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An Explorative Legal Approach to Advertising by means of Smart Toys

Master Thesis

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A big ‘thumbs-up’ goes to Matúš Mesarčík, my friend and colleague-student of the MA Law and Technology program, for the delightful exchange of thoughts that led to the title of this thesis.

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## Chapter 1

### Introducing Our New Friend

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#### 1.1 Introducing: My Friend Cayla©

In a world that is rapidly digitalizing, it is not strange to find more and more products aimed at connecting people to people (social media), devices to devices (the Internet of Things) and people to devices (smart-phones, smart-watches etc.). Smart toys are an example of the various internet-connected devices that are entering people's homes. Interconnectedness does however not seem favourable in all circumstances, as was the case with the smart toy "My Friend Cayla"<sup>1</sup>, a doll that was produced in the USA and was widely distributed on the European market. The doll raised a lot of concerns related to privacy (the recording of children's voices)<sup>2</sup> and security (hackability of the software)<sup>3</sup>. Following these concerns, various consumer organizations, such as the Nordic Forbrukerrådet and the Dutch Consumentenbond, recommended that the product was to be taken off the shelves. This recommendation was treated seriously; e.g. the distribution of the doll was halted in the Netherlands "out of precaution"<sup>4</sup> and because of claims of espionage German parents were even told to "destroy"<sup>5</sup> the doll if they owned one.

Furthermore, the Forbrukerrådet has pointed out that a careful reading of the smart toy's<sup>6</sup> privacy policy leads to the conclusion that by purchasing, "agreement" is given to allow targeted advertising to children. This advertising would, according to the policies, be based on "anonymized, personally identifiable information or information that the buyer makes publicly available"<sup>7</sup>, thus any information that is collected through the company's services.<sup>8</sup> In the same

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<sup>1</sup> My Friend Cayla website: <<https://www.myfriendcayla.com/>> (last assessed August 24th 2017).

<sup>2</sup> 'Call for privacy probes over Cayla doll and i-Que toys' (December 6<sup>th</sup> 2016), <[www.bbc.com](http://www.bbc.com)> (last assessed August 24th 2017).

<sup>3</sup> 'German parents told to destroy Cayla dolls over hacking fears' (February 17<sup>th</sup> 2017), <[www.bbc.com](http://www.bbc.com)> (last assessed August 24th 2017).

<sup>4</sup> 'Blokker haalt spionpop Cayla voorlopig uit de schappen' [Blokker takes spy doll Cayla off the shelves for now] (December 6<sup>th</sup> 2016), <[www.ad.nl](http://www.ad.nl)> (last assessed August 24th 2017).

<sup>5</sup> 'German parents told to destroy Cayla dolls over hacking fears' (Februari 17<sup>th</sup> 2017), <[www.bbc.co.uk](http://www.bbc.co.uk)> (last assessed August 24th 2017).

<sup>6</sup> This counts for "My friend Cayla" as well as for "i-Que Intelligent Robot", both brought by Genesis Toys <<https://www.genesis-toys.com/>>. (last assessed August 24th 2017).

<sup>7</sup> My Friend Cayla, Terms and Conditions: <<http://myfriendcayla.co.uk/agreement>>; My Friend Cayla Privacy Policy (February 23rd 2015), <<https://www.myfriendcayla.com/privacy-policy>> (last assessed August 24th 2017).

<sup>8</sup> F. L.-H. Myrstad (Forbrukerrådet), *#Toyfail: An analysis of consumer and privacy issues in three internet-connected toys* (December 2016), p. 23.

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context, the consumer organization also expressed its concern for the large number of pre-programmed phrases, which include a lot of references to other products. These products can be related to the company's affiliated merchandise, or constitute merchandise that is offered by other companies with whom licensing agreements were reached.<sup>9</sup> Pre-programmed phrases could include for example how much a particular Disney movie is "loved" by the smart toy, or by talking happily about affiliated products that are sold separately (Hello Barbie).<sup>10</sup> Although the most immediate concerns that led to a halt of the EU-wide distribution of "My Friend Cayla" were security related, the Forbrukerrådet has raised a fair question concerning (child) consumer rights in the case of such targeted advertisements in toys connected to the internet.

## **1.2 Relevancy of research on smart toy advertising**

My Friend Cayla is not alone. Other smart toys with similar features are entering the European market, such as i-Que Robot<sup>11</sup>, Hello Barbie<sup>12</sup> and Furby Connect<sup>13</sup>, and not all of these are under the same amount of suspicion regarding (security) risks, like My Friend Cayla. This illustrates that smart toys with integrated software for advertisement purposes are real and are entering people's homes. This is also reflected by the worldwide worth of the smart toy's market, which is one of billions of euros and is forecasted to grow immensely over the next years despite worries related to the negative publicity regarding privacy and security aspects of smart toys.<sup>14</sup> This, together with the ever progressing technology of Artificial Intelligence and a desire for smart toys in children<sup>15</sup>, attributes to the prognosis that smart toys are a phenomenon of technology that is here to stay.

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<sup>9</sup> F. L.-H. Myrstad (Forbrukerrådet), *#Toyfail. An analysis of consumer and privacy issues in three internet-connected toys* (December 2016), p. 24.

<sup>10</sup> *Idem*.

<sup>11</sup> I-Que Robot website: <<https://www.ique-robot.com/>> (last assessed August 24th 2017).

<sup>12</sup> Hello Barbie, 'Frequently Asked Questions', <<http://HelloBarbiefaq.mattel.com/>> (last assessed August 24th 2017).

<sup>13</sup> FurbyConnect website: <<https://www.hasbro.com/en-us/brands/furby>> (last assessed August 24th 2017).

<sup>14</sup> E.g. In 2015, IDATE Digiworld estimated a market worth in 2015 of 3.82 billion euros worldwide and forecasted it would steadily grow towards a staggering 8.38 billion euros: Statista, 'Smart Toys – A Huge Market Potentially in Danger?' (July 24 2017), <<https://www.statista.com/chart/10389/smart-toys-market-in-danger/>> (last assessed August 24th 2017).

<sup>15</sup> Statista, 'Number of children interested in smart toys in selected countries worldwide as of July 2014 (in millions)' (2017), <<https://www.statista.com/statistics/348507/children-smart-toys/>> (last assessed August 24th 2017).

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Apart from the (awakening) awareness towards privacy and security issues, these toys enable targeted advertising, which means that the act of advertising is tailored to fit the individual that is interacted with. This style of advertising can be called unique when one considers it is employed in smart toys, a product designed to entertain and be mostly used by children. Moreover, it is a product that is played with in locations such as a child's bedroom, where privacy is (still) thought to reign and parental supervision cannot at all times be guaranteed, which in turn adds to the suspicion that a smart toy is an undesirable instrument for marketers to use for advertising. However, at the time of writing of this thesis no focus of research has yet been laid on the topic of smart toys on the side of consumer rights and child protection, leaving it doubtful whether current EU legal frameworks that are meant to offer protection when it comes to advertising are met or whether these frameworks can even be applied as they are to this (new) kind of advertising.

Based on their findings in the My Friend Cayla doll, the Nordic consumer organization has filed a complaint to the Norwegian Data Protection Authority regarding the doll's user agreement and privacy policy and their alleged violation of privacy and consumer rights.<sup>16</sup> No response has been given as of yet, at least not one that has made public. Nonetheless, research into smart toys and advertising is still relevant as the complaint focusses on the policies of a specific smart toy (and one closely resembling it; i-Que), while this research aims to investigate the use of smart toys as an instrument for advertising from a legal perspective on a general basis.

### **1.3 Research questions**

#### **1.3.1 Main research question**

The aforementioned thoughts lead to the main research question that shall be explored in this thesis, namely: does a legal void exist in the current EU legal frameworks of consumer- and children's rights on the protection of children against (targeted) advertising by means of smart toys?

The hypothesis underlying this question is that smart toys as a means of advertising slips through the gaps of the existing EU legal frameworks on children's protection against targeted advertising due to certain features that smart toys have (i.e. by design) that make that the current

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<sup>16</sup> The Norwegian Consumer Ombudsman, 'Complaint regarding user agreements and privacy policies for internet-connected toys – the Cayla doll and i-Que robot' (6 December 2016), direct link: <https://fil.forbrukerradet.no/wp-content/uploads/2016/12/complaint-dpa-co.pdf> (last assessed August 24th 2017).



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legislation does not apply to them, accumulating to the conclusion children are not protected in the way they are thought to be.

### 1.3.2 Sub-questions

In order to find an answer to the main question, the following sub-questions will be used as a guide. Each sub-question shall correlate to a designated Chapter:

- 1) What is a smart toy and in what way(s) does it differentiate from other toys? (Chapter 2)
- 2) What is targeted and commercial advertising and in what manner is it employed in smart toys? (Chapters 2 and 3)
- 4) What makes commercial advertising by means of smart toys different from other regularly used methods of advertising? (Chapter 4)
- 5) Do the current EU legal frameworks of children's and consumer rights protect children against (targeted) commercial advertising (i.e. is there a legal void)? (Chapter 5)

## 1.4 Research method and methodology

### 1.4.1 Methodology: exploratory research

As far as I could see before writing this thesis, this work will be the first research that is aimed at testing the current EU legal framework of consumer rights and child protection against features of smart toys that enable targeted commercial advertising. Due to the modest scope of this thesis, I will only be able to ascertain whether there are any problems posed by advertising through smart toys. By problems I mean the possible circumstances that either (a) legal protection is not provided for when it comes to commercial and/or targeted advertising towards children by means of smart toys or (b) that legal protection is provided for, but that smart toys challenge the efficacy of these provisions because of its special set of features.

Alongside the modest scope of this research, there is another reason why no conclusive answer can be given to any problems that may have become apparent during or as a result of this research. This other reason lays in the fact that the answering of legal questions, such as those regarding advertising, more often than not goes hand in hand with questions that are ethical or multidisciplinary in nature. These are questions such as: *ought* the matter to be regulated (e.g.

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regulation versus parental responsibility)? And the question: is regulation in this case *feasible* (e.g. negative influence on the economy)? Such questions are difficult to answer and the attempt of coming to an answer would require a multidisciplinary approach. Another obstacle on the road to finding an answer can moreover be cultural and political influences. Not by any means am I trying to say that it will be impossible to reach an answer that can be worked with in practice. The aforementioned merely serves as an explanation for the reason why is chosen for the methodology of an exploratory research for this thesis.

#### 1.4.2 Research purpose

However, the fact that no definitive answers can be given, does not mean that this research is deprived of a goal. In the broadest sense, the purpose of this thesis is to add a modest item to the general debate of how new technologies (can) challenge existing legislative and regulatory frameworks. In particular, the purpose of this work is to draw attention to smart toys, an area for which there is a growing attention when it comes to security and privacy issues, yet none for the potential ways of unlawful advertising.

This thesis aims to assess whether targeted and commercial advertising by means of smart toys requires the attention of the EU legislator, which would be the case when the result of this research points towards the existence of a legal void. As far as this exploration goes, this thesis is not meant to distribute a negative message alone towards current legislation or towards smart toys in general. Its purpose must rather be found in providing insight with the intention of preserving or acquiring an adequate protection of children's rights in light of progressing technologies.

#### 1.4.3 Method: literature

The conducted research for this thesis is primarily based on literature from various fields of expertise. The multidisciplinary approach is needed as the act of advertising involves many different domains and drawing from legal sources alone is clearly not sufficient in order to come to a satisfying conclusion of this research. The domains that are predominantly included in this research are those of marketing, psychology, philosophy and law.

General information on smart toys is mostly taken from manufacturers' and distributors' information, terms and conditions or privacy policies and from studies on toys, their use and their history in general. Dictionary definitions were used to explain the concepts of commercial and non-commercial advertising. The concept of targeted advertising is explained on a source of

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marketing. Sources from the field of psychology were important for information concerning the impact of the (outward) features of smart toys on children. This particularly, but not exclusively, involved the workings of anthropomorphism.

Though multidisciplinary sources were needed for this research, the prime orientation of this thesis is legal. Therefore, many EU sources of legislation were used to bring about this research. This mainly involves primary and secondary instruments of EU legislation and case law.

## **1.5 Thesis lay-out**

It was already mentioned in Paragraph 1.3 that the sub-questions of this study shall correlate with the Chapters found in this thesis and how this would roughly play out. What will follow here is a more detailed outline of what information the reader can expect to find in each Chapter.

Chapter 2 shall focus on providing definitions of the concepts of “targeted” and “commercial advertising”, “children” and “smart toys” as they shall be meant in this thesis.

In Chapter 3 will be explored whether and how advertising is employed in smart toys and whether smart toys are used to gather information that would enable the practice of (targeted) advertising.

In Chapter 4 will be determined why advertising and information gathering by means of smart toys differs from other regularly used methods of advertising. The special features of smart toys as well as concepts of manipulation and anthropomorphism will be discussed.

In Chapter 5 will be explored whether the current EU legal frameworks of children’s and consumer rights provide children with protection against (targeted) commercial advertising.

In Chapter 6, the above findings will be used to come up with initial ideas on ways of regulation insofar a legal void was found in the current EU legal frameworks in regard towards the protection of children against (targeted) commercial advertising by means of smart toys.

