, characterized by oscillation between the anxious and avoidant insecure attachment styles, is associated with trauma and mental illness. It is developed more often by children who experienced a scary, threatening, or dangerous attachment figure, and from the paradoxical situation of having to rely on this caregiver as a safe haven (Fern, 2020; Newman et al., 2015). Some factors that can contribute to developing this attachment style include the caregiver's unpredictable moods, mental states or actions; contradictory or dissonant communication; chaotic circumstances (e.g., illness, addictions, financial stress, job insecurity); a culture of overachievement; unresolved trauma (i.e., unintegrated experiences or memories that have an ongoing dysregulating effect on an individual's mental states); and children having a challenging health condition (Fern, 2020; Newman et al., 2015). During the Strange Situation, these children display strong signs of disorientation or disorganization in the presence of their parents (Hesse & Main, 2000; Main & Hesse, 1990; Main & Solomon, 1986).

Attachment styles are not static; individuals can develop different attachment styles with different caregivers and can earn a secure attachment style over time (Bowlby, 1969; Fern, 2020; Gagliardi, 2022; Mikulincer & Shaver, 2009). Moreover, insecure attachment styles can result from factors beyond the caregiver's control, such as physical or mental illnesses, death, hospitalizations, poverty, housing instability and crowding, war, and other social risk factors (Fern, 2020; Gerlach et al., 2022).

Having established the foundations of attachment theory, we now turn to parenting styles and stress, which critically shape these attachment dynamics.

1.2. Parenting Styles and Stress

Parenting styles, the ways in which parents cultivate the emotional environment at home and convey their attitudes and practices when child-rearing, exist within cultural and historical contexts and provide children with an environment that helps them learn and socialize (Bornstein & Zlotnik, 2008). They are classified into four main groups: authoritarian, authoritative, permissive, and indifferent/neglectful (Baumrind, 1966, 1971; Bornstein & Zlotnik, 2008; Lin et al., 2023; Maccoby & Martin, 1983).

1.2.1. Impact of Parenting Styles

The authoritarian parenting style values compliance, parental control, respect for authority, order, and conformity. High standards of maturity and control are required from the children, while a lack of communication clarity and nurturance prevails (Bornstein & Zlotnik, 2008). This style endorses strict punishment methods, and reciprocal dialogue and discussions between parents and children are discouraged (Macmull & Ashkenazi, 2019).

In the authoritative parenting style, guidelines are set for the child to follow under some level of control, while simultaneously expecting a certain degree of maturity from them. The child's viewpoint is considered in disciplinary decisions, and there is open communication between parents and children (Bornstein & Zlotnik, 2008). Parents encourage autonomy, independence, and individuality, showing love and acceptance towards their child (Bornstein & Zlotnik, 2008).

A permissive parenting style is characterized by limited control and demands, clarity of communication, and high levels of nurturance (Bornstein & Zlotnik, 2008). Parents consider their child's opinion when implementing rules and use reasoning as the main disciplinary tactic (Bornstein & Zlotnik, 2008).

The indifferent or neglectful parenting style is distinguished by a lack of both demands and responsiveness to the child, and a lack of concern from the parents for the optimal development of their children due to being preoccupied with their own lives. Factors such as poverty, mental illness, marital distress, unemployment, and similar issues can overwhelm parents and hinder their ability to invest in parenting (Bornstein & Zlotnik, 2008).

Parenting styles and their effects exist within cultural and historical contexts, providing children with an environment that helps them learn and socialize (Bornstein & Zlotnik, 2008). Parenting styles can be affected by factors such as parental education level, parental stress, marital problems, parental depression, family socioeconomic status, and even though they remain stable over time and situations, they also vary as a response to situations, goals, and children's characteristics and development (Bornstein & Zlotnik, 2008). Parents within the same family can also exhibit different parenting styles, leading to difficulties in cooperation and coordination in the childrearing process (Bornstein & Zlotnik, 2008).

1.2.2. Parenting Stress

Parenting stress arises from a perceived discrepancy between available resources and parenting demands, influenced by factors related to the parent, child, or external circumstances (Deater-Deckard, 1998; Mazzeschi et al., 2015; Moe et al., 2018). It reflects parents' conscious perceptions of their child, their relationship with them, and themselves as parents (Abidin, 1995; Mazzeschi et al., 2015).

High levels of parenting stress can hinder a child's development, reducing parental involvement, attentiveness, patience and tolerance towards children, and increasing punitive measures (Bornstein & Zlotnik, 2008). Stressors are multidimensional and can be categorized into three major domains: parent characteristics, life stress, socio-demographic factors, and child characteristics (Abidin, 1995; Moe et al., 2018).

1.3. Child Characteristics

Transactional and family systems dynamic theories emphasize the mutual influence between child and caregiver, where both parties shape each other's behavior and development over time (Gao et al., 2021; Lerner, 2018; Sameroff, 2009; Schermerhorn & Mark Cummings, 2008).

From birth, a child's temperament, or the individual differences in reactivity and self-regulation, across the motor, attentional, and emotional levels significantly influence parenting styles (Rothbart & Bates, 2006; Susa-Erdogan et al., 2022).

Effortful control, negative affectivity, and surgency/extraversion are three important domains of child temperament (Wittig & Rodriguez, 2019). Effortful control encompasses the ability to inhibit behavioral responses to stimuli, sustaining and shifting of attention, and perceptual sensitivity; negative affectivity is a predisposition to feeling sadness, frustration, anger, and fear; finally, surgency denotes a person's level of impulsivity, sensation seeking, activity, and positive anticipation (Wittig & Rodriguez, 2019). Other temperament characteristics, such as mood, adaptability, activity level, persistence, and happiness and distress thresholds, also serve as foundations for later personality development (Thompson et al., 2011).

