Meaning-Making Through Aesthetics; Visual Semiotics in the Children's Cartoon *Krtek*

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Abstract

The Czech children's cartoon *Krtek* conveys meaning without the use of speech through composition, kinesis and colour, revealing a sub-conscious understanding of visual semiotics amongst young children who are mainly attuned to sensory representation and motion. This essay builds on research in the field of visual literacy and developmental psychology to investigate how visual signs produce meaning because it answers the need for insights into young children's interaction with and comprehension of media texts. The visual semiotic analysis of five *Krtek* episodes illustrates how meaning-making through aesthetics ties into sensory experiences and surpasses culturally fixed meanings. It is a powerful tool to establish a shared language of representations and communication worldwide and should be integrated into children's media education.

"Seeing comes before words. The child looks and recognises before it can speak."

- John Berger, 1972

As the media industry increasingly targets and produces entertainment for babies and young children, debates about its effects on their development and behaviour intensify as well. It remains challenging to investigate how young children extract meaning from media texts. In part because of cultural assumptions around a child's comprehensive capabilities and ideological assumptions about childhood innocence. The first step in clarifying their meaning-making processes is often skipped. Namely expanding this quest beyond children's media consumption and investigating a child's semiotic understanding. Semiotic (sign) theory illustrates that spoken words are only a small part of how we communicate, like John Berger beautifully formulates in the epigraph. There are several children's cartoons which do not contain speech; the Czech cartoon *Krtek* is one of them and unveils the intrinsic plasticity of meaning through its visually-driven narratives, leaving space for individual perception. The fact that *Krtek* does not contain dialogue makes it accessible for a pre and multi-lingual audience, conveying the mole protagonist's emotions through music, nonfigurative exclamations and aesthetic features like composition, kinesis and colour. Hence, *Krtek* taps into a global semiotic awareness which surpasses cultural and ideological fixed meanings.

This essay draws on observations from the field of visual literacy and developmental psychology to explore how a visual semiotic analysis of five *Krtek* episodes can reveal the construction and interpretation of meaning. The objective is to contribute to the growing need for insights into young children's interaction with media texts and to support a more comprehensive media education. The first step will be to look at some key theories related to the process of signification and philosophy of perception. Next, a selection of research on children's semiotic development and aesthetic comprehension will be introduced. Lastly, *Krtek's* visual semiotic analysis of composition, kinesis and colour will be combined with insights from the first two sections and can lay bare the complex process of meaning-making through aesthetics.

Semiotics and the process of signification

When applying semiotic theory for analysis, one is automatically confronted with questions of perception and interpretation. To investigate the process of signification, some acclaimed theories should be taken into account. Besides focusing on semiotic theory, this chapter will look at the encoding/decoding model of communication and touch upon perception and perspective in *Ways of*

Seeing. Sara Lenninger's Doctoral Dissertation 'When Similarity Qualifies as a Sign: A Study in Picture Understanding and Semiotic Development in Young Children' (2012) offers a comprehensive perspective on several semiotic theories concerning children's use of signs. She agrees that "a distinctively semiotic study must bring in the philosophy of meaning, where questions about the subject are in focus" (Lenninger 2012, 137), this is the aim of this section.

The term Semiotics refers to the detailed study of signs which investigates how meaning enters into auditive or visual representations (signs) that are integrated into language and culture. There are several definitions of a sign, but this essay will adopt Charles Sanders Peirce's theory who coined the term semiotics in the 1860s and argues that a sign can be anything which holds meaning to us. The meaning of a sign depends on the person who sees it and the context it is seen in, what is a sign for one might not be a sign for another, so the distinction between connotation and denotation disappears (Gripsrud 2006, 28). It is extremely difficult to determine the definite meaning of a sign since its meaning is mostly arbitrary. "Peirce's semiotics is, in other words, a theory of perception and knowledge (epistemology) as much as a theory of communication" (Gripsrud 2006, 29). Peirce considers signs in triadic relation and makes a distinction between (a) "symbols" which are entirely conventional and arbitrary, (b) "icons", resembling the real-life objects or things, and (c) "Indexical signs", which have casual relations to what they stand for. All three types of signs play with individual perceptual experiences but are also strongly influenced by their (social) contexts. Lenninger (2012, 64) reflects on Peirce's sign classification saying that it "is not dependent on the expression side alone, and the subject must attend to competing dominance between iconic, indexical, and conventional grounds" because signs cannot fully avoid representing cultural beliefs and ideologies.

