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EPISTEMIC STANCES IN THE DISCOURSE OF CHILDREN TV SHOWS

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Abstract: An important aspect of the acquisition of knowledge deals with our beliefs about the nature of knowledge or epistemic stances. Language plays a key role in the acquisition of such beliefs. This study explored the epistemic stances in the discourse of children TV shows. Twenty hours of children TV programming from 10 TV channels recorded in Santiago, Chile, were analyzed for discourse strategies that marked epistemic stances. The analysis found five discourse strategies with the following epistemic stances: (1) knowledge is best learned when focused around a single theme, and (2) through sequences or steps; (3) everyone has equal access to knowledge; (4) knowledge is naturally built with scaffolding through dialogues; and, (5) knowledge does not originate only from the rational mind, but also from the emotional heart.

Keywords: children TV shows, epistemology, discourse strategies, discourse analysis, epistemic stances

Actitudes Epistémicas Del Discurso En Programas De Televisión Infantiles

Resumen: Una parte importante de la adquisición del conocimiento se relaciona con nuestras creencias sobre la naturaleza del conocimiento o actitudes epistémicas. El lenguaje juega un rol clave en la adquisición de tales creencias. Este estudio exploró las actitudes epistémicas en el discurso de programas de televisión infantiles. Se analizaron 20 horas de programación televisiva grabada en Santiago de Chile, proveniente de diez canales, para definir las estrategias macro discursivas que marcaban actitudes epistémicas. Se identificaron cinco estrategias discursivas con las siguientes actitudes epistémicas: (1) el conocimiento se aprende mejor cuando se centra en una sola temática, y (2) a través de secuencias o pasos; (3) todos tienen el mismo acceso al conocimiento; (4) el conocimiento se construye naturalmente con andamiaje mediante diálogos y (5) el conocimiento no se origina solo en la mente racional, sino también a partir del corazón emocional.

Palabras claves: programas televisivos infantiles, epistemología, estrategias discursivas, análisis del discurso, actitudes epistémicas.

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1. Introduction

The discussion of acquisition of knowledge is frequently limited to theories of learning. But an important aspect of knowing, and often neglected, is essentially a very ancient epistemological question: what is the nature of knowledge? Questions such as: What types of knowledge is privileged over another? Is knowledge gained from sense experience preferred than that of intuition? And, more importantly, how do we evidence knowledge? Language, unique to humans, plays a key role in discovering our epistemological states. Language is not only a tool that allows us to gain knowledge, but, more importantly, it is a mirror that reflects the scope and type of our knowledge. By analyzing certain aspects of language-use, studies have attempted to determine epistemic attitudes, or as they are usually referred to as *epistemic stances*, in speakers (Heritage, 2013; Raymond and Heritage, 2006). This study, as point of departure, intended to explore the epistemic stances in the discourse of children TV shows.

Linguistic research, for the most part, has focused on morphosyntactical aspects of epistemic stances in everyday speech. Much remains to be done to expand our understanding about the ways language practices at the global level, such as the ways choice of discourse strategies would influence epistemic stances. Such exploration needs more attention in the context of media communication, since the outreach is not only a single person, but progressively a global audience.

The discourse of children TV shows is a fertile ground for such investigation for many reasons. First, contrary to most everyday speech, the language of children TV is carefully worked out and scripted. As such, the epistemic stances are frequently planned rather than accidental. Moreover, in contrast to many adult TV shows, such as reality, comedy, and talk shows, which only intend to be entertaining, modern children TV shows are created to be educational and to be efficient in transferring knowledge. Hence, they provide us with a unique opportunity to explore the kinds of epistemic stances that mass media has envisioned for young audiences at home.

2. Literature review

2.1. Levels of knowledge

There are at least three aspects in the way language practices can interact with knowledge. These include: (1) the acquisition of knowledge, (2) the function of knowledge, and, (3), the nature of knowledge.

Each social institution or community has its own way of transferring knowledge. Through language practices novices come to learn the way new forms of knowledge and skills must be acquired (Tweed and Lehman, 2002). For instance, Moore (2008) has shown that there are significant differences in learning practices in the non-Western world with those of Western worlds. Even within the Western educational system, pedagogical methods to teach new forms of knowledge to pupils have considerably

changed during the past 80 years or so to match with emerging learning theories, such as behaviourism (Pavlov, 1927; Skinner, 1953; Thorndike, 1932), cognitivism (Hartley, 1998, Piaget, 1952, 1985), and socio-cultural learning theories (Bruner, 1991; Dewey, 1998; Vygotsky, 1978).

