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Culture on Facebook?

An empirical study of the cultural influence on communication on a social network

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Resume

Globaliseringen har medvirket, at kulturer mødes og værdier, normer og andre kulturelle karakteristika blandes eller udviskes. Sociale medier fremmer globaliseringen og interaktion mellem kulturer. Disse medier er støt voksende, og deres potentiale har vakt interesse hos både akademikere og virksomheder. I den akademiske litteratur har der været et kald efter undersøgelser, der kombinerer forskningsområdet kultur og sociale medier. Virksomhederne har en interesse i, hvordan man bedst kan drage nytte af dette forskningsområde. Disse faktorer er motivationen bag specialet og grunden til, at det undersøger om kultur har en indflydelse på sociale medier eller om disse medier skaber en homogeniseret kultur. Derfor har vi formuleret problemformuleringen, *i hvilken grad har kultur indflydelse på Facebook?*

Undersøgelsesdesignet bruger en deduktiv tilgang til at besvare problemformuleringen, da vi har formuleret 12 hypoteser, baseret på den anvendte teori. Teorien består af Halls teori om kontekstualitet, Hofstedes kulturdimension, kollektivisme og individualisme, og Nisbetts teori om kognitive funktioner og kultur. Dermed skaber vi en triangulering af teorien, der giver en bedre indsigt i det undersøgte fænomen.

For at kunne besvare problemformuleringen har vi undersøgt Facebooks indhold, og hvordan brugerne og administratorerne agerer med indholdet. Derfor har vi anvendt metoden content analysis på både kvantitativ og kvalitativ data.

Vores undersøgelse er blevet understøttet af de 12 hypoteser. For at kunne forstå vores tankegang, er disse hypoteser blevet klassificeret i et coding scheme bestående af en uddybende redegørelse med eksempler. Hele afsnittet bliver afsluttet med en præsentation af resultaterne.

Resultaterne af undersøgelsen er, at 5 hypoteser viser empiriske tendenser og er dermed understøttet. Derimod viser 8 af hypoteserne ingen empiriske tendenser og 4 viser det modsatte af, hvad vi har antaget. Ud fra en af hypoteserne, kan vi ikke komme til en konklusion grundet mangelfuld data. Derved bliver konklusionen, at 4 hypoteser er og 8 hypoteser ikke er påvist. Derfor bliver svaret på problemformuleringen, at graden, hvorved kultur har en indflydelse på Facebook er lav til moderat.

Mange faktorer kan have haft indflydelse på vores resultater. Et aspekt er selve kulturdefinitionen af de anvendte teorier, som vi har adopteret. Teorierne bruger definitionen nationalkultur. Dog er det ikke sikkert, at nationalkultur er den mest fremtrædende kultur på Facebook. Muligvis er der andre subkulturer, der har en større indflydelse på den individuelles kultur. Derudover kan selve mediet have indflydelse på, hvor mange kendetegn af ens nationalkultur, der bliver udvist på Facebook. Teorierne er baseret på ansigt til ansigt (FTF) interaktion, hvorimod den kultur, vi har undersøgt, er blevet formidlet igennem et digitalt medie (CMC). CMC teorien forklarer, at mange af de nonverbale signaler går tabt, når man kommunikerer igennem et digitalt medie. Og mange af de nonverbale signaler, er det, der kendetegner en kultur. Mange af de kulturspecifikke karakteristikker bliver udtryk i denne nonverbale kommunikation, og hvis det ikke er muligt at bruge disse signaler, bliver nationalkulturen mindre present.

Undersøgelserne i denne kandidatafhandling har tilføjet empirisk data til et nyt forskningsområde og har derved svaret på litteraturens kalden efter ny empiri. Projektet har implikationer for videnskaben i form af, at den har vist en metode, hvorpå man kan analysere Big Social Data. Selvom graden af kultur på Facebook er lav til moderat, er den stadig til stede. Dette betyder, at virksomheder burde tage kultur i betragtning for at optimere deres præsens på Facebook. Afhandlingen lægger grund for fremtidig forskning, der f.eks. kan undersøge flere kulturer, andre brands og andre sociale netværk.

Table of Contents

1. Introduction

Advancements in digital technologies have furthered globalization and brought online consumers closer together, and the Internet and especially social media facilitate interaction between different online cultures. As such, social media have come to constitute a platform for the exchange of cultural views and values, and it is relevant to ask whether the media transform segments of online consumers into homogenized cultures, or whether culture still has an impact on social media. While the concept of culture has been heavily discussed by a plethora of scientists, including Trompenaars, Hofstede, Hall, Hampden-Turner, far less research has been done within the field of social media. There is a historical explanation for this. The word culture, or cultura in Latin, dates back to Roman antiquity, but the anthropological concept of culture we know today and use in this thesis stems from the twentieth century (Kohls, 2001). In contrast, the concept of social media did not get much attention until the early 2000's (Google Ngram Viewer, 2014). The increase in attention happened around the time of the emergence of Web 2.0 - not surprisingly, since modern social media rely heavily on the possibilities provided by this new technology. In fact, some of the most widely used websites today are social media sites that all depend on the technology of Web 2.0, such as Wikipedia, YouTube and Facebook. In consequence, little has been written about social media until the early 2000's, but public interest in social media has risen dramatically in recent years. This has in turn led to a surge in the percentage of companies that utilize this technology. More than 70 % of Fortune 500[1] companies now have an official Facebook page, 77 % use Twitter, 34 % maintain a corporate blog, and all three of these numbers have continually increased since 2008 (Barnes, Lescault, & Wright, 2013). This indicates that the use of social media will continue in the future and will soon be the norm in corporate communication (Okazaki & Taylor, 2013). The increased use stems from the global recognition of the ability of social media to effectively and inexpensively promote products, communicate brand values and engage consumers (Tsai & Men, 2012). In other words, despite being a relatively new concept, social media have quickly become essential for almost all companies.

[1] Fortune 500 is a list of companies sorted by total revenue and as such contains some of the biggest companies in the world. It is worth mentioning that such companies will typically be international.

While the advantages of using social media can be hard to ignore, any experienced business manager also knows that putting all strategic tools to their best-practice use in order to optimize use of time and money is essential. Maintaining a corporate blog, Facebook page, Twitter profile or account for the target audience in your home country requires relatively little effort, as most companies know their home market. Also, research offers plenty of insight into many basic aspects of social media use, since the majority of research in social media "*has effectively focused on several issues, including qualitative analysis of posts and comments […], causal relationships among psychological factors, drivers of eWOM*[2] *[…], or extensions of existing consumer behavior models in the social media context*", according to Okazaki & Taylor (Okazaki & Taylor, 2013). However, if a company plans on having a social media presence geared towards their international market segment, or on adapting their local presence to several smaller segments, they will have very limited research to guide their efforts, as there is almost no research elucidating the influence of culture on social media.

The influence of culture on communication is well established through for example Hall and his theory of contextual communication (1976), and an extensive amount of research has been done in this field in general. However, little is known about the extent of culture's influence on the type of communication involved in the use of social media, nor about the degree to which communicative strategies should be adapted to a given culture (Okazaki & Taylor, 2013; Tsai & Men, 2012). One important piece of research has been done by Berthon, Pitt, Plangger & Shapiro, who propose that there are three factors which determine the way social media are used; the technology, which constitutes the infrastructure that enables social media; the culture and the shared values within it; and finally rules and regulations (Berthon, Pitt, Plangger, & Shapiro, 2012). Only very few companies have the power to influence the relevant technology itself, and most must simply use what is already available. Likewise, everyone has to abide by the rules and regulations of a country or media. But when it comes to culture and cultural adaption, a company can achieve much if it has the necessary insight. This is why the number of academics, businesses and stakeholders calling for further research on cultural communication via social media is growing (Tsai & Men, 2012; Goodrich & de Mooij, 2013). Quoting Okazaki & Taylor (2013) again,

[2] eWOM: Is an abbreviation for electronic word of mouth

"…academic research on social media in an international context has been sparse and an understanding of exactly why firms face challenges in individual countries is largely absent".

This thesis, therefore, will take the approach of combining the research fields of cultural studies and social media studies. Since research on intercultural communication via social media is an area still in its infancy, little is known about the significance of cultural differences and the impact they have on communication via social media (Tsai & Men, 2012).

1.1 Research Question

Our research question has to cover a relationship between the fields described above. Therefore, the wording of the research question is:

To what extent does culture influence communication on Facebook?

Because of its position as the largest social networking site on the Internet (The Statistics Portal, 2015), we have chosen Facebook to represent social media in the context of this thesis. Facebook is a complex social media platform that incorporates many different social aspects, allowing for a comprehensive cultural analysis. In order to answer our research question, we have framed 12 hypotheses, which we have labelled either interactional or discursive. Of the 12 hypotheses, nine are interactional and quantitatively researched. These examine interaction with and the posting frequency of content. The remaining hypotheses are discursive and qualitatively researched. With these hypotheses, we analyze sentiments in texts and pictures. The last two hypotheses in the table below are regarded as one, since they constitute two opposites of the same hypothesis. All these hypotheses will assist in answering the main research question, which will constitute the core of the thesis and the governing part of the analysis. The hypotheses are:

Table 1 – Table of interactional hypotheses

Interactional
1. High context cultures will post more pictures than low context cultures
2. High context cultures will post more videos than low context cultures
3. Low context cultures will post more statuses than high context cultures
4. Low context cultures will post more links than high context cultures
5. High context cultures will have more engagement with pictures than low context cultures
6. High context cultures will have more engagement with videos than low context cultures
7. Low context cultures will have more engagement with statuses than high context cultures
8. Low context cultures will have more engagement with links than high context cultures
9. Low context cultures will post more comments than high context cultures

Table 2 – Table of discursive hypotheses

Discursive
10. Low context cultures will use more factual and informative communication than high context cultures
11. Collectivist cultures will have more engagement with in-group pictures than individualist cultures
12a. East-Asian cultures will comment more on the field of a video than Western cultures **12b. Western cultures will comment more on the object of a video than East-Asian cultures**

1.2 Purpose of the Thesis

The lack of research on a subject that is becoming increasingly relevant is the incentive for this thesis. By examining the extent of culture's influence on social media. We will attempt to contribute with new knowledge and insights. The thesis will take form of a comprehensive empirical work, with its roots in the cultural theories of Hall, Hofstede and Nisbett. To help manage the vast amounts of social media data from our research, we will utilize a Social Data Analytics Tool (SODATO) for collecting quantitative data. The qualitative data, on the other hand, will be collected manually. The theoretical framework provides the foundation for cultural understanding, as well as the foundation for our research hypotheses. Combined with our manually collected empirical data and SODATO, these tools allow us to investigate to which extent

cultural values are reflected in communication on social networks, specifically using the example of Facebook.

1.3 Contribution to Research

Since so little research on social media has been carried out, our findings may have implications for a great variety of businesses as well as academic application. Most previous research has been focused on preferred content types due to the complex data structure and vastness of Big Social Data (Vatrapu & Hussain, 2014). To our knowledge, not many previous studies have undertaken a research at this scale, examining social media and culture. Thus, our research may contribute in narrowing the knowledge gap that exists in this field and become a possible point of departure for future research. Furthermore, organizations may benefit from the research because it provides insights into cultural communication, behavior and cognitive functions of Facebook's users, which can be utilized to improve marketing efforts, product design etc. International companies can use the knowledge gained from this thesis for their online strategies. Furthermore, this insight may be used by companies to decide whether they should focus on adapting to fit the context of specific cultures, to have either a global or local strategy. In other words, the findings of thesis can be used by companies to decide on more informed grounds in regards to their usage of social media.

1.4 Delimitation

Because of the nature of the subject as well as the sheer magnitude of the empirical data that has to be analyzed, it is not possible to convey every single aspect of our research within the boundaries of the thesis.

The thesis is delimited by time and characters, which has implications for the scope of our research. Because of the extensive amount of data typically involved with Big Data analysis, we have to delimit ourselves to one social network. SODATO can only extract data from Facebook, and Facebook is currently the largest and most complex social network. Therefore, this is the social network we have chosen to focus on. We had originally formulated 28 hypotheses (Appendix D), but only 12 of these are utilized in this thesis. The remaining hypotheses turned out to be either too dependent on latent content or were simply impossible to operationalize. This is also why most of our hypotheses are based on Hall's theory, because his theory is easily applied to content on Facebook.

Another delimitation of our research question is we focus on two brands on Facebook. These brands are the theme parks Disneyland and Legoland, which will be elaborated on in the next chapter. By using Disneyland and Legoland as our case companies, we have delimited the amount of cultures we can examine. Since these theme parks are only present in eight different countries, we can only examine eight different cultures. We could add different brands, but given the time and characters available, we have to delimit us to Lego and Disney.

1.5 Facebook and Case Companies

This section is about Facebook, the related terminology and our cases. Today social media have evolved into many different branches with their own niches, such as Vine focusing on videos and Instagram focusing on pictures. There are numerous social networking sites, but our thesis only focuses on Facebook, since it combines the different niches of most other social networking sites. Facebook is the largest social networking site with its 1.36 billion users and is among the most used by businesses (The Statistics Portal, 2015). To understand the terminology of our thesis, we have to define what Facebook is and introduce different key terms and key concepts, which will be used throughout the rest of the thesis.

Facebook is a social networking site that relies on the dynamics of Web 2.0 technology. It is called the second generation of the World Wide Web because it facilitates collaboration and online information sharing rather than just one-way communication. Content is not just created and published by administrators but by all users (Oxford Dictionaries, 2015). On Facebook, the users can interact by sharing activities and interests and build connections with friends. Every user has their own personal wall, which is made of user-generated content consisting of posts with either textual content or dynamic content. There are different post types such as status updates, links, photos and videos. Status updates only consist of text whereas dynamic content is visual in form of links, photos and videos. As a user, you can engage with these posts through likes, shares and comments. The definition of engagement that is used in the thesis is the visible and measureable engagement indicators like and comment. Shares are not provided by the Facebook API[3] and are therefore not included in our engagement definition. Facebook cannot only be used by private users but also by companies. A company, you can create a page and build a fan base of users who

[3] Facebook API: API is an abbreviation for Application Programming Interface. The API allows reading from and writing to Facebook and is in our case utilized by SODATO for collecting data.

can engage with the company through the previously mentioned engagement types. The terms user and fan are interchangeably used in this thesis, because they contain the same meaning.

In this thesis, we have decided to use the two case companies Legoland and Disneyland. Legoland and Disneyland are international chains of theme parks, which were established in Denmark and USA respectively. Today, they have parks across the world and this is mirrored in their social media presence. Each park has its own Facebook company page in the respective country and these pages are:

Table 3 – Table of case companies' Facebook walls

Legoland	Disneyland
Legoland Billund (DK)	Walt Disney World (US)
Legoland Deutschland (DE)	Disneyland Paris (FR)
Official LEGOLAND Windsor (UK)	Hong Kong Disneyland (HK)
Legoland Malaysia (MY)	Tokyo Disneyland (JP)
Legoland Florida (US)	

The reason that Lego- and Disneyland fit the purpose of this investigation is that they are international brands represented in different countries. They provide us with an opportunity to analyze different cultures and their relation to the social medium of Facebook and thus provide the data we need for answering our research question. Furthermore, these brands have similar user segments with similar demographics providing a more homogenous sample.

1.6 Definition of Culture

Since we are examining the influence of *culture* on Facebook, we need to establish our definition of culture. We operate in accordance with Hofstede's definition that culture is a mental programming influenced by the "*social environments in which one grew up and collected one's life experiences.*" (Hofstede, Hofstede, & Minkov, Cultures and Organizations - Software of the Mind, 2010, p. 5). In other words, culture is the patterns of thinking, shared forms of communication, the norms, the social behaviour, customs, values and virtues that are shared and determined by the social environment in which you live.

> "*Culture is always a collective phenomenon, because it is at least partly shared with people who live or lived within the same social environment... Culture consists of unwritten rules of the social game. It is* the collective programming of the mind that distinguishes the members of one group or category of people from others. *Culture is learned, not innate*." (Hofstede, Hofstede, & Minkov, 2010, p. 6).

The reason why we adopted Hofstede's definition of culture is that it is very similar to many of our other theorists' definitions, with only a few exceptions. We also specifically choose Hofstede's definition because some of the elements are very applicable in the specific context of our thesis. The suggestion that "*Culture is always a collective phenomenon*" shared with your social environment fits the subject of our research. We examine a social medium, which by its definition is a social environment where groupa collectively gather and interact. Furthermore, we are attempting to investigate if there is a relationship between culture and social media behavior, which corresponds to the idea of a collective programming that "*distinguishes the members of one group of category of people from others*." This categorization makes Hofstede's definition of culture most suitable for the purpose of our research.

1.7 Structure Model

Each chapter will begin with a structural model indicating the reader's progress highlighted in dark blue. The model briefly introduces the content and the structural connection between each chapter. The model is introduced on the subsequent page marking the beginning of chapter 2.

1

This chapter outlines the motivation and purpose of the thesis resulting in our research question, which will be answered by means of 12 hypotheses. The necessary delimitations, definitions and researched cultures are presented before the chapter concludes with the presentation of a structure model.

2

Chapter 2 presents the theoretical framework that the hypotheses are based on. Hall, Hofstede and Nisbett's theories are described and applied to the empirical data. Categorizing the cultures according to the dichotomous distinction of each theory enables the testing of the hypotheses.

3

Chapter 3 presents the methodological choices. These include scientific approach, the process from theory to hypothesis and the methods of content analysis. Content analysis is a scientific method describing the process from raw data to answering the hypotheses.

4

Chapter 4 presents the analysis of Facebook's content. Through the theoretical reasoning behind and definitions for the 12 hypotheses combined with examples, a coding scheme is established. Lastly, the coding scheme is applied and the results of our hypothesis testing presented.

5

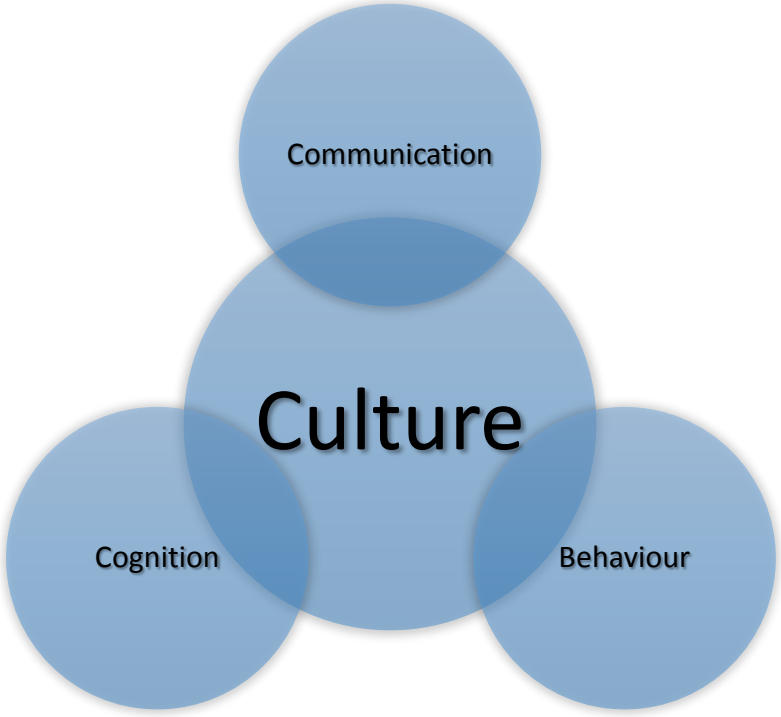
The final chapter answers the research question based on the results of the hypotheses. This is followed by a discussion of the conclusions and the implications they have for research, practice and the two case companies. The thesis is concluded with reflections on limitations and their implications for further research.

2. Theoretical Framework

In this section, we introduce the theoretical framework of the thesis. This provides the background information necessary for the reader to understand the thesis' argumentation and the formulation of our hypotheses.

The three most prominent theories referenced in this thesis are Edward T. Hall's theory of contextual communication, Geert Hofstede's theory of the individualism-collectivism dimension and Richard E. Nisbett's theory on culture and cognition. Through theoretical triangulation (Hussein, 2009) using these theories, we attempt to provide an understanding of cultural influence on communication, behavior and cognition on social media. We compare three different ways of examining the same phenomenon, and by this triangulation we provide a deeper understanding of our field of research enabling us to examine different content on Facebook in a new light. Hall's theory is used to examine how Facebook users communicate, Hofstede's theory is used in an examination of the behavioral patterns of users, and Nisbett's theory is applied to examine cognitive functions. All these theories examine the phenomenon of culture. Eventually, this approach will provide a valid explanation of and an answer to our research question. The concept of triangulation will be elaborated on in the chapter on methodology.

Figure 1 – Model displaying the triangulation of our theoretical framework (Authors' own construction)

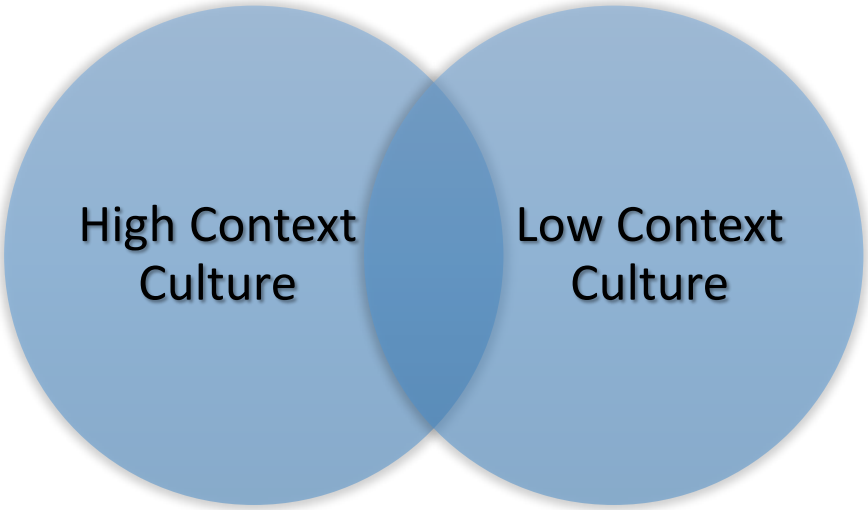


2.1 Hall's Theory of Contextuality

The first part of our theoretical triangulation is Hall's theory of contextuality. This theory is used to analyze the types of content posted and engaged with on Facebook. The theory states that the meaning of a message depends on the context of the situation in which it is expressed (Hall, 1976). For example, two scientists working within the same field of research describe a topic in fewer words than a scientist speaking with someone not within the same field. This is because the two scientists share a common knowledge. Hence, the two scientists do not have to give as much detailed background information to explain a subject as they would to the person who lacks this necessary knowledge. The same rule applies to culture and this is what Hall calls contexting. Only part of the meaning of a message is transferred in the verbal linguistic code. Another part is conveyed through a varying proportion of context. Because disparate cultures perceive contexts and situations differently, communication is culturally dependent. However, the communication of some cultures is more dependent on the context of communication than others (Hall, 1976).