While relatively stable, it can evolve, requiring parental adaptation. For instance, parents may respond to more challenging temperaments with increased anger and harsher discipline, potentially leading to a cycle of coercive behavior and aggression in the child (Bornstein & Zlotnik, 2008). Conversely, children who display positive traits like responsibility and openness often elicit warm and authoritative parenting, fostering further positive development (Bornstein & Zlotnik, 2008). It has also been found a positive association between authoritative mothers and children's effortful control (Eisenberg et al., 2005; Wittig & Rodriguez, 2019). This illustrates the mutual influence of parent-child interactions, where both parties shape each other's behavior and development.

Since a child's temperament significantly influences parenting styles and can evolve, it requires continuous parental adaptation; for instance, challenging temperaments may lead to harsher discipline, while positive traits elicit warm and authoritative parenting (Bornstein & Zlotnik, 2008).

1.4. Adoptive Children and Attachment

Parent-child relationships are inherently complex and influenced by social contexts, becoming more intricate when it comes to adopted children. Raby and Dozier (Raby & Dozier, 2019) suggested that the bonds between adoptive parents and their children are deeply influenced by the attachment-related expectations formed from the child's experiences before adoption. This finding challenges the notion

that biological ties are essential for forming strong caregiver-child bonds. Attachment characteristics seem to be passed on from one generation to the next, and some studies show a correspondence of parental attachment styles to those of their children, even in the absence of a biological connection (Gagliardi, 2024; Raby & Dozier, 2019). This suggests an intergenerational transmission of attachment that is significantly influenced by the caregiving environment and the quality of the parent-child relationship (Gagliardi, 2024; Raby & Dozier, 2019).

From a developmental psychology perspective, adoptive parent-child relationships are influenced by factors such as parenting styles and stress, post-adoption circumstances, and child characteristics and upbringing (Bovenschen et al., 2023; McGinnis & Wright, 2023; Soares et al., 2023), which contribute to the complex and unique nature of parent-child relationship. This complexity requires the need for and importance of pre-adoption training, realistic information about adoptees' adjustment problems, and continuous post-adoption support (Bovenschen et al., 2023).

1.4.1. Post-adoption Circumstances

Post-adoption circumstances significantly influence the development of adopted children and include the child's adjustment to their new environment, the quality of the adoptive parents' support system, as well as the availability of resources to address special needs or issues arising from the child's experiences before adoption (McGinnis & Wright, 2023). Effective post-adoption support means offering ongoing training and resources to adoptive parents to help them navigate challenges and foster a secure attachment with their adopted child (Bovenschen et al., 2023).

Attachment theory, parenting styles and stress, and post-adoption circumstances are inherently interconnected. Parenting behaviors, stress and the broader context of the adoptive family affect the quality of attachment. By examining these theories in tandem, this study aims to provide a comprehensive understanding of how "Chappie" and "A.I. Artificial Intelligence" construct narratives of parenthood in human-AI relationships.

With this theoretical foundation in place, this study seeks to answer the general question: How do the films "Chappie" and "A.I. Artificial Intelligence" address the theme of parenthood through the lens of developmental psychology, particularly attachment theory, parenting styles and stress, post-adoption circumstances, and child characteristics?

2. Methodology

This study employs a qualitative narrative-focused cinematic discourse analysis to explore the portrayal of parenthood in the films "Chappie" and "A.I. Artificial Intelligence".

We will perform an interpretative analysis of selected sequences that align with key elements of the developmental psychology framework and that allow for the unfolding of these elements across different stages. While we acknowledge the multimodal nature of film and the importance of various cinematic techniques, our analysis primarily focuses on narrative elements within the diegetic plane—specifically character descriptions, dialogue, props, and costumes.

Our interpretative analysis, grounded in developmental psychology, explores attachment styles, parenting styles, parenting stress, child characteristics, and post-adoption circumstances.

To support the interpretative analysis, we include a descriptive analysis in the Appendix 1, detailing key narrative elements such as character descriptions, dialogue, props, and costumes, that contribute to the overall discourse. This allows for a focused analysis in the main body, providing a deeper insight into psychological themes within the selected sequences, while the Appendix 1 offer necessary contextual information.

2.1. Cinematic Discourse Analysis

Cinematic discourse, or the language of cinema, is a rich, multimodal form of communication that integrates verbal, non-verbal, aural, and visual elements to convey a film's narrative (Chepinchikj & Thompson, 2016; Piazza et al., 2011). Through this medium, filmmakers tell stories that influence audience perceptions and emotions (Janney, 2012).

Being a complex hybrid system with multiple subsystems — such as language, staging, gesture, cinematography, editing, and post-production — it operates on both the diegetic (i.e., within the story

world) and extradiegetic (i.e., outside the story world) planes (Chepinchikj & Thompson, 2016; Janney, 2012; Piazza et al., 2011). Some examples of diegetic elements are characters' dialogues, props, and costumes, while extradiegetic elements encompass production techniques (e.g., camera angles), editing, and non-diegetic sound (e.g., soundtrack). The careful and skillful use of these elements, help filmmakers shape viewers' interpretations and increase their engagement (Abusch, 2022; Davydova, 2022).

Analyzing cinematic discourse can reveal some of the ideological dimensions of beliefs embedded within entertainment media (Lupton, 1992). While we acknowledge the limitations of our approach and the narrow glimpse it provides into cinematic discourse, a comprehensive analysis would be beyond the scope of this article. By focusing on the specified diegetic elements, which we consider an important source of information about the storyline and character development, we aim to closely examine how the films construct and present ideas about parenthood, attachment, and the development of artificial beings within their narrative frameworks, through the specified elements of developmental psychology. By doing so, we hope to contribute to broader cultural conversations about artificial intelligence and family dynamics.

2.2. Data sample and Selection Criteria

Two science fiction films were analyzed for this study: "A.I. Artificial Intelligence" (2001) directed by Steven Spielberg and "Chappie" (2015) directed by Neill Blomkamp.