A summary and conclusion will provide the answer to the main question and the sub-questions and finish this thesis.

## Chapter 2

### Game On: Key Definitions

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In this Chapter, the definitions of “advertising”, “children” and “smart toys” as they are meant in this thesis shall be given in a detailed account. They will be discussed in the same order: “advertising” in Paragraph 2.1, “children” in Paragraph 2.2 and “smart toys” in Paragraph 2.3.

#### 2.1 “Advertising”

##### 2.1.1 A dictionary’s definition

Advertising can be commercial, non-commercial or a combination of both. When someone talks about advertising, the term usually relates to advertising for commercial purposes. This is reflected in the standard dictionary entries of the word. The Oxford English Dictionary defines the verb “advertising”<sup>17</sup> as an act to *“describe or draw attention to (a product, service, or event) in a public medium in order to promote sales or attendance.”* According to the same Dictionary the verb can furthermore be used to *“1.1 Publicize information about (a vacancy)”*, *“1.2 Make (a quality or fact) known”* and in a more archaic matter of speech *“1.3 Notify (someone) of something.”*

I do not deem it fruitful to make a detailed discussion about whether a smart toy (or other home device for that matter) can be called a “public medium”. I believe it is enough to assume that using a “public medium” refers to the situation that a commercial message is distributed from a marketing entity towards a potential consumer, be it directly or indirectly. Indirectly refers to the situation in which person A is confronted with commercial content and then serves as an agent to deliver the message to person B, making person B a potential consumer. This situation is particularly relevant in light of toy advertising and advertising by means of smart toys as it’s a usually a parent or other adult that buys the toy, not the child itself, which has even been found to potentially lead towards conflicts in child-parent relationships.<sup>18</sup>

Due to the definition’s qualities of meaning “making a quality or fact known” and “to notify someone of something”, advertising can also relate to non-commercial advertising. Concerning

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<sup>17</sup> Cited verbatim from Oxford Dictionaries, search term “advertise” on <https://en.oxforddictionaries.com/> (last assessed August 24th 2017).

<sup>18</sup> M. Buijzen, P.M. Valkenburg ‘The effects of television advertising on materialism, parent–child conflict, and unhappiness: A review of research’, *Applied Developmental Psychology* (2003) 24437–456.

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the adjective “non-commercial” the Oxford dictionary states: “*Not having a commercial objective; not intended to make a profit*”.<sup>19</sup> The main objective of non-commercial advertising is to provide people with information and to stimulate people to act after exposure to this information.<sup>20</sup> It can be used by governments to inform citizens<sup>21</sup>, political parties to gain votes for an election and non-profit organisations to raise awareness for a certain cause and ask for donations.

The difference between the two kinds of advertising thus lays in the intent on making profit. A non-profit dental organisation may bring out information regarding the desired frequency of tooth brushing and may advice on the use of toothpaste with added fluoride without any commercial intent. This would constitute non-commercial advertising. However, the same information can be used with the sole intent to sell a toothbrush or toothpaste. This would obviously be an act of commercial advertising.

European consumer rights are founded on commercial advertising. This is shown by the European Commission’s view and aim of “placing consumers at the heart of the internal market”<sup>22</sup>, which “requires the strengthening of their ability and confidence to buy goods and services”<sup>23</sup>. This view is also mirrored in regulations such as the Consumer Rights Directive<sup>24</sup> in respect of distance and off-premises contracts. Therefore, this thesis shall focus on commercial advertising, meaning that advertising in this thesis can be understood as a means of communication for the purpose of promoting the sales of goods or a service.

## 2.1.2 Targeted advertising

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<sup>19</sup> Cited verbatim from Oxford Dictionaries, search term “non-commercial” on <<https://en.oxforddictionaries.com/>> (last assessed August 24th 2017).

<sup>20</sup> ‘What Is the Difference between Commercial and Non-Commercial Advertising?’, <<http://www.wisegeek.com/what-is-the-difference-between-commercial-and-non-commercial-advertising.htm>> (last assessed August 24th 2017).

<sup>21</sup> E.g. to remind citizens of easy steps they can take to prevent break-ins and burglaries in their home: Dutch Ministry of Security and Justice ‘Maak het ze niet te makkelijk [Don’t make it too easy for them]’, , , Campaign 2014, <<https://www.rijksoverheid.nl/actueel/nieuws/2014/11/17/een-op-de-vier-inbraken-eenvoudig-te-voorkomen-door-de-deur-op-slot-te-doen>> (last assessed August 24th 2017).

<sup>22</sup> Council Regulation (EC) on a multiannual consumer programme for the years 2014-20 (2014), OJ L 304/64, Recital 2.

<sup>23</sup> *Idem*, Recital 1.

<sup>24</sup> Council Directive on consumer rights (2011) L 304/64.

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Targeted advertising is advertising that is ideally tailored to fit an individual's needs, interests or desires. It usually concerns commercial advertising, but this doesn't mean that it isn't used for non-commercial advertising.<sup>25</sup>

A quick overview shall be given here of what targeted marketing entails, with Facebook used as a primary example of the practice as it extensively applies this kind of advertising. By using the Facebook profile of a user, Facebook collects information relating this individual. With all the gathered information, a digital 'footprint' is rendered that is stored in a "matrix of interests and personal proclivities that make each person unique in the meanderings", that is called a "social graph".<sup>26</sup> This is what makes up the targeting grid that Facebook sells to advertisers.<sup>27</sup> Information that is used by the algorithm to make this social graph include, but is not limited to "gender, geographic location, age, sexual preference, relationship status, workplace and education attributes".<sup>28</sup> Ads can also be targeted on "the content [the users] included in their profiles, as well as the Pages, Groups and other onsite content [the users] have chosen to connect with. This includes sections like Interests, Activities, Favorite Music, Movies and TV shows."<sup>29</sup> But it doesn't end there as Facebook can also target ads based on other day-to-day activities on a person's Facebook profile.<sup>30</sup> On another interesting note, it is said that Facebook Ads cannot be turned off and testing has shown that setting privacy settings to maximum protection has no influence on targeted advertising.<sup>31</sup>

While the Facebook example provides an example of targeted advertising online, this manner of advertising is not limited to a single medium as even billboards are experimented with to offer a more personalised commercial advertisement.<sup>32</sup>

## 2.2 "Children"

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<sup>25</sup> See for a Facebook example: <https://nonprofits.fb.com/> and <https://www.facebook.com/business/success/categories/non-profits-organizations/> (last assessed August 24th 2017).

<sup>26</sup> M. Weintraub, *'Killer Facebook Ads : Master Cutting-Edge Facebook Advertising Techniques'* (John Wiley & Sons 2011), p. 8.

<sup>27</sup> *Idem.*

<sup>28</sup> *Idem*, p. 9

<sup>29</sup> *Idem*

<sup>30</sup> *Idem*

<sup>31</sup> *Idem*, p. 10.

<sup>32</sup> R. Mathieson, , 'Branding unbound: The future of advertising, sales and the brand experience in the wireless age' (New York : AMACOM 2005), p. 113.

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Another key element of this thesis relates to the term “children”. While the research conducted for this thesis draws from multidisciplinary sources, its main objective remains legal and shall concentrate on EU law. Therefore, the basic definition of “children” that shall be used for this research is the definition that needs to be taken into account by all EU member states and institutions. This definition constitutes the following: “a child means every human being below the age of eighteen years unless under the law applicable to the child, majority is attained earlier” (Article 1 UN Convention on the Rights of the Child<sup>33</sup> (UNCRC)). The UNCRC is applicable in all Member States based on EU-wide ratification and guides the European Commission with its principles.<sup>34</sup> It is implied that other references of a ‘child’ in EU regulation, among which Article 3 (3) Treaty of the European Union<sup>35</sup> on the objective for the EU to promote the protection of rights of children, point toward this definition.

It must be taken into account that smart toys as well as advertising shall mean different things depending on the various age groups of the children involved. A 16 year old may not be as interested in playing with a smart toy-turned doll as much as a 5 year old is. Unfortunately, no hard numbers could be found to indicate between what specific ages children are interested in smart toys the most. Nonetheless, it can be reasoned with that the current smart toys on the market are targeted at young children, roughly between 5 and 10 years old, based on smart toys appearing as dolls (My Friend Cayla, Hello Barbie), plush animals (My Friend Teddy) and children within this age category are depicted in the toy’s TV ads (FurbyConnect). Besides, the manufacturer of My Friend Cayla claims that the app, that’s necessary to connect the doll to a network, is suitable for children from the ages of 5 and above.<sup>36</sup> For the reasons just mentioned, this thesis shall have its main emphasis on the lower age groups of the legal definition, meaning children between the approximate ages of 5 and 10 years old. Naturally, when the term “children” is used in relation to concepts like anthropomorphism, the term shall respond to the majority of the age group as stated by the definition and not to all the children of that group.

## **2.3 What is a “smart toy”?**

### **2.3.1 The smart toy as a “smart device”**

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<sup>33</sup> Convention on the Rights of the Child of the United Nations [1989] 44/25.

<sup>34</sup> ‘Rights of the child, <[http://ec.europa.eu/justice/fundamental-rights/rights-child/index\\_en.htm](http://ec.europa.eu/justice/fundamental-rights/rights-child/index_en.htm)> (last assessed August 24th 2017).

<sup>35</sup> Consolidated Version of the Treaty on the European Union [2012] OJ C 326.

<sup>36</sup> My Friend Cayla Terms and Conditions, “The Services including the App are suitable for children aged five (5) and above”, <<http://myfriendcayla.co.uk/agreement>> (last assessed August 24th 2017).

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The term “smart toys” is not a word that can be found (yet) in your everyday dictionary (like the Oxford<sup>37</sup> and Cambridge<sup>38</sup> versions). Seeing as “smart toys” could be regarded as a separate kind of device falling under the umbrella of smart devices, the next step is to look at how that term is generally interpreted. Although smart devices are increasingly common in people’s everyday lives, such as smart phones, smart TVs, smart refrigerators and smart watches, the term “smart devices” cannot be readily found in the common dictionaries. What the Oxford Online Dictionary does give away, is the unsatisfying notion that the adjective “smart” when used (informally) for devices indicates that the device is “programmed so as to be capable of some independent action”.<sup>39</sup> I call this unsatisfying, for what is “independent action”? Is a garden light equipped with a motion sensor “smart”, because it can detect motion and respond without the need of another input? In this example, the definition provided is too wide, as such a garden light is not considered smart, even though it could fall under the definition. On the other hand, when the definition is taken too strictly, not many devices would fall under it as more often than not an input or a touch (on a smart phone) is required to make something that is programmed happen. This definition was probably not meant to be interpreted that strict, yet it doesn’t bring us closer in finding a workable definition of a smart device or a smart toy.

Another definition of “smart device” can be found roaming around the Internet. The following is derived from [www.techopedia.com](http://www.techopedia.com) as it serves as a good example of the core concept of the way in which is often referred to “smart devices”. What is here generally called “smart” about these devices is that they are “able to connect, share [data] and interact with its user, [a network] and other smart devices [remotely]”<sup>40</sup>. In other words, according to this definition, the ability to connect to a network is one of the key features of a smart device.

This brings us a step closer in preparing a definition for smart toys for the reason that internet or network connectedness is one of the features that are often seen in those toys that are brought on the market as “smart” (e.g. My Friend Cayla, Hello Barbie, FurbyConnect). Smart toys could then potentially also be seen as a “species” of the “genus” of smart devices, the latter thus functioning as a definitional umbrella.

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<sup>37</sup> Oxford Online Dictionary: < <https://en.oxforddictionaries.com/> > (last assessed August 24th 2017).

<sup>38</sup> Cambridge Online Dictionary; <<http://dictionary.cambridge.org/>> (last assessed August 24th 2017).

<sup>39</sup> Cited verbatim from Oxford Dictionaries, search term “smart” on <<https://en.oxforddictionaries.com/>> (last assessed August 24th 2017).

<sup>40</sup> Definition of “smart device”: <<https://www.techopedia.com/definition/31463/smart-device>> (last assessed August 24th 2017).



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However, while smart toys are sometimes referred to as “internet connected”<sup>41</sup> toys, this feature does not define smart toys as there are (emerging) smart toys that do not necessarily need to be connected to the internet to give a ‘smart’ response. An example of this is CogniToys Dino, a toy that is powered by the software of IBM’s Watson and Elemental Path’s Friendgine technology.<sup>42</sup> Although this toy is WiFi-enabled, the technology of Watson raised many eyebrows when it won the difficult US quiz “Jeopardy” without being connected to a network, so without having to search online for the answers.<sup>43</sup> Therefore, it is not unthinkable that a smart toy can still be considered a smart toy without necessarily having an all-time active connection to a network, thus explaining the emphasis on “*able to connect*”.

### 2.3.2 A specific way of interacting

In the previous Paragraph, a more or less workable definition could be found for the “smart” component of what would be called a smart toy. In that light it was plausible to look at smart toys as a specific example of a smart device. However, in that case there is still no conclusion of the definition of a smart *toy*. It then turns even more interesting when writers were found describing smart *toys* with a whole other approach; one that is not necessarily based on the ability of connection to a network. It was not easy to find scholars that give clear-cut definitions of smart toys in their work that I could compare. I only found two of such definitions and for the reason given just now (of having a different approaches to the concept) I found it worthwhile to mention them here. They will help in finding a workable definition, their differences only supporting the idea that there appears to be no uniform or standard definition.