Hall has conceptualized this perceived differentiation into a dichotomy that divides cultures' varying use of context in communication into *high* or *low context*. This is where the example above comes into play. The two scientists represent a high context culture, where context is used in communication to convey and explain a message. A high context culture has a shared common knowledge about cultural cues, norms and values. Hence. detailed background information is not necessary in order to convey the message. On the other hand, the scientist speaking to the person who does not study the same field represent a low context culture. Since they do not have a similar knowledge within the field, they cannot depend on the context; detailed background information is needed to communicate the same message. Low context cultures do not rely on cultural cues, norms and values to express meaning in communication. They explicitly verbalize what they are attempting to express. This division should not be viewed as an absolute in the sense that a culture is either high or low, but rather as two circles that overlap or a continuum that ranges from high to low and vice versa (Hall, 1976) as exemplified in Figure 2.

Figure 2 – The relationship between high and low context cultures (Authors' own construction)



2.1.1 High Context Culture

Hall's conceptualization of the two opposites is a comparative description of distinctive cultural characteristics. The distinct cultural characteristics of high context cultures are that "*high-context communication or message is one in which most of the information is either in the physical context or internalized in the person, while very little is in the coded, explicit, transmitted part of the message*" (Hall, Beyond Culture, 1976, p. 91). Since, high context cultures depend on the context of the situation wording becomes very important, since a complex message can be communicated very effectively with the use of just a few words in correlation with non-verbal communication. The non-verbal communication can manifest itself as facial expressions, pause, space, gestures, posture, etc., so decoding these non-verbal cues is crucial to understanding messages in high context communication. However, as Hall explains in the above citation, much of the prescribed knowledge needed to understand non-verbal cues and implicit information expressed in a message is internalized. Communication in high context cultures depend on preprogrammed information already present in the receiver and in the context of the situation. Thus, very little information is found in the actual explicit part of transmitted message (Hall, 1976).

High context cultures have close-knitted collectivist relationships and promote in-group dynamics in their societies. These concepts will be elaborated upon in the next chapter. The high context cultures do not require or expect in-depth information about the people in these relationships. They have pre-existing knowledge and interpretational skills needed to understand their peers

without the need for overly explicit verbal messages. This results in is short verbal messages consisting of fewer words, since giving too much information is considered rude and condescending (Cardon, 2008). Therefore, an individual communicating within a high context culture will often talk around the point, never directly mentioning the specific issue (Hall & Hall, 1990). High context cultures value slow and indirect messages (Cardon, 2008). It is the role of the receiver to interpret the non-verbal cues of the communication and thereby what is being expressed (Hall, 1976). Speaking is an "*art form*" and communication unifies the group and is an expression of "*sophistication, nuance and cultural identity.*" (Cardon, 2008, p. 401).

With the above description of high context cultures, it has been established that dependency on context in communication is a principal cultural characteristic. However, it is difficult to analyze communicational context on Facebook, because non-verbal cues cannot be expressed clearly. Subtle cues in communication are lost on social media and hence this communication may not be as nuanced. If the result of communication in high context cultures is short verbal messages with fewer words, this could also apply for Facebook. However, if context is not an influence on communication on social media, it could change the communication style of high context cultures.

2.1.2 Low Context Culture

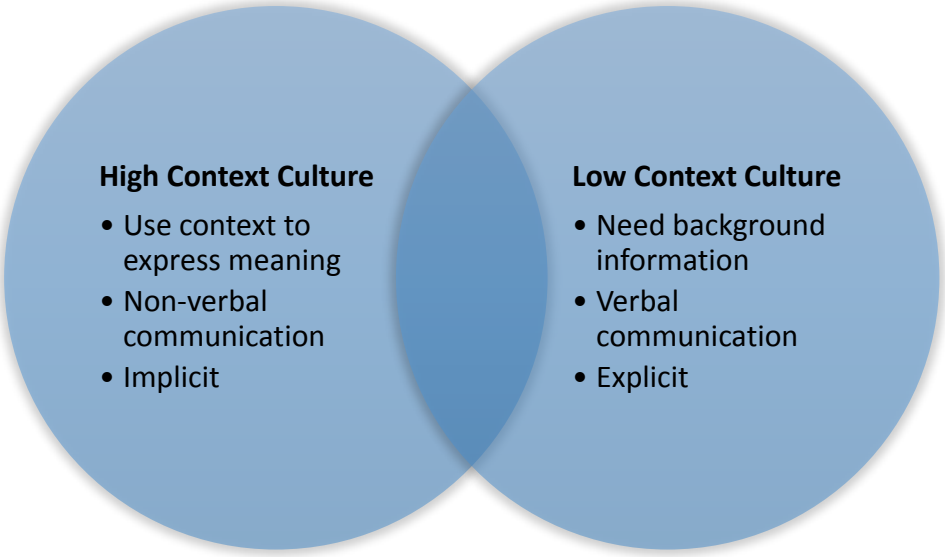
In low context cultures on the other hand, "*the mass of the information is vested in the explicit code*" and therefore these cultures rely heavily on verbal communication (Hall, 1976, p. 91). Communication is task-oriented and the most salient information of a message must be transmitted in the verbal message (Cardon, 2008). The prescribed and pre-programmed information is not internalized or evident through the external context of the situation, so these cultures need and expect detailed background information for their communication. This is often expressed through a high amount of factual information and detailed descriptions. The salient information is vested in the explicit code and non-verbal communication is not as prevalent in social interactions as it is in communication within high context cultures. Everything that needs to be said is spelled out in an ongoing flow of information and these cultures value fast and direct messages (Hall, 1976; Cardon, 2008).

I contrast, high context cultures, low context cultures have superficial and compartmentalized relationships. These relationships do not presuppose an in-depth knowledge of other members of the society. Therefore, people communicating within low context cultures do not have pre-existing

contextual knowledge and hence need detailed, explicit information in order to understand the context of the communication. This manifests itself in communication as the usage of more words and detailed information. In low context cultures, this way of communicating is considered thorough and meticulous (Hall & Hall, 1990; Hall, 1976).

While the lack of context on Facebook could affect communication within high context cultures, this is not the case for low context cultures, which gives the impression that Facebook is more geared towards low context cultures. Since, they are not dependent on context to express their message, so the communication style and cultural characteristics of low context cultures are not as restricted and by Facebook as is the case with high context cultures. Social media support the superficial relationships of low context cultures, where users interact with many people similarly. The figure below summarized the key differences in communication style of the two culture types.

Figure 3 – Key points of high and low context cultures (Authors' own construction)



Low context cultures are located in Western societies such as Germany, Scandinavia and the USA. High context cultures, on the other hand, originate from Arabic, Asian and East-Asian countries such as China, India and Malaysia. Despite the general perception of France as being a Western culture, French culture is also categorized as a high context culture by Hall (Hall, 1976). However, he does mention that northern France tends toward a low context communication style, while southern France is more inclined to high context communication. Therefore, Hall does

acknowledge that his generalization is too rigid and that sub-cultural differences have to be considered (Hall & Hall, 1990; Hall, 1976). In our thesis, we investigate the cultures off eight different countries: England, Denmark, Germany, France, China, USA, Japan and Malaysia. Hall has classified our respective countries as follows:

Table 4 – Hall's dichotomous classification of the included cultures

High context cultures	Low context cultures
Malaysia (Legoland Malaysia)	USA (Walt Disney World and Legoland Florida)
China (Hong Kong Disneyland)	Denmark (Legoland Billund)
France (Disneyland Paris)	Germany (Legoland Deutschland)
Japan (Tokyo Disneyland)	England (Official Legoland Windsor)

Hall's theory of high and low Context Cultures, along with the field of intercultural communication in general, has been criticized for not being empirically validated. Additionally, subsequent research attempting to test his model empirically has not been able validate his theoretical framework either (Cardon, 2008). Hall describes different cultures in his works, but does not account for the methodology behind his contexting model, which is another point of criticism. His work is mainly based on qualitative interviews and observational methods but lacks quantitative empirical evidence (Cardon, 2008). Nevertheless, Hall's contextual theory is still one of the most cited works in the field of intercultural communications and provides the background for our analysis of different cultures on Facebook in this thesis.

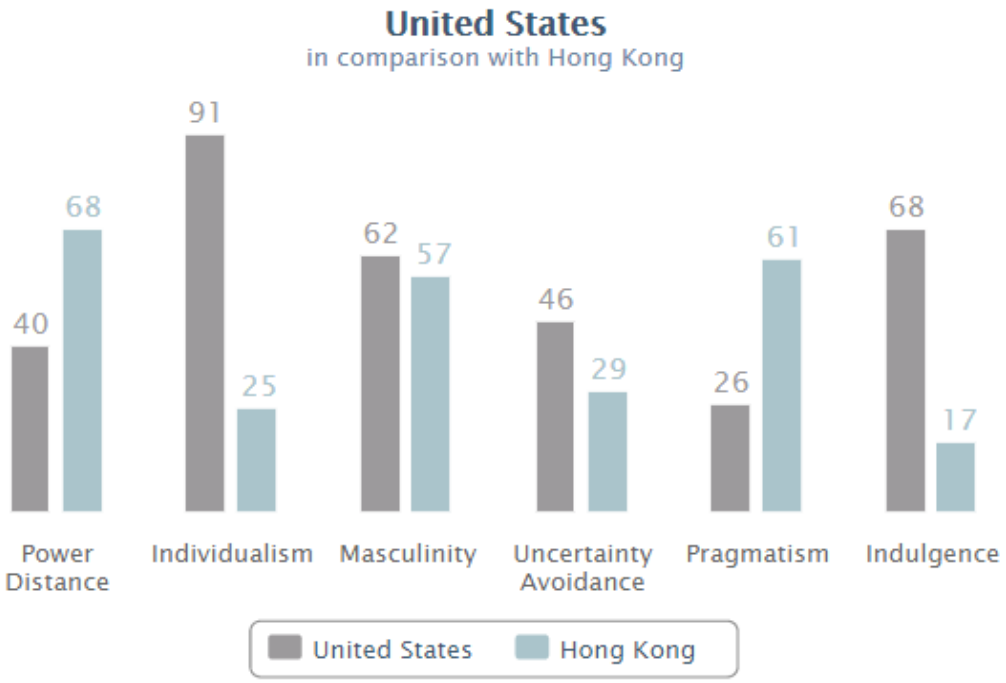
2.2 Hofstede's Cultural Dimensions

The second theory used for our theoretical triangulation is Geert Hofstede's theory cultural dimensions, specifically the dimension of individualism versus collectivism. We will apply his theory in an examination of the behavioral patterns of Facebook users, specifically how users interact with pictures. In order to understand our analysis of the users' interaction with pictures, we will need to establish the basics of Hofstede's theory. Therefore, the most important aspects of Hofstede's framework applied in our thesis are presented in the following.

Hofstede's model ranks cultures on a scale from 1 to 100 and with each dimension follows a thorough description of cultural characteristics. Originally, Hofstede formulated four dimensions, which were called high/low power distance, individualism/collectivism, high/low uncertainty

avoidance and masculinity/femininity. Since then, Hofstede, in collaboration with other researchers, has elaborated on his theory on the basis of additional empirical research and added several dimensions such as pragmatic versus normative and indulgence versus restraint. For the purpose of this thesis, only one of the original four dimensions is applied, namely the individualism and collectivism dimension, since this dimension was most easy to operationalize. We had formulated hypotheses that covered some of the other dimensions, however these were not able to be operationalized. Figure 4 is an illustration of Hofstede's model with Hong Kong and the United States as examples. The figure displays the different country scores for all dimensions.

Figure 4 – Example of Hofstede's model (Hofstede, 2015)



The individualism-collectivism dimension describes whether societal focus is on the individual or on the collective. Hofstede defines it as:

> "*Individualism* pertains to *societies in which the ties between individuals are loose: everyone is expected to look after him- or herself and his or her immediate family. Collectivism* as its opposite pertains to *societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty*." (Hofstede, Hofstede, & Minkov, 2010, p. 92).

2.2.1 Collectivism

According to Hofstede, groups are of paramount importance in collectivist and are defined by strong social structures. These social structures are highly hierarchal with a paternalist leader in all parts of society (e.g. politics, family, business etc.). Members of collectivist cultures are taught to believe they are a part of a whole and to have holistic mind-sets. They believe that invisible strings interconnect everyone in the group and do not view themselves as individuals. They are taught to have a "we-consciousness", which always favors the group before the individual. In collectivist cultures the needs of the group are above the needs of the individual (i.e. the needs of the many outweigh the needs of the few). Personal opinions do not exist, because the group predetermines one's opinions. If one deviates from the predetermined norms and virtues of the group, one is considered an outcast (Hofstede, Hofstede, & Minkov, 2010).

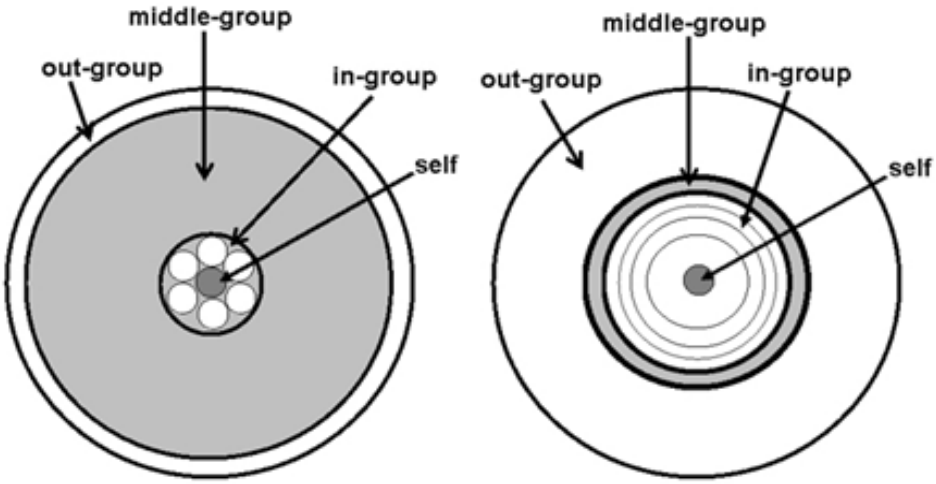
2.2.1.1 In-group

In collectivist cultures, the most important group is the family, which has a strong influence on the individual's life. The term "family" may not only include parents and siblings but also aunts, uncles, grandparents and other persons within the household or in the near vicinity. This family structure is called "the extended family". People who do not have an immediate relationship with the family or the extended family are considered the "other". These dynamics, which Hofstede also touches upon in the above citation, are termed in-group and out-group. Out-groups are defined as everyone with whom one does not share a relationship. The relationship can be physical or psychological. When individuals are regarded as belonging to an out-group, they are treated with indifference, antipathy or even animosity (Hofstede, Hofstede, & Minkov, 2010).

An in-group on the other hand is defined as family, friends, colleagues or everyone a member appears to be connected with. There is interdependency between the members of the in-group that is both psychological, physical and practical of nature. Moreover, in-groups are the origin of one's identity and the basic pillar where one can find security and protection against the destitutions of life. One can always turn to the in-group for help, and therefore loyalty to the in-group is a lifelong bond. Breaking this bond can ultimately lead to exile from the in-group, which is the worst punishment a member of an in-group can receive (Hofstede, Hofstede, & Minkov, Cultures and Organizations - Software of the Mind, 2010).

On social media, these dynamics could change. As we suspected in relation to Hall's theory, relationships on Facebook will often be superficial, which may influence these group dynamics. The usually very strong relationships in collectivist cultures become more superficial, because members do not necessarily have a lifelong bond with other users. The relationships established with other users on Facebook are temporary. Therefore, in-groups might be artificially formed on social media in specific situations or during certain events. These in-groups come into existence, because of a strong unconscious need for users to be a part of a group. Consequently, a new in-group will be formed if the situation requires it. These in-groups, called situational in-groups in the following, cease to exist when the specific moment, time or event and the psychological interconnectedness has passed. Furthermore, these situational in-groups do not only restrict themselves to form on social media. They can also spontaneously form in reals situations, for example at an event in Legoland. Figure 5 illustrates the difference of individualist and collectivist group dynamics.

Figure 5 - The left illustration represents individualist group dynamics and right represents collectivist group dynamics (Allred, Chia, Wuensch, Ren, & Miao, 2007)



2.2.1.2 Face

Since in-groups dynamics have a strong influence on collectivist cultures, it is a necessity that all members participate in upholding harmony within the group. Consequently, members of collectivist cultures seldom directly oppose their peers or participate in discussions, as this is considered rude and undesirable, since it poses a risk to the harmony of the group. Disturbing social harmony or breaking societal norms and virtues causes shame to you and to your family

because your family is an extended part of yourself. This concept of upholding harmony, following societal norms and virtues and not bringing shame to you or your family is called “face”. Members of collectivist cultures go through great lengths to uphold face and to not lose face through actions that fail to “*meet essential requirements placed upon him by virtue of the social position he occupies*” (Hofstede, Hofstede, & Minkov, Cultures and Organizations - Software of the Mind, 2010, p. 110). Upholding face requires conforming to the norms and values of your in-group in a culture that is very conscious of social contexts (Hofstede, Hofstede, & Minkov, 2010).

If members of collectivist cultures seldom oppose their peers or participate in discussions, this circumstance should also be observable on social media. If you constantly attempt to uphold harmony in your in-group, open discussions should not be observable on Facebook. However, if in-group dynamics are more superficial and temporary on Facebook, this may be evident in the influence of Face and the will to uphold harmony of collectivist cultures.

2.2.2 Individualism

Whereas collectivist cultures are focused on the group and the in-group dynamics are pivotal ground pillars of society, individualist cultures focus on the single person, the individual. In these cultures, social systems and norms focus on the individual’s performance and further an “I-conscious” mind-set. One has a personal identity, which is distinct from other people’s identities, and as such, the individual does not believe to be a part of a collective group identity. You are dependent on yourself and not the group (Hofstede, Hofstede, & Minkov, 2010).

In individualist cultures, the interests of the individual prevail over the interests and the needs of the group. Most families in individualist cultures are nuclear families, consisting of two parents and a number of siblings. Other relatives are rarely a part of the nuclear family structure. Relationships in these cultures are not prearranged, but emerge voluntarily between individuals. You are not predetermined to only associate with your in-group members. These relationships have to be carefully nurtured so they do not wither, in contrast to the bonds between members of collectivist cultures, which are eternal once established. Furthermore, individualist cultures do not struggle to uphold harmony in society, since in-groups are not as prevalent as in collectivist cultures. Therefore, the concept of face is also not as prevalent in these societies (Hofstede, Hofstede, & Minkov, Cultures and Organizations - Software of the Mind, 2010).

As a result, members of individualist cultures do not necessarily hesitate to confront each other and express discontent publicly on for example social media. Discussions occur frequently and are viewed as a natural way of expressing one's opinion and as freedom of speech. Thus, individualist cultures should engage in discussions and expressions of their discontent on Facebook more frequently than collectivist cultures, since they do not adhere as much to in-group dynamics and the dynamics of Face. Table 5 below represents a summary of the most important cultural characteristics of the individualism-collectivism dimension.

Table 5 – Key characteristics of collectivist and individualist cultures

Collectivist characteristics	Individualist characteristics
"We-consciousness"	"I-consciousness"
In-group dynamics	Independent relationships
Concept of Face	Open discussions
Do not oppose peers	Confrontation accepted

Examples of individualist cultures include cultures with Anglo-American roots such as USA, Britain, Australia and cultures such as Germany, Denmark and France. Cultures that score high on the collectivist index are Central and South American countries such as Guatemala, Venezuela and Colombia but also include Asian cultures such as Malaysia, Hong Kong and South Korea. (Hofstede, Hofstede, & Minkov, Cultures and Organizations - Software of the Mind, 2010). Hofstede classifies the countries of our thesis as follows:

Table 6 – Hofstede's dichotomous classification of included cultures

Individualist cultures	Collectivist cultures
Denmark (Legoland Billund)	China (Hong Kong Disneyland)
Germany (Legoland Deutschland)	Malaysia (Legoland Malaysia)
England (Official Legoland Windsor)	Japan (Tokyo Disneyland)
France (Disneyland Paris)	
USA (Walt Disney World & Legoland Florida)	

Many academics have criticized the validity of Hofstede's model and discredited his work because his dimensions are solely based on measurements taken from cultures within IBM. Critics believe

that the results cannot be used to generalize on a national level, that the researched sample of people would be inadequate and only reflect organizational culture. Furthermore, his cultural model is criticized of being stereotypical and not displaying the diverse complexity of culture (Hanna, 2005). However, Hofstede's methodology has since been frequently replicated and his dimensions have been supported by independent research. Hofstede has since included additional data from other large surveys (World Value Survey, GLOBE Study) into his own research, which has substantiated his research. He has since dedicated a section for each dimension to retort the accusations of invalidity (Hofstede, Hofstede, & Minkov, Cultures and Organizations - Software of the Mind, 2010).

Recent research in intercultural behavior provide little or no advancement in comparison with Hofstede's original research and even more seem to correlate and support Hofstede's theoretical framework (Goodrich & de Mooij, 2013) . Another criticism of Hofstede's cultural dimensions is that his classifications of national cultures suggest that culture appear to follow geographical borders. However, considering that sub-cultures go beyond geographical borders in many countries, the concept of national culture loses its validity. Hofstede does acknowledge sub-cultural variances and stress that intra-cultural differences are prevalent in all cultures. These sub-cultures do not follow geographical borders, the general cultural norm of the prevalent culture they live in or the general description of the culture of his dimensions (Hofstede, Hofstede, & Minkov, 2010).

Nonetheless, Hofstede's dimension of individualism and collectivism and the concepts defined in the theory provides the basis for understanding our hypotheses. Even though we have had several other hypotheses that stem from Hofstede's other dimensions, individualism and collectivism was the most applicable on Facebook for our purposes.