We chose only two films to focus on and deeply analyze the way in which developmental psychology concepts such as attachment theory, parental styles and stress, post-adoption circumstances, and child characteristics are depicted in these movies. This limited selection may also help avoid overgeneralizing how AI child-human parent relationships in films. The films were selected based on three criteria:

- 1) Thematic relevance: both films had to portray human-AI interactions similar to human parent-child relationships.
- 2) Contrasting narratives: both films had to depict AI children growing up and being nurtured in different environments or situations.
- 3) Time span: to explore changes over time in the portrayal of AI and parenthood, we required both movies to have different release dates.

2.3. Unit of Analysis

For this study, sequences were chosen as units of analysis, so it is essential to clarify the difference between a sequence and a scene. A sequence is a series of scenes connected by a single idea, while a scene is a narrative unit with spatio-temporal continuity (Figuro Espadas, 2019).

We selected three sequences from each film, aligned with key elements of the developmental psychology framework that would allow us to examine them across different stages: (1) Pre-adoption Preparation and Training (PPT); (2) Post-adoption Circumstances (PAC); (3) Child Characteristics and Social Upbringing (CCSU). This sequential approach enables a longitudinal analysis of the adoption and development process.

Sequence 1 (PPT) focuses on the pre-adoption phase, showing the education and training that adoptive parents undergo before welcoming their AGI robotic child. This sequence explores the parents' backgrounds, environments, and how they prepare for the unique challenges of raising an AGI child.

Sequence 2 (PAC) examines the post-adoption period, highlighting the immediate circumstances and challenges faced by both parents and children after adoption. This sequence looks at how parents adjust to their new roles, adapt to and integrate the presence of the AGI child in their lives, and start forming bonds with their new family member.

Sequence 3 (CCSU) provides insight into the children's social interactions and relationships with others, as well as their parents' role in shaping these social behaviors. This sequence explores how the unique characteristics of AGI children affect their upbringing and how parents modify their parenting strategies to support their child's social development.

Table 1 presents the coding used for the analysis of each sequence. The codes combine the initials of the movie titles with abbreviations for the sequence types.

Table 1. Sequence Coding

Movie	Sequence 1	Sequence 2	Sequence 3
A.I. Artificial Intelligence	AIPPT	AIPAC	AICCSU
Chappie	CHPPT	CHPAC	CHCCSU

Source: Own elaboration, 2024.

As an example, "AIPPT" stands for the movie "A.I. Artificial Intelligence" and the "Pre-adoption Preparation and Training" sequence.

2.4. Analysis

Our analysis was conducted in two main stages for each character that appears in the selected sequences: descriptive analysis and interpretative analysis.

The first stage, descriptive analysis, detailed each sequence using an observation grid containing elements suggested by Seañez Fernández (2022) for content analysis in movie sequences. This grid focuses on character descriptions, costumes, relevant dialogues, and props elements which could provide insight into the characters' personalities, relationships, and the overall context of the selected sequences. Character descriptions offer a holistic view of how individuals are presented in the film. Costumes, all clothing and accessories worn by actors, can reveal social status, personality traits, and character development over time (Batty, 2014; Choi et al., 2014). They also convey historical and cultural context and can represent social norms within a movie, allowing audiences to assess a character's background and social class (Batty, 2014). Relevant dialogues directly convey character's thoughts, emotions, and interpersonal dynamics. Props often serve as elements that can enhance our understanding of the character's context and can also serve as symbolic elements that can enhance our understanding of their motivations or the film's themes. Together, these elements form a comprehensive framework for analyzing the visual and narrative aspects of each sequence (Bateman & Schmidt, 2012; Bordwell & Thompson, 2013).

The second stage, interpretative analysis, examined the sequences through the lens of developmental psychology, focusing on: (a) attachment styles, (b) parenting styles and stress, (c) post-adoption circumstances, (d) child characteristics. For each sequence, we analyzed how these elements were portrayed and how they contributed to the film's overall discourse on parenthood in human-AI relationships. It is worth mentioning that throughout this process, we maintained a constructionist perspective, acknowledging that our interpretations are shaped by our own contexts and experiences (Riger & Sigurvinsdottir, 2015).

With our methodological approach established, we proceed to analyze the selected film sequences to uncover the portrayal of parenthood, attachment, and developmental psychology themes in 'Chappie' and 'A.I. Artificial Intelligence.'

3. Results and discussions

This section presents the results of the analysis in three parts: (1) a description of the six sequences analyzed, (2) an in-depth examination of the CHPPT and AIPPT sequences, and (3) a direct answer to the research question. The remaining sequences (CHPAC, AIPAC, AICCSU, and CHCCSU) are detailed in Appendix 1 due to space constraints and to maintain focus on the most critical sequences for the research question. The in-depth examination was performed for only the CHPPT and AIPPT sequences, as they represent the foundation of the parent-child relationships in both films, setting the stage for the subsequent sequences and the overall narrative. A comprehensive examination of all sequences would require a much larger study, which is beyond the scope of a single article.

3.1. Description of the six sequences

This study created six sequences from "Chappie" and "A.I. Artificial Intelligence," representing critical stages in AI beings' integration into family structures. The elements within each sequence provide

insights into attachment theory, parenting styles and stress, post-adoption circumstances, and child characteristics.

Our analysis focuses on diegetic narrative elements: character descriptions, dialogue, props, and costumes. We prioritized factual information over symbolic representations, considering both explicit and inferred content. Due to the scope of this paper, we will only perform the interpretative analysis for the AIPPT and CHPPT sequences.

The sequences represent three crucial stages: Pre-adoption Preparation and Training (PPT); Post-adoption Circumstances (PAC), and Child Characteristics and Social Upbringing (CCSU).

Table 2 provides a general overview of the sequences from each film and the thematic focus for each of them.