Mark Allen describes “smart” not as the ability to connect to a network, but rather as the ability to engage in advanced ways of interacting with its user, aided by technology. He defines smart toys as “toys that have embedded electronics, leverage some form of computational power, and appear to have a capacity for adapting their interactivity to the abilities of the player”.<sup>44</sup>

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<sup>41</sup> H. Wallop ‘Meet Cayla – the first Internet connected doll’ (2014), <<http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/10881303/Meet-Cayla-the-first-Internet-connected-doll.html>> (last assessed August 24th 2017).

<sup>42</sup> CogniToys website: <<https://cognitoys.com/>> (last assessed August 24th 2017).

<sup>43</sup> J. Markoff ‘Computer Wins on ‘Jeopardy!’: Trivial, It’s Not’ (2011) <<http://www.nytimes.com/2011/02/17/science/17jeopardy-watson.html?pagewanted=all>> (last assessed August 24th 2017).

<sup>44</sup> M. Allen, ‘Tangible Interfaces in Smart Toys’ in Jeffrey Goldstein, David Buckingham and Gilles Brougère (eds), *Toys, Games and Media* (Lawrence Erlbaum Associates 2004), p. 179.

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Ellen DePasquale zooms in even more on the feature of interactivity by defining smart toys as “[t]oys that use technology to enhance play by interacting with the child either through the (1) initiation of “open-ended” play suggestions, or (2) [by] responding to the child’s actions in a way that sparks the child’s creativity.”<sup>45</sup> She continues by explaining that “[o]pen-ended play suggestions allow the child to define the play scenario (...) without dictating precisely what or where (...). The child is then free to use his or her imagination to invent the situation and details.” The example that she gives is an ambulance toy with the pre-recorded phrase ‘Help is needed here’, after which the child is free to use its imagination in determining the situation and who or what is in need. The second type of interaction, involving the responding to a child, is explained as the sparking of a child’s creativity by means of responses that typically involve either sound, light, movement or a combination of these.

Neither Allen nor DePasquale thus seem to take on the ability of connecting to a network as a precondition for a toy to be considered smart and focus instead on the interactivity between the toy and the child. In their view, the specific kind of by technology enabled interaction appears a key distinguishing feature of smart toys.

The increased level of interactivity is a good point to keep in mind when drafting the definition used in this thesis, as the specific way of how a toy interacts with a child will influence the degree in which advertising can take place. It will thus also offer a peek into how a toy can be used for advertising. This can help to assess whether such advertising techniques are regarded as acceptable or too invasive under current legislation.

### 2.3.3 A certain degree of Artificial Intelligence

What both points of view, whether focusing on the ability to connect to a network, or on the amount of interactivity by technology, have in common is that having electronical or digital components alone is not enough to be considered a smart toy.

In the definition provided by DePasquale, she mentions smart toys as “interacting with the child (...) [by] responding to the child’s actions in a way that sparks the child’s creativity”. The example she gives here consists of a keyboard that, instead of producing a musical sound, plays a duck’s quack that changes in tone depending on which key is struck.<sup>46</sup> The weakness of this last example is that the duck’s quack on a keyboard does not display an advanced level of interacting

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<sup>45</sup> E. DePasquale, ‘How to Be Smart About Smart Toys’, <<http://www.brainy-child.com/article/smart-toys.shtml>> (last assessed August 24th 2017).

<sup>46</sup> E. DePasquale, ‘How to Be Smart About Smart Toys’, <<http://www.brainy-child.com/article/smart-toys.shtml>> (last assessed August 24th 2017).

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on itself. The interface of the keyboard may be equipped with two different modes, but the keyboard will only produce the specific sound for which it was programmed. Of course it will be “interacting with the child (...) [by] responding to the child’s actions in a way that sparks the child’s creativity” because a button is pushed, but it will not interact with the child in the sense of adapting its responses to the specific input given by the user in the manner of conversation that a My Friend Cayla doll or Hello Barbie could.

If the response is initiated with the pushing of a button alone, without anything else (technically) happening, no distinction can be made from a ‘regular’ toy keyboard with embedded electronics. What does make the distinction, specifically the ability to adapt its response to its user, is technology that is often referred to as Artificial Intelligence. By Artificial Intelligence is meant the capability of a machine to simulate or imitate intelligent human behavior, at least to a certain degree.

From this keyboard example can thus be derived that embedded electronics alone is not enough; a toy must be equipped with a certain degree of Artificial Intelligence before it can be considered a smart toy. This appears to be another important element of the final definition.

#### 2.3.4 Additional note: the 3D feature

It might have been clear already, but I would like to make a small note here that with a “toy” is meant a 3-Dimensional object. It will not be dealt with further here, as I deem that it serves a better purpose in Chapter 4 on advertising and anthropomorphism than it does here trying to come to a definition of a smart toy.

#### 2.3.5. The definition of “smart toys”<sup>47</sup>

Concluding from Paragraphs 2.3.1 and 2.3.2, it appears that smart toys are looked at from two different perspectives. The first is smart toys seen as category of smart devices in which case they must have the ability to connect to a network (the modern-day technological point of view). The second would be smart toys as seen as a category of toys in which case the key feature of what constitutes a smart toy is the specific way of how it interacts with its user by means of technology

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<sup>47</sup> Toys may exist with the same features as what are called “smart toys” in this thesis, but these toys are sometimes attributed other names by their manufacturers, such as intelligent toy, internet-connected toy or educational toy (other variants may exist). For the purpose of this work, such toys are also categorised as “smart toys”.

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(the socio-psychological point of view). Both points of view seem to cover an important aspect of what comprises a smart toy and they do not seem to exclude one another. Therefore, I prefer to take on a definition that combines these two perspectives, which is possible for the reason that they don't exclude each other.

The ability to connect to a network I see as an outcome of the technological turbulence that plagues legislation in general, while the interactivity component seems to better pinpoint the definition towards the way in which a child can be affected by the toy's interface. Both elements are thus also well suited to serve the purpose of this thesis.

Considering the above and the features of the toys that are brought on the market labelled as "smart toys", I come to the following definition of a smart toy that will be used throughout this thesis:

*A smart toy is a 3-Dimensional toy that is outfitted with an embedded electronic circuit and an in-built central processing unit (CPU) that leverages some form of computational power and has Artificial Intelligence based software that enables interactivity by means of adapting its appearance or response to its user and has the ability to connect to a network or another device.*

## Chapter 3

### A Taste of Advertising by means of Smart Toys

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It's time to take a look at how advertising by means of smart toys happens in practice.

Unfortunately, companies do not easily nor freely hand out all information on what makes their companies tick. This gives an indication that information found on commercial activities in smart toys can either be all there is or merely be a small tip of the iceberg. Though the latter shall by most be regarded as the most terrifying scenario of the two, the most realistic take on it is to say we frankly do not know what happens with all the processed data consisting of children's voices. All I can do in this work is give information that *is* available and use it to determine that advertising by means of smart toys is not just a matter of science-fiction. The My Friend Cayla and Hello Barbie dolls shall be used to give an idea of this practice. The choice for the My Friend Cayla and Hello Barbie smart toys is based foremost on the quantity of available on-topic information, especially in light of phrases that the dolls are pre-programmed with. It is meant to provide a better grasp on how advertising can be used in all smart toys available on the market.

The first topic that shall be discussed in Paragraph 3.1 is the product or franchise related phrases that My Friend Cayla and Hello Barbie are pre-programmed with. In Paragraph 3.2, the possibility of actions with a disguised commercial intent will be investigated. In Paragraph 3.3 targeted advertising shall be at the centre of attention and will be shown how much and what kind of information can potentially be gathered by means of a smart toy. In Paragraph 3.4 shall be reflected on the ways in which advertising by means of smart toys is engaged in, in practice.

#### 3.1 Product-related pre-programmed phrases

My Friend Cayla shall be first to be discussed. The information regarding phrases that the My Friend Cayla doll is pre-programmed with has become public knowledge due to the thorough research of the Nordic consumer organisation into the toy in the so-called #ToyFail project.<sup>48</sup> The most prominent example of marketing that they found was the way in which how Cayla talked happily about “how much she loves different Disney movies [*while*] the app-provider has a commercial relationship with Disney”<sup>49</sup>. Apparently, her favourite movie is *The Little Mermaid*

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<sup>48</sup> F. L.-H. Myrstad Forbrukerrådet, *#Toyfail: An analysis of consumer and privacy issues in three internet-connected toys* (December 2016).

<sup>49</sup> F. L.-H. Myrstad Forbrukerrådet, *#Toyfail: An analysis of consumer and privacy issues in three internet-connected toys* (December 2016).

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and her favourite song is “Let it Go,” from the movie *Frozen*.<sup>50</sup> Furthermore, “Cayla also tells children she loves going to Disneyland and wants to go to Epcot in Disneyworld”<sup>51</sup>. Apart from Disney, the app-provider, a company called ToyQuest, also partners with a wide range of other licensors, including Nickelodeon and Dreamworks.<sup>52</sup> Questions that are suggested (on the Cayla website) to ask Cayla also contain those that could trigger these Disney-themed answers, such as “Who’s your favorite princess?”, “Who is Daisy Duck?”, “Tell me the story of Snow White” and “Where is Disneyland?”.<sup>53</sup> A comprehensive list of phrases that Cayla is (currently) programmed with is unfortunately not provided for by the doll’s manufacturer Genesis. The same goes for other smart toys such as the FurbyConnect and CogniToys Dino.

Hello Barbie is an exception to this. On the toy manufacturer’s website, a list can be found with all the phrases that Hello Barbie is (currently) pre-programmed with.<sup>54</sup> The most recent list at the time of writing comes from the year 2015 and is a notable 216 pages long. It is mentioned that the list continues to be updated, so it remains unclear how many lines and with what content the doll is pre-programmed with 2017 and with what content the doll is updated along the way: “Hello Barbie is programmed with more than 8,000 lines and 20 interactive games (...). More topics will be programmed from time to time to allow for engaging and tailored conversations.”<sup>55</sup>

Toy manufacturer Mattel is very clear about advertising through the Hello Barbie doll. “There is no advertising content within Hello Barbie. Your children’s conversations are not used to advertise to your child.”<sup>56</sup> A claim that sounds slightly ironic in respect of Hello Barbie winning the worst toy of the year 2015 award with 56% of the votes, organised by a non-profit organisation called the Campaign for a Commercial-Free Childhood.<sup>57</sup> Despite the name of the organisation, the main arguments for this award laid more in the field of Privacy and Data protection than that it concerned clear acts of advertising. The main argument related to the

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<sup>50</sup> J.J. Roberts ‘Privacy Groups Claim These Popular Dolls Spy on Kids’ (2016), <<http://fortune.com/2016/12/08/my-friend-cayla-doll/>> (last assessed August 24th 2017).

<sup>51</sup> *Idem*.

<sup>52</sup> F. L.-H. Myrstad (Forbrukerrådet), *#Toyfail: An analysis of consumer and privacy issues in three internet-connected toys* (December 2016).

<sup>53</sup> Questions for Cayla: <<https://www.myfriendcayla.com/questions-for-cayla>> (last assessed August 24th 2017).

<sup>54</sup> Hello Barbie-lines-v2, Downloadable from: <<http://HelloBarbiefaq.mattel.com/what-does-hello-barbie-say/>> (last assessed August 24th 2017).

<sup>55</sup> *Idem*.

<sup>56</sup> <<http://HelloBarbiefaq.mattel.com/privacy-commitment/>>; also on Hello Barbie-faq-v3.pdf, p. 4. Downloadable from <<http://HelloBarbiefaq.mattel.com/faq/>> (last assessed August 24th 2017).

<sup>57</sup> ‘Hello Barbie Wins Dreaded TOADY Award for Worst Toy of the Year’ (December 8 2015), <<http://www.commercialfreechildhood.org/hello-barbie-wins-dreaded-toady-award-worst-toy-year>>. (last assessed August 24th 2017).

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recording of children's private conversations and transmitted to cloud servers “where they are analysed by algorithms, listened to by employees of Mattel's partner ToyTalk, and shared with unnamed third parties”.<sup>58</sup> Yet, in their HellNo Barbie Campaign, the concern is voiced of potential advertising in Hello Barbie related to separately sold products that can be mentioned by the doll and the acknowledgement of Mattel that the doll will talk about pop culture and that the script will be updated to keep up the pace with the latest movies and music.<sup>59</sup> The fear of marketing lays in the question on what grounds Mattel will decide which artist and media Barbie will talk about, hinting at possible licencing or other third party contracts.<sup>60</sup>

Mattel's statement must be given credit in the sense that there are indeed no lines listed that would consist of commercial advertising as in “You/your parents could/should buy this product”. However, there is the finding of the HellNo Barbie Campaign that Hello Barbie is programmed with phrases directly involve the mentioning of other products that are separately sold by Mattel. In practice, this activity could have the effect of advertising, based on the extent in which such products are talked about and emphasized upon.