2.3 Nisbett's Theory of Culture and Cognition

The last theory that is introduced and completes our triangulation is Richard E. Nisbett's theory of culturally dependent cognitive functions. This theory will provide the necessary knowledge to understand our analysis of videos on Facebook and how we arrived at our hypothesis.
Nisbett is a social psychologist who has shared the assumption with the most salient psychologists of the 20th century that all basic cognitive functions of humans are universal. He believed that all humans depend on the same cognitive processes of perception, memory, causal analysis,

categorization and inference and that these functions did not pertain to cultural alterations. He was convinced that if people from different cultures had different beliefs, norms and values, it was not because they had different cognitive processes. Nisbett believed that these differences stemmed from a difference in teaching (Nisbett E. R., 2005). However, talking with one of his Asian students, Nisbett re-evaluated his position.

> "*You know, the difference between you and me is that I think the world is a circle, and you think it's a line… The Chinese believe in constant change, but with things always moving back to some prior state. They pay attention to a wide range of events; they search for relationships between things; and they think you can't understand the part without understanding the whole. Westerners live in a simpler, more deterministic world; they focus on salient objects or people instead of the larger picture; and they think they can control events because they know the rules that govern the behavior of objects"* (Nisbett E. R., 2005, p. 13).

This revelation made him believe that different cognitive functions such as attention and perception were not universal, but could possibly be culturally dependent. Nisbett began research into culturally distinct features of different cognitive functions. He concluded that there was cultural differences in five cognitive functions of Westerners and East-Asians. These are attention, perception, causal inference, knowledge organization and reasoning. For the purposes of our thesis, we will only focus on the two cognitive processes of attention and perception. The reason why we have chosen these specific cognitive functions is that it provides us with a tool to analyze visual content. This gives us the opportunity to analyze videos posted on the walls of our brands. Furthermore, when Nisbett writes about Westerners, he refers to cultures of European descent whereas East-Asians refer to cultures that are influenced by Chinese philosophy, such as Japan and Korea. We will adopt the same distinction for our purposes and the derivatives from the words such as Westerner, Asian etc. Nisbett is aware that this is a broad generalization and that subcultures exist in each culture but merits it on the background of Asian philosophy vs. Western philosophy, which are very distinct from each other (Nisbett E. R., 2005).

Nisbett states, derived from the two distinct philosophies above, that people do view the world in different terms dictated by their social reality. East-Asians view the world holistically, whereas Westerners view the world analytically. Westerners tend to categorize the world around them and use formal logic when solving problems. In contrast, Asians view the world as more complex and believe that events are interconnected. They seek the "middle way" in problem solving when opposing propositions are at hand. Where Westerners only see one solution, East-Asians often believe that there are several solutions to a problem, even if the solutions seem to contradict each other in the eyes of a Westerner (Nisbett E. R., 2005).

Westerners view themselves as individuals with distinctive attributes and their own set of characteristics. In western society, people aim at unique personalities, to stand out from the crowd and be different from other individuals. These cultures are focused on personal goals, success and achievement and view loyalty to the group as a hindrance to achieving these goals. In contradiction, East-Asians are supposed to be less concerned with personal goals and self-achievement and more concerned with group goals. A salient societal task is to maintain harmonious relationships in society, which takes precedence before the well-being of the individual. Individual distinctiveness is undesirable whereas fitting in to the group and meeting group expectations is a prominent goal (Nisbett E. R., 2005).

These two unique set of values, norms and cultural characteristics result in different worldviews that influence cognitive processes. This manifests itself in culturally distinctive patterns of perception and attention. In cultures where the group and the relationship within the group is the most important societal structure, attention and perception are influenced by the environment and the relationships of the group. Nisbett has termed these cultures *field dependent*. In a society where personal goals and individual distinctiveness are important, one could expect these cultures to focus more attention and perception on salient individual objects. These cultures have been termed *object dependent* cultures by Nisbett (Nisbett E. R., 2005).

2.3.1 Object Dependent Cultures

Westerners are more inclined to decontextualize objects opposite East-Asians. Westerners detach the object from its environment, whereas Easterners see the relationship between the environment and the object as a whole. Westerners do not detect a relationship between the object and the field; they do not see the context. In these societies, group dynamics do not have

the same salient aspect as in East-Asian countries. You do not have to be aware of others or uphold harmony in a group. It is yourself, the object, that is the most important aspect of society. Therefore, the cognitive processes of Westerners are primed to attend to the object and their perception primed to detect changes related to the object and not in the environment.

2.3.2 Field Dependent Cultures

Asians pay attention to the field and the relationship between the field and the object. Field dependence correlates with cultures that live in collectivistic societies. In these cultures, you cannot only care for yourself, the individual object, but have to focus on the group. Therefore, your attention is primed to consider the whole, which is the field and not the single object. Furthermore, harmony of the in-group is important, which is why members of the in-group have to pay attention to the whole and the relationship between the members of the group to maintain harmony. In-group members have to be very perceptive about the emotions of other group members to maintain the harmony. They have to be able to read other in-group members' feelings, which mirror itself in the cognitive processes of attention and perception. Hence, East-Asian cultures are field dependent and their attention is focused on the whole field or the relationship between the field and the object (Nisbett E. R., 2005). Table 7 displays the most important characteristics of field and object dependent cultures.

Table 7 – Summary of object and field characteristics

Object dependent cultures	Field dependent cultures
Holistic worldview	Analytical worldview
Attention on the individual	Attention on relationships
Attention on salient focal object	Attention on the field
Decontextualize objects	Context between object/field

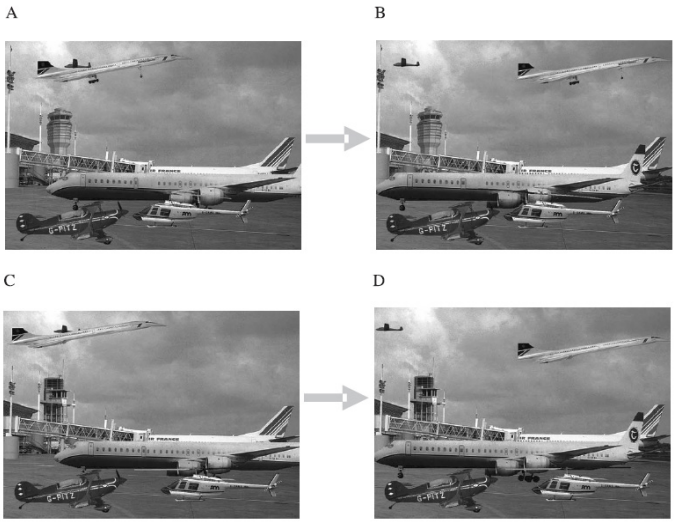
These cultural differences in attention could influence what kind of content these cultures attend to on social media. More specific, it could influence what these cultures focus on in pictures or videos. Brands on social media could utilize this knowledge by adapting their videos and picture to optimize interaction and engagement. Videos adapted to field dependent cultures should have complex environments and backgrounds. Videos adapted to object dependent cultures, on the other hand, should have simple backgrounds with salient objects. These videos should not focus

on changes on background because object dependent cultures would most likely not notice these changes.

Nisbett and his colleagues illustrated their hypothesis through a cross-cultural research program, which systematically has investigated cognitive differences across cultures (Vatrapu & Suthers, 2009). Nisbett and his colleagues have conducted several experiments to test if attention and perception are culturally conditioned. For example, the Embedded Figures Test where participants are asked to locate a simple figure embedded in a more complex environment. The longer it takes the participant to locate the figure in the context, the more field dependent the participant is assumed to be (Nisbett E. R., 2005).

A similar test is the Change Blindness test, which is applicable for the purposes of our thesis. In this test, Japanese and American students were shown short, computer-generated color video clips. These clips were almost identical, but there was either a change in the foreground in a salient object or in the background. If the participants reacted to the changes in the salient object in the foreground, they were considered object dependent and if the participants reacted to changes in the background, the objects in the background or in the relationships between the objects, they were considered as field dependent. This experiment supported Nisbett's hypothesis that Westerners mostly detected changes in and commented on the most salient object of the clips. For the majority of the cases, East-Asians on the other hand commented on and detected changes in the background, the objects of the background and the relationships between objects (Nisbett E. R., 2005). The following picture is an example of the vignettes used in the Change Blindness test.

Figure 6 – Example of Nisbett's experiment (Nisbett & Masuda, 2006)



To avoid or minimize biases of his experiment, Nisbett changed the vignettes of the video clips. He adapted the video clips to an American, an Asian and a neutral environment and repeated the experiment. This changed the results and supported the cultural difference of field and object dependency. This could also be relevant to consider for our thesis, however, we believe since the videos posted on the different Facebook pages reflect their natural environment, this bias should not influence our research. In other words, videos posted on Asian Facebook walls also have Asian environments and videos posted on American walls display American vignettes.

Nisbett has categorized the countries used in our thesis as displayed in the table:

Table 8 – Nisbett's dichotomous classification of the included cultures (Authors' own construction)

Object dependent (Western) cultures	Field dependent (East-Asian) cultures
Denmark (Legoland Billund)	Malaysia (Legoland Malaysia)
Germany (Legoland Deutschland)	China (Hong Kong Disneyland)
France (Disneyland Paris)	Japan (Tokyo Disneyland)
USA (Walt Disney World & Legoland Florida)	
England (Official Legoland Windsor)	

Since Nisbett's theory on culturally dependent cognitive functions is a more recent theory, only few have criticized his work. However, by our own assessment, Nisbett's definition of culture is very generalizing. His cultures only differentiate between Westerners and East-Asians. He mentions that his sample consists of students who are mainly Americans and Chinese, which is not representative of all western and eastern oriented cultures.

2.4 Theoretical Summary

Nisbett's theory concludes our theoretical triangulation, which provides three different perspectives on the phenomenon we are examining. The theories presented provide the understanding for our analysis and are the point of departure for our hypotheses. A general tendency of the three theorists is that they have similar descriptions and classifications of the cultures, even though they describe very different areas such as communication, behavior and cognition. For example, Hall's description of high context cultures correlates with Hofstede's description of collectivist cultures and Nisbett description of field dependent cultures. They all share similar descriptions of cultural characteristics and all mention in-group dynamics. An

explanation could be that they have read and based their description of the cultures on each other's theories. Nisbett for example cites both Hall and Hofstede in his book The Geography of Thought (Nisbett E. R., 2005). However, another is that the theories' similar descriptions support their conclusions and claims. Nevertheless, the theories provide the opportunity to examine different content on Facebook, which is the reason why they have been applied in the thesis.

1

This chapter outlines the background and purpose of the thesis, resulting in our research question. The necessary delimitations and definitions are established before the chapter concludes with the presentation of our structure model.

2

Chapter 2 presents the theoretical framework that the hypotheses are based on. Hall, Hofstede and Nisbett's theories are described and applied to the empirical data. Categorizing the cultures according to the dichotomous distinction of each theory enables the testing of the hypotheses.

3

Chapter 3 presents the methodological choices. These include scientific approach, the process from theory to hypothesis and the methods of content analysis. Content analysis is a scientific method describing the process from raw data to answering the hypotheses.

4

Chapter 4 presents the analysis of Facebook's content. Through the theoretical reasoning behind and definitions for the 12 hypotheses combined with examples, a coding scheme is established. Lastly, the coding scheme is applied and the results of our hypothesis testing presented.

5

The final chapter answers the research question based on the results of the hypotheses. This is followed by a discussion of the conclusions and the implications they have for research, practice and the two case companies. The thesis is concluded with reflections on limitations and their implications for further research.

3. Methodology

In the previous section, we presented and explained our theoretical framework, a necessity for understanding *why* and on what basis we formulated our hypotheses. In this section, we will present *how* we did it. This includes an explanation of our view of the world as well as our methodological approach for content analysis, covering how we intend on answering our problem statement and our data collection procedures.

3.1 Scientific Approach

The scientific approach of a research paper or experiment determines the basic rules, fundamental problems and the issue of validity within the context of different professions and disciplines. It affects how the world is perceived, how problems are addressed and how conclusions are drawn. Therefore, awareness of the functional paradigm is important. Not only is it important to the author or researcher, but it also enables the reader to understand the thought process and conclusions (Fuglsang & Olsen, 2013). Furthermore, there is a general belief within theory of science that (almost) no meaningful or productive discussions can occur between the different paradigms (Kuhn 1962 and Popper & Notturno 1994 in Fuglsang & Olsen, 2013).

Within the natural sciences, a positivistic approach is typically applied. This approach indicates that only sensory observable circumstances and logically derived conclusions, which can endure continual testing, are definitively true (Fuglsang & Olsen, 2013). A positivist considers such results reached in this manner as objective truth. On the contrary, social constructivists believe that there are no objective truths, only socially constructed realities. According to this school of thought, all societal structures and phenomena such as social institutions and culture are assembled, changed and disassembled throughout history as a result of social processes (Fuglsang & Olsen, 2013). This paradigm is commonly applied within social sciences.

Our thesis operates within two fields of research, namely the contemporary field of social media studies and the long-standing field of cultural studies. Both culture and social media can be regarded as social phenomena since they are the result of human interaction or social processes occurring over time. This may initially make most sense regarding culture, but social media is not particularly different. It constitutes communication and interaction between humans, which is a social process. Additionally, the construction and development of social media is ever changing,

similar to culture. In the perspective of social constructivism, all social constructs are dynamic processes evolving over time.

Where the positivist would only consider the results of an experiment as true if they can be repeatedly tested and verified, a basic assumption of social constructivism is that "the social" can only be described through the analysis of dynamic processes (Fuglsang & Olsen, 2013). Therefore, truth is bound to the constructs in which it can be observed. Some constructs, however, are more rigid and hardly ever change, thus, giving the work done within the paradigm of social constructivism credence nonetheless (more on this later).

However, given the framework and methods of this investigation our approach primarily abides by the paradigm of positivism. Namely, our use of hypotheses and deductive conclusions is a common approach within positivism. The concepts of concern in this dissertation are dynamic and thus no objective truth can be arrived at. However, our applied method of content analysis is largely positivistic, which requires the process to be repeatable and show the same results. Nevertheless, with a positivistic approach, less standardized types of content analysis, which considers latent content and the inferences made from latent content, would not be considered completely objective.

In sum, this thesis utilizes a positivistic approach. However, given the fields of research in which the thesis operates, the theoretical framework employed and the objective of analyzing and describing social processes, this thesis' worldview corresponds to that of social constructivism. In order to understand how social dynamic constructs can be rigid and thus decomposable, the following section will explain social constructivism.

3.1.1 Social Constructivism

This section elaborates upon the most relevant elements of social constructivism as they pertain to this thesis. Specifically, a clarification of the concepts of social structures and phenomena will be presented. In addition, this section seeks to clarify how we manage to research these concepts despite their social, historically constructed and changeable nature.

In the perspective of social constructivism, there is no objective reality, only interpretations. Since an interpretation is a subjective evaluation of a circumstance or process, even our recognition or realization of reality is socially constructed (Fuglsang & Olsen, 2013). According to the Danish

philosopher Finn Collin, there are two distinctive directions within social constructivism; an epistemological and an ontological. While the former claims that our knowledge of reality is socially constructed, the ontological direction claims that reality itself is socially constructed (Fuglsang & Olsen, 2013). We can apply this within social science and use the phenomenon culture as an example. In an epistemological perspective, recognition of culture will always be affected by social reality. With an ontological approach, on the other hand, reality or culture is determined through realization. The result of this is that culture is not something you can recognize but only a process that you can realize as an individual. In the light of this dichotomy, this thesis takes an epistemological approach, since the objective is indeed to recognize and describe culture.

Culture would by most be considered one of the more rigid phenomena created by humans, along sexuality, identity, ethnicity, crime and many more (Fuglsang & Olsen, 2013, p. 404). In fact, most things that do not directly relate to nature or are considered natural facts would be considered social constructs under this paradigm. While some phenomena only exist briefly, others exist on a much larger scale with only minor modifications over time. This is made possible through the continuous "…*construction of the societal reality via human praxis/practice"* (Fuglsang & Olsen, 2013, p. 408). According to the sociologists Berger & Luckmann (1966), society and its institutions are the result of recurring response patterns and the meaning we attach to them. In other words, actions that to the individual have a subjective meaning or purpose will on a repeated, grander scale give rise to society as a more objective, reified reality (Fuglsang & Olsen, 2013).

Berger & Luckmann have theorized on how human actions can create a world of structures. The process happens in three steps: externalization, objectification and internalization. Societal structures are essentially *externalized* human practice (see above quote) continually created and shaped through human habits, routines and interpretations. As time passes, they become *objects* and take on a more permanent status. A child born into a world of already established structures would undoubtedly adapt the values through *internalization* (Fuglsang & Olsen, 2013). The final point regarding social constructivism and our view of social structures is also the most important in relation to this thesis. Berger & Luckmann explain that once these objects or structures have been established, they have a tendency to lose their connection to their origin and become almost unchangeable. They are, in one word, reified (Fuglsang & Olsen, 2013). The sociologist Émile Durkheim (2013) explains why this fact is important. According to Durkheim, the first and most

important rule of sociology is that social phenomena should be considered independent entities. This emphasizes their autonomous existence making said phenomena objects of exact science. The reifications made possible through this paradigm provide the thesis with the grounds to research a social construct such as culture.

In summary, this thesis:

- .. addresses problems and draws conclusions according to the positivistic tradition, typically seen in social science theses
- .. applies social constructivism since the researched phenomenon is dynamic
- .. sees the socially constructed world epistemologically as this allows the recognition and description of the studied phenomenon
- .. has implications and allows for recommendations due to the reified nature of the phenomenon

3.2 Research Approach

The purpose of this section is to account for the key methodological choices made throughout this thesis. When making such choices, it is important to constantly be aware of the project's overarching purpose. In this case, the purpose or incentive stems from an interest in the field of intercultural communication on social media, coupled with the need for further research in the area. More specifically, various theorists call for empirical studies that elucidate the influence of cultural values on social media. The absence of existing research in this area renders this thesis an explorative study, since it seeks to provide a deeper understanding of the interdisciplinary field (Andersen, 2013).

Since this thesis utilizes empirical data, it must also be considered an empirical study. The explorative research will take its point of departure in an analysis of data, which is the content of Facebook. Specifically, we will analyze content in an attempt to answer the hypotheses. According to Holsti (1969), content analysis is defined as *"Any technique for making inferences by systematically and objectively identifying special characteristics of messages".* As we intend to examine the relationship between cultural characteristics and communicational behavior on social media, we will apply methods of content analysis to ensure a systematic and objective approach.

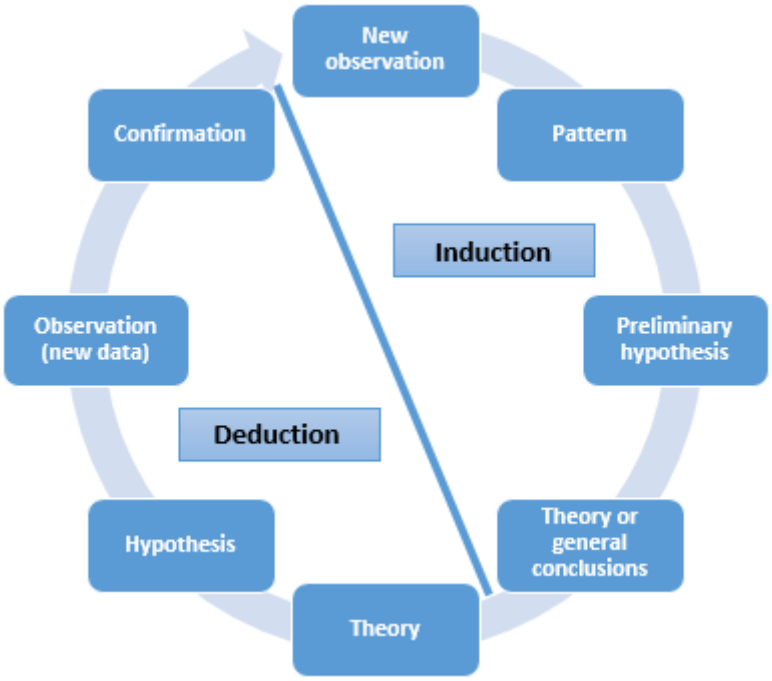
Firstly, however, we will explain our method of reasoning in forming our hypothesis and the production of knowledge. Thereafter, an explanation of the basics of content analysis and its relation to this study will be presented. This section covers data coding, treatment of results and reliability and validity. Furthermore, a description of our approach for data collection and a distinction between the different types of data will explain how we prepare the data for content analysis. We will also explain the use of methodological triangulation and its effect on validity. Finally, a brief description of our method of translation follows.

3.2.1 Induction and Deduction

When researchers attempt to produce new knowledge, they do so primarily through either a deductive or an inductive approach. Both are scientific methods used to draw conclusions. A deductive approach is an attempt to explain a specific occurrence using already known principles and concepts based on existing knowledge. An inductive approach, on the other hand, is an attempt to arrive at generalized principles based on a single occurrence. Repeatedly applying the method of induction, verifying or modifying the principles you arrive at, will eventually provide more scientifically grounded and generalizable results. These results will in the end turn into theory that can be used deductively to explain future occurrences. Within the social sciences however, it is often hard to distinguish between the two methods, since they are often interchangeably applied in studies (Andersen, 2013).

If we try to relate these different approaches to the theory applied in this thesis, it will help clarifying our process. In short, the inductive process creates new knowledge based on empirical data, and through systemization of this new knowledge, new theories or models can be created (Rasmussen, Østergaard, & Beckmann, 2006). This is also the approach Hall, Hofstede and Nisbett adopted in forming their theories before arriving at their current framework. Figure 7 below represents this process using Nisbett as an example. Nisbett began investigating the raised question by outlining the patterns he suspected to be true in the shape of preliminary hypotheses. Based on his experiments, he ultimately made a conclusion from the results and formulated a theory.

Figure 7 – Induction/Deduction model (Authors' own construction)



According to Rasmussen (2006), these inductively formed theories can then be deductively used in new situations, typically through the formulation of a series of hypotheses based in theory. Looking at Figure 7, this process starts in the theory box and moves toward confirmation. This corresponds to the method applied in this thesis, since we have formulated 12 hypotheses based on our theoretical framework. With these hypotheses, we intend to test the theories' assumptions in a social media context. In the end, answering our research question will depend on whether or not the ideas presented in our theoretical framework can be confirmed. In other words, our primary method for constructing new knowledge is that of deduction.