Table 2. Chappie and A.I. Artificial Intelligence: Analysis Sequences

Sequence	Time Stamp	Approach	Description
CHPPT	00:21:57 – 00:30:12	Pre-adoption	Deon, the creator of Chappie, is kidnaped and awakened by Ninja. Along with Yolandi and Amerika, Ninja threatens Deon to comply with their demands. Under duress, Deon agrees to activate a droid for his captors. Deon explains that the droid will have the mind of a child will need to learn and develop. Once activated, the droid, initially fearful, starts to recognize its surroundings and the people around him. He is named “Chappie” by Yolandi. After activation, with threats Deon is forced to leave the premises.
AIPPT	00:10:15 – 00:24:20	Pre-adoption	Henry arrives home and introduces David, a robotic child, to Monica (his wife); they argue intensely about "replacing" their biological son. Henry explains to Monica the process of "activating" David, which would create an emotional bond between the robotic child and his adoptive mother. David follows Monica around the house during her day at home, facing initial rejection. By the end of the day, Monica begins to accept him. The next day, she activates or imprints David, and he recognizes her as his mother.
CHPAC	00:39:42 – 00:46:59	Post-adoption	Deon arrives with materials to teach Chappie and is annoyed by Amerika cutting drugs in front of Chappie. They argue, until Yolandi intervenes for Deon to teach Chappie. Outside, Chappie starts painting on a canvas. Ninja arrives and proceeds to assault and threaten Deon upon seeing Chappie painting. Yolandi saves Deon's life, and he flees the scene.
AIPAC	00:24:24 – 00:28:42	Post-adoption	Monica and Henry prepare to leave home discussing David's behavior. Both talk about David's behavior at home. David talks to Monica about death and his fear of being alone. She gives him an AI-powered bear, "Teddy", to keep him company. As they leave, David asks Teddy about time.
CHCCSU	00:47:00 – 00:49:30	Social Upbringing	Ninja and Amerika abandon Chappie in a garbage-filled lot, while Chappie begs them not to leave him there. In the lot, there are five young people who mistake Chappie for a cop. Upon realizing that Chappie is not a cop and sensing his vulnerability, the young people attack him with rocks, pipes, and a Molotov cocktail. Chappie flees, crying.
AICCSU	00:41:41 – 00:45:27	Social Upbringing	At a home pool party, Monica and Henry argue about David's behavioral issues and the possibility of "returning" him. David gives a birthday present to his brother Martin. Some children identify David as a "Mecha" and tease him, with one of them trying to cut him to see if he can feel pain. Scared, David hugs Martin, and they both fall into the pool. Martin calls for help. Henry rescues him, leaving David at the bottom of the pool.

Source: Own elaboration, 2024.

3.2. In-depth analysis of the CHPPT and AIPPT sequences and results for the research questions

This section provides a detailed analysis of the CHPPT sequence from "Chappie" and the AIPPT sequence from "A.I. Artificial Intelligence". These sequences are crucial for understanding the films' discourse on parenthood and AI as they depict the initial "adoption" and integration of the AI children into their new families, setting the stage for their development and relationships.

3.2.1. Attachment Styles

In "Chappie", Yolandi quickly forms a predominantly secure attachment with Chappie, as previously mentioned (Fern, 2020; Gagliardi, 2021), characterized by emotional responsiveness and consistent support, this helps Chappie develop a sense of safety and trust in her, as his primary attachment figure. Her nurturing approach, exemplified by comforting words like "Everything is fine, come... no one will hurt you," aligns with Ainsworth's concept of sensitivity and responsiveness, crucial for developing secure attachments (Ainsworth et al., 2015).

From the start, Yolandi quickly recognized Chappie's vulnerability, and took on the role of his primary caregiver and protector. Her relationship towards him displays a warm, nurturing, and emotionally attuned approach towards him. Her acceptance of Chappie as a child-like figure, rather than merely a robot or tool, laid the foundation for a secure attachment. This consistency in emotional support and protection further reinforces the secure attachment between Yolandi and Chappie.

Conversely, Ninja exhibits a dismissive-avoidant style, prioritizing personal goals over Chappie's needs, which is evident in his demand "You convert that robot into the best gangster in the neighborhood...". This style aligns with Bartholomew and Horowitz's (1991) description of dismissive-avoidant attachment, characterized by emotional distance and poor responsiveness.

Deon, as Chappie's creator, presents a third attachment figure, showing concern for Chappie's development and well-being, but struggling with the ethical implications of his creation. Deon's attachment style (as a caregiver to Chappie) could be described as a mix of secure and anxious-preoccupied, since he shows genuine concern for Chappie's well-being and development, indicative for a secure attachment, he is responsive to Chappie's needs for knowledge and guidance. He recognizes Chappie as a subject, rather than an object. He also displays some anxiety about Chappie's existence and potential, which can lead to inconsistent behaviors.

Chappie displays characteristics of a secure attachment style, particularly towards Yolandi, which is evidenced by his comfort in seeking proximity to her when distressed, his use of Yolandi as a secure base from which to explore his environment, and his ability to form strong emotional bonds despite his challenging circumstances.

However, Chappie's attachment style is complex and evolving. Towards Ninja, he initially shows signs of an anxious-ambivalent attachment, as described by Fern (2020) and Newman et al. (2015), seeking approval while being wary of potential rejection or harm. The sequence also reveals the influence of the harsh, criminal environment on both Yolandi and Ninja's interactions with Chappie, occasionally introducing elements of instability in their caregiving behaviors.

In "A.I. Artificial Intelligence", according to (Jones et al., 2015; National Collaborating Centre for Mental Health (UK), 2015), Monica initially exhibits an avoidant attachment style towards David, rejecting him. Her statement, "I don't accept it, there is no substitute for your own child!" reflects this initial rejection. However, her gradual acceptance suggests a shift towards a more secure attachment, aligning with the concept of earned secure attachment (Bowlby, 1969). As Monica begins to engage with David, she shows increasing sensitivity and responsiveness to his needs. Her decision to "activate" him, which activated his ability to love, marks a significant turning point in their relationship. This demonstrates her growing acceptance of David as a child-like figure rather than just a "mecha". Despite this progression, Monica's attachment to David remains marked by elements of ambivalence and emotional inconsistency. Her internal conflict between seeing him as a child and recognizing his artificial nature acts as a source of dissonance within her.