The second aspect is in regard to the function of knowledge. At schools, children learn language, arts, humanities, and basic sciences as groundwork for future and more serious specialized skills or professions. In that context, the goal of learning is to become professionals. Media, on the other hand, show us with a vast and diverse amount of information about the world around us with the implicit function of turning us into living encyclopaedias; that the more we know, the better off we are. In contrast, children of farmers or hunter-gatherer communities in remote areas of the planet may only learn necessary skills to survive in their immediate environment (Diamond, 2012). Hence, there are wide assumed functions for the acquisition of knowledge.

The third level of knowledge has an epistemological dimension. From this perspective, the nature of knowledge is questioned and explored. In other words, the interest is to know if there are different ways of accessing knowledge, and to know about its extent and scope. Similar to cultural differences in learning, there is a wide variation of epistemological attitude toward the nature of knowledge (Chan and Elliott, 2004; Gottlieb, 2007). Moreover, studies have shown that there is a direct relationship between learning and epistemic stances, especially in the context of schooling (Buehl and Alexander, 2005; Cano, 2005; Glaser, 1984; Karabenick and Moosa, 2005; Schommer, 1990; Schommer, Crouse, and Rhodes, 1992).

As discussed previously, human language is an important tool that allows us to access knowledge. But, more importantly, differences in language practices can also hint to differences in epistemological viewpoint (Watson-Gegeo, 2004). In fact, there is a recent movement to revive a new version of the linguistic relativity theory of Sapir-Whorf (Sapir, 1958; Whorf and Carroll, 1956) to advocate that the morphosyntatic and lexicon diversities in languages are evidences of differences in epistemological perspectives among language-users across different cultures (Deutscher, 2010; Kovecses, 2006).

This study is concerned with the later aspect of knowledge, that is, to explore how language practices can indicate certain epistemic stances. By analyzing the discourse of children TV shows, as a point of departure, and by following Bateson's idea of *deutero-learning* (1972), this study argues that there is a meta-learning effect produced by discourse practices utilized in children shows. By watching TV shows, children do not only come to gain new forms of knowledge, but frequently also learn about the knowledge itself. There are in fact many different epistemic stances about the nature of knowledge, and through language practices, media play an important role in the way we come to have those stances.

2.2. Acquisition of epistemic stances

It may appear that all humans acquire knowledge the same way, but many variables are involved in the way we approach, process, and retain knowledge (Wildenger, Hofer

and Burr, 2010). For instance, studies have shown that human developmental stages (Fischer and Pipp, 1984; Piaget and Inhelder, 1969), cultural differences (Greenfield et. al., 2003; Lillard, 1998; Varnum et. al., 2008), access to education (Glaser, 1984), and exposure to media (Tichenor et. al., 1970), among others, shape the way we approach knowledge. These findings have important implications because they suggest that despite similarities in our cognitive system, individuals or communities may interact with knowledge in fundamentally different ways.

An exploration into the dynamics of ordinary epistemology has a greater urgency in human early life than that of adults since some of the initial dispositions to cognition have been shown to have enduring and stable effects. For instance, Varnum and colleagues (2008) have suggested that the differences in perception and cognition across cultures can be readily explained by early social orientations. In another related finding, Greenfield (1999) studied the learning processes and cognitive development of Maya children of Mexico, once in the 1970s and then again in 1990s. Her comparative studies demonstrated that there was a major shift toward more analytical thinking, abstract representation, and creativity between two generations of Maya children when their social upbringing shifted from an agricultural-based environment toward a more money-oriented society. Greenfield took her finding to suggest that "culture is inside the individual, [and] that human beings are intrinsically social and primed both to learn from and to teach their conspecifics" (p. 37).