Cultural theorist Stuart Hall focusses more specifically on how media texts are encoded and decoded in cultural contexts, and he stresses the importance of analysing the shared cultural maps of meaning in relation to signifying practices. A transcripted lecture by Professor Hall, 'Representation & the Media' (1979), highlights the complexity of meaning production in communication. Hall uses the word representations, referring to "the way in which meaning is somehow given to things which are depicted" (Hall 1979, 6). He argues that representation is part of the object or event itself because its meaning enters into the event through culture and ideology. In other words, we communicate and make sense of the world around us through a shared language of representations which have been culturally encoded. Representations here also refer to signs; their cultural meanings are externalised through discourse and other signifying practices. His argument that "nothing meaningful exists outside of discourse" (Hall 1979, 3), invites us to look at representations

and signs as both "reflection and distortion of reality", because how can you measure their universal truth? Hall was the first to develop the "Encoding/Decoding model of communication" (1973) which disregarded the earlier linear model: Sender-Message-Receiver. He claims that media audiences decode or interpret messages differently depending on their personal experiences, cultural backgrounds and economic standing. Hall stresses that "there is no escape from the fact that meaning is, in the end, interpretation. It always shifts from one historical setting to another. It is always contextual" (Hall 1979, 18). On the other hand, he mentions that, this fixating of meaning, what Peirce (2017) calls "The Fixation of Belief" is precisely what certain political forces aim to achieve. Even if we would all communicate according to the same universal map of meaning, Hall critically asks how one could ever check if we see and perceive the world in the same way as everyone else.

Questioning what we see lies at the core of this research. The book *Ways of seeing* (1990) written by John Berger analyses paintings to investigate visual meaning and perception. Berger points out that we never look at images without relating it to other elements and to ourselves. This makes it impossible to agree on one meaning of a picture, colour or shape because any of such signs pass through the subjectivity filter of the perceiver. The meaning of an image changes depending on what we see before, beside or after it (Berger 1990, 29). However, this does not mean that the meaning of the image itself becomes entirely obsolete. Paintings establish a world in themselves through aesthetic elements which are perceived by the viewer simultaneously. Animated images and cartoons establish their world by narrating the order in which aesthetic elements are presented. This possibility opens up a new type of power, "we could begin to define our experiences more precisely in areas where words are inadequate - Seeing comes before words" (Berger 1990, 33).

Communicating meaning beyond words, through aesthetic elements, can create new meanings which acknowledge and respect individual perceptions.

Philosophical debates about meaning and perception are infinite, but this essay merely scratches the surface in order to situate visual semiotic analysis within its larger philosophical dimension. The realisation that we perceive the meaning of individual signs according to cultural maps of meaning, and through our individual perception filter is crucial. Meaning is everywhere, transforming our personal comprehension and collective cultural evolution. Semiotic analysis can help to better distinguish differences in perception, like Gripsrud (2006, 28) concludes: "semiotic analysis is as much a frame of mind as it is a set of techniques". For the purpose of this research, we need not only to look at differences in adult perception, we must also take into account a child's

perception and semiotic development before putting these insights into practice in analysing the *Krtek* cartoon.