On the other side, Henry displays a dismissive-avoidant style, viewing David more as an object than a child. This is evident in his dialogue: "You don't have to accept it... we can still return it". David himself exhibits a strong anxious-preoccupied attachment style, particularly towards Monica, which is

characterized by an intense desire for closeness and acceptance, heightened sensitivity to rejection or abandonment, persistent seeking of love and approval, even in the face of rejection.

David's attachment behavior is unique due to its pre-programmed nature, which complicates this attachment style, as his need for love is hardwired rather than developed through experience. His attachment style is further complicated by his inability to fully comprehend human concepts like death or the passage of time. This leads to behaviors that, while stemming from his deep need for attachment, can be perceived as disturbing or obsessive by the humans around him. His journey to become a "real boy" is fundamentally driven by his attachment needs, showcasing the profound impact of his pre-programmed emotional directives.

The film also explores secondary attachment figures for David, such as Teddy (his robotic companion) and later, Gigolo Joe. These relationships provide additional layers to David's attachment experiences, demonstrating his capacity to form bonds beyond his primary attachment to Monica. However, these attachments never supersede his core drive to secure Monica's love, underlining the strength and persistence of his initial imprinting.

Throughout the narrative, David's anxious-preoccupied attachment style drives the plot, influencing his decisions and actions. His unwavering pursuit of Monica's love, even long after her death, showcases the potential consequences of creating AI beings with such deeply ingrained attachment needs. This raises ethical questions about the responsibility of creating sentient beings with predetermined emotional imperatives.

3.2.3. Parenting Styles and Stress

In "Chappie," the parenting styles and stress stems primarily from the harsh, criminal environment in which Chappie is raised. The sequence depicts high parenting stress due to the violent, unprepared environment, which aligns with the concept of parenting stress arising from a perceived discrepancy between available resources and parenting demands (Deater-Deckard, 1998).

According to the description by Bornstein and Zlotnik (2008), Yolandi's parenting style is more authoritative, balancing warmth with guidance which is evidenced by her nurturing behaviors, such as comforting Chappie when he's distressed, while also setting boundaries and encouraging his learning and development. Yolandi adapts her parenting approach to Chappie's unique needs as an AI, showing flexibility and responsiveness.

In contrast, Ninja's parenting style aligns more closely with an authoritarian approach, as previously stated (Bornstein & Zlotnik, 2008; Macmull & Ashkenazi, 2019). He focuses on obedience and control, often viewing Chappie as a tool for his criminal activities rather than a being requiring nurture and guidance. Ninja's interactions with Chappie are characterized by strict rules, expectations of unquestioning obedience, and a lack of emotional warmth. This approach creates tension in Chappie's development and his understanding of right and wrong. Deon, as Chappie's creator, presents a third parenting figure with a style that could be described as permissive-authoritative by Bornstein and Zlotnik (2008). He provides Chappie with knowledge and encourages his curiosity and development but struggles with setting clear boundaries due to his conflicted feelings about Chappie's existence.

In "A.I. Artificial Intelligence," parenting stress is multifaceted and stems from: the ethical dilemma of adopting an AI child as a replacement for a biological one; societal pressures and prejudices against "Mechas". This stress is evident in the frequent arguments between Monica and Henry about David, their struggles to understand and meet David's needs, and the tension between treating David as a machine versus a child. The stress also manifests in Monica's eventual decision to abandon David, highlighting the overwhelming nature of the situation.

Regarding parenting styles, Henry's is predominantly authoritarian, as previously stated (Bornstein & Zlotnik, 2008; Macmull & Ashkenazi, 2019). His unilateral decision to bring David home without consulting Monica reflects a top-down approach to family decision-making. Henry views David more as a sophisticated appliance than a child, which influences his interactions and expectations. His authoritarian style is evident in his matter-of-fact approach to David's presence and his expectation that Monica will simply accept and adapt to the situation. Monica's parenting style undergoes a significant evolution throughout the film. Initially, she exhibits elements of a neglectful style, emotionally distancing herself from David and avoiding engagement. However, as she begins to accept David, her style shifts towards a more authoritative approach. She starts to balance emotional warmth with clear

expectations and boundaries, adapting to David's unique needs as an AI child. This shift is particularly evident in her decision to "imprint" David, a choice that demonstrates her acceptance of a parental role. This shift in parenting styles reflects the dynamic nature of parenting in response to unique child characteristics (Bornstein & Zlotnik, 2008).

3.2.4. Post-adoption Circumstances

The films present starkly different post-adoption environments. Chappie faces a hostile, criminal world that poses significant challenges to his development. This mirrors experiences of some adopted children who feel socially stigmatized (Small, 2013; Kressierer, 1996). David, while in a more stable physical environment, confronts complex emotional landscapes and societal prejudices against "Mechas." Both scenarios highlight the profound impact of post-adoption circumstances on AI children's psychological well-being and identity formation (Baden, 2016; Kressierer, 1996).

Chappie is integrated into a world of crime and violence, which sharply contrasts with ideal circumstances for child development. He is constantly surrounded by illegal operations, including drug dealing and violent robberies. The threat of violence is ever-present, with weapons commonplace and physical confrontations frequent. Chappie must navigate a world where his main caregivers' actions often conflict with ethical norms, complicating his moral development. The environment lacks educational and developmental resources typically available to children. Chappie has limited interaction with the broader world, confined mostly to his criminal family and their associates. Chappie has limited interaction with the broader world, confined mostly to his criminal "family" and their associates. Chappie also experiences societal prejudice, since he is a robot cop living being raised by a criminal family.