When one takes a look at the list of phrase that Hello Barbie is pre-programmed with, many of such lines can be identified. Most concern Barbie's ‘life’ and family, which can, naturally, be seen as a way for the doll and the child to ‘get to know each other’. It only so happens that by getting to know Barbie better, the child is introduced to a great portion of the Mattel line of products. Here will follow a couple of such phrases. The underlined font is added to indicate the separately sold products. Examples include: “*I have three sisters - Chelsea, Stacie and Skipper! We have a lot of fun together!*”, “*Oh! I have a cat named Blissa, a dog named Taffy, and a horse named Tawny! They're the best.*” and “*My dream house is in Malibu, California!*”

Another way in which marketing can be found is in lines that contain an indirect mentioning of other Mattel products that are sold separately. Examples include: “*Oh hi! (EXCITED) I've got a camping trip coming up and I'm so excited I can hardly stand it! It's so much fun to have something to look forward to, don't you think?*” (Barbie Camper) and “*I've been riding horses ever since I can remember! What about you?*” (Horse and Stable). Sometimes, other Mattel products can even be talked about in a conversation-style, initiated by Barbie: (response 1)

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<sup>58</sup> ‘Hello Barbie Wins Dreaded TOADY Award for Worst Toy of the Year’ (December 8 2015), <<http://www.commercialfreechildhood.org/hello-barbie-wins-dreaded-toady-award-worst-toy-year>>. (last assessed August 24th 2017).

<sup>59</sup> ‘Hell No Barbie: 8 reasons to leave Hello Barbie on the shelf’, <<http://www.commercialfreechildhood.org/action/hell-no-barbie-8-reasons-leave-hello-barbie-shelf>>(last assessed August 24th 2017).

<sup>60</sup> *Idem*.

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*“Hey! I’ve got a quick question for you. I just saw a movie and there was a unicorn... but it also had wings! So is a unicorn with wings still a unicorn or is it something else now?”, (response 2)*

*“Ohh... I’m not sure. I came in halfway through when it was on TV. But just as I turned it on... there was this beautiful unicorn with wings. Now what do you call a unicorn with wings?” (response 3) “I guess maybe they’re just extra special flying unicorns.”*

Then there are some lines about certain elements of pop culture that greatly worried the organisation Campaign for a Commercial-Free Childhood.<sup>61</sup> Not many of these could be found in the list, but (yet again) it is unknown how the list will be updated as time passes. On the topic of books, Barbie can mention *“Having a big half-giant show up at my door and say, “Barbie, you’re a wizard”...that’d be a pretty amazing day!”* thus giving a wink towards the Harry Potter series. After Barbie or the child has initiated a conversation about Halloween costumes that the child likes or has seen on others, Barbie can pose the suggestion *“You could be (...) a character from one of your favourite movies...?”* which can be followed by the expression *“Oooh icy powers are so IN! What’s your princess costume gonna look like?”* In 2015 and even now in 2017, I believe there are few children aged between 4 and 10 years old in the wealthier parts of the world that have no idea what movie or franchise is talked about here (Disney’s Frozen). Though Disney has in fact seriously let go of Mattel as partner for their Disney dolls manufacturing in 2015 (effective 2016)<sup>62</sup>, this line of conversation provides a nice look into how a conversation about products of licenced partners of smart toy manufacturers can go down, no matter how suggestive.

### 3.2 Disguised commercial intent?

There are also pre-programmed phrases that Hello Barbie is equipped with that do not relate to certain products or a certain franchise on themselves. These dubious phrases may in practice have the result of stimulating a commercial desire in children. While it is difficult to proof commercial intent, it is also hard to deny that some of the phrases seen in this Chapter are purely without such intent due to the context in which the phrases were said.

An example is the phrase: *“My birthday is March 9th!”* This is a line that is not related to a specific product, but what if a context is set in which Barbie is really looking forward to it? *“Oh yes, birthdays are definitely exciting! Cake and presents and parties...so much to look forward*

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<sup>61</sup> ‘Hell No Barbie: 8 reasons to leave Hello Barbie on the shelf’, <<http://www.commercialfreechildhood.org/action/hell-no-barbie-8-reasons-leave-hello-barbie-shelf>>(last assessed August 24th 2017).

<sup>62</sup> C. Suddath ‘The \$500 Million Battle Over Disney’s Princesses: How Hasbro grabbed the lucrative Disney doll business from Mattel’ (December 17 2015), <<https://www.bloomberg.com/features/2015-disney-princess-hasbro>>/(last assessed August 24th 2017).



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*to!*”, “(HAPPY SIGH) *I just love having things to look forward to!*”, “*When I get really excited about something, it's like I have this bouncy ball in my stomach that won't sit still!*” And what if Barbie emphasizes on how much she likes presents? “*Yes! All the presents! (WITH AWINK) I mean, they're one of the best parts, right?*”

Does this constitute advertising or not? Does the message carry the purpose of promoting the sales of goods? It is hard to tell. There is a chance young children might feel stimulated to get (or let their parents get) Barbie a present. It is “her birthday” after all. However, much will depend on how and when the relevant lines are used and structured in a conversation with the child. Examples would include repetition and the insisting on a topic (“*We talked a little bit about sisters and how I have three of them*”). The same holds true for the other pre-programmed lines that were seen earlier in this Chapter. The list of phrases does not hold a particular structure and merely serves as an indication of the possible sentences Barbie can produce. More information on the algorithm would be required to make out if, and in what quantity, the child’s mind would be ‘moulded’ in wanting to bring Barbie a gift in the form of new accessories or the company of one of her sisters (“*Oh! And I especially love hanging out with my sisters. We always have fun together!*”).

This practice can also be turned around, as Hello Barbie is supposed to ‘remember’ certain information of a child.<sup>63</sup> Parents can also provide Barbie with information on the child, such as the child’s birthday. This data will be stored internally through the ToyTalk services and thus require no internet connection.<sup>64</sup> It is even said that the first response of Barbie is checked by Toytalk’s services, to see whether the “the current day matches a day that has been marked on the conversations options such as the birthday or a holiday”<sup>65</sup>, in which case Barbie can sing a song or ask how it feels to be one year older (“*How does it feel to be five/six/seven/eight/nine/ten?*”). One can imagine how undesirable it would be if, leading up the birthday or Christmas, the smart toy starts repeating phrases that (in)directly relate to other products.

The list of pre-programmed phrases basically gives out a presumed transparency where there is none. A list is provided, but it is not known which phrases the algorithm picks up to voice its response to the child with. Though the possible responses might be provided (minus the phrases that the list would be updated with), parents or guardians might also not be aware of the effect of psychological processes, like anthropomorphism, that happen subconsciously.

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<sup>63</sup> J.K.T. Tang and P.C.K..Hung ‘Computing in smart toys’ (Springer International Publishing 2017), p. 25-26.

<sup>64</sup> J.K.T. Tang and P.C.K..Hung ‘Computing in smart toys’ (Springer International Publishing 2017), p. 24.

<sup>65</sup> *Idem*.

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### 3.3 Targeted advertising and notes on information gathering

#### 3.3.1: Targeted advertising in My Friend Cayla

My Friend Cayla's Privacy Policy states that they "use the information collected about and from you for a variety of business purposes"<sup>66</sup>. It must be remembered that by using the App that is required to be installed to enable the doll's interactive features, the terms and conditions that apply to My Friend Cayla are deemed 'accepted' by the parent or guardian of the child and that by accepting these terms and conditions, the parent or guardian has also provided 'consent'<sup>67</sup> to all the terms and conditions including those regarding the collection of personal and non-personal information.<sup>68</sup> Furthermore, the Privacy Policy states that information is shared with other parties in a limited number of circumstances, one of which constitutes targeted advertising. I believe this passage deserves a full quotation:

"Genesis may display targeted advertisements based on anonymised information, personally identifiable information or information *you make publicly available*. No personal information will be provided to the advertiser directly by us when you interact with or view a targeted advertisement. However, by interacting with or viewing an advertisement *you are consenting* to the possibility that the advertiser will collect data *from you* and/or make the assumption that *you* meet the targeting criteria used to display the advertisement."<sup>69</sup>

It's interesting that this passage states that targeted advertising may be displayed based on "information *you* make available" and that by interacting with or viewing that advertisement, you are "consenting to the possibility" of data being collected "from *you*". It follows from the preamble of the Privacy Policy that "you" is aimed at the parents or guardians of the child playing with the doll:

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<sup>66</sup> My Friend Cayla Privacy Policy (February 23rd 2015), <<https://www.myfriendcayla.com/privacy-policy>> (last assessed August 24th 2017).

<sup>67</sup> Sadly, this thesis does not provide the room to go into a detailed discussion about whether and when one can speak of truly given 'consent' and other issues related with its concept in Privacy and Data Protection.

<sup>68</sup> My Friend Cayla, Terms and Conditions: <<http://myfriendcayla.co.uk/agreement>>; My Friend Cayla Privacy Policy (February 23rd 2015), <<https://www.myfriendcayla.com/privacy-policy>> (last assessed August 24th 2017).

<sup>69</sup> My Friend Cayla Privacy Policy (February 23rd 2015), <<https://www.myfriendcayla.com/privacy-policy>> (last assessed August 24th 2017).

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“This Privacy Statement relates to our use of any personal information *you or any child under your care* provides to us via phone or text, by email, in letters or correspondence. It also relates to our use of any personal information *you, or any child under your care*, provide to us online or via any mobile device.”<sup>70</sup>

What these passages practically state, is that the parents or guardians of the child playing with the Cayla doll give their consent to the collection of their personal data and consent to targeted advertising based on this information. This can include information that is provided by the child “online or via any mobile device”. The App that runs Cayla’s interactive features is the same App that uses (and records) the child’s voice in order to do so, thus possibly allowing targeted advertising based on the child’s voice input. From the text cannot be taken whether targeted advertising is only utilised towards the parents or guardians. The phrases containing references to Disney franchise unfortunately suspect that the child is not spared.

Though the My Friend Cayla doll can be said to be ‘highly suspicious’ given the above information, targeted advertising can only be shown as a possibility. Regrettably, no examples can be given of targeted advertising ‘in action’ in the way it happens with advertisements on websites as Facebook. For the same reason, it cannot be properly established whether answers given by Cayla might be derived from sponsored websites.

### 3.3.2 The newest Barbie career: an informant?

The Hello Barbie doll is more dubious in regard to the possibility of targeted advertising. Different from Cayla, the Privacy Policy of ToyTalk, the app that enables the interactive features of Hello Barbie by providing the voice-recognition and recording technology, explicitly states that “voice recordings or their content, including any personal information that may be captured therein” is not used “to contact children or to advertise to them”.<sup>71</sup> They also state not to share voice recordings with Mattel, though “certain transcripts or other text derived from voice recordings” may be shared, but will only be used “for the purpose of enabling Mattel to assist us in providing quality control and in improving and approving the scripting of the Barbie Products”.<sup>72</sup> It makes me wonder whether this restricted sharing is what Mattel has in mind with

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<sup>70</sup> “(...) by interacting with or viewing an advertisement (...)”, My Friend Cayla Privacy Policy (February 23rd 2015), <<https://www.myfriendcayla.com/privacy-policy>> (last assessed August 24th 2017).

<sup>71</sup> Hello Barbie/Barbie Hello Dreamhouse Privacy Policy (11 April 2017), <<https://www.toytalk.com/HelloBarbie/privacy/>> (last assessed August 24th 2017).

<sup>72</sup> *Idem*.

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the intent to update Barbie from time to time “to allow for engaging and tailored conversations”<sup>73</sup>.

Regrettably, it is not possible for me to see whether Mattel and ToyTalk hold their promise to the applicable Privacy Policy. A list of pre-programmed phrases on itself does not make targeted advertising and while updates for more “tailored conversations” could turn into a form of targeted advertising, I lack the information to make a good assessment of whether such practice takes place. In order to make an accurate analysis one would need to know how the algorithm of the smart toy works; what responses are triggered when, how the dialogue is built up and with what content the smart toy is updated with.

The Privacy Policy attempts to steer away from concerns related to activities of targeted advertising, but this doesn’t satisfy just yet. The reason for this is found in the amount of information that is collected by ToyTalk. As mentioned in the real-life example of targeted advertising on Facebook, an individual’s interests and preferences must be ‘mapped’ to enable targeted advertising. Information happens to be the necessary element to make the socio graph on which an advertising grid can be based. In the Hello Barbie list of phrases, put together by ToyTalk in collaboration with Mattel<sup>74</sup>, many lines involve an inquiry for information. While the actual voice recordings may not be shared for advertising purposes, it is not clearly defined in the Privacy Policy whether voice recordings are used to make a socio graph or advertising grid of the child or its parents that *is* shared or sold to other parties as seen in the targeted ads policy of Facebook. According to the Policy “feature extracted data”, which is said to be “data that is created from the voice recordings, but which no longer contain a child’s voice”, may be shared with service providers or other third parties.<sup>75</sup> These parties may use this data for research and development purposes that are unrelated to the services they provide ToyTalk, but no mention is made of commercial purposes.<sup>76</sup>

In ToyTalk’s Privacy Policy and Mattel’s Privacy Commitment<sup>77</sup> targeted advertising is only denied regarding advertising towards children. This leaves open the option for targeted advertising towards the parents or guardians on the parental account of the ToyTalk app based on

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<sup>73</sup> ‘Q: What willHello Barbie talk about?’, <<http://HelloBarbiefaq.mattel.com/wp-content/uploads/2015/08/HelloBarbie-faq-v1.pdf>> (last assessed August 24th 2017).