Semiotic Development in Children

Developmental psychology, combined with semiotic studies, have proven to be suitable for investigating young children's aesthetic comprehension and communicative practices. Sara Lenninger's Doctoral Dissertation (2012) incorporates several of such studies and investigates how picture comprehension develops throughout the first three years of a child's life. She focusses on children's ability to detect and understand similarity relations in pictures, arguing that "the picture sign reflects a dual semiotic process..." (Lenninger 2012, 12). Picture understanding requires recognition of perceptual similarities. At the same time, picture understanding uses underlying communication processes which are deep-seated in all possible types of signs. The Dissertation identifies "two different organisations of meaning relations in picture signs: as primarily perceptual (visual) and as primarily communicative (cultural)", what encompasses the child's construction of meaning entails understanding both perceptual and conventionalised similarities (Lenninger 2012, 187). Lenninger emphasises children's inherently communicative tendency from the moment they are born and offers a framework for observing the development of their picture-sign understanding.

Experiments conducted by Judy DeLoache have helped many scholars (including Sara Lenninger) to investigate when young children gain insight into symbol-referent relations. Her article 'Early Understanding and Use of Symbols' (1995), examines how young children start using symbols as an information source and ground for reasoning. The experiment presents children with a scale model of a room where a doll has been hidden. They test how the participants execute the task of relating the scale model to the real-life version of the room in order to find the doll. The research led to a "heuristic, conceptual model" of young children's use and understanding of symbols. In a later study, DeLoache and Chiong (2009) specifically focus on educational infant media and question to what extent babies learn from it. Their result shows that "infants and very young children have difficulty understanding the relation between what they see on a screen and the real world" (DeLoache and Chiong 2009, p4). However, this does not mean that inside the model or show such similarities or relations are not detected either. A deeper look into children's semiotic development is required.

Ordan Zlatev and Mats Andren mainly analyse children's "acts of bodily communication" to distinguish five developmental stages in children's use of signs: Stage 1 (protomimesis) "gives rise to shared representations between self and other", stage 2 (dyadic mimesis) "in

which the body is felt to be 'one's own' (...) stabilises, around nine months", stage 3 (triadic mimesis) occurs around fourteen months and establishes "the three-part relationship between (i) self-initiated mimetic gesture, (ii) its intended meaning and (iii) the receiver of the intended meaning", stage 4 (protolanguage) begins between twenty to twenty-seven months and "brings along a more or less explicit understanding (insight) that the meaning of the sign (gesture or word) is common to oneself and the addressee, i.e. the sign's conventionality", and stage 5 (language) "introduces semiotic systematicity, involving hierarchical relations between composite and simple signs (...) This corresponds to the basic mastery of a public language (spoken or signed)" (Zlatev and Andrén 2009, 3-5). The article concludes that the cultural similarities in children's semiotic development outweigh the cultural differences (Zlatev and Andrén 2009, 19). Facial gestures are also capable of transcending cultural specific meanings. Eeva Elliott and Arthur Jacobs (2013, 3), explain that, what children acquire as facial expressions, are "semiotic units and the knowledge of how to combine them into more complex semiotic units". They distinguish between three dimensions on which facial expressions vary: semantic, compositional, and iconic. They argue that, even though there are many culturally specific meanings, it has been suggested that universal meanings of particular facial expression are evident.

The stages and transitions mentioned above also help to investigate a child's aesthetic comprehension of visual elements like colour, lighting and depth of field. The article by Xiaona Ma highlights that children's animation is an integral part of their growth and psychological development but does usually not provide for younger children below three because their abilities of aesthetic comprehension are different (Ma 2015, 34). Young children focus on colour contrast and the emotional conveyance in kinesis rather than plot and moral concepts of right and wrong. Teacher and researcher Sylvia Pantaleo (2015, 125) registered "concern about student's visual literacy skills", and her article describes the results of two classroom-based studies conducted in grade four and seven. It offers insights into the children's knowledge, appreciation and interpretation of various visual elements like colour, line, point of view, and framing, "the students' responses (...) demonstrated their awareness of the synergistic nature of the semiotic resources of images that were studied during the research" (Pantaleo 2015, 125). She stresses the importance of teaching children how to analyse visual elements in multimodal text and examine their multiple meanings in order to improve children's selection, interpretation and understanding of the texts. "Living in a visually rich world does not mean that youth are naturally visually literate" (Pantaleo 2015, 114). Here Henry Jenkins (1997, 2) would argue that the "myth of childhood innocence" is kept in place partly by the lack of education in media communications. All the scholars mentioned