However, a thesis is an iterative process. Therefore, deduction and induction are interchangeably applied at different stages of the process. Similar to our theorists, we will inductively draw conclusions about culture based on the results and the observed patterns seen on Facebook. Although in our case, the purpose is not the development of theory, but rather investigating case or culture specific implications.

3.2.2 Content Analysis

The purpose of content analysis, according to some of the main contributors in recent time, is to provide a scientific approach to *"'…arrive at rather unambiguous descriptions of fundamental features of society'"* (Franzosi, 2008, p. 5). In order to explain that in order to describe trends in

mass communications, a quantitative, systematized, precise, explicit and objective approach is needed.

Content analysis is a method involving a series of processes with the aim of making valid inferences from social communication artefacts (Weber, 1990; Berg & Lune, 2012). As the quote from Holsti indicates, the most important characteristic of any content analysis is a systematic and objective approach. In order to derive meaning from our data, we must first make the data *systematically* comparable. This is accomplished through the *objective* formulation of a coding scheme that will describe the rules for systematization of the data based on shared meaning. A third and perhaps more decisive characteristic of content analysis is its inherent quantitative approach made evident in the statistical treatment of results, where counting based on the coding scheme will produce frequencies. Furthermore, to ensure reliability and validity, it is important that any content analysis base itself upon precisely formulated, explicit and exhaustive criteria for selection, so that others can replicate the study with comparable results (Berg & Lune, 2012).

The above definition describes the characteristics and intention of content analysis, but explaining the actual methodological techniques of content analysis will aid the researcher in defining and the readers in understanding the criteria for data selection and categorization. Additionally, this provides practical techniques for ensuring reliability and validity. These concepts, along with our approach to each, are explained in the following.

3.2.2.1 Coding Scheme

Although the objective and explicit formulation of a coding scheme is at the heart of content analysis, there is a necessary preceding step. If an inductive approach is taken, the researcher must first examine the data in order to identify the dimensions and themes of the data. Based on this, creation of the criteria for selection or categories can commence. This is the approach needed when seeking to generate theory grounded in data. On the other hand, if the researcher is seeking to test propositions based on theory, a deductive approach will use empirical indicators of the study's theoretical framework to define the categories (Berg & Lune, 2012).

In this thesis, we seek to examine the concepts of culture theory as laid out by Hall, Hofstede and Nisbett in the context of social media. Since their work is not based on data from social media, our intention of testing hypotheses based on these theories in relation to a new medium is a

deductive approach. As Berg (2012) states, with this approach, the researcher should use the empirical indicators of theory in formulating the categories of the coding scheme. Our process was firstly to frame the hypotheses thereby introducing a concept with each one. These concepts are all based in theory and their definition constitutes the definition of our categories.

Each content analysis is unique and since a content analysis is concerned with the inference of qualitative data, there is no guide or model for the development of coding scheme categories (Berg & Lune, 2012). This is why an objective and explicit approach is so important. In this study, we obtain this through an exhaustive explanation of the concepts of our hypotheses in relation to the theory. Furthermore, Berg (2012) stresses the importance of any study to include at least three examples, based on the categories, which offer detailed excerpts from the data. Our explanation of the concepts accompanied by examples for each can be found in the later chapters on Interactional Hypotheses and Discursive Hypotheses. It is in the combination of our explicit definitions and the applied examples that we establish our coding schemes and thus determines how we most practically categorize each piece of data.

3.2.2.2 Statistical Treatment of Results

Once all the data has gone through the coding scheme and has been categorized accordingly, the researcher is ready to process the results using descriptive statistics and/or inferential statistics. Descriptive statistics helps in summarizing data through a tabulated and graphical presentation and a discussion of results based on empirical trends. Inferential statistics includes techniques that allow generalizations of populations based on samples (Laerd Statistics, 2014). The use of inferential statistics is highly technical and requires expert knowledge and this thesis will therefore refrain from applying this technique. We will however present the relative frequency, also called the empirical probability, when calculated on real-world data for each hypothesis and each wall in a table, as this will help in fully demonstrating the overall data (Berg & Lune, 2012). We will also present the average frequency per culture type accompanied by charts visualizing the difference, as our hypotheses are formulated based on the relevant theory's dichotomy of culture types.

While it is indeed impossible to scientifically infer anything about greater populations without the use of inferential statistics, it should be said that the method of content analysis has always had frequency counting at its core (Franzosi, 2008). Furthermore, this thesis does use a large data

sample spanning several years' worth of user interaction to resemble the culture in question more closely.

3.2.2.3 Reliability and Validity

When it comes to reliability and validity, Krippendorf is an often cited contributor (Weber, 1990). His work with these concepts has paved the way for a more scientific yet still expressive approach to content analysis. Therefore, the following section will draw heavily on his work.

When the content analyst ultimately draws his conclusions, he does so grounded in analyzed data. As in other academic disciplines, it is of utmost importance that this data has been gathered with precaution of any distortion that might affect its integrity and that the process of coding the data is replicable beyond chance (Krippendorff, 2004). Put differently, Krippendorff (1980) says that variations in results should reflect true variations in the data rather than stemming from extraneous noise.

While reliability is the assurance that a proper scientific method has been used to draw conclusions, validity is concerned with the truthfulness of these conclusions. The concepts of reliability and validity are connected though not obviously. Even if coding of data is not based on a reliable approach, there is still a chance that some of the conclusions are valid. However much a reliable approach might help in drawing valid conclusions, it does not guarantee it. Even though the systems of the methodological approach itself do not contain errors and the procedure is replicable and scientifically sound, the conclusions might be objectively wrong (Krippendorff, 2004; Webb, Campbell, Schwartz, & Sechrest, 1966). If, however, the coding process upholds a high level of data integrity and the categorization of data is done using explicit rules, a high degree of reliability will offset the problem of validity significantly (Laver & Garry, 2000). The following paragraphs will therefore primarily focus on reliability and the calculation of reliability followed by a brief account of what validity means in the field of content analysis and how to ensure valid conclusions.

Reliability

As mentioned, reliability is concerned with ensuring that the results indeed reflect actual data. As later explained, the degree of reliability can successfully be measured. There are, however, an almost infinite number of issues, or in Krippendorff's words "extraneous noise", that could potentially influence reliability. Among these inconsistencies most frequently mentioned in the

literature are ambiguity of content meaning, insufficient category definitions and coding instructions, coder's fatigue, carelessness and typing or counting errors (Krippendorff, 1980; Weber, 1990; Krippendorff, 2004). Regarding some of these issues, readers of this thesis will have to depend on the integrity of our research. The category definitions and coding instructions will influence this metric and can be viewed in their respective sections. In regards to ambiguity of content meaning, there is a helpful classification, which can be applied in content analysis, namely that of manifest content versus latent content. By focusing solely on manifest content, the researcher has fewer interpretations to make and thus a smaller margin for error (Potter & Levine-Donnerstein, 1999). In the present study, we seek only to code data that is apparent in its meaning though we cannot avoid latent content entirely. This is in part due to the nature of some of our hypotheses, in which we for example examine comments constituting factual and informative communication. Even though we clearly define factual and informative communication, the infinite variety of possible articulations require us to engage in a certain degree of subjective interpretation.

One thing that many of the potential inconsistencies have in common is that they are the result of human error. Thus, it comes as no surprise that coding done by computers is considered to provide a much higher degree of reliability, in regards to the classification process (Weber, 1990; Krippendorff, 2004). This comes at a cost however. Since computers do not share the interpretative abilities of human coders, they are inadequate interpreting latent meanings (Krippendorff, 2004). Krippendorff (2004) therefore suggests an equilibrium between highly reliable procedures and valid interpretations that reflects the context of the data. We have sought this middle ground by utilizing SODATO to collect most of our data with the exception of H11 and H12, thereby minimizing potential errors during data fetching. Regarding the process of classification, all of the interactional hypotheses depend on pre-defined categories such as "pictures". This means that besides human error, there is no possibility of performing false classification of for example a picture as a like or similar. When addressing the present study's reliability in the following paragraphs, this applies to our discursive hypotheses as these rely on interpretation.

While Krippendorff initially formulated the idea of reliability in 1973, most literature on content analysis today distinguishes between three types of reliability. They are *stability*, *reproducibility*

and *accuracy,* and each of these constitutes different ways of measuring reliability in the collection of data and to ultimately accept or reject the data.

Stability can be determined when the same data is coded more than once by the same coder but at different times. Inconsistencies would tell a story of an unreliable coding approach, for reasons which were described earlier. Stability is the easiest dimension of realiability to obtain and can help the researcher in limiting intracoder inconsistencies. It is, however, also the weakest form of reliability, and is in itself insufficient for accepting data as reliable (Krippendorff, 2004).

Reproducibility, also called intercoder reliability, refers to how often content is coded similarly by two or more coders. The data for measuring reproducibility is gathered by having coders apply the same coding scheme to the same data independently of one another. Reproducibility measures not only intracoder inconsistencies but also intercoder inconsistencies, and is therefore considered a much stronger measure of reliability (Krippendorff, 2004). This is the standard approach for assessing the reliability of a content analysis.

Accuracy is however an even stronger measure of reliability since it compares the coding process to an already established standard that is considered correct. Typographical errors for example are errors in comparison to accepted spelling standards. However, the use of accuracy is limited since typically there are no standards for comparison. Most content analyses are concerned with complex textual content which is often unique within the context. Thus, finding a standard for comparison is rarely possible (Krippendorff, 2004).

This content analysis draws on input from two coders, and reproducibility or intercoder reliability can be said to be the strongest measure of reliability available. There are numerous indices for measuring this kind of reliability, the most popular being a simple %-agreement, but more advanced measures such as Cohen's Kappa and Krippendorff's alpha are also common (Osborne, 2008). While the %-agreement is the most popular since it is easily applied and intuitively understood, it is a simple measure that does not consider chance (Osborne, 2008; Krippendorff, 2004). Correcting for agreement by chance is especially important when dealing with dichotomous data. This means that each variable can take only one of two categories, as is the case in the present study. Both Cohen's Kappa and Krippendorff's alpha calculate chance-corrected agreements, but Krippendorff's alpha is a more complex calculation that extends beyond the

scope of this thesis. Therefore, we will calculate our intercoder reliability using Cohen's Kappa. In doing this, the %-agreement is an intermediate result, which will be presented in addition. It should be noted that chance is not eliminated but minimized.

In calculating Cohen's Kappa, we will follow the systematic guide by Kimberly A. Neuendorf in her book The Content Analysis Guidebook (Neuendorf, 2002). In this book she describes each element of Cohen's Kappa and provides an example of its use. We utilize Neundorf's guidelines for the following calculations.

In order to calculate the intercoder reliability, using our coding scheme, we independently coded a sample of 100 comments as well as 100 pictures randomly selected from our data (Appendix A). This means we searched for factual comments and in-group pictures respectively. In both cases the outcome is either the presence or absence of the sought after content, i.e. a dichotomous selection.

The formula for Cohen's Kappa:

$$Kappa = \frac{PA_o - PA_e}{1 - PA_e}$$

Where PA_o is the observed proportional agreement and PA_e is the proportion agreement as expected by chance. A Kappa of 1.0 indicates perfect agreement. In order to calculate these variables, we will first present the results of our reliability sample in a cross-tabulated table.

Table 9 – Intermediate results of Cohen's Kappa (Authors' own construction)

Coder 1	**Coder 2**		
	Presence	**Absence**	Marginal frequency
Presence	37 (0.185)	4 (0.02)	(0.205)
Absence	3 (0.015)	156 (0.78)	(0.795)
Marginal frequency	(0.20)	(0.80)	(1.00)

The sum of this table is 200, since that was the size of our reliability sample. Presence-presence and absence-absence (37 and 156) represent the instances we agreed upon and the remaining are our disagreements. The numbers in parentheses is the percentages out of the 200. From this table, we can calculate the proportional agreement PA_o also called the %-agreement:

$$PA_o = 0.185 + 0.78 = 0.965$$

Using the marginal frequencies from the same table, we can calculate the chance-expected agreement PA_e:

$$PA_e = 0.205 * 0.20 + 0.795 * 0.80 = 0.677$$

With the necessary intermediate calculations completed, applying them is the final step before we know our chance-correction intercoder reliability:

$$Kappa = \frac{0.965 - 0.677}{1 - 0.677} = 0.892$$

In sum, our %-agreement landed at 0.965, but after correcting for chance, using Cohen's Kappa, our level of agreement fell to 0.892. As mentioned earlier, chance is not eliminated. Considering the SPSS 22.0 guideline, which advises that having a Cohen's Kappa of 0.75 or higher is acceptable, our result is above the requirement (IBM, 2013).

Validity

Validation is key for the acceptance of scientific results. This is because validity is concerned with the quality of the research, ensuring that the applied instruments, specifically the concepts and categories derived from them, measure what they were intended to measure (Weber, 1990). In pragmatic terms, our conclusions are only valid insofar they truly represent the people and the context we are investigating. Post-research, this can be tested by applying our methodology to new data with a similar outcome or if the application of our results produce successful actions (Krippendorff, 2004). However, this can only be tested once our conclusions are made, but as Krippendorff and others (Weber, 1990) have mentioned, the essence of validity is that the applied concepts and derived categories measure what the researcher intended. This can be assessed pre-research from the perspective of *face validity, social validity and empirical validity.*

Face validity, the weakest form of validity, is the acceptance based on something making sense on the surface. If the constructs of a content analysis seemingly measure what they are meant to, using common sense, then they have face validity. Although not very scientific, this is the typical method used for validation in the field of content analysis. This is because content analysis is concerned with the interpretation of text and symbols, a process normally considered associated

with the use of common sense (Krippendorff, 2004). It is hard to imagine that anyone would release a paper that does not at least appeal to common sense. Krippendorff (2004) makes a good point in saying that though based in common sense, this kind of validity is ultimately about an individual assuming that everyone else would agree. We consider our investigation to have a high level of face validity.

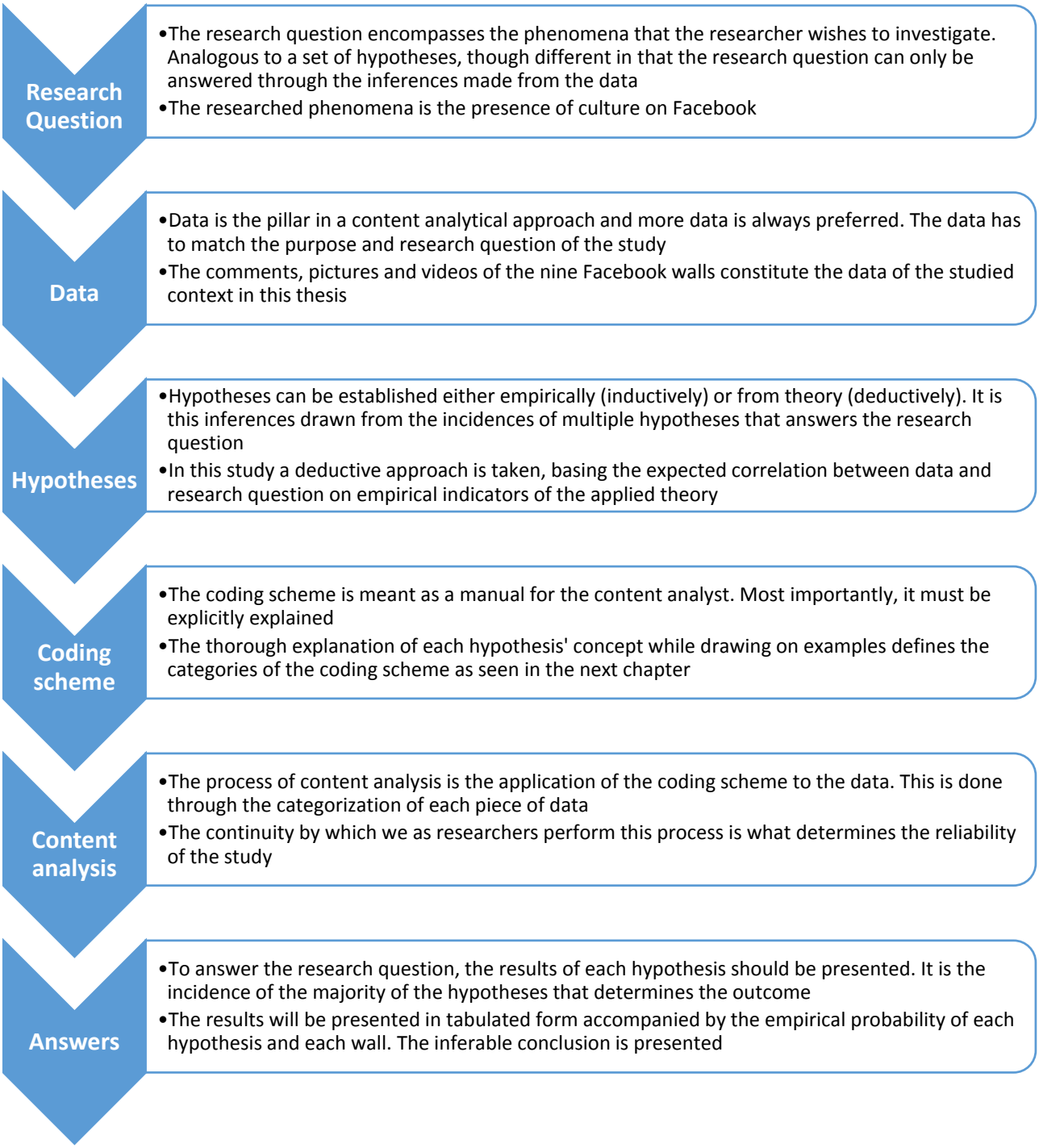
Social validity, a stronger form of validity, is validation based on the social applicability of results (Krippendorff, 2004). The results are the product of coded data based on the concepts and derived categories and so these must make sense in the real world. In the words of Riffe, Lacy & Fico, social validity is "*the degree to which the content analysis categories created by the researchers have relevance and meaning beyond an academic audience"* (Riffe, Lacy, & Fico, 1998, p. 137). A content analysis that produces results considered to be socially valid and thus applicable can propose practical solutions, gather funding and have real business impact (Krippendorff, 2004). If the present study produces reliable and valid results that indicate a significant presence of culture in communication on social media, then these will indeed have social application. This is however also a post-research validation. For pre-research validation, we must ask whether the concepts and categories make sense beyond an academic audience, which they would not.

Empirical validity, the strongest form, is validation through an analysis of the research process. It is an extensive procedure, beyond the scope of this paper. However, two key points from this process are applicable prior to any conclusion and will be briefly explained and applied. These are *semantic validity* and *sampling validity. Semantic validity* is the degree to which the categories of an analysis correspond to the meanings the data has within its context (Krippendorff, 2004). We are testing if culture is present in the field of social media, as per the definition of our theorists, rather than trying to map the content inductively. This does subtract from our semantic validity, though we have put great consideration in the wording of our categories so that they are strongly linked to the theory, yet match the context. *Sampling validity* is the degree to which the analyzed data sample represents the population. The preferred approach is always active using sample strategies but content analysis is often applied in practical situations in which the sample is predetermined. This can cause data to contain biases by representing phenomena advantageously (Krippendorff, 2004). The data utilized in this study, collected from the Facebook walls of Legoland and Disneyland, are indeed the result of practical circumstances. The phenomenon of interest is

culture, an omnipresent concept, making almost any Facebook wall useable, as long as the data from the walls represent different cultures.

3.2.2.4 Content Analysis Summary

Figure 8 – The process of Content Analysis based on Krippendorff's conceptual framework (Krippendorff, 2004)



3.2.3 Data Collection

Data can be collected using many different methods where some of the most typical would be interviews, questionnaires and analysis of databases or internal information from a case company. Generally, the various techniques with which you can collect data can be distinguished on two levels. Firstly, whether the data is from a primary source, meaning you collected the data yourself for a specific purpose, or from a secondary source, meaning data that others collected, i.e. databases. Secondly, data can be divided into qualitative data or quantitative data. The latter takes the shape of numbers i.e. a population's height in centimeters, where the former constitutes anything but numbers such as text, pictures or speech (Andersen, 2013). Qualitative data can however be categorized and then counted enabling the use of quantitative methods such as statistics. In this section, these concepts and how we apply them will be explained.

3.2.3.1 Primary Data

Primary data is raw data that the researcher collects and there are many reasons for using primary data. The first is that primary data is collected in order to answer a specific problem or elucidate a specific issue meaning that the data should conform to the specific objective. Since it is raw data, it will be unprocessed and can thus more easily be applied in the study (Rasmussen, Østergaard, & Beckmann, 2006). Primary data is, however, a much more time consuming source of data to collect than secondary data and can have high costs depending on the amount of data needed. Primary data is further categorized into stimuli data and non-stimuli data. This sub-categorization serves to discern data that might be affected by the researcher from data that definitely is not. A typical example would be an interview. An interview is a primary source of data where the researcher might unconsciously affect the respondent and thus the data (Andersen, 2013).

There are several ways in which primary data can be collected. Andersen (2013) makes a distinction between stimuli techniques and non-stimuli techniques. The aforementioned scenario with an interview would be an example of a stimuli technique alongside the wide variety of question-asking techniques, such as questionnaires and focus groups. Any method of collecting data in which the researcher could potentially influence the data would fall under this category. In contrast to this, we have the non-stimuli techniques, which Andersen categorizes as either observational techniques or unobtrusive measurement techniques. Rather than observing behavior, as this would be considered using an observational technique, the unobtrusive

measurement technique is instead characterized by registering the traces or footprints left by this behavior.

Being an explorative study, this investigation uses almost exclusively primary data. Specifically, this primary data comes from Facebook using an unobtrusive measurement technique where we register every artefact made by the users and admins. A database of all these digital footprints is created based on the nine walls of our two case companies. The collective data from all these walls constitute a massive amount of information and, as mentioned earlier, collecting this amount of data is a time-consuming process. For the qualitative hypotheses, we have mostly gathered the data manually, and for the quantitative, we have relied on SODATO.

Social Data Analytics Tool (SODATO)

The Social Data Analytics Tool (SODATO) is an application that was developed as a response to the growing demand for tools for big social data analysis. In addition, the existing commercial applications typically do not provide the raw data and lack transparency regarding the algorithms and formulas used. SODATO, on the other hand, was developed using a more scientific and scholarly approach by presenting the theoretical foundation, conceptual model and the technological architecture on which the application was based (Hussain & Vatrapu, 2014).