2.3. Linguistic markers of epistemology

Much research about the relationship between language practices and epistemic stances has focused its attention at the lexical and grammatical level of language. These studies seek to understand how the speaker choice of words or grammatical structures reflects certain epistemic attitudes. Paradis (2003), for instance, has argued that the meaning of the adverb 'really' is highly context-sensitive, and that speakers condition its use to portray different epistemic stances of truthfulness. Similarly, Vold (2006) studied linguistic hedges in research articles published in three different languages, English, French, and Norwegian. The findings of the study showed that English and Norwegian researchers use hedges more frequently as epistemic markers than their French counterparts. And at the grammatical level, Fitneva (2001) has shown that "epistemic marking in Bulgarian characterizes the source of information rather than the speaker's attitude" (p. 401). These and similar studies strive to understand how changes at the morphosyntactical level of language can show different epistemic attitudes in speakers or different interpretations on the part of listeners.

2.4. Epistemic stances in children TV shows

TV shows are one of the most important ways in which children both receive linguistic input (Linebarger and Walker, 2005; Rice, 1983) and learn about the norms, values, and the world around them (Samaniego and Pascual, 2007; Tan et al, 1997). However,

in contrast to classical children animation series, such as Mickey Mouse or the Bugs Bunny show, produced solely with entertaining goals, increasingly modern children TV shows carry educational messages, and intent to teach children new forms of knowledge, skills, and ways of behaviour (Tizard and Hughes, 2008). Often, these messages are not carried out by typical parents or teachers, but by a body of specialists such as psychologists, TV screenwriters, and pedagogical consultants disguised in the form of a wise fish, a witty fairy called Tinker Bell, or a 5-year old adventurer girl named 'Dora the explorer.' Hence, in analyzing the epistemic stances in the discourse of 'Dora the explorer,' we are gaining insight into the way mass media thinks about learning and knowledge.

This paper has the following structure. First, the methods and data used for the study are discussed. Next, the results of the study are explained, complemented by actual transcripts of the data. The results section follows, divided into five sections, "thematization of knowledge," "sequentialization of knowledge," "democratization of knowledge," "Dialogization of knowledge," and, "dramatization of knowledge". The paper concludes with a discussion and conclusion section.

3. Methods and data

The examples used in this study come from recorded TV programmes intended for young children. The data were collected from 10 TV channels in Santiago, Chile. Six of them broadcast on cable TV and cover the whole Latin America and many parts of the world, and four free-to-air channels broadcast for local audiences. The content of the free-to-air channels were also very similar to cable TV. A total of 60 children shows were selected for this study. The selection of data included different genre of shows, such as, animation, children competitions, puppet shows, and in-studio recorded contents. Most TV shows intended for children have around 20 minutes of content (excluding the commercial time). The data were recorded in its original production language, mostly in English. Hence, 20 hours of data were selected, recorded digitally, and transcribed using transcription conventions (Goodwin and Heritage, 1990; Ochs, 1979). Discourse analytical methods were used to analyze the data (Wood and Kroger, 2000). Segments of data that carried epistemic messages at global and macro level of language-use were selected for analysis.

4. Results

Previous studies had focused on epistemic stances between conversational partners or written text at the micro and morphosyntactical level of language (Cornillie, 2009; Fitneva, 2001; Paradis, 2003; Vold, 2006). In contrast, this study looked at more global and macro discursive structure of language in children TV shows that carried epistemic stances. Five general categories of global discursive strategies were found in the data.

4.1. Thematization of knowledge

From a discourse analytical perspective, one of the most important communicative strategies used in children TV shows was carried on by means of introducing diverse forms of knowledge. Every single show, however, had a specific theme. Each theme aimed to produce a focused learning event. Table 1 shows typical children TV programming broadcast sequentially on the TV channel *Discovery Kids* with the major learning outcomes of the show. As shown in the table, the TV shows covered a broad range of knowledge and skills, from knowing about mockingbirds, platypus, and fish, to providing the audience with pieces of advice on friendship and household responsibilities. There are many implicit messages embedded within such epistemological approach. The first message is that children should know about an array of subjects about the world around them. Another implicit epistemological message is that separate and independent parts of knowledge may not need to be related. In other words, there is no information as to how such pieces of puzzle may fit to create a bigger body of knowledge. Most people born into the digital age may take such epistemological approach as granted. However, an overview of many traditional societies can reveal a very different picture. In such societies, the extent of knowledge is restrained to correspond with only daily life activities, and frequently there is no clear border between types of knowledge (Diamond, 2012). As a communicative strategy, theme-centered topics, or as labeled here, *thematization*, portray knowledge as bounded and delimited.