in this section would agree with him that: "We need to help our children to become more critically reflective about the media they use (...) our goals must be not to protect our children but to empower them" (Jenkins 1997, 3). Incorporating visual semiotic analysis into the curriculum would be a good starting point.

Even though heaps of research has been done on children's meaning-making processes, it remains impossible for any kind of study to map its complexity and formulate one developmental theory applicable to all children. However, defining phases and stages of a child's semiotic development is beneficial. Young children communicate and comprehend meaning produced through (visual) signs from a young age onwards, yet not in the same way as adults do. Any bit of research helps to dissect further how children do interpret and make use of signs. Like the insight that a child's (pre-lingual) communication consists of learning to recognise similarities and comprehend visual signs; they will integrate those that are used by their immediate environment. It is vital to investigate a correct pedagogical response but first attempt to look at media texts through the eyes of a child and analyse visual semiotic elements like composition, kinesis and colour.

Visual Semiotics in Krtek

The ability to communicate a rich meaning to child audiences without the use of speech is what makes *Krtek* so significant. Animator Zdeněk Miler developed *Krtek* (meaning Mole in Czech) and his first film won two Golden Lions at the Venice Film Festival in 1957. All episodes have been released under the Czech animation studio Bratři v Triku which was founded in 1945. Miler's daughters played an essential part in his creative process. He showed them previews of all his new works in order to determine if the episode's message was perceivable by children. Miler excluded dialogue to make the *Krtek* films accessible for the entire world. "[His] films drew audiences in more than 80 countries, including China, India and Japan" (Hevesi 2011). Miler managed to covey the mole protagonist's perception and emotions through non-figurative exclamations, kinesis and instrumental score's. The music which accompanies the cartoon amplifies the character's personalities and emotions; its importance should be recognised but will not be further addressed because *Krtek*'s visual use of signs is the primary focus of this essay.

Krtek' storylines seem to be driven by explorations of an environment or object in which composition plays an important role. The Mole functions as an intermediary, he "observes the world through the eyes of a child but at the same time shows children how things are made" (Miklóssy and Ilic 2014, 152). Most episodes are symmetrically framed in a theatre-like way, maintaining one viewpoint on eye-hight of Krtek. The cartoon never switches to POV-shots; this adds a sense of

looking at a stage. There are usually only a few elements in the foreground: Krtek himself (and/or other characters), plus one or more objects which will be interacted with. How such environments and objects are designed connotes their (in)significance or relation to the character. For example, the episode 'Krtek a Zápalky' (1974) is set in autumn and the floor is covered in leaves which are bigger than Krtek himself and he collects chestnuts which are almost half his size (fig.1). This already illustrates that he has a different relationship to the forest because he is significantly smaller. Krtek finds a matchbox underneath a leaf and as it is placed in the centre of the frame, he first circles it, exploring from a distance. Lenninger (2012, 177) suggests that "infants have expectations about the properties or behaviour of objects before they can reach for them manually or explore them with high perceptual resolution". Krtek functions as an extension of curious children's eyes.