SODATO utilizes a social network's API to retrieve, store and analyze social data. The data can be divided into social graph and social text. Social graph is the actors involved, the artefacts created, actions taken and activities engaged in (interactional). The actors involved on Facebook represent the users and administrators, and the artefacts created are the different types of posts. The actions taken and the activities engaged in are the instances of users engaging through likes, shares and comments. Social text on the other hand is the sentiments expressed, topics discussed or other data that requires manual interpretation (discursive) (Hussain & Vatrapu, 2014).

Although SODATO does support some descriptive stats, its primary function in the context of this thesis was its ability to provide raw data for both social graph and social text content by means of an unobtrusive measurement technique. Once the walls had been fetched, the raw data was exported using Microsoft Excel. From here, we were able to analyze the social graph data directly in Excel in order to answer hypotheses H1-H9. SODATO also provided social text data, namely all written text by both administrators and users. This chronologically organized data was used for

hypothesis H10. The data for hypothesis H11 and H12 required different methods and could therefore not be provided by SODATO.

3.2.3.2 Secondary Data

Secondary data is data collected by other people or institutions and is as such data that was not collected for the specific purposes of the researcher's study. Secondary data is cheap, easily accessible data that can serve as the main source of data in certain studies but will mostly complement the primary data. This can be accomplished through the correct use of sources like registers, statistical databases, documents, letters, documentaries, websites, articles or journals (Andersen, 2013). Looking at secondary data is also an excellent way of examining a given field of research finding niches that call upon new primary data (Rasmussen, Østergaard, & Beckmann, 2006).

The last mentioned use of secondary data is also how we formulated the problem statement of this thesis as well as gained an insight into commonly used theories within our research areas. In addition, since this is an exploratory study relying predominantly on primary data, the use of secondary data is limited to sources describing terms, concepts and/or providing perspective.

3.2.3.3 Qualitative Data

Whether data has been collected using a primary or secondary source, it can be further classified as qualitative data and quantitative data. Qualitative data is non-numerical data, i.e. text, pictures or speech. The qualitative method focuses on the significance or sentiments that derive from qualitative data and is characterized by seeking an understanding of the subject's cognitive and emotional aspects (Rasmussen, Østergaard, & Beckmann, 2006). According to Rasmussen, the qualitative method is especially applicable in exploratory studies in a field where little is known by going *"… into depth as regards the respondents' less tangible precursors of behaviour such as attitudes, feelings and motives"* (Rasmussen, Østergaard, & Beckmann, 2006).

Part of the qualitative data of this thesis has been fetched using SODATO, specifically all the textual information used solely for H10, while photos and videos were gathered by the researchers. In order to use this data in the investigation of our hypotheses, we will first define the concepts of our hypotheses that have no objective definition as mentioned previously under *Coding Scheme*. All 12 hypotheses are quantitative by nature. However, the 3 hypotheses that we generally refer to as our discursive hypotheses, called so because of their high dependency on the

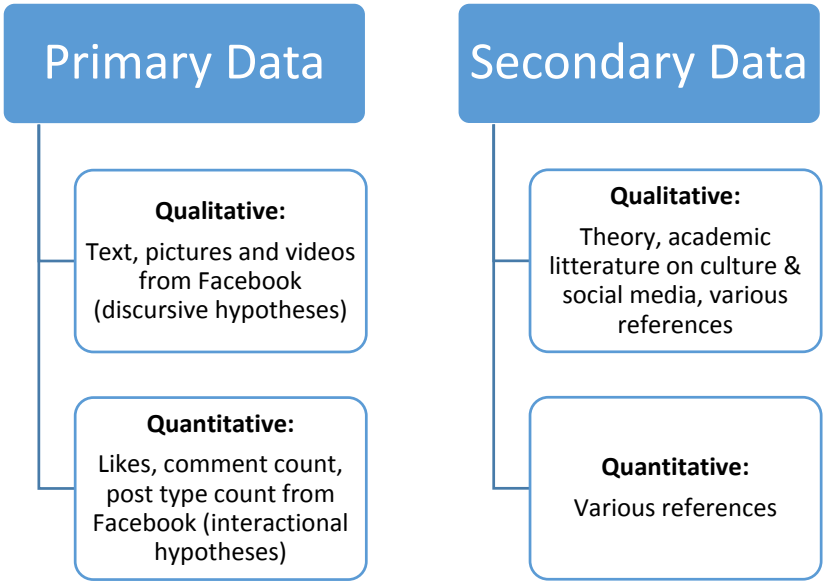
qualitative data and method, requires a definition of the concepts that do not have an apparent and clear meaning in the context of Facebook. Only then can the data be categorized and counted. This categorization of data gives way to the quantification of qualitive information (Andersen, 2013). Furthermore, breaking down the data into respective categories allow us to calculate frequencies, present the results in tables and charts, and finally, discuss them.

3.2.3.4 Quantitative Data

Quantitative data is numerical data, e.g. a population's height, a Facebook wall's total likes or the results of a parliamentary election. The quantitative method focuses on the significance that derives from quantitative data by means of descriptive and inferential statistics. It is characterized by providing insight on the basis of numbers. While the qualitative method seeks to provide an understanding from the data, the quantitative method is typically used to identify trends or to generalize (Andersen, 2013). In other words, data has to be quantifiable before you can subject it data to any form of statistical presentation. The process of categorizing and counting qualitative data converts it into quantiative data which is necessary for answering our hypotheses.

The quantitative data of this thesis has been collected using SODATO. This is the part of the database that is already countable, since it relies on what is considered objectively agreed upon categories, such as pictures or likes, allowing us to simply count the occurrences of these types of content through time. Without the need for interpretation, this part of the data is ready for hypothesis testing.

Figure 9 – Summary of data sources (Authors' own construction)



3.2.4 Triangulation

The word triangulation is borrowed from the world of navigational equipment in which a specific point is best determined by measuring it in relation to two or more locations. Within the social sciences, it bears a similar meaning but here the purpose is to increase the confidence and validity in the answer to a research question by using multiple approaches. In his book on research in the social sciences, Webb (1966) makes one of the earliest definitions of triangulation: *"Once a proposition has been confirmed by two or more independent measurement processes, the uncertainty of its interpretation is greatly reduced. The most persuasive evidence comes through a triangulation of measurement processes"* (Webb, Campbell, Schwartz, & Sechrest, 1966, s. 3). He reasoned that if a proposition still holds true even though it has been subjected to multiple research methods, confidence in its validity will rise. He does however note that principally all the applied measures could be wrong, though this is equally true for a single measure approach (Webb, Campbell, Schwartz, & Sechrest, 1966). In other words, it is the convergence of results using multiple techniques that will aid the researcher in further supporting the proposition or research question.

According to Denzin (1978), who later disserted the concept of triangulation, these techniques can stem from different practices, though the conventional meaning of triangulation is that of methodological triangulation. He also suggested the use of data triangulation in which data is gathered using multiple samples from different times, populations and social situations. Furthermore, he also suggests investigator triangulation, where the use of more than one researcher for data interpretation will add perspective, and finally a theoretical triangulation, in which the interpretation of data is done through multiple theories (Denzin, 1978).

In the present study, data from each individual Facebook wall constitutes the samples that represent the specific culture's social media communication. The social situation remains the same in all samples but the study does indeed rely on multiple samples over a continuum of time. Furthermore, through the analysis based on twelve theoretically founded hypotheses, our data will be subjected to theoretical triangulation by being based in three theories. Though all our hypotheses will face hypothesis testing, a quantitative approach, the three qualitative hypotheses had to undergo qualitative code scheming followed by the categorization of the qualitative data based on this scheme. In sum, this means that the present study utilizes both a qualitative

methodological approach as well as a quantitative one in accordance with our research methodology.

Despite triangulating on several levels, the researcher should not assume a high accuracy of the results merely based on triangulation. This is because methods are often incomparable and still individually fallible. Therefore, rather than guaranteeing the validity of results, triangulation should be viewed as supplementing the level of richness and complexity of a given inquiry (Bryman, 2004).

3.2.5 Translation Methodology

In this thesis, we analyze content from Facebook pages of different countries and cultures. As a result, some of the brand pages are in foreign languages. Therefore, we had to translate some of the texts in order to analyze meaning and to verify our hypotheses. We have four foreign languages in need of translation, which are French, Cantonese, Japanese and Malay. The other pages are in Danish, German or English, which we are qualified to translate ourselves. Because of the scope of the thesis, we have used native speakers in our network rather than professional translators to translate the French, Cantonese, Japanese and Malay parts of the data. Once the data had been gathered, we provided our translators with an Excel sheet of the text for translation. We have provided the link necessary to locate the context on Facebook. This method has the risk of being subject to biases. There is a possibility that data was incorrectly translated, which could result in incorrect interpretations by the coders and thus influence the results.

1

This chapter outlines the motivation and purpose of the thesis resulting in our research question, which will be answered by means of 12 hypotheses. The necessary delimitations, definitions and researched cultures are presented before the chapter concludes with the presentation of a structure model.

2

Chapter 2 presents the theoretical framework that the hypotheses are based on. Hall, Hofstede and Nisbett's theories are described and applied to the empirical data. Categorizing the cultures according to the dichotomous distinction of each theory enables the testing of the hypotheses.

3

Chapter 3 presents the methodological choices. These include scientific approach, the process from theory to hypothesis and the methods of content analysis. Content analysis is a scientific method describing the process from raw data to answering the hypotheses.

4

Chapter 4 presents the analysis of Facebook's content. Through the theoretical reasoning behind and definitions for the 12 hypotheses combined with examples, a coding scheme is established. Lastly, the coding scheme is applied and the results of our hypothesis testing presented.

5

The final chapter answers the research question based on the results of the hypotheses. This is followed by a discussion of the conclusions and the implications they have for research, practice and the two case companies. The thesis is concluded with reflections on limitations and their implications for further research.

4. Coding Scheme and Results

In this chapter, we present our quantitative and qualitative research and results guided by our 12 hypotheses and the coding schemes. The hypotheses are divided into nine interactional and three discursive hypotheses, and they will all be covered by a coding scheme with an exhaustive description. For the three discursive hypotheses, the coding scheme includes five exemplifications. The coding schemes act as guides for the reader to understand our thought processes and the selection of the data. Finally, the chapter concludes with a presentation of the results of the qualitative and quantitative data analysis. These results, in combination with our methodological triangulation, should allow us to eventually provide a conclusive answer to our research question.

4.1 Interactional Hypotheses

In this paragraph, the nine quantitative hypotheses will follow. The first four hypotheses are concerned with the administrators' posting frequency and the remaining hypotheses are concerned with the users' engagement. Table 10 sums up the coding scheme for the interactional hypotheses.

Table 10 – Manual for the analysis of interactional hypotheses

H#	Coding scheme for interactional hypotheses
H1	Number of pictures for each wall throughout its timeline
H2	Number of statuses for each wall throughout its timeline
H3	Number of links for each wall throughout its timeline
H4	Number of videos for each wall throughout its timeline
H5	Number of pictures and the sum of their engagement for each wall throughout its timeline
H6	Number of statuses and the sum of their engagement for each wall throughout its timeline
H7	Number of links and the sum of their engagement for each wall throughout its timeline
H8	Number of videos and the sum of their engagement for each wall throughout its timeline
H9	Number of comments for each wall throughout its timeline

H1: High context cultures will post more pictures than low context cultures

According to Hall's description, high context cultures depend on the context of the situation when conveying a message. They depend less on verbal communication and more on non-verbal communication in order to express meaning. Most of the information in the communication process is implicitly present in the communicative context and manifests itself through cues such as facial expressions and gestures. As a result, high context cultures are more attentive to visual and perceptual stimuli, since these stimuli are used as requisites in non-verbal communication. For the purpose of this investigation, we interpret these stimuli to be pictures and videos when analyzing content on Facebook.

H2: High context cultures will post more videos than low context cultures

Another kind of visual stimulus often used on social media and especially on Facebook is videos. To cover this, we have formulated a similar hypothesis following the same reasoning as in H1.

H3: Low context cultures will post more statuses than high context cultures

The third hypothesis encompasses the other extreme of Hall's theoretical framework. Hall has established that low context cultures do not rely on the context of the situation to express their message but rather use explicit verbal communication. Thus, low context cultures should also express themselves through explicit messages on social media. Because the most salient information in their communication is vested in explicit code, we believe that these cultures prefer written communication on Facebook instead of visual content. A specific post type that caters this need is the status post. Statuses consist exclusively of written communication in the form of words and sentences and do not contain any visual or perceptual stimuli. This type of post facilitates their tendency to use explicit verbal communication to express their message. Hence, we expect to observe a higher posting frequency of statuses in low context cultures than in high context cultures.

H4: Low context cultures will post more links than high context cultures

Another kind of post type that also caters to low context cultures' explicit way of communicating is links. Because Facebook is not a medium that encourages elaborate articles, links can be used to provide additional information by linking to for example company pages. Low context cultures naturally seek more information about the context to fully understand the message, which can then be found on the company page by browsing through the site.

H5: High context cultures will have more engagement with pictures than low context cultures

H5 follows the same reasoning as H1 about the susceptibility of high context cultures to visual and perceptual cues, but is the first hypothesis that focuses on the users. The users' engagement is based on a larger sample than the posting frequency of the administrators, which provides a more indicative view of the culture's preference.

H6: High context cultures will have more engagement with videos than low context cultures

This hypothesis follows the same reasoning in relation to H5 as H2 does to H1. It examines the user's engagement with videos, which should provide an indicative view of high context cultures' preference of content engagement.

H7: Low context cultures will have more engagement with statuses than high context cultures

This hypothesis is also grounded in the reasoning that low context cultures need more information about the context of a communication in order to express their message. Statuses provide an excellent opportunity to accommodate this need because with a status you can convey more explicit information than with a picture. There is a saying that a picture says more than a thousand words, but in a low context culture, you explicitly have to express your meaning. If the right amount of information is not conveyed explicitly in communication in these cultures, it will ultimately result in a demand for the missing information, i.e. questions. This cultural characteristic should be observable in the way that users engage with statuses. In short, we believe that statuses will get more engagement in low context cultures than in high context cultures.

H8: Low context cultures will have more engagement with links than high context cultures

As briefly mentioned above, links can provide users with more information about a given subject. We believe that low context cultures will have more engagement with this type of post than high context cultures, because communication in low context cultures require more detailed background information. This translates into a need for sufficient information about subjects, and if a status update does not provide this information, low context cultures will search for this missing information. Therefore, links will have more engagement in low context cultures since they provide additional information. High context cultures will not engage as much with links as low context cultures because high context cultures convey their message through the context. In these cultures, detailed background information about subjects is not needed. Consequently, there should be less user engagement with links providing background information in high context cultures.

H9: Low context cultures will post more comments than high context cultures

The last of our quantitative hypotheses for testing the extent of culture's impact on users' communication on Facebook is concerned with comment frequency. We believe that low context cultures will comment more frequently on all types of post, e.g. status updates, pictures, videos, and links. This is due to the need for information when communicating within these cultures. There will be a tendency to ask more questions and a need to more explicitly share information within these cultures, which will ultimately lead to a higher number of comments on post than in high context cultures.

4.2 Discursive Hypotheses

In this chapter, we account for our three discursive hypotheses and provide five examples for each hypothesis to clarify what we are investigating. We explain the thought process behind our hypotheses, which together with the examples constitute the coding scheme. The discursive hypotheses will be the point of departure for a thorough investigation of user sentiment and provide an in-depth perspective on cultural preferences. Table 11 is a summation of the coding scheme for each discursive hypothesis.

Table 11 – Manual for the analysis of discursive hypotheses

H#	Coding scheme for discursive hypotheses
H10	Number of factual comments and total comments for each wall throughout its timeline. A factual comment must contain communication comprised of facts, background data, detailed descriptions, elaborations, additional and/or rational information
H11	Number of in-group or non in-group pictures and the sum of their engagement for each wall throughout its timeline. An in-group picture must contain a family, colleagues, friends, brand characters and/or a situational, typically momentary relation. It should be instantly observable that those in the picture are together. Pictures outside this definition are considered non in-group pictures. For this hypothesis, it is especially important to draw on the examples
H12a	Number of field comments and total comments on videos for each wall throughout its timeline. A field comment contains contextual or relational information that focuses on the surroundings and periphery (field) or the relation between the surroundings and the object (context). Mentioning the objects' movement or location is also considered the field
H12b	Number of object comments and total comments on videos for each wall throughout its timeline. Object comments are focused on the most salient focal object, often a character or person. The shape, color and number of the object are also object comments

H10: Low context cultures will use more factual and informative communication than high context cultures

Hall's theory states that low context cultures need detailed background information when communicating because they do not depend on the context to convey their message. From this, we have deduced that low context cultures will use a higher degree of factual and informative communication in comparison to high context cultures in order to make up for absent contextual information. Low context cultures need and expect as much information about a situation as possible in order to interpret messages correctly and to make the right decisions. As a result, communication within these cultures often takes the form of factual and informative communication.

A definition of factual and informative communication has to be established. Factual and informative communication is characterized by being comprised of facts, background data, detailed descriptions, elaborations, additional and/or rational information. These are the signifiers of factual and informative communication. An exemplification of this in relation to the theme

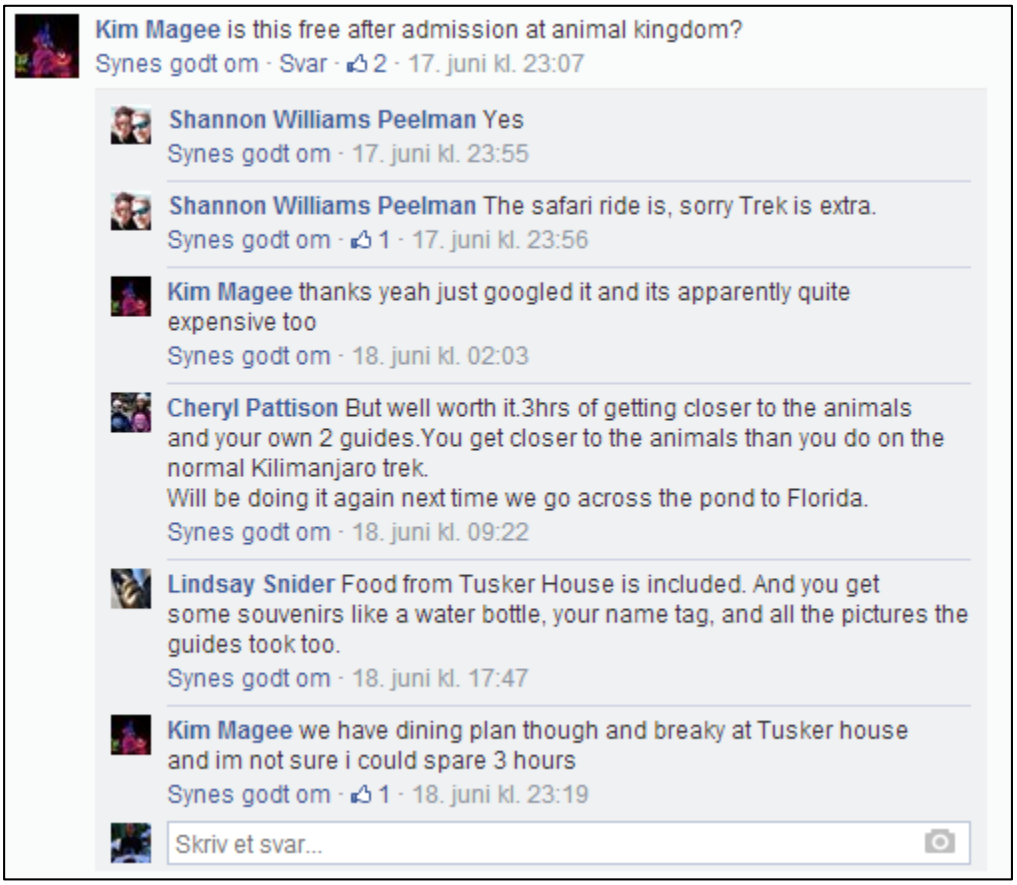
parks could be the way they communicate information about events, the amusements of the parks or how they answer questions with detailed descriptions. Questions express a need for information not evident in the context of the situation and answers are often comprised of factual information. Communication that is emotionally charged, on the other hand, does not provide this kind of information and is not considered factual or informative. Emotionally charged communication is characterized by containing expressions of for example love or hate. In relation to the theme parks, this kind of communication could be exemplified in the way users describe their enthusiasm for the park, how much fun they have or just how much they hate standing in line at an amusement. Nevertheless, this emotionally charged communication can also contain facts, detailed description etc. If this is the case, these emotionally charged comments are also considered factual and informative communication.

In addition, another characteristic of low context communication is that detailed background information will often be bestowed upon a receiver even though nothing indicates a need for more information. The dependency on explicit information in communication in low context cultures is such a basic cultural attribute that the sender of a message presupposes that the receiver requires more information than is asked for. In other words, if a person asks a question, the respondent will often voluntarily provide additional information beyond what the question required. In high context cultures, on the other hand, the amount of information provided in the explicit part of a message is much more limited since most of the information needed for decoding the message is implicitly present in the context.

Hypothesis 10: Example 1 – The Animal Kingdom

To illustrate the cultural characteristics suggested by the hypothesis above, we will look at an umber of specific examples. The first example of factual and informative communication in a low context culture is in this post from the Walt Disney World Florida's Facebook page:

Figure 10 – Example 1 (Walt Disney World, 2015)



In the original post, a user asks for information: "*is this free after admission at animal kingdom?*" The question asked is if the Walt Disney World attraction, "animal kingdom" is free after admission fee at the entrance has been paid. Comment 1 is not an example of any particular kind of communication. It does answer the question, but it does not provide additional information, background information or a detailed description. Comments 2, 4 and 5 however, can be said to comprise factual and informative communication. Comment 2 is an elaboration on comment 1 by the same user. This elaboration signifies factual and informative communication, since it provides background information ("*The safari ride is")* and adds additional information *("Sorry Trek is extra")*. In comment 4, a different user elaborates even further, even though additional or more detailed information was not asked for. The user provides the additional information that you receive "*3hrs of getting closer to the animals and your own 2 guides. You get closer to the animals than you do on the normal Kilimanjaro trek*." Comment 5 is another elaboration, which provides additional factual information. It explains that included in the price for the trek is "*Food from the Tusker House… And you get some souvenirs like a water bottle, your name tag, and all the pictures*

the guides took too." This is a good illustration of the use of factual and informative communication in a low context culture.

Hypothesis 10: Example 2 – Disney Vacation Tips

Another example that highlights the characteristics of factual and informative communication can be seen in a second post from the Walt Disney World's Facebook wall. Here, the administrator of the wall posts a link, which provides information on five ways to keep your smartphone charged in the theme park.