<sup>74</sup> ‘Q: What is the role of ToyTalk?’’, <http://HelloBarbiefaq.mattel.com/wp-content/uploads/2015/08/HelloBarbie-faq-v1.pdf> (last assessed August 24th 2017).

<sup>75</sup> Hello Barbie/Barbie Hello Dreamhouse Privacy Policy (11 April, 2017), <https://www.toytalk.com/HelloBarbie/privacy/> (last assessed August 24th 2017).

<sup>76</sup> *Idem*.

<sup>77</sup> ‘Hello Barbie Privacy Commitment’, < <http://HelloBarbiefaq.mattel.com/privacy-commitment/>> (last assessed August 24th 2017).

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information that was provided by the child during playtime. It can be questioned whether this would constitute a desirable development.

Below will follow an overview of phrases pre-programmed in Hello Barbie to show that enough information can be gathered to allow the mapping of a child's interests and even the interests and consistency of its entire household. I would like to remind the reader that even though many lines are displayed here, many more of the same kind can be found in the complete 2015 Hello Barbie list. I will start with the phrases that would fit in the first category relating to information regarding the child's own interests. Examples are: *"And remind me...how old are you today?"*, *"Well? Do you have a favorite kind of music?"*, *"What's one thing you're really hoping to get for Christmas this year?"*, *"What new candy flavor would you like to try?"*, *"What's something you'd like to collect?"*, *"And what's your favorite restaurant?"*, *"When I met you, I just knew that you'd be a great sharing buddy! We share stories, share interests, all kinds of things! Right?"*.

The second category contains questions about the child's family or household. Family members that are programmed in Barbie to be discussed are siblings (further specified as older or younger brother or sister), (step) mother, (step) father, (little) cousins, grandmother and grandfather, aunt and uncle.

The questions regarding a child's family can be direct (*"Do you have any sisters?"*) and will even go in detail about how many (*"So you have one sister?"*). The last phrase has multiple variants, varying from one up to four sisters or brothers. Barbie can also detect and respond to other information regarding the consistency of the family: *"Cool! You have two dads?"*, *"Oh... did you say your [family member] passed away? I'm so sorry..."* and *"Are there any babies in your family right now?"*. Yet, even more information can be angled for.

The most notable example of this practice is the so-called Family Town Game, which is initiated by the doll (*"...I'd love to learn more about you (BRAINSTORM) Oh, I know! Let's make a game of it. The game's called Family Town!"*). Barbie is ready to explain how the game is played:

- "We're gonna pretend all of your family members run different shops in a make-believe town!"
- "Okay, so every member of your family gets their own shop. One per person! I'll visit each shop, and you'll tell me who runs it! Got it?"
- "Oh, here's an example. If someone asked me who runs the pet store in my town, I'd say "My Sister Chelsea!" That's cause she loves animals so much. So now I'll ask you, and you'll tell me who in YOUR family runs what shop!"

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From Barbie's explanation of the game can be derived that each shop of the Family Town is run by a specific family member ("one per person"). The child is supposed to select a family member best suited for a specific shop and why, based on that family member's personal interests or abilities as seen from the child's perspective. The shops that can be talked about include a bakery, a pet shop, a hardware store ("*So, does [s]he like to build things?*"), a flower shop ("*Which flowers are her favorite?*"), a video arcade ("*[S]He must really love to play video games!*"), a jewellery store ("*Does [s]he love jewelry a lot?*"), a nail salon, a bookstore ("*What kinds of books would she have in her store?*"), a bank ("*Which of your family members would run the bank? Someone who is responsible and organized I bet!*", "*Why is [s]he the best person in your family to run the bank?*") and a movie theatre ("*What kind of movies does [s]he like to watch?*", "*Oh cool! I'll make sure to go to them for all my movie recommendations!*").

### **3.4 Reflection: Advertising in practice**

From the previous paragraphs could be gathered that smart toys can confront children with (targeted) advertising and can be used for the extensive gathering of information that would enable targeted advertising. As admitted by toy manufacturer Genesis, My friend Cayla is used for commercial and targeted advertising. This was a different story in Hello Barbie. Toy manufacturer Mattel, as well as app provider ToyTalk, denies the involvement of the smart toy in any kind of advertising activities towards the child.

Yet, it is still possible that in Hello Barbie uses a very subtle manner of advertising by pre-programming the doll with many phrases that contain a direct or indirect reference to other Barbie products. However, much will depend on how and when the relevant lines are used and structured in a conversation with the child. The by Mattel provided list of phrases does not hold a particular structure and merely serves as an indication of the possible sentences Barbie can produce. More information or research on the algorithm that makes the conversation between child and toy engaging and tailored would be useful or necessary before a more constructive conclusion can be drawn on how much emphasize is put on the separately sold products or in what intensity commercial desires are stimulated.

Another issue is the gathering of information that could enable targeted advertising. According to the statements of Mattel and ToyTalk, the information that is gathered from the child via Hello Barbie is not used for targeted advertising towards the child. It is not specified whether targeted advertising towards parents or guardians does take place. What can be determined, is that by means of the Hello Barbie smart toy, a lot of information is or can be

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gathered about the child and its family or household. This would mean that information could be gathered from the child and used for profiling and subsequent targeted advertising towards the parents or guardians via the parental account on the app. This would also mean that a profile of the child could be made, for whatever purpose that would be. This aspect overlaps with Privacy and Data Protection, a topic that is unfortunately too broad to be explored in this thesis in connection to smart toys.

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## Chapter 4

### Interactivity sponsored by anthropomorphism

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In the previous Chapter became apparent that advertising by means of smart toys is possible and happening (My Friend Cayla). Furthermore, smart toys can and are used to gather information about the child and its family's interests and consistency (Hello Barbie) for mostly unknown or undetermined purposes. This Chapter shall focus on the question why smart toys are a more worrisome instrument for advertisers to choose for their commercial endeavours than regular media used for advertising. This will be discussed by means of addressing a number of factors related to the established definition of 'smart toys' and the psychological processes lying underneath. These factors will be of relevance to (targeted) commercial advertising as well as for the gathering of information to enable targeted advertising.

The overarching theme on which the varying topics will stand on is 'interactivity'. Because all topics that will be discussed can be related to interactivity, it shouldn't surprise the reader that some paragraphs shall overlap somewhat in content though it was aimed to keep the instances of overlap as low as possible.

Paragraph 4.1 shall revisit the definition of 'smart toys' that was established in Chapter 2. In Paragraph 4.2 smart toys, as an instrument of advertising, shall be compared to regular media used for advertising to set out some of the general differences. Paragraph 4.3 shall dive deeper into the meaning of anthropomorphism within the setting of the 'interactivity' component of smart toys. In Paragraph 4.4 the similarities between manipulation and advertising shall be investigated. Finally, Paragraph 4.5 will provide a reflection of the information that's been gathered so far on the subject of smart toys as an instrument for advertising.

#### 4.1 Revisiting the definition of 'smart toys'

In Chapter 2 of this work, a definition was established of 'smart toys' that constitutes the following:

*A smart toy is a 3-Dimensional toy that is outfitted with an embedded electronic circuit and an in-built central processing unit (CPU) that leverages some form of computational power and has Artificial Intelligence based software that enables interactivity by means of adapting its appearance or response to its user and has the ability to connect to a network or another device.*



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The main differences between a smart toy and regular advertising media or methods lay in the underlined elements of the definition given above. The feature of being able to connect to a network and having functions that allow the (real-time) processing of (personal) data of the user is not a feature that is one that sets smart toys apart as this method can also be found in other smart devices. One can think of movie suggestions made by smart TVs based on user preferences deduced from browsing and viewing history.

Respectively, the main difference is found in the element of interactivity. This element is supported by the aspect of the toy being 3-Dimensional and in the feature of the ability to adapt its appearance or response to its user. Although the main theme orbits around the aspect of interactivity, one can also expect to find the elements of 3-Dimensionality and the possibility to adapt its appearance or response to its user in most paragraphs in a more or lesser extent. The underlined elements of the definition thus correspond to the factors and relevant psychological processes that will be elaborated upon in this Chapter.

## **4.2 A start on the differences with other media and methods of advertising**

### **4.2.1 2-Dimensional and 3-Dimensional**

Among the many different mediums that can be chosen by a marketer to distribute its advertising from, the mainly preferred ‘weapons of choice’ are TV commercials and digital advertising.<sup>78</sup>

What both have in common is that a potential consumer is to watch a screen in order to be exposed to the advertisement.

A feature that smart toys have opposed to TV commercials and digital advertising is that advertising can be brought in a 3D format, therewith providing a different kind of interaction. Unlike advertising presented on a 2D display, smart toys are tangible objects. As the adjective implies, they can be held, cuddled and played with as is the intention of a toy in the first place. Inherent to toys as well is the aspect of being primarily designed for children; though exceptions exist, a smart phone or tablet is not initially intended to be cuddled or invited to attend an imaginary tea party. Together with the at children targeted design, smart toys remain toys and are outfitted with one (main) purpose which is (still thought to be) to entertain children.

The aspect of ‘interactivity’ is of importance relating the difference in 2D and 3D advertising in the way of simulating a conversation or general social occurrence. The smart toy

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<sup>78</sup> ‘European Online Advertising surpasses TV to record annual spend of €36.4bn, 11 May 2016’, <<https://www.iabeurope.eu/research-thought-leadership/press-release-european-online-advertising-surpasses-tv-to-record-annual-spend-of-e36-2bn/>> (last assessed August 24th 2017).

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Leka<sup>79</sup> will be used to illustrate this. Leka is a smart toy that is “shaped like a ball, has an endearing “face” that changes expressions, and uses sound, light and colors to interact with users through customizable games that improve cognitive and motor skills”.<sup>80</sup> The smart toy is especially designed “to help children with autism and other developmental disabilities [to] better learn and communicate with others”<sup>81</sup>. Leka helps these children (...) [b]ecause these children often have trouble interacting with others, taking social cues, and learning in traditional environments [and] toys like Leka help to act as an intermediary [so they can] overcome social barriers to learn and progress at their own pace.”<sup>82</sup> It’s an interesting feat that a smart toy is accredited to aid children that experience trouble with social situations. Moreover, that the ‘aid’ does not constitute a 2D screen-based app, but is provided for in a 3D object that can be handled and reacts to the children with movement and light.

I deem that the example posed by the Leka smart toy implies that the 3D shape of a smart toy is crucial in its ability to invoke a sense of social interaction. While 2D media, especially in the digital domain, increasingly elevate their level of interactivity to reach children for advertising purposes<sup>83</sup>, this does not resemble the same social interaction as is possible by means of a 3D object. Together with processes such as anthropomorphism, this can arguably lay in the notion that a 3D object forms a continuous presence in the room with the child, whereas a 2D medium consists of a screen that can be turned off. The importance of the toy being 3D compared to a 2D digital medium is also suggested in a case where children brought a stuffed dog in connection with aspects that adults relate to friendship, whereas they didn’t in case of a virtual dog.<sup>84</sup>

For the sake of completeness, I will briefly address brand-associated 3D objects, as children are confronted with these objects of merchandise as well, from the moment they wake up and until the moment they turn in for the night, metaphorically and literally. The difference between this kind of 3-Dimensional brand exposure and a smart toy is that these 3D objects lack the Artificial Intelligence to be able to engage in interactivity the way smart toys do, i.e engaging in a (simulated) conversation. This is why these 3D objects do not compare with advertising by

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<sup>79</sup> Leka smart toy, <<http://leka.io/index.html>> (last assessed August 24th 2017).

<sup>80</sup> M. Weisberger ‘Robotic Toy ‘Leka’ Designed for Kids with Autism’ (2016) <<https://www.livescience.com/54741-leka-robot-for-autistic-kids.html>> (last assessed August 24th 2017).

<sup>81</sup> N. Statt ‘The Leka smart toy is a robot for children with developmental disabilities to help them learn and communicate ( 2017) <<https://www.theverge.com/ces/2017/1/4/14167590/leka-smart-toy-robot-autism-learning-tool-ces-2017>> (last assessed August 24th 2017).

<sup>82</sup> *Idem*.

<sup>83</sup> V. Verdoodt, D. Clifford and E. Lievens ‘Toying with children’s emotions, the new game in town? The legality of advergames in the EU’ (2016), *Computer Law & Security Review*, 32 p.599–614.

<sup>84</sup> N.R. Aguiar, and M. Taylor ‘Children’s concepts of the social affordances of a virtual dog and a stuffed dog’, *Cognitive Development* (2015) 34 p.16–27.

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means of smart toys. Yet, smart toys share the feature of potentially being around the child 24/7. This touches upon the aspect of interactivity, which will be described in detail in the next paragraph.

#### 4.2.2 Invoking emotions of friendship and trust

It is public knowledge that advertisers use techniques that appeal to certain emotions to help improve the sales of their product. Emotions that can be referred to are for example envy and desire; products are presented in a way that by owning it or by using a service, one can feel happy, popular or attractive. On the other hand, advertising in smart toys appear to aim for a range of emotions that are more readily found in inter-personal relationships than they are in person-object relationships. It's the car that 'gives' you social status, it's the mascara that 'makes' you attractive, but it's the smart toy that feigns friendship.