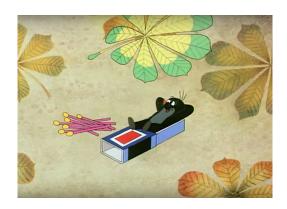


Figure 1: 'Krtek a Zápalky' (1974)

He tests the object and different ways of using it, from a bed to a swing to a boat etc. In the episode 'Krtek a Vejce' (1975) Krtek finds an egg and ends up on a tray of eggs that is being transported to a cookie-factory. Opposed to the organic shapes inside the forest, the cookie factory introduces sharp lines and a less shallow depth of field (fig.2). Sylvia Pantaleo's (2015, 121) classroom-based study tested (grade 7) students comprehension of lines and found they recognise "the multiple types of information that can be conveyed by an artist's use of lines". Students pointed out how the use of lines can lead the viewer's eyes into different directions. In Berger's (1990, 13) words: "The compositional unity of a painting contributes fundamentally to the power of its image." Another



Figure 2: 'Krtek a Veice' (1975)

element which is strongly related to how compositional elements gain significance has to do with the character's kinesis.

Any gesture performed by *Krtek* characters is an exaggeration of human gestures and emotions, making them relatable for young children. As Krtek repeats these gestures throughout different episodes, they begin to bear more meaning, like Lenninger's similarity thesis points out. Besides the fact that animals exhibit human emotions and gestures, the cartoon occasionally anthropomorphises objects as well. In the episode 'Krtek a Telefon' (1974), Krtek finds an old rotary dial telephone. As he interacts with it, the phone first starts to behave like a dog, then like a cat and finally turns into a baby. Even though the object remains the same, its behaviour changes through simple shifts in Krtek's interaction with it. This is how it conveys different meanings. As the phone starts to shiver and cry, Krtek responds by covering it in a blanket and rocking it in his arms (fig.3). Like Elliott and Jacobs describe (2013, 1) "some facial expressions have a universal meaning which can be interpreted without reference to culture", expressions related to comforting a baby could be categorised as such, possibly because it involves a recognisable emotion.



Figure 3: 'Krtek a Telefon' (1974)

Besides happiness, sadness and anger, the episode 'Krtek a Zelená Hvězda' (1969) encompasses a full range of complex emotions such as longing, tenderness, awe, devotion, envy and grief. While cleaning out his hole, Krtek hits his head on a bump of dirt. This surprises and slightly shocks him, illustrated by his enlarged eyes and the confused touching of his head. The second time he hits his head causes frustration; instead of reaching for his hurt head, he now grabs his shovel with a sharp frown and attacks the bump. Language does not merely consist of spoken or written words; our bodies move and articulate thought and emotion in various ways (Hall 1997, 11). As the dirt crumbles down, a shining object falls out. Krtek's feeling of awe is immediately reflected in the way he gently approaches the object and takes it in his hands. Outside, he raises it above his head into the night-sky, connoting that the shining object is a fallen star and that he wishes to return it to its origin (fig.4). This is an example of how kinesis and composition work together to signify an



Figure 4: 'Krtek a Zelená Hvězda' (1969)

object's importance. The episode's antagonist, an envious magpie bird, amplifies the star's enchanting nature and ends up betraying Krtek's trust. Instead of returning the star to the sky, the magpie bird hides it in his nest among his other treasures. Once reunited with the star, Krtek shows extreme tenderness, pulling it close to his chest and caressing it with his cheek. As the night falls again, he looks longingly up to the sky. His mimicry does not show mere sadness, it shows grief. Tears run down his cheeks filling the birds-nest with an actual puddle of grief. Such strong emotions are not commonly associated with child communication, yet Krtek manages to convey them in their most ontological sense. Zlatev (2013, 59) mentions that "mimesis in the sense of — mime (as in symbolic play), as well as the communicative intent necessary for —triadic mimesis, is still absent in children around the age of one". If children of such young age were to watch the scene described above, they would not yet be able to relate it to their own emotions, but being exposed to them might influence its gradual development. Furthermore, emotion is not merely produced by kinesis, colour also plays a vital role in how we experience an environment.