Figure 11 – Example 2 (Walt Disney World, 2014)

Figure 12 – Example 2 (Part 2)

In the first comment, a user provides additional tips on how to save power on smartphones. She says that you can "*take a screen shot of your daily itinerary from My Disney Experience and set it as your wallpaper so you don't have to keep logging in to see your next Fastpass or dining reservation*". This will save the users' power because they do not have to switch on their WIFI, which would drain the battery. Hence, this user provides an elaboration on the post from Walt Disney World without directly being encouraged. This information is provided because of a subconscious belief that the additional information may be beneficial in this context. In the second comment, a user describes the advantages of using the Disney smartphone application in the park by listing all the possibilities the application offers. The user explains that the application can give you "*information like what time the parades are or even locate your favorite meet n greet character.*" Here the user voluntarily provides additional information for other users. These signifiers and exchanges of information between the users are good examples of factual and informative communication in a low context culture.

Hypothesis 10: Example 3 – Lego Star Wars Days

The next example highlighting factual and informative communication is from Legoland Deutschland, Germany:

Figure 13 - Example 3 (LEGOLAND Deutschland, 2015)

The above example is a good illustration of factual communication. The original post from Legoland Deutschland is permeated with background information about a Star Wars event and also contains a link for a page with additional information. For example, it says that over 200 persons in Star Wars costumes are going to be attending the event. Linking to a page with additional information is also a good example of low context cultures' need for more information. Furthermore, even though the original post from Legoland Deutschland contains plenty of information, several users still provide additional background information in their comments.

Figure 14 – Example 3 (Part 2) (LEGOLAND Deutschland, 2015)

The first comment is from a user who provides a link with more information about the event. Perhaps this user provides additional information because he believes that the context of the communication requires it. In the second comment, a user asks when the Star Wars parade is happening. Again, this illustrates a need for information that is not evident in the context of the communication. In comment 4, Legoland Deutschland answers the posed question and also links to another page with additional information. The part of the response linking to additional information literally translates into "*more information at:*", which explicitly highlights low context culture's need for information and the tendency to use factual and informative communication. In comment 5, another user asks a question, which translates into "*which star is going to write autographs…*" This is answered in the following comment, translated into "*Today Sean Crawford*

and Tim Dry were here and Hennes Bender". While this does not exactly answer the question, it does provide additional information, which the other user may find useful. Generally, the comments reflect both a need for and a willingness to provide the factual and background information not already provided through the context of the communication.

Hypothesis 10: Example 4 – The Lego Nerds

The following example is from Legoland Billund, Denmark.

Figure 15 – Example 4 (Legoland Billund, 2015)

The setting is an advertisement from Legoland Billund for an event where Lego enthusiasts are building different Lego figures. In the first comment, a user says, "*Many tourists call for a museum and a large LEGO store in Copenhagen. Is that something you have considered?*" This question is directed at Lego, however, another user seizes the opportunity to answer the question in a comment (1a) on the comment and says "*There IS a large LEGO store in the middle of Strøget.*[4] *It has been there since 2010, I believe.*" The first part of the sentence is the answer to the posed question. However, the location of the store, "*in the middle of Strøget*", is a detailed description. The last part of the answer, "*it has been there since 2010*" is an elaboration, which provides the user of the original question with additional information. Furthermore, the user in comment 1a links to another page that provides detailed background information, which establishes this as a good example of factual and informative communication. Additionally, the user of comment 1 reiterates her first question in comment 1b and says: "*Okay, well what about a museum..*", which is then answered in comment 1c: "*Then you have to go to Billund sometime next year –*" Again, a link to additional related information is provided. The last comment also provides additional background information on the topic. It translates into: "*During the summer the Danish Fan Association, Byggepladen.dk, had an exhibition in City 2 and in the last couple of years LEGO-World has been held at the Bella Center. But if the tourists want to see Lego somewhere else than in the store, they have to take the train to Vejle and take the bus to Billund (or simply take the plane)…*" The user provides the additional information that Lego has a yearly exhibition that tourists can visit instead of a Lego museum with detailed descriptions of the organizers and the whereabouts of the exhibition. The user even continues, though a bit sarcastically, with another elaboration by describing the various possibly ways of travelling to Legoland Billund. This is another example of factual and informative communication even though it is used in a humorous fashion.

Hypothesis 10: Example 5 – Advise on Bricks Restaurant

The last example illustrating factual and informative communication is from Legoland Windsor, England.

[4] Strøget is the main shopping street of Copenhagen.

Figure 16 – Example 5 (Legoland Windsor, 2015)

Here, a user raises a question on Legoland Windsor's wall concerning Bricks restaurant and whether "*non-hotel guests can book lunch*" at the restaurant. The question is actually addressed to Official LEGOLAND Windsor but is answered by other users. This is an indication of the need in low context cultures to fulfill missing information. The first user answers the question in comment 1 with "*you can have lunch*", which would have been a sufficient answer to the question by itself. However, the user elaborates with detailed descriptions: "*its open from 12 til 2.30 on weekends and half term. i think adults is 14.95 children are 6.95*". The additional information about the opening hours and the price is a signifier of factual and informative communication. Comment 3 elaborates further with a detailed description of the location. The user says, "*Best place there is the one in the castle by the Dragon ride.*", which also displays the need to provide more information than the context of the situation requires.

In sum, the above five examples illustrate our definition of factual and informative communication and provide the coding rules necessary for hypothesis testing. One generally observable trend is that factual and informative communication in low context cultures often is found in connection with questions. Questions are inextricably connected with situations that create a demand for factual and informative communication. When responding, members of low context cultures often provide more information than the context of the situation requires.

H11: Collectivist cultures will have more engagement with in-group pictures than individualist cultures

The next hypothesis is based on Hofstede's theory on collectivism, which states that people living in collectivist cultures have strong ties to their in-group. Therefore, we have hypothesized that these cultures will have more engagement with pictures that reflect such societal structures. In other words, pictures featuring in-groups are expected to prompt a higher level of interest within collectivist cultures than within individualist cultures because members of these cultures can more easily relate to the in-group dynamics of such pictures. In-groups constitute one of the most important elements of collectivist societies and it is this "we-mentality" that provides the reasoning behind the hypothesis.

Before we can begin testing whether or not collectivist cultures have more engagement with pictures showing in-group affiliation, we must first define what comprises an in-group picture. Previously, we defined an in-group as a group of people that share a psychological or a physical relation. An in-group could be a family, a group of colleagues or friends, and in relation to the case companies, it could also be a group of Disney or Lego characters. The strength of the relation differs depending on the group. The family is typically the strongest group, as opposed to situational in-groups. A situational in-group comprises a relationship that seizes to exist with the situation, for example at an event in LEGOLAND. Individuals can form a relation in these situations creating a temporary in-group with an artificial and temporary connection, because the situation requires it. If we transfer these characteristics of in-groups to pictures from the various Facebook walls, then pictures featuring a group of seemingly comfortable people and/or characters sharing an experience or taking part in an event, and as such have a relation, would be perceived as in-group pictures.

It is important to notice that it is impossible for the viewer to know whether the people in a picture are related, unless this is explicitly stated in the caption of the picture. Nevertheless, as long as the group in the picture is perceived as an in-group, it should increase engagement in collectivist cultures. Pictures that fall outside this category are considered non in-group pictures and will typically be pictures without people, scenic shots of the park, parades, rides, lone individuals, multiple unrelated individuals or commercial pictures. A final addition to the definition of an in-group picture is that it should be instantly observable that the people in it are connected. If in doubt, the viewer will not familiarize with or relate to the picture as easily and thus be less likely to engage as expected. We believe this is because engagement is often a subconscious, culturally dependent response.

Hypothesis 11: Example 1 - The Gold Award

In the following, we provide five examples, which, together with the description above, will comprise the coding scheme for this hypothesis. The first picture displays a group of employees from Hong Kong Disneyland:

Figure 17 – Example 1 (Hong Kong Disneyland, 2014)

The associated text reads, "*Thank you & congratulations to all Cast Members for the commitment to quality guest service! Hong Kong Disneyland Resort wins the Gold Award of the 2014 Hong Kong Management Association (HKMA) Quality Award.*"

This picture is a good example of an in-group picture because the caption states that these people are part of the same in-group. But even by just looking at the picture, we see a group of people who are easily identifiable as a group of colleagues. They are reaching for the trophy they presumably won together, and this reaching for something *together* is a strong signifier of an in-group. The fact that they are not only connected momentarily in a situational in-group, but are perceived as colleagues, makes this in-group's connection stronger, which should be reflected in the level of engagement with the picture.

Hypothesis 11: Example 2 – The Railroad

The second picture features a family using cardboard cutouts to look like passengers aboard the Hong Kong Disneyland Railroad.

Figure 18 – Example 2 (Hong Kong Disneyland, 2014)

The caption for this picture has little relevance. This is a picture of a family engaged in a fun activity at Disneyland. Nothing in the picture indicates that this is not a family, the most important in-group to anyone living in a collectivist culture. Although this picture does in fact feature hired actors rather than an actual family, it is instantly perceived as an in-group. This is evident especially through the posture of the father and son leaning towards each other, which signifies that the people in this picture belong to the same in-group. The fact that they are actors has only become known after browsing through hundreds of pictures from the Hong Kong Disneyland page.

Therefore, this picture still falls under our definition of an in-group picture, which should be reflected in the level of user engagement with the picture.

Hypothesis 11: Example 3 – New Year's Eve

The third picture features Mickey and Minnie Mouse looking celebratory on New Year's Eve. This picture exemplifies an in-group based on characters related to the theme park.

Figure 19 – Example 3 (Hong Kong Disneyland, 2013)

In this picture, the focus is on Mickey and Minnie Mouse holding each other tight. These characters are clearly associated with each other, not only by name, but also in everyone's mind and because they physically have a relationship. They are displayed and perceived as partners and thus share a strong relation, a signifier of an in-group. This association, the perceived relationship and the physical and psychological bond they share in this picture should increase user engagement.

Hypothesis 11: Example 4 – The Visit from Denmark

Another picture example of an in-group picture is collected from the Legoland Malaysia wall and displays a smiling family.

Figure 20 – Example 4 (Legoland Malaysia, 2014)

The caption to the picture reads that it is a family visiting from Denmark. Already from this, the viewer will recognize this as an in-group. The family represents one of the strongest types of in-groups in a collectivist culture, and it is obvious from body language that this family shares both physical and psychological relations. The father holding his arm around one of the children and the mother leaning towards her son are signifiers of these relations. Furthermore, the fact that these people have wet clothes suggests that they have just taken a ride in an amusement together. All of this signifies that this is an in-group, which should increase the level of user engagement with this picture in collectivist cultures.

Hypothesis 11: Example 5 – Launch of the Water Park

The fifth and last exemplification is also from the Legoland Malaysia wall and displays five people together holding a sign.

Figure 21 – Example 5 (Legoland Malaysia, 2013)

The caption of the picture, in contrast to the former example, does not indicate any kind of relation between the men in the picture, so their connection is not initially made explicit. Nevertheless, it is still obvious that these people are somehow related and thus qualify as an in-group. These people are perceived as an in-group because of their uniformity. They all wear the exact same shorts, t-shirts, hats and even sunglasses, which indicate that they are colleagues working at the park. Again, the body language of them leaning towards and standing close to each other signifies a shared psychological relation and hence an in-group. This should prompt higher engagement with this picture in collectivist cultures.

Hypothesis 11: Example 6 – Driving School

To establish clearer distinctions between in-group and non in-group pictures, the two following pictures are examples of non in-group pictures. This picture from LEGOLAND Malaysia displays children driving in LEGO cars:

Figure 22 – Example 6 (Legoland Malaysia, 2014)

In this picture, a number of individuals participate in the same event, which according to our definition could be perceived as a situational in-group. However, they fail to display any of the defined signifiers of an in-group because they do not display a relation. They do not share obvious physical or psychological bonds and are therefore not perceived as an immediate in-group. Therefore, this type of picture falls outside the definition of an in-group picture and should not receive as much engagement in collectivist cultures as the former examples.

Hypothesis 11: Example 7 – Lego Legends

The seventh example features a boy presenting his shield and sword in LEGOLAND Malaysia:

Figure 23 – Example 7 (Legoland Malaysia, 2014)

Although it could be his relatives in the background, these people do not exhibit any signs of relation with the boy and are hence not perceived as an in-group, since there is no obvious and instantly observable connection. No signifiers of an in-group are displayed, and the individuals in the picture do not seem to share any particular bonds. The boy appears as an individual among individuals. Thus, the picture does not constitute an in-group picture according to the definition and should therefore have less engagement in collectivist cultures.

Through the examples, it has been illustrated that in-group pictures must be pictures of people who share an immediately perceivable connection, such as families, colleagues or friends. Furthermore, collectivist cultures can establish situational in-groups, which are created from otherwise unrelated individuals who share a connection in a specific moment. Pictures of all these in-groups should have a high level of user engagement in collectivist cultures. On the other hand, we have established that pictures displaying individuals or people without any obvious relation are not perceived as in-group pictures and should in turn not prompt much engagement in these cultures.

H12a: East-Asian cultures will comment more on the field of a video than Western cultures

This hypothesis is the first of two concerned with Nisbett's theory of cognitive functions, especially with the dimension of attention. Nisbett's theory states that attention is culturally dependent and is focused on either the object or on the field and the relationship between field and object. Westerners are focused on the salient focal object whereas East-Asians are prone to focus their attention on the entire field and the relationship between the field and the object.

In order to prove this correlation, we initially tried to examine comments on pictures for references to the field. We interpreted Nisbett's definition of field and object and applied our interpretation to comments on pictures posted on the wall of the specific theme park. We defined a field-oriented comment as a comment that focuses on the surroundings and periphery (field) or the relation between the surroundings and the object (context). We defined an object-oriented comment as a comment that is concerned with the most salient focal object of the picture. Imagine a picture with Mickey Mouse standing in front of a complex background showing a detailed forest. Here, Mickey Mouse would be the main character, the focus or the salient focal object of the picture. On the other hand, the complex and detailed forest would be considered the field. Hence, comments focused on the forest or on the relation between the forest and Mickey Mouse would be regarded as a field-oriented, while comments specifically related to the most salient focal object, Mickey Mouse, would be considered object-oriented.

Based on this, we analyzed a sample of comments from pictures posted on the walls of Disneyland and Legoland. However, during this initial analysis we realized the setup of Nisbett's experiment

did not match our own. In his experiment, Nisbett showed test subjects movie clips where something was changed in either the field or the object. Depending on the responses of the test subjects, Nisbett interpreted whether their attention was drawn to the field or the object. The pictures on the Facebook walls, however, are static objects, so nothing changes which can draw the user's attention to either the field or the object. We quickly realized that the walls contained other visual content better suited for our needs, namely videos. Videos essentially consist of thousands of consecutive pictures, so here we had visual content that could draw the user's attention to the object or the field depending on their cultural disposition. We applied the same interpretations to videos and defined a focal object comment as one referencing the main character or object of the video or properties such as shape, color and number. A field comment references contextual/relational information such as background or movement. By analyzing video comments, we looked for these signifiers. In combination with the examples this comprises our coding rules.

Definitions of the object and field of videos have been established, but to provide clearer distinctions, the following paragraphs will provide specific examples. Nisbett has defined East-Asian countries as field dependent cultures. Within the scope of this thesis, this can then be applied to the cultures of Hong Kong, Japan and Malaysia. Legoland Malaysia's Facebook wall only has two videos and the comments that we have translated cannot be considered either field or object dependent, but only as noise. Therefore, all of our examples on field-oriented comments are collected from Hong Kong Disneyland and Disneyland Tokyo.

Hypothesis 12a: Example 1 – Christmas TV Show

The first example of a field-oriented comment is from a video on Hong Kong Disneyland's wall about a new Christmas TV Show.

Figure 24 – Example 1 (Hong Kong Disneyland, 2010)

The video stars many of the main characters of Disneyland, such as Mickey Mouse, who can be considered objects of the video. Most of the comments on this video are what we define as noise, because they do not directly comment on the plot of the video, the objects, the field or the relationship between the field and the object. An example of noise in this context is users commenting on their time of arrival. However, a user who comments on the field of the video is the comment above, which translates into "*I've been there! More beautiful at night*." This user does not comment on one of the objects but on the surroundings of the video. The user comments on the field and the relationship between the field and the object because the objects appearing in the video are "*More beautiful at night*". Therefore, the attention of the user is not

drawn to the object, but to the change in the relationship between field and object. According to our definition, this kind of focus makes this a field dependent comment.

Hypothesis 12a: Example 2 – Halloween Mystery

The next video is a Halloween mystery about a bearded lady who enters a tent and is later found dead.

Figure 25 – Example 2 (Hong Kong Disneyland, 2011)

The caption of the video reads that the "*Bearded Lady finds the death of Reptile Boy Puzzling, so she returns to the set to investigate. But as she almost puts her finger on the truth, she sees a shadow behind the curtain. But when she walks up to it…*" In this case, the main object of the video is the bearded lady.

The comment from the above example translates into "*This Disney network drama has first class paint work. Disney has a good standard of painting, they paint it pretty*". This comment does not refer to the bearded lady or any of the other objects appearing in the video. On the contrary, it is

focused on the aesthetics of the video, "*they paint it pretty*", which is a part of the field. It refers to the realism of the effects and characters in the video. Consequently, this is a comment on the field of the video since it comments on the surroundings rather than the object.

Hypothesis 12a: Example 3 – The V.I.P Badge

Another example is a video about a V.I.P badge, which customers of the park can buy to receive special treatment.

Figure 26 – Example 3 (Hong Kong Disneyland, 2012)

Many of Disney's characters are displayed in the video, for example Pluto, Mickey Mouse, Minnie Mouse, who must all be considered objects in this video. The video provides users with many opportunities to comment on the different objects in the video but the focus of the comments is on the field of the video. The comment above translates into "*Last visit the generous staff handed out Disney cartoon character stickers at the special floral pattern on the ground…*". The comment addresses the floral Mickey Mouse pattern on the lawn, which is seen several times during the video. This is a very distinct example of a field dependent comment because the user addresses a

pattern displayed in the background behind the family. The attention of the user is not drawn to the object of the video in the foreground, which in this case is a group of people, but rather to the field.

Hypothesis 12a: Example 4 – The V.I.P Badge

Another comment on the above video exemplifies our definition of a field dependent comment.

Figure 27 – Example 4 (Hong Kong Disneyland, 2012)

The user could have commented on the objects of the video, which are the Disney characters, but the user chooses to comment on the "*beautiful and big garden*" instead. This is a field dependent comment, since the attention of the user is drawn to the background rather than to the objects in the foreground.

Hypothesis 12a: Example 5 – Toy Story Land

The last example is a video about a new amusement area in the park. This new area is dedicated to the movie Toy Story.

Figure 28 – Example 5 (Hong Kong Disneyland, 2011)

Again, there are many objects to comment on in this video, such as two designers recounting the process of building Toy Story Land or the characters from the movie. The comment above translates into "*…also the parachute jump is OK*"**.** This comment is about a ride in Toy Story land, which was seen in the background of the video, which signifies a field dependent comment. The ride, as seen in the example, is displayed only a few seconds during the video, which is two minutes long. The user's perceptual attention was not drawn to the objects of the video but to the field.

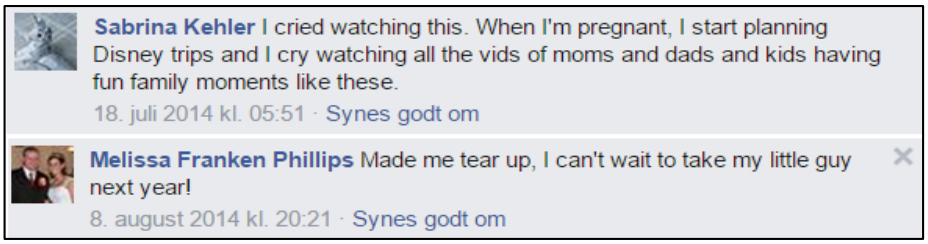
H12b: Western cultures will comment more on the object of a video than East-Asian cultures

In contrast to the East-Asians, Nisbett claims that Westerners are prone to focus on individual objects rather than the field. Five examples of this are listed below.

Hypothesis 12b: Example 1 – Mom's #DisneySide

Our first example of an object-oriented comment can be found in relation to this video from Walt Disney World, Florida:

Figure 29 – Example 1 (Walt Disney World, 2014)



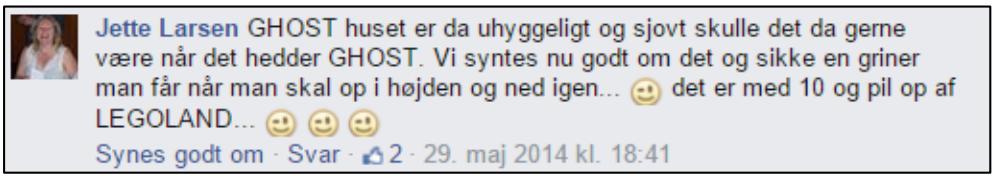
The video caption reads, "*Moms have a #DisneySide, too!"* and the minute and a half long video features a mom and her son sharing a day in Disneyland. The caption combined with the actual content of the video makes it clear that the focus of this video is on the mom and her son. They are the most prominent focal objects of this video.

Most of the comments on this video can be considered noise as they simply write "*Love", "I love this",* or "*I love Disneyland".* Quite a lot of the comments say, *"Try not to cry"* or similar, a reference to the strong bond witnessed between mother and son, but not quite an object-specific reference. However, two comments are prominent examples of object dependent comments: *"I cried watching this. When I'm pregnant, I start planning Disney trips and I cry watching all the vids of moms and dads and kids having fun family moments like these" a*nd the second comment, *"Made me tear up, I can't wait to take my little guy next year!"* Both of these comments provide great examples of object-specific references. Both comments are about crying, again pointing out the strong bond witnessed, but the first comment also specifically mentions *moms* and *kids*, which are objects of this video. In the second comment, the poster puts herself in the position of the mom of the video, thus relating to the object, by saying she intend on going to Disneyland with her son. A field dependent comment, on the other hand, would have referred to the other people moving in the background of the video or the stands that are displayed in a scene. However, there are no prominent examples of comments on this video that refer to anything other than the object or noise.

Hypothesis 12b: Example 2 – GHOST – The Haunted House

The next example is from Legoland Billund in Denmark and is a video about a new attraction called GHOST – The Haunted House.