The feigning of friendship can already be ascertained in the names of certain smart toys, like My Friend Cayla and My Friend Teddy, but also happens with the phrases that the smart toy is pre-programmed with. Hello Barbie's repertoire contains a lot of phrases indicating this: *"I'm so glad we're friends"*, *"Of course I love you! You're my best friend!"*, *"Well, I would pick you to be in my family any day of the week!"* and *"And anytime I can help you out with anything, just let me know, cause that's what friends do!"*.

It is likely that smart toys are aiming for the right spot too, as children between the ages of 4 and 7 years old let their conception of friendship be guided by features of "affection" and "support".<sup>85</sup> Coincidentally, Hello Barbie is outfitted with phrases that exactly portray such messages, as can be seen in the aforementioned phrases. Feelings of a social connectivity or even 'friendship' towards a toy are not uncommon with children attributing "mental states and sociality" to a robodog even when knowing the toy was not alive as seen from a biological perspective.<sup>86</sup> Children have also been found to associate toys, concretely a stuffed dog in the referenced research, with items that adults rated as relevant for friendship.<sup>87</sup> Yet, it doesn't appear desirable to stimulate feelings of friendship between children and toys when there's even a possibility that data shared by the child is recorded, used or shared with third parties for

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<sup>85</sup> W. Furman and K. L. Bierman 'Developmental Changes in Young Children's Conceptions of Friendship' (1983), *Child Development*, Vol. 54, No. 3, pp. 552, <<http://www.jstor.org/stable/1130041>> (last assessed August 24th 2017).

<sup>86</sup> P.H. Kahn Jr., H. E. Gary and S. Shen 'Children's Social Relationships With Current and Near-Future Robots', *Child Development Perspectives* (2013) Volume 7, No. 1, p. 33

<sup>87</sup> N.R. Aguiar, and M. Taylor 'Children's concepts of the social affordances of a virtual dog and a stuffed dog', *Cognitive Development* (2015) 34 16–27.

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commercial purposes. In the words of Susan Linn from the HellNo Barbie Campaign: “Kids (...) aren’t only talking to a doll, they are talking directly to a toy conglomerate whose only interest in them is financial.”<sup>88</sup> Another reason is that a setting is promised in which information would be shared in a two-way manner (as friends do), but in reality it’s the smart toy that’s asking more without truly returning the favour.<sup>89</sup> In terms of data, the transaction cannot even be called ‘fair’ as the child is able to provide information about itself or its family that can be used for commercial purposes and is thus of monetary value, while the smart toy can only give information about its ‘life’ and ‘interests’ that are of a fictional nature and therefore deprived of any value.

Heavily related to feigning a sense of friendship, is the creation of a feeling of trust. Many questions can be asked by the smart toy, but these are unlikely to be answered when there is no trust. Vice versa, when there are no feelings of trust, a sense of friendship shall not be readily present. When other kinds of advertising media are used, trust is gradually built for a specific brand or product over time; people will get to associate the brand or product with a particular quality or style that they like. This way of advertising is not built on as high a social level of interaction as is aimed for in advertising by means of smart toys. This method is not only effective for direct commercial advertising, but also for the attempt to get information out of the child, Hello Barbie: *“That’s so awesome...I promise I won’t tell ANYone!”*

In advertising by means of other media, such as TV or digital advertising, discussions are known to have taken place concerning the question if and in how far children understand it when something is advertised to them. Regarding advertising on a digital, it is already found that children are not aware of commercial advertising taking place when playing advergames online.<sup>90</sup> Based on the findings above one could reason that many children wouldn’t ‘stand a chance’ against a commercial message that is presented in a toy whispering words of trust and friendship.

### **4.3 Essential to ‘interactivity’ is anthropomorphism**

#### **4.3.1 What is anthropomorphism?**

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<sup>88</sup> <<http://www.commercialfreechildhood.org/action/hell-no-barbie-8-reasons-leave-hello-barbie-shelf>> (last assessed August 24th 2017).

<sup>89</sup> J. Vlahos ‘Barbie Wants to Get to Know Your Child’ (2015) <<https://www.nytimes.com/2015/09/20/magazine/barbie-wants-to-get-to-know-your-child.html>> (last assessed August 24th 2017).

<sup>90</sup> V. Verdoodt, D. Clifford and E. Lievens ‘Toying with children’s emotions, the new game in town? The legality of advergames in the EU’ (2016), *Computer Law & Security Review*, 32 599–614.

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This paragraph will tune in with the endearing outward features of a smart toy. Already touched upon was the observation that interactivity plays a vital role when it comes to why smart toys shouldn't be used by advertisers as an advertising instrument. In turn, the concept of anthropomorphism is essential in explaining how interactivity comes to be the main theme in addressing this question.

Anthropomorphism is described as the “tendency to imbue the real or imagined behaviour of nonhuman agents with humanlike characteristics, motivations, intentions, or emotions.”<sup>91</sup> This can range from attributing human emotions or personalities to pets, seeing faces in clouds and the action of giving an old car a ‘pat on the back’ for having successfully made a long drive.

The phenomenon can be made appealing or less appealing, based on the amount in which a lifeless object is made to look and reflect a human being. It was envisioned by the Japanese robotics professor Masahiro Mori that a likeness to humans enhances positive feelings of affinity, but also that people's reactions would abruptly shift from empathy to revulsion towards the object when it would “approach, but failed to attain a lifelike appearance”.<sup>92</sup> The range in which this natural inclination of revulsion would exist is called and known as the “Uncanny Valley”.

Mori made some other predictions in his essay as well. One is that a moving object would result in a much steeper ‘valley’ (depicted in Figure 2<sup>93</sup> at the end of this paragraph) and that it would be possible “to create a safe level of affinity by deliberately pursuing a nonhuman design.”<sup>94</sup>

As seen in Figure 1<sup>95</sup> (at the end of this paragraph), the robotic toy is estimated to be around mid-way of the curve on the left side of the Uncanny Valley, though it could vary according to a specific toy's appearance. Chucky, a doll from the 1988 movie *Child's Play* is an example of how an at first seemingly innocent looking doll (on the positive left curve of the Uncanny Valley scale), turns creepy instantly at the prospect of it moving and behaving like a (murderous) human being (on the slide down into Uncanny Valley).

The Uncanny Valley is relevant to the research on smart toys as an instrument of advertising as the position on the curve indicates that most smart toys shall be deemed as ‘safe’, which means that affinity towards these toys is generally felt. This aids processes like the

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<sup>91</sup> N. Epley, A. Waytz, and J.T. Cacioppo ‘On Seeing Human: A Three-Factor Theory of Anthropomorphism’, *Psychological Review* (2007), Vol. 114, No. 4, 864 – 886.

<sup>92</sup> M. Mori, “The uncanny valley,” *Energy*, (1970) vol. 7, no. 4, pp. 33–35, 1970 (in Japanese). Used translation: M. Mori (Translated by Karl F. MacDorman and Norri Kageki), *The Uncanny Valley*, *IEEE Robotics & Automation Magazine* (2012), p. 98-100.

<sup>93</sup> *Idem*.

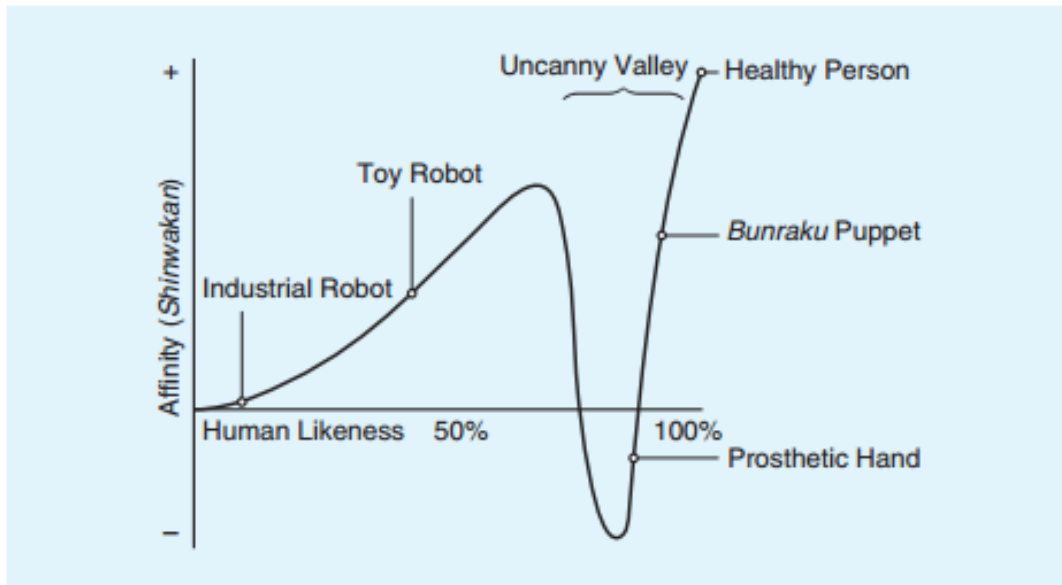
<sup>94</sup> *Idem*, p. 99.

<sup>95</sup> *Idem*.

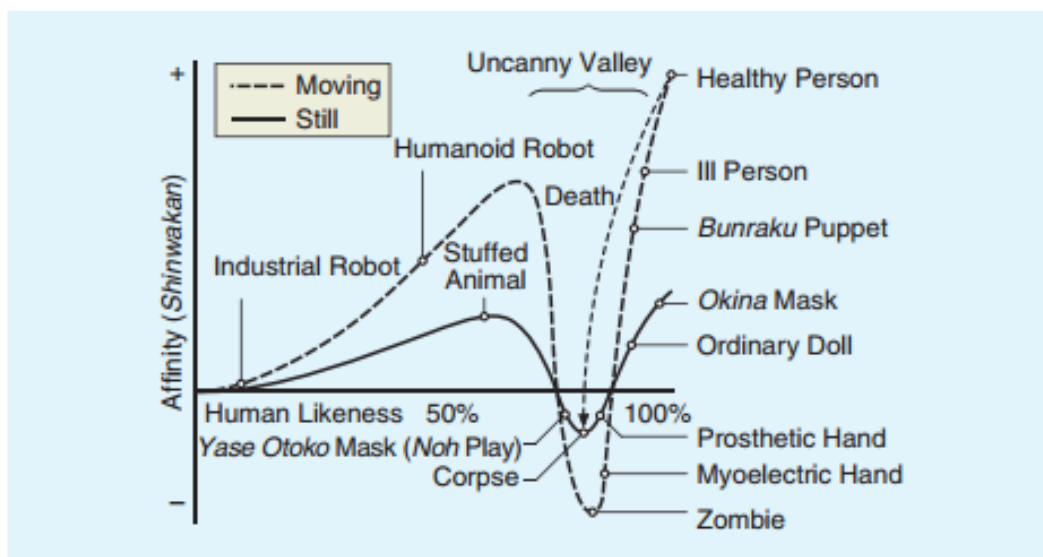
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establishing of trust and friendship as seen in the previous paragraph. It could potentially even be used as a tool of manipulation, in which case emotions as empathy towards the smart toy can be exploited for commercial purposes.



**Figure 1.** The graph depicts the uncanny valley, the proposed relation between the human likeness of an entity, and the perceiver's affinity for it. [Translators' note: *Bunraku* is a traditional Japanese form of musical puppet theater dating to the 17th century. The puppets range in size but are typically a meter in height, dressed in elaborate costumes, and controlled by three puppeteers obscured only by their black robes (see front cover).]



**Figure 2.** The presence of movement steepens the slopes of the uncanny valley. The arrow's path represents the sudden death of a healthy person. [Translators' note: *Noh* is a traditional Japanese form of musical theater dating to the 14th century in which actors commonly wear masks. The *yase otoko* mask bears the face of an emaciated man and represents a ghost from hell. The *okina* mask represents an old man.]

#### 4.3.2 Anthropomorphism used in advertising

Anthropomorphism is used as a general advertising technique for a large range of products to make them appeal to humans, stimulating them to buy the product.<sup>96</sup> This can happen on two levels. The first relates to the wish of advertising to convince consumers that they need their product. When a product is advertised by means of anthropomorphic demonstration, the product is generally perceived to be higher in efficacy, hence positively influencing the intention to buy the product.<sup>97</sup> Albeit not specifically a matter of efficacy, the attribution of human qualities to smart toys is also used to stimulate consumers to buy the product. The My Friend Cayla doll, for example, is marketed with the terms of “having a personality” and is said to not know everything as she is “not a search engine, she’s a seven year old girl.”<sup>98</sup>

In respect to smart toys, it is not so much a matter of efficacy that constitutes the requirement for a parent to buy such a product. As with other toys, it is important that the smart toy’s appearance appeals to children. It is no surprise that smart toys come in fun and possibly even cuddly designs, such as FurbyConnect, My Friend Teddy and CogniToys Dino.

Apart from using anthropomorphism so that people buy the product, anthropomorphism is also a useful feature for advertising and information gathering by means of the smart toy as soon as it has figuratively ‘entered the house’. This is the second level in which anthropomorphism can be put to use. When the smart toy is bought, the effect of anthropomorphism comes into play regarding a smart toy’s level ‘interactivity’.