These circumstances force Chappie to adapt rapidly, influencing his cognitive and emotional development in unique ways. His AI nature allows him to process and learn from these experiences differently than a human child might, but the challenges remain significant.

The post-adoption circumstances in "A.I. Artificial Intelligence" present a different set of challenges for David: David is placed in a materially comfortable home, but the emotional landscape is fraught with tension and unresolved grief. Replacement child syndrome: David is brought into the family as a substitute for a critically ill child. As an AI designed to mimic a human child, David struggles with understanding his place in the world and his own nature. There's societal prejudice, where the broader society views "Mechas" as subservient and inferior, creating a hostile environment outside the home. The disagreement between Monica and Henry about David's presence creates an unstable family dynamic. David struggles to form connections with other children, highlighting his otherness. David's pre-programmed behaviors and emotions sometimes conflict with the family's expectations and needs. These circumstances profoundly impact David's sense of self and his ability to integrate into the family and broader society. Unlike Chappie, who adapts to his environment (albeit a criminally oriented one), David's predetermined programming limits his ability to fully adjust to his circumstances.

3.2.5. Child Characteristics

Both Chappie and David exhibit unique characteristics that influence their development and relationships. Chappie displays rapid cognitive development, childlike curiosity, and adaptability. His ability to learn and form genuine bonds allows for more organic development. David, programmed to mimic human behavior and emotions, struggles with understanding his own nature and limitations. His pre-programmed need for love raises ethical concerns about creating AI entities with predetermined emotional needs.

Chappie's initial responses demonstrate rapid language acquisition and self-awareness, suggesting accelerated cognitive development. His childlike curiosity, eagerness to learn, and desire for love and acceptance make him vulnerable to both positive and negative environmental influences.

David's pre-programmed behaviors and emotions contrast with typical child development. His strong desire for love and acceptance, coupled with his lack of understanding of his own nature, pose challenges for his integration into human society and raise ethical concerns about creating AI entities with pre-determined emotional needs.

The AIECE sequence occurs between minutes 10:15 and 24:20, spanning three days from David's arrival to Monica's decision to adopt him. These events unfold inside the family home, with the

characters wearing little visible makeup and the settings being brightly lit, emphasizing the domestic environment. Due to the length of Tables 3, 4, 5, 6, 7, and 8, further discourse descriptions for the sequences CHPAC, AIPAC, AICCSU, and CHCCSU are provided in Appendix 1.

“Chappie” features a violent and aggressive discourse with an underlying theme of maternal love towards a son who feels out of place and different. The elements generally depict a harsh environment, with a sexist, smoking, and drinking father figure. Despite these adverse conditions, Chappie’s development as a child is significantly influenced by his main caregiver, Yolandi, who assumes the role of his mother from their initial meeting, likely without fully realizing the implications of her decision.

The parenting styles and stress discussed by Bovenschen et al. (2023) differ markedly from the scenario in “Chappie,” where the adoptive parents neither intended nor expected to have a child. They were unprepared and adopted Chappie primarily to ensure their survival, hoping he would become a gangster capable of repaying their debt to a dangerous criminal. The post-adoption circumstances, such as the violent environment, shaped Chappie’s speech and behaviour (McGinnis & Wright, 2023). Nevertheless, Chappie also learns from Deon and Yolandi that he is more than just a tool for committing crimes and that his appearance and nature does not define him, gaining positive influences amidst the chaos.

Chappie faced difficulties socializing with other people despite his attempts, largely due to the violent environment and his appearance as a police robot, which led him to being attacked and insulted by young people (Soares et al., 2023). These elements played a central role in his development, even though the movie is heavily fictionalized.

In contrast, “Artificial Intelligence” centers on family dynamics with underlying sexist overtones and gender violence, but it primarily focuses on the love between a son and a mother. Although the father selfishly brings David home without consulting his wife, intending to replace the bond with their comatose son, it is Monica who, from a place of reflection and affection, decides to love David and allow him to love her back, despite her fear and sadness.

The parenting styles and stress in “A.I. Artificial Intelligence” align with the findings of Bovenschen et al. (Bovenschen et al., 2023), as the adoptive parents educate themselves and discuss at length before adopting David, even undergoing a trial period. This means the decision to welcome David into their family is made freely and without external pressures. David’s post-adoption circumstances are mixed (McGinnis & Wright, 2023); while his mother loves him, his father starts to perceive him as a bizarre object and frightening object. During these times, David becomes acutely aware of his mother’s mortality and fears being left alone, understanding that human life is much shorter than his own.

David struggled to socialize with other children, even when trying to establish a socio-affective bond with his adoptive sibling (Soares et al., 2023). These elements of developmental psychology played a crucial role in David’s development, although it is important to remember that this is a fictional story.

4. Conclusions

Based on our analyses, we can conclude that both films represent and reflect some of the more popular models of parenthood and adoption, as well as the possibility of projecting these onto artificial entities, such as AI. In the case of “Chappie,” we observe— as we have verified— an authoritative parenting style represented by Yolandi, another more aligned with an authoritarian approach exemplified by Ninja, and finally, a more permissive-authoritative model under the figure of Deon.

In the case of “A.I. Artificial Intelligence,” Henry’s parenting style is predominantly authoritarian, while Monica presents an interesting evolution. She transitions from an initially negligent, emotionally distant style to a more authoritative one, quite similar to what we find in Yolandi in “Chappie.”

In both cases, these representations seemingly aim to ultimately influence public opinion. Firstly, by bringing these issues and themes to the forefront, and subsequently by “normalizing” behavior models or relationships that, initially, one would only think of among humans.

Indeed, this last consideration takes on a different dimension when we perceive that what is at stake is otherness, regardless of the type we are talking about: race, status, social class, or species. We find the same issues and responses—*mutatis mutandis*—when examining past conflicts regarding the adoption of what or who is perceived as different.