Name of the program	**Major learning outcomes**
The cat in the hat	How yarn is made from wool
Martha speaks	The life of cowboys
Sesame street	Knowing about shapes and numbers
Bananas in pyjamas	Knowing about the Mockingbird
Bananas in pyjamas	The importance of keeping your environment clean
Jelly Jamm	Darkness is not scary
Hi5	Knowing about different fish
My big big friend	Learning a new language is as much fun as playing
Backyardigans	Why is it important to be smart, brave, and strong
Lazytown	There are no shortcuts in life
Mister Maker	How to create crafts at home (a tropical island model)
Wild Kratts	Knowing about platypus
Princesses of sea	The importance of friendship
Princesses of sea	The importance of home
Wow! Wow! Wubbzy	The importance of books in learning a new skill
Wow! Wow! Wubbzy	Imagination is the key to having fun
Caillou	There are different ways to solve a problem

Table 1: Sequential shows broadcast on the TV channel *Discovery Kids* with the major learning outcomes assumed for each show.

4.2 Sequentialization of knowledge

Similar to the above discourse strategy, frequently children TV shows implemented a protocol-like procedure to transfer knowledge. In the data, learning or activities were usually broken down into smaller steps, and young viewers were reminded about the current step and also the remaining steps that had to be followed in order to accomplish a task. At times, those steps were spelled out from the very beginning and at other times, they were linguistically marked by using discourse markers such as, 'first,' 'next,' 'then,' and 'and finally.'

In the animation series *Agent Oso*, a teddy bear, Agent Oso, receives instructions from his computerized assistant, *Paw Pilot*, to complete certain assignments. The assignments are timed and they usually involve helping kids around the world who have trouble with very mundane life issues such as tying their shoestrings or blowing the birthday candles. In one episode, the wind blew away the ticket of a little girl under a pier, who was waiting to ride on a carousel. While singing with accompanying background music and being cheered by children (CH), *Paw Pilot* (PP) called *Agent Oso* to help the little girl with riding the carousel on time[1].

Transcript 1

1	PP	three special steps that's all you need
2	PP	three special steps and you'll succeed
3	PP	the special assignments starting now
4	PP	and the <u>three special steps</u> will show you how
5	CH	<u>STEP ONE</u>
6	PP	find the lost ticket
7	CH	<u>STEP TWO</u>
8	PP	pick a horse to ride
9	CH	<u>STEP THREE</u>
10	PP	climb onto the horse

There are at least three epistemological messages embedded within the framework of these kinds of protocol-like knowledge. First, young viewers are encouraged to think of knowledge as stages with defining borders rather than being on a continuum. Second, they are reminded that all other learning events in the show are only backgrounds for a foregrounded issue, which is the termination of an assignment. And third, children are prompted to assume that applying knowledge in real-life

[1] The transcription conventions can be found in Appendix 1.

situations requires high levels of concentration, and that one should avoid being distracted by other events that may show up during the execution of a task. From an epistemological standpoint, using step-like procedure and highly focused tasks in the transfer of knowledge is related to Cartesian dualistic philosophy, where learning is considered to be the trait of the logical and abstract 'mind' and not the physical 'body'. From such perspective, knowledge is associated with the analytical mind. Breaking tasks into their logical steps allows faster and easier processing.

4.3. Democratization of knowledge

Many children shows found within the data were an adaptation of mythological, historical, fairytale, or religious stories. Fairies, princes and princesses, kings and queens, prophets, noblemen, wizards, emperors, and heroes, to name a few, were commonly found in TV shows that were based on such tales. In the original story, these figures are usually portrayed as extraordinary personalities, some assumed to be immune to mistakes due to their inherited qualities, and others to possess unusual abilities, courage, or wisdom. It is interesting to note that in such stories, the knowledge of these characters is portrayed very differently than the kind of knowledge that has been discussed so far. These extraordinary entities do not learn by reading books or by engaging in a discussion. They are either born that way or are inspired by a higher entity bigger than humanity. The epistemological approach in such stories resembles a top-down approach to knowledge, where the wizard, the superhero, or the teacher assumes the roles of the transferring knowledge and expertise to others. Similarly, in the original version of these stories, experience is given more importance than abstract knowledge, and one *learns* to fulfill a professional, cultural, or moral role.