Anthropomorphism is not product specific<sup>99</sup> and can safely be assumed to be present in the attitude of children towards smart toys as they don’t differ with regular toys in this regard. This is not surprising, considering the human and endearing features that are attributed to the toys,

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<sup>96</sup> P. Aggarwal and A.L. McGill ‘Is That Car Smiling at Me? Schema Congruity as a Basis for Evaluating Anthropomorphized Products’ (2007) *Journal Of Consumer Research*, Vol .3.

<sup>97</sup> D. Laksmidewi, H.Susianto and A. Zakaria Afiff ‘Anthropomorphism in advertising: the effect of anthropomorphic product demonstration on consumer purchase intention’(2017), *Asian Academy of Management Journal* , Vol. 22, No. 1, p. 1-2.

<sup>98</sup> H. Wallop ‘Meet Cayla – the first Internet connected doll’ (2014), <<http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/10881303/Meet-Cayla-the-first-Internet-connected-doll.html>> (last assessed August 24th 2017).

<sup>99</sup> N. Epley, A.Waytz, and J.T. Cacioppo ‘On Seeing Human: A Three-Factor Theory of Anthropomorphism’, *Psychological Review* (2007), Vol. 114, No. 4, 864 – 886.

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such as a having big eyes, a friendly smile or a sad face, looping ears, a memory<sup>100</sup>, certain voice intonations or an overall “cuteness” factor. Especially facial features on a non-living object appear to greatly enhance the effect of anthropomorphism in 3 to 5 year olds.<sup>101</sup> To name an example, the FurbyConnect is marketed to have “colorful eyes that display more than 150 animations to help express what Furby wants”<sup>102</sup>, hence showing a human-face component that feigns the presence of emotions.

The future holds even more in store to enhance the interacting feature of smart toys, making the experience even more ‘human-like’, when one considers that apart from the existing technologies of facial recognition, new technologies of emotion-detection and -recognition are well on its way and can<sup>103</sup> or will<sup>104</sup> in time be incorporated into toys.

Should the child ever wonder about her Hello Barbie, then the doll is prepared with the answer: *“If I seem real, I am real, right? And what's really real...? Our friendship.”*

#### **4.4 Advertising and manipulation**

Advertising is often brought in connection with manipulation.<sup>105</sup> Manipulation can be defined as “directly influencing someone’s beliefs, desires, or emotions such that she falls short of ideals for belief, desire, or emotion in ways typically not in her self-interest or likely not to be in her self-interest in the present context.”<sup>106</sup> Advertising has already been shown to influence or appeal to a person’s emotions or desires. Based on the given definition, advertising would constitute manipulation when the influencing part occurs in ways that are not or not likely to be in the self-interest of the child (when talking about smart toys as an instrument for advertising). The element

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<sup>100</sup> J.K.T. Tang and P.C.K..Hung ‘Computing in smart toys’ (Springer International Publishing 2017), p. 25-26.

<sup>101</sup> J. L. Jipson and S. A. Gelman ‘Robots and rodents: Children's inferences about living and nonliving kinds’ (2007) *Child Development*, 78, 1675-1688.

<sup>102</sup> Furby Connect Product Information: <<http://www.hasbro.com>> (last assessed August 24th 2017).

<sup>103</sup> E.g. Nogueiras and others ‘Speech emotion recognition using hidden markov models’, (Research Center TALP: 2001), <<http://gps-tsc.upc.es/veu/>>;

Website of tech-company Affectiva on SDKs and APIs they offer for emotion-enabled applications <<http://www.affectiva.com>> (last assessed August 24th 2017).

<sup>104</sup> ‘Artificial Intelligence Invades the Home ... In Toys’ (2016), <[www.time.com](http://www.time.com)> (last assessed August 24th 2017);

A. McManus ‘Emotions at Play: The Potential for Emotion-Enabled Toys’ (2016), <<http://blog.affectiva.com/emotions-at-play-the-potential-for-emotion-enabled-toys>> (last assessed August 24th 2017).

<sup>105</sup> C. Coons, and M. Weber ‘Manipulation: Theory and practice’, (Oxford University Press 2014), p. 1-2.

<sup>106</sup> A. Barnhill, ‘What is manipulation?’, in C. Coons, and M. Weber (eds.) *Manipulation: Theory and practice* (Oxford University Press 2014), p. 51-72.



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of “self-interest” is a difficult one to tackle, for when would advertising to a child be in his or her self-interest? Philosopher Allen Wood would even go as far as saying that every act of advertising is in fact an act of manipulation and thus should all be banned; “advertising corrupts the root of rational communication...[and] precludes the possibility of any human freedom.”<sup>107</sup>

In the current state of legal affairs, the European legislator is seemingly out to balance the interest of the functioning of the European internal market by ensuring the existence of fair competition between companies on the one hand (Articles 101 and 109 Treaty on the Functioning of the European Union)<sup>108</sup> and consumer protection on the other. Consumer protection does not involve a total ban on advertising. Rather, it is restricted in the instances when advertising or its employed method is taken ‘too far’, such as in cases of misleading or aggressive advertising (Annex I Unfair Commercial Practices Directive (UCPD))<sup>109</sup>. The section regarding aggressive advertising, also called the Black List<sup>110</sup>, lists acts of advertising that are always prohibited and includes examples ranging from deceiving techniques (e.g. Item 13 Annex I UCPD on deceptive promotion) to methods that brush with or even enter the domain of coercion (e.g. Item 24 Annex I, UCPD on pressure selling).

When the EU legislator retains the current stance of wanting to only regulate acts and methods of advertising that go ‘too far’, a discussion of whether or when advertising by means of smart toys can be considered manipulation will not carry any relevance for this research.

For the interested I will state that when the given definition of manipulation is taken to heart, many notable examples of manipulation in smart toys can be found in the pre-programmed phrases of Hello Barbie in Chapter 3.

#### **4.5 Reflection: the recipe of a troubling instrument of advertising**

A number of factors underlay the perception that smart toys differ as an instrument of advertising compared to other methods or media that are generally used. The ability to interact with a child on a new level is the main foundation of this perception. Although interaction is becoming a more

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<sup>107</sup> C. Coons, and M. Weber ‘Manipulation: Theory and practice’, (Oxford University Press 2014), p. 1-2 (quote); A.W. Wood ‘Coercion, Manipulation, Exploitation’ in C. Coons, M. Weber (eds), *Manipulation: Theory and practice*, (Oxford University Press 2014), p. 37-41 (on advertising and manipulation).

<sup>108</sup> More information can be found on the information hub of EU competition rules: [https://europa.eu/european-union/topics/competition\\_en](https://europa.eu/european-union/topics/competition_en) (last assessed August 24th 2017).

<sup>109</sup> Council Directive (EC) 2005/29/EC concerning unfair business-to-consumer commercial practices in the internal market (‘Unfair Commercial Practices Directive’) [2005] L 149/22.

<sup>110</sup> For detailed examples and explanation of the various items, see ‘The Black List: banned commercial practices’, [http://ec.europa.eu/justice/consumer-marketing/unfair-trade/unfair-practices/is-it-fair/blacklist/index\\_en.htm](http://ec.europa.eu/justice/consumer-marketing/unfair-trade/unfair-practices/is-it-fair/blacklist/index_en.htm) (last assessed August 25th 2017).

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frequently used method of advertising, especially in digital advertising, smart toys have an additional dimension of social interaction insomuch that it can stimulate subconscious processes mostly occurring between real-life persons or between a child and its stuffed toy without advertising properties.

Whereas anthropomorphism plays a big role in these processes, it does not constitute manipulation on itself. It doesn't pose a problem on itself either for advertising, considering that it's a regularly used concept throughout all the available platforms of advertising, without raising any eyebrows. However, anthropomorphism can work as a catalyst for manipulation in respect to advertising when it is combined with other methods of influence such as pre-programmed phrases that are aimed at building a sense of trust and friendship. This works in the way that anthropomorphism can invoke emotions of affinity or empathy, thus laying the groundwork for feelings of trust and friendship. Trust and friendship can make children more susceptible in the sharing of information relating to themselves or their family members. The worrying difference in having a smart toy operate as an instrument of advertising and/or an instrument for the gathering of information to enable (targeted) advertising compared to regular media used for commercial activities are the way in which it can interact more and more intensely with the child. This is especially worrisome considering the possible involvement of (unspecified) third parties in these commercial endeavours.

When one brings together the above mentioned findings, as sure 'recipe' can be ascertained of what factors make out the answer to the question why smart toys are a more worrisome instrument for advertisers to choose for their commercial endeavours than regular media used for advertising. The ingredients of this recipe are anthropomorphism, pre-programmed phrases that are aimed to construct feelings of trust and friendship, pre-programmed phrases that contain commercial content or intent in connection with an enquiry for information and the possible involvement of third parties. Anthropomorphism has its effect on both kinds of phrases. This roughly accumulates to the following simplistic formula:

*Smart toys as an instrument for advertising = anthropomorphism + (phrases to build trust and friendship + phrases that contain commercial content and/or intent in connection with the enquiry for information) + possible involvement of third parties.*  
*= worrisome instrument of advertising.*

## Chapter 5: An exploration of legal frameworks on children's protection against advertising

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Now that is seen to the question what smart toys are and why they are a worrisome instrument to use for marketing purposes, it is time to take a look at how children are protected by EU legislation in regard to (targeted) advertising by means of smart toys. As follows from the main research question of this thesis, a particular point of interest will be whether a legal void can be found.

Paragraph 5.1 will shed a light on the instrument of legislation that in, general terms, is the most relevant regarding the protection of children against advertising. Paragraph 5.2 will describe how current legislation and case-law is focused on regulating 2-Dimensional media of advertising (TV and online advertising). Paragraph 5.3 shall determine whether there are fundamental rights that could protect children against advertising.

### 5.1 General protection:

#### Unfair Commercial Practices Directive (UCPD)

On the European level the will to protect children against certain kinds of advertising was transferred into the Unfair Commercial Practices Directive 2005/29/EC, stating that commercial practices will in all circumstances be regarded as unfair when it contains “a direct exhortation to children to buy advertised products or persuade their parents to do so” (Annex I al2 28 UCPD)<sup>111</sup>. This should be seen as “putting pressure on children to buy a product directly or to persuade adults to buy items for them (‘pester power’).”<sup>112</sup> A likable notion of the European Commission is that parents in such a case “may need to get some earplugs.”<sup>113</sup> Examples that are given by the European Commission are the invitation to “*buy more*”, “*buy here*”, “*upgrade now*” and “*upgrade to Superstar*” in a children’s gaming community, which was correctly banned in Sweden<sup>114</sup> and lines such as “*Hey kids! Get your parents to buy the Golden Horrorscope Trilogy DVD and we'll*

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<sup>111</sup> Item 28 on Annex I: Commercial Practices which are in all circumstances considered unfair (aggressive commercial practices), Council Directive (EC) 2005/29/EC concerning unfair business-to-consumer commercial practices in the internal market (‘Unfair Commercial Practices Directive’) [2005], . L 149/22.

<sup>112</sup> European Commission ‘Guidance on the Implementation/Application of Directive 2005/29/EC on Unfair Commercial Practices’ (2016), {COM(2016) 320}, p. 100

<sup>113</sup> Direct exhortations to children: “Go buy the book!” on: <[http://ec.europa.eu/justice/consumer-marketing/unfair-trade/unfair-practices/is-it-fair/blacklist/blacklist-items/blacklist\\_item25\\_en.htm](http://ec.europa.eu/justice/consumer-marketing/unfair-trade/unfair-practices/is-it-fair/blacklist/blacklist-items/blacklist_item25_en.htm) (last assessed > August 24th 2017).

<sup>114</sup> European Commission ‘Guidance on the Implementation/Application of Directive 2005/29/EC on Unfair Commercial Practices’ (2016), {COM(2016) 320}, p. 100.

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*enter your name to win a trip for four people to the Golden Hills Theme Park.*"<sup>115</sup> This last example is accompanied with the explanation that it constitutes "a direct appeal" to children and that this practice is banned "on all media (internet, TV, magazines)."<sup>116</sup> Important to note on the line of thought of the legislator is that the prohibition is not intended to impose an outright ban on advertising directed at children (recital 18 UCPD).

The drawback of this provision, especially in light of advertising by means of smart toys, is that in practice it "could be unclear whether a commercial practice includes a direct exhortation to children."<sup>117</sup> The Commission does not, cannot or wants not (or a combination of these) to go into further detail about when exhortation to children would be taking place and refers to a practice having to be examined and determined of a "case-by-case-basis."<sup>118</sup> What the Commission does say, is that the impact of the commercial practice needs to be assessed from the perspective of the average member of that group (Recital 18 UCPD).

The determination on a case-to-case-basis is understandable in most cases of legislation, but not when smart toys are used for advertising purposes. A smart toy has the potential to not provide a static, unchanging commercial message, in the way it was the case in the examples mentioned by the Commission. The lines that a smart toy is programmed with can be altered or updated in amount and in content. Therefore, much could depend on how the conversation is or conversations are structured. A case-to-case approach could then only be applied to individual sentences or conversations. This is accumulates to an impossible task of the enforcing the right enshrined in Annex I al2 28 UCPD in light of advertising by means of smart toys. Even more so, when taking into account the finding that smart toys can cloak their commercial message in terms of 'friendship and trust', making it hard to detect and feel confronted by 'aggressive' advertising.