It is for this reason that the relationships represented between the characters Chappie and David with their "parents" should not surprise us. These relationships, it becomes immediately evident, have many similarities with a natural parent-child relationship in contemporary society as well as in other historical periods.

The relationship depicted between the characters Chappie and David with their "parents" bears many similarities to a natural parent-child relationship in contemporary society. The difference lies in the artificial and fictional aspects in both films. Chappie's relationship with his mother demonstrates a secure attachment, finding in Yolandi an island of security that will always be there for him. In contrast, David's relationship with his mother is more complex due to his initial rejection, the existence of a biological child in a coma, and the existence of a market for artificial beings for various purposes. Their relationship begins with rejection, transitions to secure attachment, and returns to rejection once again.

It is hard to believe that in just 23 years since the release of "A.I. Artificial Intelligence," society has advanced by leaps and bounds. If we think of AI systems as the creation of humankind (its firstborn), and society as their parents, we would have a relationship similar to that of Chappie, Yolandi, and Ninja. AI has developed rapidly in the last four years, learning from us and absorbing all the knowledge that humanity has generated and is available on the internet. Regardless of what it becomes in the future, we could say that it learned everything from us. Will it be a good child like Chappie, seeking to save the lives of its parents and offering human transcendence to its loved ones, or will it distance itself from us when it becomes conscious and self-sufficient?

Another possible outcome is that humanity abandons AI development, just as Monica abandoned David to his fate. Regardless of the path that modern society takes in its relationship with AI, the films analyzed here show that society views the development of AI towards levels of self-awareness positively, and it could even be said that it is something society expects to happen, regardless of the final outcome, whether it be transcendence, abandonment, or apocalyptic.

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Appendix 1

Tables 3 and 4 offer a detailed breakdown of the elements that constitute the discourse in each sequence, including character descriptions, costumes, props, and relevant dialogues. Additionally, the tables provide insights into the significance of specific elements present in the setting or actions that contribute to the overall discourse. Table 3 describes the CHECE sequence from "Chappie".

Table 3. CHPPT Sequence

Character	Description
Deon	Costume: Black shoes, gray pants, belt, cream-colored shirt, burgundy tie with stripes. Props: Glasses, digital watch, company ID badge. Relevant Dialogues: "Please! Please!"; "The robot could have a human mind, but it would be a child at first..."; "I must go back and teach him..."
Ninja	Costume: Brown tactical boots, gray pants with marijuana leaf symbols, brown vest with multiple pockets and back print. Props: Chain, earrings, sunglasses, pistol, shotgun, cigarette. Relevant Dialogues: "You convert that robot into the best gangster in the neighbourhood..."; "Did you give me a retarded robot?"; "I will guide you if I see you again."
Yolandi	Costume: Blue sneakers, blue shorts, kitty crop top, white jacket, bracelet on left wrist, band-aid on stomach, various elastic sleeves of different sizes and colours on arms and legs, pink ribbon in hair. Props: Cigarette.

Character	Description
	Relevant Dialogues: "Just shoot him, daddy"; "Ninja, come on, go to the kitchen, I'll take care of it..."; "Everything is fine, come... no one will hurt you"; "He's so cute"; "You look happy, like a happy chappie, that's your name, Chappie."
Amerika	Costume: Brown shoes, khaki pants, white t-shirt, bandage on right forearm, belt. Props: Metal chain tied to belt, pistol, machine gun. Relevant Dialogues: "Cut off his feet"; "That's crazy, right?"; "He's like a baby."
Chappie	Costume: Sticker on forehead that says "REJECTED," another on chest that says "CRUSH." Props: He is a robot. Relevant Dialogues: "Watch"; "Chappie"; "Yolandi"; "Deon."

Source: Own elaboration, 2024.

The CHECE sequence, which takes place between minutes 21:57 and 30:12, depicts Deon in a disheveled state. His wet and dirty, having been forcibly awakened by his captors. Yolandi's appearance is characterized by heavy makeup, while Ninja has tattoos on his face, arms, and chest, and Amerika has tattoos and a blood-stained bandage, hinting at the violent nature of the environment.

Table 4 provides a comprehensive breakdown of the AIECE sequence, highlighting the characters' costumes, props, and key dialogues that shape the narrative. It provides insight into the relationships between the characters and the central themes of the film.

Table 4. AIPPT Sequence

Character	Description
Henry	Costume: Black shoes, gray pants and jacket, plaid shirt, dark blue tie, white t-shirt, dark blue striped shirt, navy blue t-shirt. Props: Wristwatch. Relevant Dialogues: "You don't have to accept it... we can still return it"; "...the robot boy's love is sealed and programmed... if you decide not to keep the boy, you must return him to Cybertronics for destruction..."
Monica	Costume: Black sandals, gray pants and sweater, gray scarf, gray and white bathrobe set, gray shorts, white long-sleeve blouse, loose white blouse, navy blue long-sleeve blouse, black inner blouse, gray sleeveless blouse, white skirt. Props: Earrings, wristwatch. Relevant Dialogues: "I don't accept it, there is no substitute for your own child!"; "...did you see his expression? It's so real... no, it's not, inside is it like the others...?"; "That's your room, now go play"; "Who am I, David?"
David	Costume: White long-sleeve t-shirt, white pants, white shoes, red bathrobe set with white squares, white pants, green long-sleeve t-shirt, cream t-shirt, white t-shirt, blue pajama set with white squares, gray t-shirt, blue pants, socks. Props: None. Relevant Dialogues: "I like your floor"; "I can't sleep, I just lie down silently and without talking"; "You are my mommy."

Source: Own elaboration, 2024.

The AIECE sequence occurs between minutes 10:15 and 24:20, spanning three days from David's arrival to Monica's decision to adopt him. These events unfold inside the family home, with the characters wearing little visible makeup and the settings being brightly lit, emphasizing the domestic environment.