In the data analyzed for this study, however, children TV shows gave a modern twist to such epistemological approach to the acquisition of knowledge and to those extraordinary characters involved in the stories. These figures were portrayed in a very different light than of those from, let us assume, the original Grimm brothers' fairy tales (Zipes, 1987). The heroes, fairies, and wizards commonly committed mistakes and even learned few things, especially from children. The young characters of these TV stories were active participants and knowledge-bearers, rather than passive bystanders to be rescued, taught to, or disciplined. In fact, sometimes the extraordinary figures were ridiculed to compensate for cultural biases that put them in the pedestal of knowledge.

In the animation series '*Dora the explorer*,' the main character, *Dora* (DR, in the transcript), and her monkey pal, *Boots* (BT), go on a new adventure in every show. In one such adventure, Dora became a participant in a fairytale, where a king had lost his mother and asked a host of fairytale characters to bring her back. All refused to help, and it was only Dora who had the courage to accept the adventure. Rather than accessing any magical knowledge or power, Dora used real-world items such as her favourite map to guide her on her path and her backpack full of practical items to save the king's mother. Additionally, by presenting questions to her young audience

at home, Dora constantly engaged with other children as a source of knowledge to carry on with her mission. Dora is not only a child; she is a knowledgeable child and represents the wisdom of all children by engaging them through many of her discursive features. As shown in the following transcription, interrogatives in lines 1, 3, and 8 (Heinemann, 2006; Woodward-Kron, 2007), pauses in lines 4, 10, and 12 (Slotta, 2004), and directives in lines 9 and 11(Goodwin and Cekaite, 2013; Rahma, 2012) were used as linguistic resources to allow children to become active participants in the construction of knowledge.

Transcript 5

1	BT	but dora we don't know where the king's mommy is?
2		((dora faces her imaginary audience at home))
3	DR	who do we ask when we don't know which way to go?
4		(2.2)
5	BT	THE MAP
6	DR	the map (.) right
7		((dora faces her imaginary audience at home))
8	DR	will you check the map to see where the king's mommy is?
9	DR	you have to say MAP
10		(1.0) ((a map sneaks out of dora's backpack))
11	BT	SAY MAP SAY MAP ((talking to audiences at home))
12		(2.2)
13		((the map jumps out of dora's backpack and start singing a song))

In this and similar stories, the relationship between a child and fairytale characters are not of critical importance, especially in the construction of knowledge. The fairytale characters are only used as a context to make stories more attractive. Additionally, when a child is in need for more information, it is the other children who have to come to his aid and not the fairytale characters. As such, the epistemological approach in these shows intends to defy cultural biases that give importance to the knowledge of an all-knower person in lieu of empowering the knowledge of children. In the same show, the king constantly behaved childishly by sobbing and crying out, "*I want my mommy, I want my mommy*."

4.4. Dialogization of knowledge

Dialogues were one of the important discursive features found in children TV shows. Dialogical interactions were achieved through a myriad of communicational and linguistic markers such as use of questions, pauses, and elaboration of the topic. That

is, characters of the TV shows, which usually consisted of only children, utilized these linguistic features to create instances of dialogical interactions. In such events, the adult characters were either in the background of such interactions or played an equal role in the dialogues. Moreover, animals, frequently used in lieu of human characters in children shows, were equally engaged in the dialogical interactions.

Dialogues are, of course, famously recognized as the Socratic Method of constructing knowledge (Jowett, 1911). Within such epistemological perspective, knowledge is not bestowed to an individual, but instigated through a series of collaboration of different ideas and sharing of collective experiences. Hence, being a philosopher, teacher, scientist, or an expert does not grant a person a higher access to the truth. Questions, comments, and elaborations are tools of the Socratic Method as they place the construction of truth in the centre of a debate instead of a person. Within this epistemology, every individual has equal access to provide and create knowledge. Similarly, the use of animals in children TV shows intend to neutralize cultural and societal features, such as age, gender, and social class that create hierarchical structures with respect to knowledge.