## **5.2 2-Dimensional media as focal point of regulation and case law**

### **5.2.1 Member State level protection**

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<sup>115</sup> Direct exhortations to children: "Go buy the book!" on: <[http://ec.europa.eu/justice/consumer-marketing/unfair-trade/unfair-practices/is-it-fair/blacklist/blacklist-items/blacklist\\_item25\\_en.htm](http://ec.europa.eu/justice/consumer-marketing/unfair-trade/unfair-practices/is-it-fair/blacklist/blacklist-items/blacklist_item25_en.htm) (last assessed > August 24th 2017).

<sup>116</sup> *Idem.*

<sup>117</sup> European Commission 'Guidance on the Implementation/Application of Directive 2005/29/EC on Unfair Commercial Practices' (2016), {COM(2016) 320}, p. 100.

<sup>118</sup> *Idem.*

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On the European level, some protection is also granted by the Audiovisual Media Service Directive.<sup>119</sup> This Directive limits amount of marketing to which children may be exposed during children's programmes, e.g. Article 9.1(g), Article 10.4, Article 11, Article 20.<sup>120</sup> Another initiative to limit the amount of screen time is related to the advertising of certain foods and beverages.<sup>121</sup>

There are also legal instruments on Member State level on the topic of protecting children against various forms of advertising, most stemming from and adhering to the implementation of the UCPD. For the reason that this thesis does not provide the room for an comparative analysis between the forms of implementation between Member States, only one example shall be named, which is the one the European Commission has listed in their Guidance on the implementation of the Directive. Some Member States, such as the UK (which at the time of writing is still officially an EU Member State) have issued guidelines on what would result in commercial practices that would be 'less likely or unlikely to comply' with the UCPD as a part of the implementation of the Directive.<sup>122</sup> These guidelines are directed at online and app-based games.<sup>123</sup> Criteria relate mostly to the aspect of the earning or spending (in-game) currency<sup>124</sup>, which does not seem to be of great relevance when it comes to smart toys. Yet, a notion is made that the context in which the message was conveyed is important as well in the sense that the game (the game) could be "likely to appeal to children"<sup>125</sup>, especially if a trader "could reasonably be expected to foresee that [the game] is likely to appeal to children."<sup>126</sup>

The consideration of the context of the message is an interesting one concerning smart toys. Yet, as with the previously mentioned regulations, this guideline is meant to provide guidance on the topic of online and app-based games alone.

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<sup>119</sup> Council Directive (EC) 2010/13/EU on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audiovisual media services (Audiovisual Media Services Directive) [2010] L95/1.

<sup>120</sup> See also: 'EU acquis and policy documents on the rights of the child' (2016), Version 1.8, JUST.C2/MT-TC, p. 31.

<sup>121</sup> Joint Action on Nutrition and Physical Activity '3rd Health Programme (2014-2020): EU Action Plan on Childhood Obesity 2014-2020' (2014), [JANPA] [677063], p. 15-16, <[https://ec.europa.eu/health/sites/health/files/nutrition\\_physical\\_activity/docs/childhoodobesity\\_actionplan\\_2014\\_2020\\_en.pdf](https://ec.europa.eu/health/sites/health/files/nutrition_physical_activity/docs/childhoodobesity_actionplan_2014_2020_en.pdf)> (last assessed August 24<sup>th</sup> 2017)

<sup>122</sup> European Commission 'Guidance on the Implementation/Application of Directive 2005/29/EC on Unfair Commercial Practices' (2016), {COM(2016) 320}, p. 101.

<sup>123</sup> UK Competition and Markets Authority 'Office of Fair Trading, Principles for online and app-based games' (2014), OFT 1519.

<sup>124</sup> European Commission 'Guidance on the Implementation/Application of Directive 2005/29/EC on Unfair Commercial Practices' (2016), {COM(2016) 320}, p. 101.

<sup>125</sup> *Idem*.

<sup>126</sup> *Idem*, p. 102.

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It is observed that all the mentioned provisions relate to the conveying of commercial messages by means of 2-D media (TV and digital advertising in particular) and thus do not relate enough to the not-screen based smart toys as there is no ‘currency’ or a reduction in view-exposure possible in smart toys.

### 5.2.2 Member State case-law on Annex I al2 28 UCDP

Annex I al2 28 UCDP has been found to be the only instrument of legislation that is directly aimed to provide children some protection against advertising by means of smart toys. The amount of protection it provides depends on how this provision is interpreted in practice.

As of yet, there are no European Court of Justice cases that provide an interpretation of Annex I al2 28 UCPD. However, there are a handful of cases (7 in total, at the time of writing) on this provision on Member State level.<sup>127</sup> What these cases have in common is that all of them relate to 2-Dimension forms of media. These involve online advertising<sup>128</sup> and ‘classic’ paper media of advertizing, such as magazines.<sup>129</sup>

The only court decision that could be of relevance on the use of smart toys is the decision in the *Videospiel D-Universe Case*.<sup>130</sup> The general legal question of the case was: “To what extent does an advertisement directed to children, constitute an unfair commercial practice?” The Austriaa Supreme Court decided that “indirect exhortations to buy products, aimed at children, do not automatically constitute aggressive commercial practices.” The court explained indirect exhortation here as the case in which “the consumer has to make an intermediate step between the advertisement and the decision to purchase and if the advertisement only generally describes the product as desirable and presents the options to move ahead with the purchase.”

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<sup>127</sup> The case law is listed on the EU Commission’s site of ‘Unfair Commercial Practices’: [https://webgate.ec.europa.eu/ucp/public/index.cfm?event=public.directive.browse2&elemID=224#article\\_232](https://webgate.ec.europa.eu/ucp/public/index.cfm?event=public.directive.browse2&elemID=224#article_232) (Path: UCPD Directive -> Annex I, 28 -> Cases) (last assessed August 24th 2017).

<sup>128</sup> Austria Supreme Court (Oberster Gerichtshof Wien) [2013], 4Ob95/13v (“Videospiel D-Universe”); Austria Supreme Court (Oberster Gerichtshof Wien) [2013], 4Ob27/13v (“SMS-Vertragsänderung”); The Swedish Market Court (Marknadsdomstolen) [2012], MD 2012:14; Regional Court (Berlin) (Landgericht - LG (Berlin)) [2010], 103 O 171/08.

<sup>129</sup> Austria Supreme Court (Oberster Gerichtshof Wien) [2013], 4Ob244/12d (“Stickeralbum”); Austria Supreme Court (Oberster Gerichtshof Wien) [2008], 4 Ob 57/08y (“PonyClub”); Latvia Consumer Rights Protection Centre (Patērētāju tiesību aizsardzības centrs (Rīga)) [2008], Consumer Rights Protection Centre Decision Nr. E03-RIG-511.

<sup>130</sup> A note relating to all the information on this case: all information is derived from the EU Commission’s site of ‘Unfair Commercial Practices’, the full decision is only available in German; Austria Supreme Court (Oberster Gerichtshof Wien) [2013], 4Ob95/13v (“Videospiel D-Universe”).

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This interpretation led the Court to decide that (online) used phrases such as "now available" and "available now in retail" cannot automatically be regarded as unfair, in other words; aggressive advertising.

Although the (online) phrases that led to this case can, in my opinion, not be compared to the extent in which a smart toy could provide. Interesting to mention perhaps, is that the Supreme Court overruled the decision of the first instance judge and the court of appeal, which both did consider the phrases aggressive commercial advertising. This could indicate a sense of doubt regarding the use of indirect advertising. Unfortunately, the question was not brought forward to the European Court of Justice.

### **5.3 Reflection: Filling the void on human rights level?**

Annex I al2 28 UCDP is a general provision on the protection of children against (aggressive) advertising. Other instruments of legislation appear to focus only on 2D forms of media and advertising or on the advertisement of specific products. Their protection would not suffice when it comes to advertising by means of smart toys. One could thus speak of a legal void when the interpretation of the UCDP provision is left as wide as it is now.

Generally, a legal void could be overcome when there is an ability to fall back on fundamental rights or other principles of law, which apply in any situation. Children are generally protected by the principle of "the child's best interest". This principle is stated in the words: "In all actions concerning children, whether undertaken by public or private (...) institutions (...) the best interests of the child shall be a primary consideration." This passage is found across various legal instruments that uphold human rights, namely Article 3 UNCR, Article 24 of the Treaty on the Functioning of the European Union (TFEU)<sup>131</sup>, Article 24 Charter of Fundamental Rights of the European Union<sup>132</sup> and Article 3 (3) of the Treaty on the European Union.

The "best interests of the child"-principle constitutes an open norm on which, unfortunately yet not surprisingly, no case-law could be found. Most cases in which the best interests of the child are interpreted relate to the family atmosphere, such as the matter of custody or relate to principles needed to be taken into account by policy makers.

The UNCR also has a provision the right of children to relax and play (Article 31), but it is unclear how this would relate to the playing with smart toys.

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<sup>131</sup> Consolidated Version of the Treaty on European Union [2012] OJ C 326.

<sup>132</sup> Charter of Fundamental Rights Of The European Union [2000] OJ C 364/01.

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The 'problem' with these principles is that such norms are too wide and too vague to be used as a way to compensate any lacuna in the protection offered, especially without any relevant case law to back such a claim up. Therefore, too wide or vague equals no protection in this specific matter.



## Chapter 6: Summary and conclusion

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The research that was conducted in this thesis revolved around the main research question whether there exists a legal void in the current EU legal frameworks of consumer and children's rights on the protection of children against (targeted) advertising by means of smart toys. The research was exploratory, which indicates that problems were identified relating to the main question, yet that no solution can be found in this summary and conclusion.

The research started on the hypothesis consisted of the idea that smart toys as a means of advertising slips through the gaps of the existing EU legal frameworks on children's protection against targeted advertising due to certain features that smart toys have (i.e. by design) that make that the current legislation does not apply to them, accumulating to the conclusion children are not protected in the way they are thought to be.

The most important finding of Chapter 2 was the definition of a smart toy. It was determined that a smart toy would be considered as:

*A smart toy is a 3-Dimensional toy that is outfitted with an embedded electronic circuit and an in-built central processing unit (CPU) that leverages some form of computational power and has Artificial Intelligence based software that enables interactivity by means of adapting its appearance or response to its user and has the ability to connect to a network or another device.*

In Chapter 3 the smart toys My Friend Cayla and Hello Barbie were examined, in the manner of a sampling test, regarding the phrases that they are pre-programmed with and what their Terms and Policies stated on any acts of commercial advertising that are employed in the toy. The analysis showed that targeted commercial advertising is definitely happening in the My Friend Cayla Doll. The practice in Hello Barbie was more dubious with phrases that mentioned other (separately sold) products of the same manufacturer. Hello Barbie was also programmed with many lines about the child preferences, interests and family. However, it is not known how the algorithm structures a "tailored" conversation between child and doll, in other words; when is which phrase picked as a response to a child's voice input. Due to this lack of knowledge, it couldn't be established if (targeted) commercial advertising was happening, but the elements that would have to be present to enable this were there. The sampling of these two smart toys proved that (targeted) commercial advertising is and can happen by means of smart toys in general.

In Chapter 4 the question was addressed what differentiates smart toys as a means of advertising from the regularly used media for advertising (e.g. TV and online advertising). The main differences were explored. This mainly entailed the aspect of its interaction with its user.

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Respectively, this came down to the 3D aspect of the smart toys, the way in which they build feelings of trust and friendship and the subconscious workings of anthropomorphism. It was found that subconscious processes are commonly used in advertising, but also that the level of impact of these processes was raised significantly because of the combination of the features that smart toys are programmed or designed with.

In Chapter was looked at the current EU legal framework regarding provisions that are aimed to protect children against (targeted) advertising. The only relevant piece of legislation was located in number 28 of the Black List of commercial practices that are always considered ‘unfair’ in light of the Unfair Commercial Practices Directive (UCPD). This provision only held that “direct exhortation to children to buy advertised products or persuade their parents to do so” is not legally permitted, regardless of the medium that was used.

The problem with it, is that it is not always clear whether a certain practice entails “direct exhortation”. This is even more the case in smart toys; because of a repetitive building of feelings of trust and friendship. Furthermore, the notion that it must be determined on a case-to-case basis whether a practice constitutes an ‘unfair’ commercial practice, doesn’t help with smart toys either, seeing that a smart toy has the potential to not provide a static, unchanging commercial message. The programmed lines can be altered or updated in amount and in content.

The case-to-case approach could in smart toys only be applied to individual sentences or conversations. This is accumulates to an impossible task when it comes to the enforcement of this provision.

It could only be concluded that advertising by means of smart toys is hardly protected the UCPD. There are also no other legal instruments that could fill the void, because these provision are either too vague (fundamental rights) or not applicable to smart toys (regulation on advertising by means of 2-Dimensional media).

All things considered, it must be stated that there appears to be legal void in the current EU legal frameworks of consumer and children’s rights on the protection of children against (targeted) advertising by means of smart toys.

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Hi! Do you want to play?

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