Figure 30 – Example 2 (Legoland Billund, 2014)



The caption of the video translates into: "*Today our new TV commercial called GHOST has its premiere. We are excited to hear your thoughts.*" This draws the attention of the viewer to GHOST – the Haunted House. Comments focusing on the attraction itself or on the family in the video must be considered object dependent, whereas comments focusing on for example the moon, the clouds or the relationship between the family and the other objects in the video should be considered comments pertaining to the field. The example above reads: "*The GHOST house is scary and it should also be fun when it is called GHOST...*" This comment refers to the ghost house, which through the caption is framed as the main object of the video.

Hypothesis 12b: Example 3 – The Missing Crown

The third example is also found on the wall of Legoland Billund in Denmark.

Figure 31 – Example 3 (Legoland Billund, 2014)

The caption is very important because it frames the focal object. It translates into "*Heeeeelp, the crown of the princess is lost!... Submit your guess on who has stolen the princess' crown no later than Tuesday at 12 o'clock. Then you participate in the contest to win a trip to LEGOLAND for the whole family…*" The main focal object in this video is the princess in the foreground. However, through the wording of the caption there is another, less obvious focal object in the video, which is the Pink Lego Brick in the background. Since the challenge is to find the thief of the crown, the Pink Lego Brick must also be considered an object. Hence, comments referring to the brick or the princess are object dependent comments. Virtually all comments on this video refer to the Pink Brick as the thief, so this illustrates how the caption of the video is crucial in directing the viewer's attention. A field-oriented comment would have been focused on the colorful houses in the background or the child walking from the left of the screen to the right, because these objects are not framed as main objects of the video. Nevertheless, there are no comments on this video that can be considered field dependent.

Hypothesis 12b: Example 4 – Lloyd Godson – The Crazy Guy

The next video to illustrate object dependent comment is from Legoland Deutschland, Germany.

Figure 32 – Example 4 (Legoland Deutschland, 2010)

The headline of this video says "*Lloyd Godson – the crazy guy*" and the caption reads, "*Thats our crazy Lloyd – please support him as much as you can ;-) We're sure he will make it*" There are many different scenes in this video, which gives the video different objects. However, because of the above scene along with the headline and the caption, we must consider Lloyd the main object of the video. The first comment on the video cannot be considered an object dependent comment because it does not contain any characteristics of our object definition. On the other hand, the next two comments are both object dependent because they both refer to Lloyd. The second comment is even explicitly directed at Lloyd, since it reads "*hey crazy adventurer!*" which refers to Lloyd. The next comment translates into "*he's got internet in his aquarium, so he can surf the*

internet for 14 days without any obligations…" Without mentioning the name of the object directly, the comment mentions "*he*" twice. This is a reference to Lloyd, and the comment must therefore be considered object dependent. A field-oriented comment could have referred to for example the water in the background, or to the relation between object and field, which could be that Lloyd is close to the moving shark in the aquarium. However, there are no comments, which can be regarded as field dependent.

Hypothesis 12b: Example 5 – Windsor and Eton Flippin' Pancake Challenge

The fifth video that exemplifies an object-oriented comment is from Legoland Windsor in England. The video is about a race with the Pink Lego Brick.

Figure 33 – Example 5 (Legoland Windsor, 2011)

The caption of the video reads: "*Our LEGO Pink Brick took part in the Windsor and Eton Flipping Pancake Challenge today, it's not the winning it's the taking part that counts.*" Again, the caption directs the attention of the viewer towards the Pink Brick, thereby making it the prominent focal object of this video. All five comments of the video relate to the Pink Brick in different ways. The first comment says "*definitely the most graceful if not the fastest!!*" The Pink Brick is not directly mentioned by words in this comment, but the comment refers to the Pink Brick by omitting "The Pink Brick is…" and using the adjectives "*graceful*" and "*not the fastest*" to describe it. The next two comments, comment 2 and 3, directly mentions the Pink Brick and the fourth and fifth comments are similar to the first. Therefore, all the five comments attached to this video are object-oriented comments. The background of the scene and the entire video is a complex environment, which provides the viewer with many opportunities to comment on the field. In relation to this video, a field-oriented comment could be a comment on the people in bird costumes in the background, on the bystanders watching the race or on the facade of the house.

Generally, the main focal objects of these videos are either different Disney or Lego characters or the humans interacting. Nevertheless, it is also noticeable that the framing of the video, the caption, has a great influence on what the viewer perceives as the object of the video, because the caption can direct your attention in a specific direction as seen in Example 3 – The Missing Crown. Here the obvious main character and hence the object of the video is the princess in the foreground. However, because of the strong framing of the video through the caption, the video has another object, the pink brick, situated in the background, which by Nisbett's definition would normally constitute a part of the field.

4.3 Results

In this chapter, the results of our empirical analyses will be presented. First, we present the results for the investigation of our interactional hypotheses followed by the discursive hypotheses. The results for the interactional hypotheses are divided between administrator's posting frequency (H1-H4), users' engagement with different post types (H5-H8) and users' comment frequency (H9).

The amount of data available for the interactional hypotheses varied for each separate case (Appendix B). In order to make the data comparable, we normalized timespan differences and the amount of fans. The Facebook wall with the least available data had data spanning over 31 months, and the average timespan investigated for each case was 55 months. For the investigation

of the discursive hypotheses, data was manually gathered. In total, we analyzed 18,159 comments for factual information, 4,658 pictures for in-groups and 22,852 video comments for field or object dependency (Appendix C). For some cases, we were not able to utilize data from every wall because of corrupt data or translation issues. In these cases, N/A (not available) marks the omitted wall.

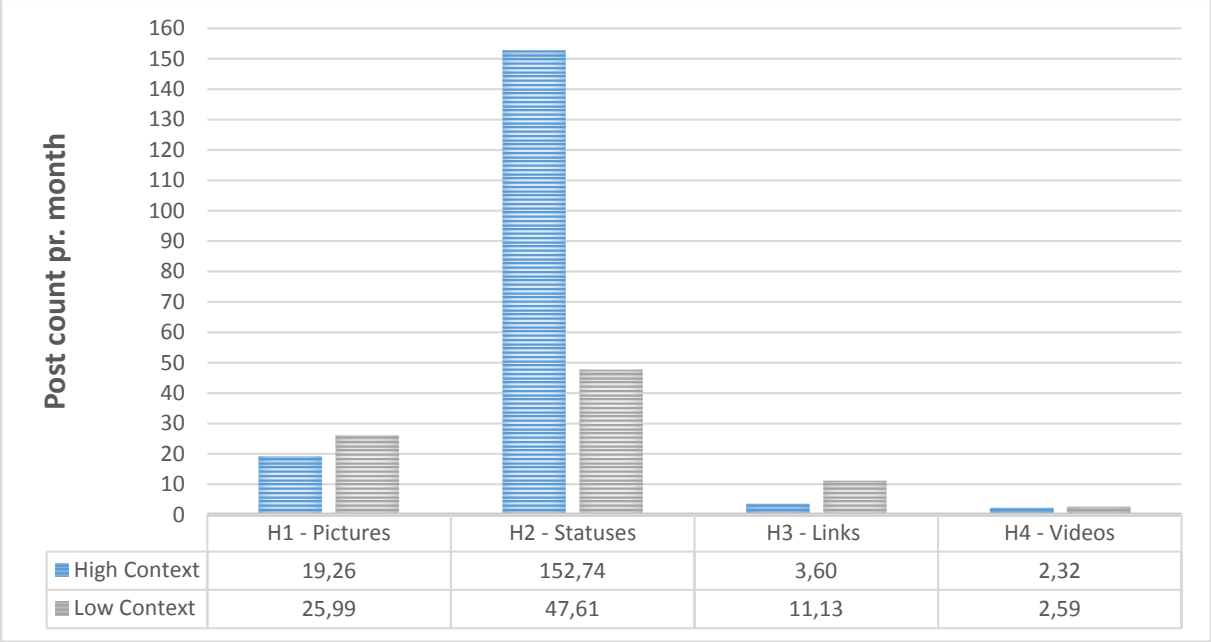
Hypotheses 1-4

The first four hypotheses are based on Hall's theory of high and low context cultures. These are focused on the post type frequency of the wall administrator.

- H1 - High context cultures will post more pictures than low context cultures
- H2 - Low context cultures will post more statuses than high context cultures
- H3 - Low context cultures will post more links than high context cultures
- H4 - High context cultures will post more videos than low context cultures

The final results of our hypotheses testing for H1-H4 are displayed in Figure 34:

Figure 34 – Results of H1-H4



	H1 - Pictures	H2 - Statuses	H3 - Links	H4 - Videos
High Context	19,26	152,74	3,60	2,32
Low Context	25,99	47,61	11,13	2,59

The X-axis of the chart represents the four hypotheses separated into high and low context cultures and the Y-axis shows the unit of measure post count pr. month. The final results for both cultures types, and for each hypothesis, can be seen in the table accompanying the chart. Before arriving at these results, we first had to analyze each wall, then group each according to their

culture type and finally calculate the average. The calculation is displayed below followed by the intermediate results for each wall.

$$\frac{Number\ of\ post\_type}{Number\ of\ months}$$

Table 12 – Intermediate results of individual walls

Wall name	H1 – Pictures	H2 – Statuses	H3 – Links	H4 - Videos
Tokyo Disneyland	N/A	N/A	N/A	N/A
Hong Kong Disneyland	14.17	1.24	1.14	1.74
Disneyland Paris	8.91	367.30	2.35	1.14
Legoland Malaysia	34.71	89.68	7.32	4.06
Walt Disney World Florida	42.08	27.81	29.17	3.24
Legoland Billund	20.24	42.39	3.03	3.29
Legoland Florida	42.72	130.77	17.81	4.62
Legoland Deutschland	5.43	2.71	1.77	0.34
Legoland Windsor	19.48	34.38	3.90	1.48

H1 - High context cultures will post more pictures than low context cultures

The high context cultures we have analyzed post on average 19.25 picture posts per month while the low context cultures post 25.99 picture posts per month. Comparing these numbers, no definitive empirical trend can be observed. These numbers actually display the opposite correlation of what our hypothesis predicted. Part of the explanation can be found in the low picture post count for Disneyland Paris. From our analysis of their wall, we found that Disneyland Paris tends to use the post type status for posting pictures. This is reflected in the low picture post frequency and high status post frequency (Table 12). If we rerun the calculations without including Disneyland Paris, the high context culture post frequency would instead have been 24.44. Despite this correction, there is still no observable empirical trend in the picture posting frequency of the two culture types.

H2 - Low context cultures will post more statuses than high context cultures

The post frequency of statuses for the high context cultures is 152.74 and 47.61 for the low context cultures. These results display a significant difference between the two cultures, though it is the opposite of what we hypothesized. Therefore, we can conclude that an empirical trend is observable, but not one supportive of the hypothesis. As mentioned in H1, this can in part be explained by the picture-status issue with Disneyland Paris. If we recalculate the results excluding

Disneyland Paris, the high context culture post frequency will instead be 45.46. With this correction, the low context cultures would post statuses more frequently as hypothesized, but the difference between the two culture types is not significant enough to indicate an empirical trend.

H3 - Low context cultures will post more links than high context cultures

The post frequency of links for the low context cultures is on average 11.13 for each month and in the high context cultures it is 3.60 per month. These numbers do display a significant difference between high and low context cultures' post frequency of links, which means that we can observe an empirical trend supporting our hypothesis. The high frequency of the low context cultures is mostly influenced by the two American walls, but in our analysis we have not discovered any irregularities explaining their high frequency. Therefore, we believe that the numbers are representative.

H4 - High context cultures will post more videos than low context cultures

The post frequency of videos for the high context cultures is 2.32 pr. month and for the low context cultures it is 2.59 post pr. month. These numbers do not indicate a significant difference between high and low context cultures' post frequency of videos, which means that we cannot observe an empirical trend supporting our hypothesis.

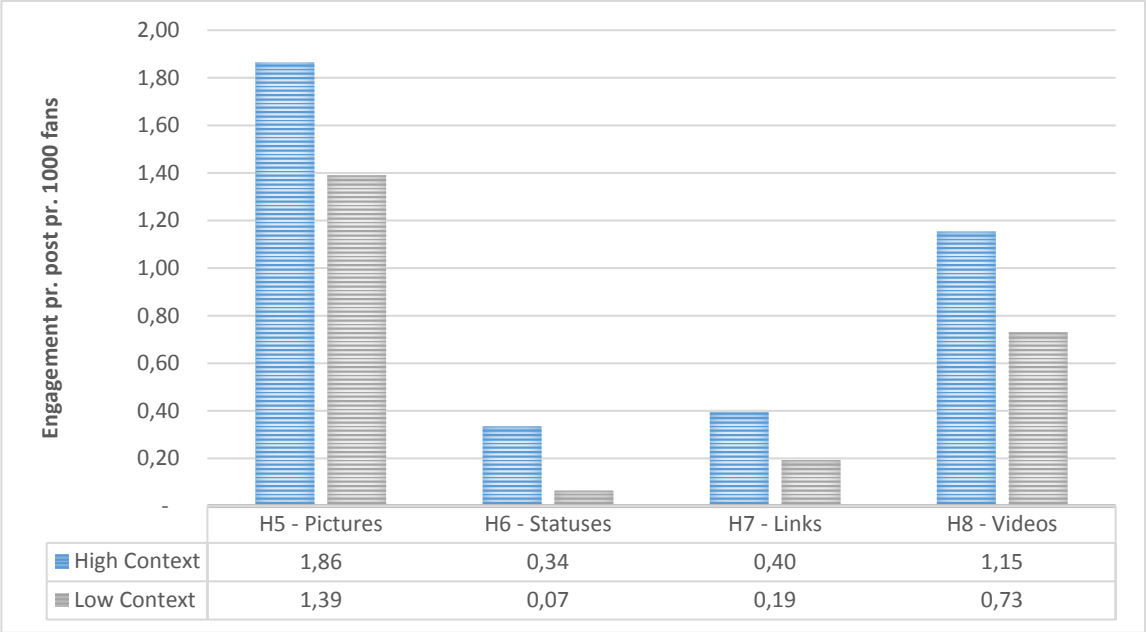
Hypotheses 5-8

Similarly to the previous four hypotheses, H5-H8 are also concerned with the four post types possible on Facebook and based on Hall's theory of high and low context cultures. Here however, the focus is on the users' engagement.

- H5 - High context cultures will have more engagement with pictures than low context cultures
- H6 - Low context cultures will have more engagement with statuses than high context cultures
- H7 - Low context cultures will have more engagement with links than low context cultures
- H8 - High context cultures will have more engagement with videos than low context cultures

The final results of our investigation of hypotheses H5-H8 are displayed in Figure 35:

Figure 35 – Results of H5-H8



The X-axis of the chart shows each of the four hypotheses separated into high and low context cultures, and the Y-axis shows the unit of measure engagement for each post per 1,000 fans. The final results for both culture types in relation to each hypothesis can be seen in the table accompanying the chart. To calculate these results, we analyzed each wall, grouped them according to culture type and finally calculate the average. The calculation used is displayed below, followed by the intermediate results for each wall.

$$\frac{Sum\ of\ engagement\ /_{Number\ of\ post\_type}}{Fans\ /_{1{,}000}}$$

Table 13 – Intermediate results of individual walls

Wall name	H5 - Pictures	H6 - Statuses	H7 - Links	H8 - Videos
Tokyo Disneyland	N/A	N/A	N/A	N/A
Hong Kong Disneyland	4.345	0.991	1.119	3.281
Disneyland Paris	0.236	0.001	0.003	0.061
Legoland Malaysia	1.005	0.014	0.068	0.118
Walt Disney World	1.012	0.028	0.115	0.387
Legoland Billund	2.152	0.091	0.171	0.745
Legoland Florida	0.754	0.045	0.190	0.202
Legoland Deutschland	1.884	0.098	0.300	1.756
Legoland Windsor	1.149	0.064	0.191	0.565

H5 - High context cultures will have more engagement with pictures than low context

The high context cultures we analyzed engage on average 1.86 times with each picture per 1,000 fans, while the low context cultures engage 1.39 times with each picture per 1,000 fans. These numbers do display a difference between high and low context cultures' engagement with pictures, indicating an empirical trend supporting the hypothesis. However, as displayed in Table 13, Disneyland Paris has low engagement with pictures and the other post types as well. As can be seen on the wall, they segment[5] all their posts. We believe this to be the cause for the low engagement level. The reason is that when segmenting, they would have to use more posts to cover each segment, resulting in a lower engagement pr. post. Calculating without including Disneyland Paris, the results would instead have been 2.67 engagements with each post per 1,000 fans for high context cultures. Under these circumstances, a significant empirical trend for the high context cultures is now observable with almost twice the engagement of the low context cultures.

H6 - Low context cultures will have more engagement with statuses than high context cultures

The low context cultures engage on average 0.07 times with each status per 1,000 fans and the high context cultures engage 0.34 times with each status per 1,000 fans. With the high context cultures engaging almost five times as much with statuses, we do see a significant empirical trend, but it is the opposite of what we hypothesized. Thus, the hypothesis is unsupported. Looking at Table 13, Disneyland Paris it still an outlier due to the issue of segmentation and the earlier mentioned picture-status issue. Excluding Disneyland Paris from the calculation increases the level of status engagement for the high context cultures from 0.34 to 0.50 engagements with each post per 1,000 users. This strengthens the empirical trend but in the opposite direction of what was hypothesized.

H7 - Low context cultures will have more engagement with links than high context cultures

The low context cultures engage 0.19 times with each link per 1,000 fans and the high context cultures engage 0.40 times pr. link pr. 1,000 fans. With high context cultures engaging more than twice as much with links, these numbers display a significant empirical trend. It is, however, the opposite of what the hypothesis predicted. Excluding Disneyland Paris increases the high context

[5] Segmentation: The act of making a post observable by specified segments e.g. based on nationality or language.

cultures' level of engagement to 0.59 engagements with each post which pushes it even further from what was hypothesized. This hypothesis is therefore not supported.

H8 - High context cultures will have more engagement with videos than low context cultures

The high context cultures engage 1.15 times with each video per 1,000 fans, while the low context cultures engage 0.73 times with each video per 1,000 fans. This indicates a significant difference between high and low context cultures' engagement with videos. Hence, there is an empirical trend supporting the hypothesis. The empirical trend appears even more significant if we account for the aforementioned segmentation issue, since this increases the high context cultures' average engagement with each video to 1.70 per 1,000 fans.

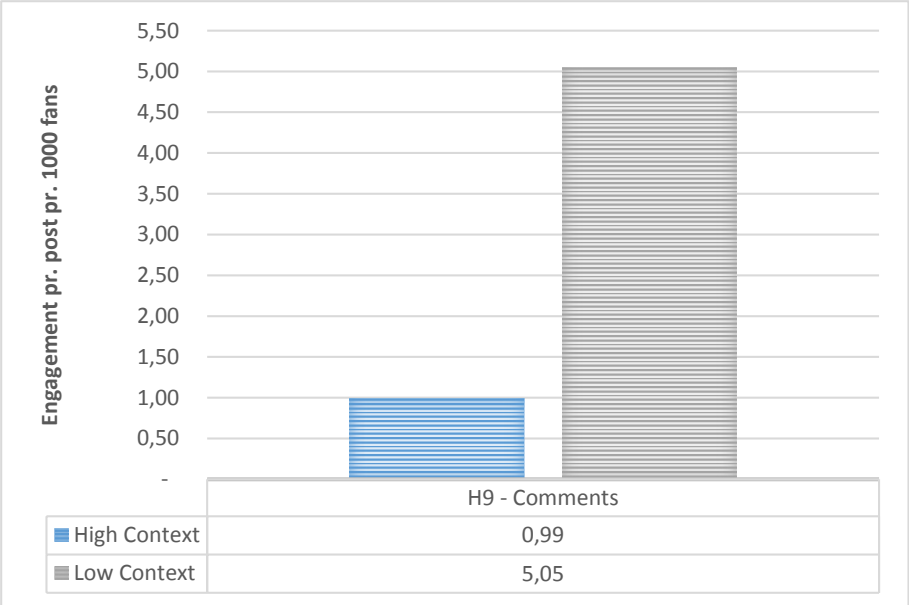
Hypothesis 9

The last interactional hypothesis using Hall's theory is focused on the users' comment frequency.

- H9 - Low context cultures will post more comments than high context cultures

The final results of our investigation of hypothesis 10 are displayed in Figure 36:

Figure 36 – Result of H9



The X-axis of the chart shows the hypothesis separated into high and low context cultures and the Y-axis displays average comments per month per 1,000 fans. The final results for both culture types are displayed in the table accompanying the chart. The results were produced by analyzing

each wall, grouping each wall according to its culture type and finally calculating the average. The exact calculation is displayed below followed by the intermediate results for each wall.

$$\frac{Number\ of\ comments\ /_{Number\ of\ months}}{Fans\ /_{1{,}000}}$$

Table 14 – Intermediate results of individual walls

Wall name	H9 - Comments
Tokyo Disneyland	N/A
Hong Kong Disneyland	0.98
Disneyland Paris	0.23
Legoland Malaysia	1.77
Walt Disney World	1.93
Legoland Billund	11.14
Legoland Florida	5.57
Legoland Deutschland	1.49
Legoland Windsor	5.11

H9 - Low context cultures will post more comments than high context cultures

The low context cultures comment on average 5.05 times each month per 1,000 fans, while this number is 0.99 for the high context cultures. With the low context cultures commenting five times more than the high context cultures, we can observe a significant empirical trend. Excluding Disneyland Paris from the calculations increases the high context cultures' comment frequency to 1.38 posts each month. Even with this correction, the low context cultures comment three times as much as the high context cultures, still displaying a significant difference and supporting the hypothesis.