In the animation series *Bubble Guppies*, mermaids sat down on a stair-like platform to listen to Mr. Grouper, a big orange fish. Mr. Grouper instructed the mermaids about the mysteries of ancient Egypt. The physical characteristics of the setting evoke a classroom context, where learning is assumed to happen. However, it is the particular kind of dialogical interaction between the characters that implicate an epistemological viewpoint about the nature of knowledge. Here a fish is a teacher, and human-like mermaids are the students, undermining the role of human adults as providers of knowledge. And as seen in the following transcript, the fish, or Mr. Grouper (MG) did not provide the answer; rather, following Socratic Method, knowledge was *scaffolded* (Vygotsky, 1978; Wood, Bruner and Ross, 1976) and mediated by all the participating mermaids, Molly (MO), Jana (JA), Gil (GI), Oona (OO), and Nonny (NO).

Transcript 4

1	MO	Mr. Grouper did you ever go to a place called Egypt?
2	MG	Egypt? wow no but I always wanted to go there
		oh I love to see the pyramids the river Nile and the Sphinx
3	JA	hey what happened to his nose? ((referring to the Sphinx))
4	GI	nobody knows
5	MO	[that's the secret of the sphinx]
6	GI	[that's the secret of the sphinx]
7		((everyone laughs))
8	GI	but if we can figure out what's the secret of the sphinx
		we'll find its nose

9	JA	mysterious ((speaking spooky))
10	MG	oh yes the sphinx's missing nose is just one of the many mysteries of the ancient Egypt
11	OO	what does ancient mean?
12	NO	ancient means very very old
13	MG	that's right Nonny

In the above dialogue[2], mermaids constantly provided answers to one another's questions (line 4, 5, 6, and 12), and did not wait for Mr. Grouper to tell them the correct response. All the participants, furthermore, used previous expressions to scaffold and advance the discussion. The topic of the Sphinx introduced by Mr. Grouper (line 2) was turned into a question by Jana (line 3), and responded to by Gil (line 4), and further twisted many times by other participants throughout this learning event. Furthermore, within this epistemic framework, all questions were answered, and comments were appreciated. In this and similar instances, questions, comments, and elaborations by involved parties were used as discourse strategies to allow for participation and collaboration of knowledge. And in so doing, our young TV viewers are encouraged to think about knowledge as dialogical and participatory.

4.4 Dramatization of knowledge

It is not only the fairytale characters and adults who have lost their privileged access to knowledge in children in TV programmes. The children TV shows, at times, also took on the role of empowering children and recognizing their collaborative knowledge even at the expense of challenging the extent of rational mind. By valuing subjective experiences of children, these shows encouraged children to trust their intuition, emotions, and imagination as important sources of knowledge.

In the animation movie '*Tinker bell and the great fairy rescue*,' broadcast on Disney channel, a young girl named *Lizzie* (LI, in the transcript), attempted several times to convince his father, *Dr. Griffiths* (DG), a dedicated scientist, of the existence of fairies. The father insisted that fairies were not real and were only the product of imagination. In one interaction, Lizzie showed her father a field journal filled with drawings made by her and her fairy friend, Tinker bell, as proof of the fairies' existence.

[2] Reprinted from Social Semiotics, Vol 25, edition 5, Saeid Atoofi, "Context from a social semiotic perspective: a discourse analytical study of the children TV show, Bubble Guppies" Pp. 558-577, Copyright (2015), with permission from Tylor and Francis.

Transcript 6

1	DG	oh, elizabeth. this is what you have been doing?
		field journals are to be filled with facts and not fairy tales
2	LI	but father these are facts ((pleading tone))
3	DG	I don't understand this foolishness. you have such talent
		why would you waste it this way?
4	LI	why can't you just (1.2) believe me?
5	DG	I believe in what is real. and it is about the time you started
		doing the same ((father puts away all fairy artifacts))

As shown in the transcripts, Dr. Griffiths did not believe her daughter's accounts of the events. At this point Tinker bell became furious and produced herself as evidence of the fairy's existence. Naturally, Dr. Griffiths still dismissed such things as fairies and believed that Tinker bell was nothing more than an evolutionary mutation. The movie continued with the dramatization of events in which Dr. Griffiths softened his scientific view and finally came to *see* the fairies. In this and similar examples, dramatization was used as a communicative strategy to intensify the emotional states in the favour of the child character. Children were constantly reminded that they share similar sentiments and that the outside world may not have a positive evaluation of their subjective experiences, such as daydreaming, imaginations, and fantasies. Dramatization produced two related effects. First, it allowed children to feel sympathy for one another by recognizing their common subjective experiences. Second, from an epistemological standpoint, dramatization blurred the boundary between knowledge gained from sense experience and the rational mind from that of sentiments and fantasies, and in so doing, it allowed all kinds of knowledge to fall into a continuum of human experiences rather than into objective facts.