This final part of *Krtek's* analysis will look at how colour is employed as an artistic and educational element which simultaneously speaks to our feelings. The colour design of the episode's backgrounds consists of soft watercolours and even though they are never in focus, they tell half of the story. Most of the episodes are set inside the forest, where shades of green and subtly coloured flowers set the scene (fig.5). One could easily frame episode stills and consider them as autonomous works of art. Objects placed in the foreground jump out because of the use of gouache and dark pencil contours. Xiao Ma (2015, 36) describes how "animations' attractions for children audience change from bright colours and exaggerated models to interesting plots". Following this



Figure 5: 'Krtek a Medicina' (1987)

line of thought, *Krtek's* use of colour would capture both very young and older children's interests as their eyes will gradually shift attention from the apparent forefront colours to the artistically engaging background sceneries.

The cartoon occasionally uses colour to tell a more explicit story. In the episode 'Krtek Malírem' (1972), the Mole attempts to escape from a fox as he comes across a collection of painting jars. Covered in paint, he realises his new appearance scares the fox. This inspires Krtek to paint his forest friends with the plan to scare the fox away for good. The big hare, for example, is transformed into a tiger by applying yellow and black stripes to his fur. This visual metamorphosis of the character also changes his behaviour and illustrates how colour can transform meaning (fig.6).



Figure 6: 'Krtek Malírem' (1972)

Overnight they paint all the trees and plants surrounding the fox hole, they strongly contrast with the dark background. The scenery is now completely un-relatable and almost psychedelic (fig.7). In this context, Berger (1990, 15) notes that, "Mystification is the process of explaining away what might otherwise be evident". To illustrate the agency and power of colour, this episode throws all ties to reality overboard and creates a visual scape which stands on its own. Even though *Krtek* incorporates references to objects and events in the real world, the main purpose of its visual appearance is often to show the individual agency of objects or visual elements. Xiao Ma stresses that "animation scripts should be written in a manner to make any element completely understood by children" (Ma 2015, 35). Krtek's investigative attitude allows such full exploration and attention for a single object or activity even if the child might not fully comprehend it.



Figure 7: 'Krtek Malírem' (1972)

Exploring Krtek's composition, kinesis and colour as single semiotic units reveal not only their individual agency, it also illustrates how prevalent non-speech communication is. Judy DeLoache (1995, 111) argues that "Anticipating a symbolic relation, children focus less on the concrete characteristics of a symbol and more on its abstract, representational function". Krtek's explorations of the unknown happens through the eyes of a child and are based on sensory experience. The cartoon conveys meaning and emotion through composition, kinesis and colour; it teaches children a broader sign language, aesthetic meaning-making which incorporates universal signs that are understood by all people no matter their social or cultural heritage.

Conclusion

Semiotic theory addresses how signs produce meaning and how this establishes cultural meanings. Children gradually learn to interpret and use these cultural signs from their immediate environment. Today, in the 21st century, they also interact with a dominantly present and globally connected media environment. The distinct use of signs in media texts is integrated into their lives. The *Krtek* cartoon illustrates how, even without verbal signs, meaning is strongly conveyed through composition, kinesis and colour. Combined with insights and research from the field of visual literacy and developmental psychology, we gain a better understanding of the perception of the child and how a media text can shape it. *Krtek's* value lies in establishing a sensory space with aesthetic features, movement and music, a world beyond words. Hence, it invites a different way of perceiving its meanings. We should examine how young children's conceptual activities, which are mainly attuned to sensory representation and motion, could be an advantage and should be enforced through their education.

There are infinite ways of seeing and decoding meaning. The *Krtek* cartoon taps into a global semiotic awareness which surpasses cultural and ideological doctrine. Where verbal culture and ideology fixates meaning, non-verbal communication expands meaning, opening it up to different interpretations to build a more globally shared language of representations. The episodes themselves already reveal the intrinsic plasticity of visual signs and the multiple meanings they can convey. This is why *Krtek* is watched and loved worldwide. If we examine non-verbal ways of communication to understand the aesthetics of meaning-making, we can build a more comprehensive media education that focuses on teaching children how to navigate today's accelerating media landscape and understand that the universal language lies beyond words.

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