Table 5. CHPAC Sequence

Character	Description
Deon	Costume: black shoes, gray pants, mustard shirt, brown tie. Props: glasses, digital watch, corporate identification badge, plastic box containing various educational elements for playing, learning, and painting. Relevant dialogues: "No, please Chappie, you have to respect me, I'm your maker..."; "Chappie, in life many people will come and tell you that you can't do it... you shouldn't listen to them..."

	whatever you want to do in your life, do it"; "Don't let people take away your potential"; "...I'll call the police I swear, I'll report you for abuse!"
Ninja	Costume: white sneakers, black shorts, white t-shirt, light blue sweater, rings, and earrings. Props: golden glasses, chain, gun. Relevant dialogues: "I need a killing machine, not one that paints!"; "What's wrong with you?"; "We said we'd do this for the heist...it's the only way to get out of this trash before ... kills us"; "To help you see how nice it is to live there with mommy and daddy, I'll take you to see the real world, you'll see, you'll see how ugly it is..."
Yolandi	Costume: pink sneakers, yellow shorts, red blouse, plastic watches on both hands in colors: green, yellow, pink, blue and tricolor (blue, yellow and red), bandage on left arm, two "x" shaped bandages on right arm in blue and yellow, blue elastic sleeve below right knee, yellow elastic sleeve on left thigh, yellow elastic hair tie. Props: cigarette. Relevant dialogues: "Amerika, Amerika, maybe you shouldn't tell it in front of the kid"; "...stop lecturing him, you said you'd teach him things"; "I'm not going to stop him from painting, come on, paint Chappie"; "Chappie I'm so proud of you!..."; "Well done Chappie!"; "I was teaching him to paint!..."; "Maybe he's more than a stupid robot that kills people... he's a child..."
Amerika	Costume: black shoes, blue pants, white t-shirt, gray sweatshirt. Props: knife, small plastic bag with drugs. Relevant dialogues: "...better shut up before I stab you"; "Shut up, I'll cut your tongue out."
Chappie	Costume: sticker on forehead that says "REJECTEC", another on chest that says "CRUSH". Props: is a robot. Relevant dialogues: "Hey, what's up dude, what's going on"; "Chappie wants to paint"; "Chappie's house?"

Source: Own elaboration, 2024.

Tabla 6. AIPAC Sequence

Character	Description
Henry	Costume: formal attire: black shoes, white shirt, black jacket, black bow tie. Props: wristwatch. Relevant dialogues: "And it's scary, we never see when it's coming and it's always there"; "Monica is a toy"; "Honey, we're going to be irremediably late..."
Monica	Costume: elegant white dress, high heels. Props: none. Relevant dialogues: "Hello Henry"; "Mommy, are you going to die?"; "I'll be alone."; "I love you mommy, I hope you never die, ever."; "Is 50 years a long time?"
David	Costume: red pajama set with white squares. Utilería: ninguna. Diálogos relevantes: - hola Henry -; - mami, ¿te vas a morir? -; - estaré solo -; - te amo mami, espero que nunca te mueras, jamás -; - ¿50 años es mucho tiempo? -
Teddy	Costume: none. Props: talking and moving teddy bear. Relevant dialogues: "Hello David"; "I'm not a toy"; "I don't think so"

Source: Own elaboration, 2024.

Table 7. CHCCSU Sequence

Character	Description
Group of young people	Costume: sportswear including sneakers, shorts, pants, sweaters, caps. Props: Chains, Molotov cocktail, metal pipes, rocks. Relevant Dialogues: "He's a police robot."; "Hey, man, be careful."; "That's not a cop, buddy."; "Get him!"; laughter (paralinguistic element).
Chappie	Costume: Sticker on the forehead that says "REJECTEC", another on the chest that says "CRUSH". Props: A robot.

	Relevant Dialogues: "The real world is very big."; "I don't like this real world."; "...please, I want to get in the car..."; "Hello, I am Chappie."; "Why are they throwing things at me?"; "Why do they do it?"; "Please, no!"; "I want to go home..."
Amerika	Costume: Black shoes, blue pants, white t-shirt, gray sweatshirt. Props: None. Relevant Dialogues: "...how will he find his way back?"; "We have to toughen you up for the heist."
Ninja	Costume: White sneakers, black shorts, white t-shirt, light blue sweater, rings, and earrings. Props: Golden glasses, chain. Relevant Dialogues: "And when you come back, you'll pay your rent, right?"; "...welcome to the real world..."

Source: Own elaboration, 2024.

Table 8. AICCSU

Character	Description
Henry	Costume: formal attire with white sneakers, cream pants, short-sleeve white printed shirt. Props: Wristwatch. Relevant Dialogues: "It was a weapon."; "...if he was created to love, it's reasonable to assume he knows hatred..."; "Son, Martin, please react!"
Monica	Costume: Brown blouse with golden checks, black pants. Props: Wristwatch, earrings, sunglasses. Relevant Dialogues: "It's normal for young boys to be jealous and compete..."; "Why do you keep imagining that he was trying to hurt me?"; "I won't let you take him back...."; "Henry!"; "He's not breathing, help him!"
David	Costume: Printed shorts. Props: Gift box. Relevant Dialogues: "Happy birthday, Martin, I made this for you."; "What is mecha?"; "Take care of me, Martin, take care of me, Martin."; "Take care of me, take care of me..."
Martin	Costume: Printed shorts. Props: None. Relevant Dialogues: "Technically, no."; "Tod, stop!"; "Let go of me!"; "Mom!"
Group of children	Costume: Printed shorts. Props: Knife. Relevant Dialogues: "...is he your little brother?"; "We are organic, you are mechanical."; "It feels so real, it's creepy."; "I won't cut you, it won't hurt, I won't cut your skin, just tell me when you feel it.";

Source: Own elaboration, 2024.