From this epistemological stance, knowledge was portrayed as more dynamic and inclusive rather than static and exclusive. That is, knowledge, rather than consisting of immutable facts obtained and disseminated by rational scientists, was depicted as a constantly-developing phenomenon that was created by all of our experiences, including those of imagination and fantasies. In such construction of knowledge, the rational mind must take the backseat and allow the emotional heart to drive the child to the unknown.

5. Discussion and conclusion

The findings in this study show that the discourse of children TV programmes, above and beyond passing on new forms of knowledge, contains messages about the very nature of knowledge, i.e., what is knowledge and how it must be acquired. More

globally, the data analyzed for this study showed that, in terms of an epistemological perspective, the discourse of children TV shows do not follow a particular philosophy, whether modern or classical, but one that intends to validate the knowledge and experiences of children.

As illustrated in the data, the classical debate of emotional heart versus rational mind in knowing and interacting with the world is still very much alive in children TV programming. Yet similar to the heroes of the *Star Trek* series, where rational and logical Commander Spock always argued with the emotional and wise Captain Kirk, children TV shows frequently remind their young audiences that emotions carry their own source of intelligence, and that emotions, hopes, and fantasies are what makes us humans. However, as evidenced in current trends in discourse analysis, affective stances do not function only as a decorative layer over speech, but rather as an important pragmatic and co-operative dimension of talk that convey action onto words (Goodwin, 2000; Goodwin and Cekaite, 2013; Kaukomaa, Peräkylä and Ruusuvuori, 2013). That is, dramatization of events in children programmes functions to mimic real world phenomena by depicting that 1) our thoughts and behaviours are naturally organized and co-constructed within a multimodal environment that encompasses, at least, an affective and a discursive dimension, and, 2) without emotions, humans are similar to robots that lack incentive to convert inner states such as thoughts into their corresponding action.

Other than theoretical implications in discourse analysis and philosophy of language (Devitt and Hanley, 2006; Lepore and Smith, 2006), the findings of this study can also make a practical contribution to educational-related fields and communication studies. First, beyond the lexical level, we now understand how language at the discursive level can portray knowledge as one kind or another, at least within the medium of children TV shows. Second, the findings allow us to critically assess the discourse of any learning settings with an eye to not only the content of learning, but also its epistemic scope. That is, language does not only convey new forms of knowledge, but at the macro level, it also instructs the learners about the very nature of knowledge.

Relatively, a big corpus of data was analyzed for this study; however, there were many constraining factors in methodology. For instance, while a great majority of children shows are produced in North America and Australia, most countries in the world also broadcast their own locally-produced programming that may differ widely, both in content and form, from those analyzed here. Second, this study focused on only some of the epistemic stances at the macro discursive level. Other studies may find and focus on other aspects and discourse strategies not analyzed here. Third, while this study, for the most part, was interested to explore the global discourse strategies of epistemic stances, there is always a direct relationship between morphosyntactical (micro) and discursive (macro) features of language. Words do not carry inherent meaning without a context, and reversely, context is defined by the way people use certain words in lieu of others (Atoofi, 2015). In response to these shortcomings, future studies can look into non-Western children TV contents and also the way epistemic stances are carried over from sentence level to discourse and vice versa.

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Appendix 1

Transcription conventions

(1.5) Numbers between parentheses indicate length of pauses in seconds and tenths of seconds.

. . . Three dots indicate an untimed pause.

= Equal signs indicate 'latching,' that is, two utterances that follow one another without any perceptible pause.

[A square bracket between turns indicates the point at which overlap by another speaker starts.

(don't) Words between parentheses in the first line of the transcripts represent the best guess of a stretch of talk which was difficult to hear. Words are added in the parentheses in the second or third line of the transcripts to provide meaningful translation in English.

(()) Material between double quotes provides extralinguistic information, e.g. about bodily movements.

so::: colons indicate the lengthening of the last sound.

>talk< Right and left carats (or “more than” and “less than” symbols) indicate that the talk between them was speeded up or “compressed” relative to surrounding talk.

<talk> Left and right carats (or “less than” and “more than” symbols) indicate that the talk between them was slower or “stretched” relative to surrounding talk.