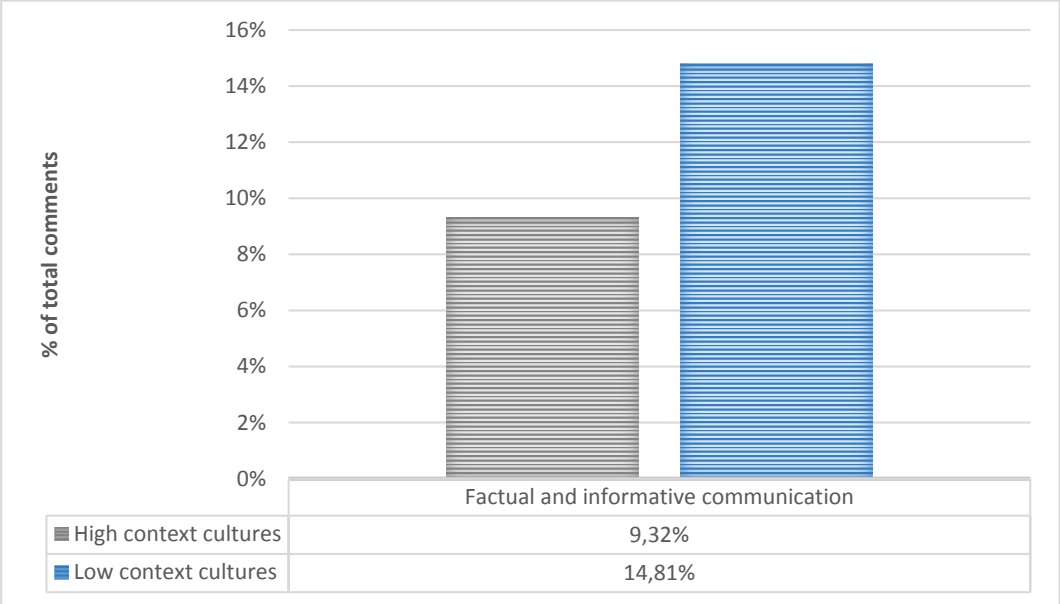
Hypothesis 10

The first discursive hypothesis is the last one based on Hall's theory and is focused on the users' cultural preferences for using factual and informative communication.

- H10 - Low context cultures will use more factual and informative communication than high context cultures

The final results of our investigation of hypothesis 10 is displayed in Figure 37:

Figure 37 –Results of H10



The X-axis illustrates the hypothesis separated into high and low context cultures and the Y-axis shows the unit of measure, percentage of total comments. The final results for both culture types are displayed in the table accompanying the chart. The results were provided by analyzing each wall, grouping them according to culture type and finally calculating the average. The exact calculation is displayed below followed by the intermediate results for each wall.

$$\frac{Factual\ comments}{Total\ comments}$$

Table 15 – Intermediate results of individual walls

Wall name	H10 - Factual
Tokyo Disneyland	N/A
Hong Kong Disneyland	N/A
Disneyland Paris	N/A
Legoland Malaysia	9.32%
Walt Disney World	N/A
Legoland Billund	17.36%
Legoland Florida	13.70%
Legoland Deutschland	16.33%
Legoland Windsor	11.86%

The high context cultures' comments are factual or informative 9.32 % of the time, while the low context cultures' comments are factual 14.81 % of the time. This means that low context cultures

use factual or informative communication approximately 50 % more than high context cultures displaying an empirical trend. However, the data for testing this hypothesis from Hong Kong Disneyland and Tokyo Disneyland was corrupt, and the amount of translation required for the data from Disneyland Paris to match the scope of this thesis proved too extensive to handle. As seen in Table 15, the high context cultures are therefore only represented by data from one culture, which is arguably insufficient for proving or disproving the hypothesis. As a result, no definitive conclusions can be deducted from the data.

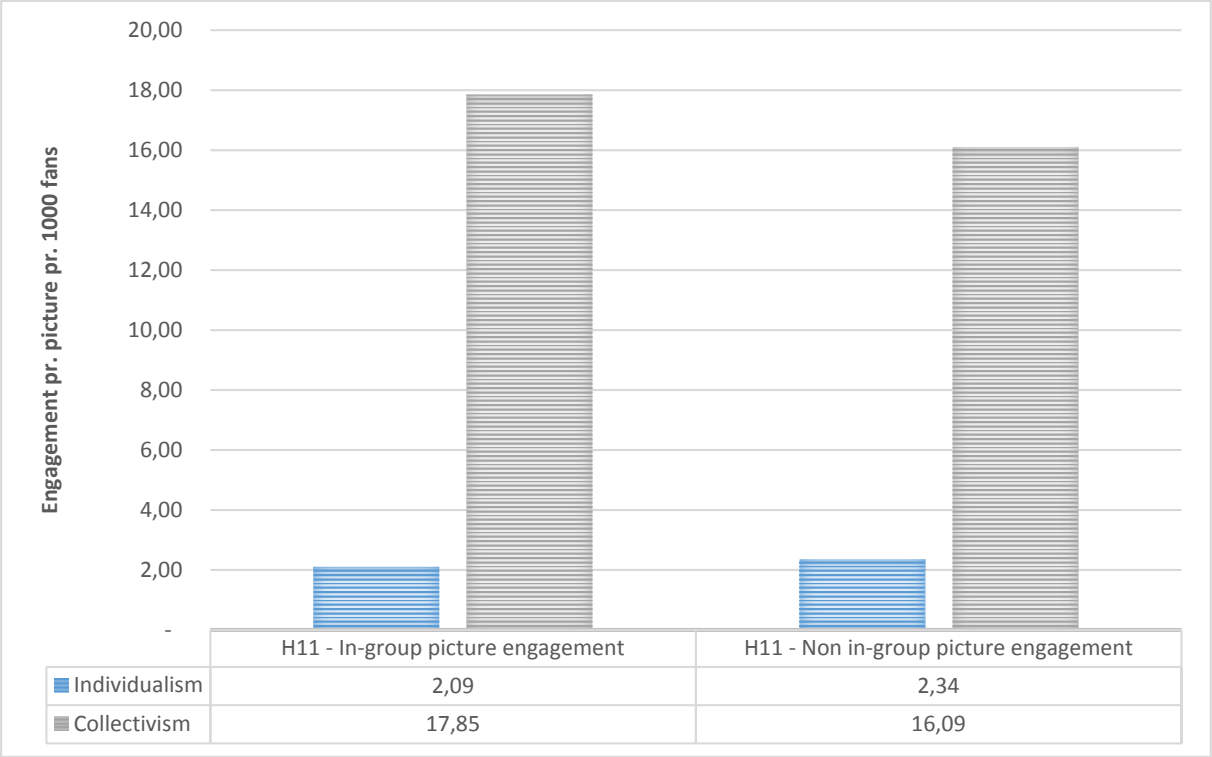
Hypothesis 11

The second discursive hypothesis is based on Hofstede's individualism and collectivism dimension revolving around the users' engagement with in-group pictures.

- H11 - Collectivist cultures will have more engagement with in-group pictures than individualist cultures

The final results of our investigation of hypothesis 11 is displayed in Figure 38:

Figure 38 – Results of H11



The X-axis shows the hypothesis separated into the individualism and collectivism dimension and the Y-axis shows average engagement with each picture per 1,000 fans. The results for both

dimensions are displayed in the table accompanying the chart. The results were produced by analyzing each wall, grouping them according to culture type and finally calculating the average. The exact calculation is displayed below followed by the intermediate results for each wall.

$$\frac{Sum\ of\ picture\ engagement\ /_{Number\ of\ pictures}}{Fans\ /_{1{,}000}}$$

Table 16 – Intermediate results of individual walls

Wall name	H11 - In-group	H11 - Non in-group
Hong Kong Disneyland	7.16	4.96
Tokyo Disneyland	44.87	41.63
Legoland Malaysia	1.51	1.68
Disneyland Paris	N/A	N/A
Walt Disney World	2.29	2.61
Legoland Billund	2.95	3.39
Legoland Florida	1.15	1.44
Legoland Deutschland	2.09	2.25
Legoland Windsor	1.99	2.01

H11 - Collectivist cultures will have more engagement with in-group pictures than individualist cultures

The individualist cultures engage on average 2.09 times with in-group pictures per 1,000 fans, whereas collectivist cultures have an average of 17.85 engagement per picture, displaying a significant empirical trend. However, for the hypothesis to be supported, collectivist cultures cannot simultaneously have a similar engagement level with non in-group pictures. The collectivist cultures' engage with non in-group pictures on average 16.09 times per 1,000 fans, which is less engagement than with in-group pictures as hypothesized, but the difference is insignificant. This insignificant difference displays no noteworthy cultural preference for engagement with in-group pictures and thus there is no observable empirical trend supporting our hypothesis. Finally, looking at Table 16, Tokyo Disneyland protrudes with their level of engagement and is a clear outlier. Excluding Tokyo Disneyland from the calculation provides similar results and does not alter our conclusion.

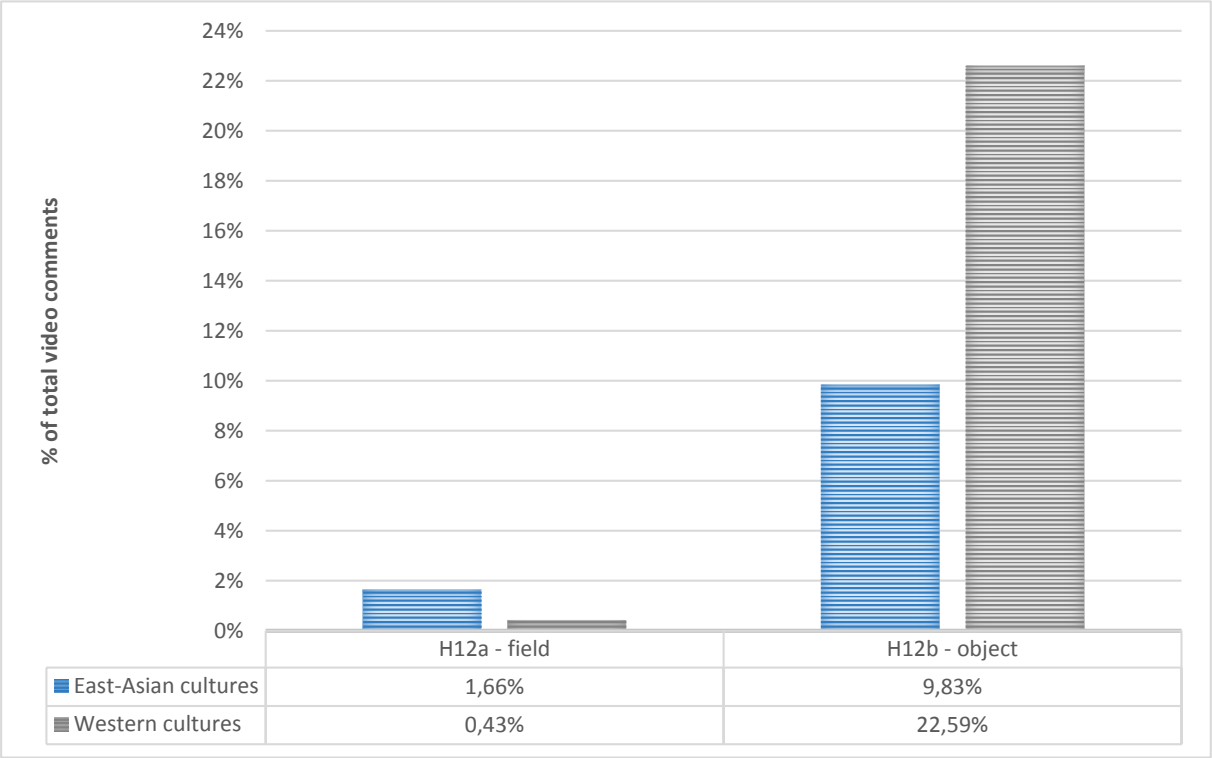
Hypothesis 12ab

The third and last discursive hypothesis applies Nisbett's theory on cognitive functions to user's comments on videos.

- H12a - East-Asian cultures will comment more on the field of a video than Western cultures
- H12b - Western cultures will comment more on the object of a video than East-Asian cultures

The results of our investigation of theses hypotheses are displayed in Figure 39:

Figure 39 – Results of H12ab



	H12a - field	H12b - object
East-Asian cultures	1,66%	9,83%
Western cultures	0,43%	22,59%

The X-axis of the chart shows both hypotheses separated into Western and East-Asian cultures and the Y-axis shows the unit of measure, percentage of total video comments. The results for both culture types are displayed in the table accompanying the chart. Before arriving at the results, we first analyzed each wall, then grouped them according to culture type and finally calculated the average. The exact calculation is displayed below followed by the intermediate results for each wall.

$$\frac{Object\ or\ field\ comments}{Total\ video\ comments}$$

Table 17 – Intermediate results of individual walls

Wall name	H12a - Field	H12b - Object
Hong Kong Disneyland	3.43%	5.88%
Tokyo Disneyland	1.54%	13.85%
Legoland Malaysia	0.00%	9.76%
Walt Disney World	0.30%	1.23%
Legoland Billund	0.27%	77.51%
Legoland Florida	0.30%	2.17%
Legoland Deutschland	0.00%	25.00%
Disneyland Paris	0.61%	15.01%
Legoland Windsor	1.12%	14.61%

H12a - East-Asian cultures will comment more on the field of a video than Western cultures

H12b - Western cultures will comment more on the object of a video than East-Asian cultures

Out of all the video comments 1.66 % are on the field for the East-Asian cultures and 0.43 % for the Western cultures. 22.59 % of the comments are on the object for the Western cultures, while this number is 9.83 % for the East-Asian cultures. These empirical trends corresponds to what the hypotheses predict. However, for the hypotheses to be supported, it is important that East-Asians do not simultaneously comment more on the object and Westerners do not comment more on the field. Otherwise, though the hypothesis in itself might be supported, it bears no meaning if they in fact comment more on the opposite area of attention (field vs object). Looking at the chart, we can see that East-Asians comment more on the object than on the field with 1.66 % field comments against 9.83 % object comments. Hence, the hypothesized attention to field for East-Asians is not supported. In regards to Westerners, the chart shows that they do comment more on the object than the field, with 0.43 % field comments against 22.59 % object comments, thus still supporting H12b. However, for hypothesis H12ab to be supported both parts should have been supported. In sum, the conclusion from looking at the chart and table is that the object receives far more comments in general. In our opinion, the explanation is to be found in the way videos are framed using captions encouraging the users to focus on certain objects. This provides an explanation for the overall trend, but also for the most apparent outlier seen in Table 17, Legoland Billund. Legoland Billund stands out with 77.51 % object comments as a result of one video competition (Appendix C) where the caption encourages the user to comment on a certain object. Testing without this video, Western cultures would instead have 11.65 % comments on the object.

Under these circumstances, the difference in comment frequency on the object is insignificant and hence no longer supporting H12b.

Table of Final Results

Table 18 – Presentation of final results

Hypothesis	Result
H1 - High context cultures will post more pictures than low context cultures	Unsupported
H2 - Low context cultures will post more statuses than high context cultures	Unsupported
H3 - Low context cultures will post more links than high context cultures	Supported
H4 - High context cultures will post more videos than low context cultures	Unsupported
H5 - High context cultures will have more engagement with pictures than low context cultures	Supported
H6 - Low context cultures will have more engagement with statuses than high context cultures	Unsupported
H7 - Low context cultures will have more engagement with links than low context cultures	Unsupported
H8 - High context cultures will have more engagement with videos than low context cultures	Supported
H9 - Low context cultures will post more comments than high context cultures	Supported
H10 - Low context cultures will use more factual and informative communication than high context cultures	Data issues
H11 - Collectivist cultures will have more engagement with in-group pictures than individualist cultures	Unsupported
H12a - East-Asian cultures will comment more on the field of a video than Western cultures	Unsupported
H12b - Western cultures will comment more on the object of a video than East-Asian cultures	Supported

As can be seen in Table 18, we found empirical trends supporting hypotheses H3, H5, H8, H9 and H12b of which H3 and H9 show strong empirical support. We observed no empirical trend supporting hypotheses H1, H2, H4, H5, H6, H7, H11 and H12ab combined. For H1, H2, H6 and H7, our results showed the opposite of what the hypotheses predicted. The investigation of hypothesis H10 was inconclusive. In total, four hypotheses were supported and eight hypotheses were unsupported.

1

This chapter outlines the motivation and purpose of the thesis resulting in our research question, which will be answered by means of 12 hypotheses. The necessary delimitations, definitions and researched cultures are presented before the chapter concludes with the presentation of a structure model.

2

Chapter 2 presents the theoretical framework that the hypotheses are based on. Hall, Hofstede and Nisbett's theories are described and applied to the empirical data. Categorizing the cultures according to the dichotomous distinction of each theory enables the testing of the hypotheses.

3

Chapter 3 presents the methodological choices. These include scientific approach, the process from theory to hypothesis and the methods of content analysis. Content analysis is a scientific method describing the process from raw data to answering the hypotheses.

4

Chapter 4 presents the analysis of Facebook's content. Through the theoretical reasoning behind and definitions for the 12 hypotheses combined with examples, a coding scheme is established. Lastly, the coding scheme is applied and the results of our hypothesis testing presented.

5

The final chapter answers the research question based on the results of the hypotheses. This is followed by a discussion of the conclusions and the implications they have for research, practice and the two case companies. The thesis is concluded with reflections on limitations and their implications for further research.

5. Discussion

With the result presented, the thesis' research question can be answered. Subsequently, we will discuss the outcome of our hypotheses applying our experiences and observations from the analysis. Simultaneously, we will attempt to add perspective on the applicability of our theories by discussing the notion of culture and drawing on the theory of and computer-mediated communication.

5.1.1 To what Extent does Culture Influence Communication on Facebook?

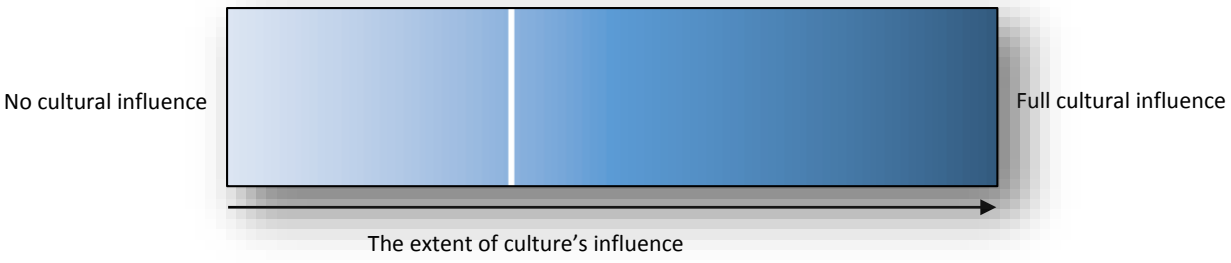
Embedded into our research question is an assumption, which is based on our experience and initial research, that culture does influence communication on Facebook. Before analyzing the extent of this influence, it makes sense to first consider whether this underlying assumption is correct. Based on our results as seen in Table 18, only four of our hypotheses are supported, while eight are unsupported. However, with four supported hypotheses the results do indicate that culture influences communication to some extent meaning that the assumption is correct. Therefore, we will continue by addressing the extent and thus answer our research question.

Because of the complex nature of concepts such as culture, the extent of culture's influence on communication is not easily quantified. By taking an approach relying heavily on content analysis, the method of quantifying qualitative data, we have attempted to provide as exact an answer as possible. A visualization of the answer will be displayed in a model.

Out of the 12 hypotheses investigated, H10 was not completed. As a result, we are left with 11 hypotheses to base our answer on. With four out of 11 hypotheses being supported, the final result indicates a trend leaning towards "no cultural influence" on the continuum "no cultural influence / full cultural influence". However, among the seven failed hypotheses, three of them (H1, H2, H4) were concerned with the post frequency of the wall administrator. These posting frequencies are more related to the managers and the brands' digital marketing strategy and therefore provide little insight on the extent that cultural values are reflected in communication on Facebook. The first four hypotheses are still of interest, but they are best applied when later providing recommendations for our case companies. We are then left with seven hypotheses that are concerned with the users, which are more indicative of cultural characteristics. Out of these seven, three are supported showing an empirical trend presented by the white line on the

continuum. In sum, we conclude that the extent of culture's influence on communication on Facebook is low to moderate.

Figure 40 – Continuum of cultural influence (Authors' own construction)



5.1.2 The Notion of Culture

Having answered our research question, we will continue by discussing a number of relevant aspects useful for putting the results into perspective. First, we will discuss the concept of culture. Our definition of culture encompassed a collective programming of the mind, a shared form of communication, and similar patterns of thinking and social behavior. This corresponds to the main research areas of this paper. The three applied theorists in this thesis share the same basic definition of culture and their theoretical frameworks all reflect what can be called national culture. However, are the groups of Facebook users we have investigated even representative of this kind of culture? Other forms of culture could exist or even be more prevalent on this social network. One alternative culture type could be organizational culture, which might influence individuals' national culture. Our hypotheses do to some extent reflect an aspect of organizational culture in H1-4. These hypotheses are concerned with the posting frequencies of the two theme parks. As mentioned earlier, the administrators could follow a certain strategy, which would in turn influence the observed behavioral patterns. This could potentially bypass the influence of national culture. We suspect that this is one of the explanations why the results did not reflect our hypotheses and some in fact indicated the opposite empirical trends of what we expected.

Another potential distortion of the influence of national culture could be the dynamics of the social network. Being a member of a social network, in this case Facebook, could presuppose a specific type of behaviour and a specific form of communication. A social network could have its own subculture pertaining to certain cultural norms, which users have to adapt to if they wish to

belong to that culture or group. Thus, a potential need for adaptation could have caused an alteration of the characteristics of these cultures, which may have influenced the results.

We believe that another subculture does interfere with the national cultural influence on communication on Facebook in these cases. When users follow a brand on a social medium like Facebook, a group is created that has its own behavioural patterns, communication style etc. This becomes an established culture with its own set of cultural characteristics, which are centred around the brand in question and the Facebook wall. Especially if this encompasses a cross-national culture such as a global Lego or Disney culture, we believe it will dissipate some of the influence of the individual's national culture on communication within these subcultures. We suspect that the results of our investigation reflect this. To some extent, they show a Lego community and a Disney community rather than national cultures. We suspect that the extent of users' involvement with various subcultures on for example social media heavily influences the way that national cultural characteristics impact behavioural patterns in these cases. If these subcultures or sub-subcultures take precedence over national culture, this would affect the cultural characteristics expressed through the way users communicate on the respective Facebook walls that we have analysed. Users can effortlessly switch between different cultures when interacting on social networks, and the different personas or cultures could influence the cultural characteristics displayed.

Another aspect that could influence the communication is that Lego and Disney represent Western companies and products. There are equally large local Asian theme parks and brands, which may cater more to Asian cultures. However, the Western brands in the Asian context could have created a subculture. It is possible that Asians who interact with these companies are more westernized than other members of their culture. These individuals may be influenced by Western cultural characteristics connected to subcultures of Western brands. This could interfere with the influence of national culture, making it less prevalent, which may in turn have affected our results.

Our hypotheses examined culture on a national level, but there are different levels of culture observable on Facebook. We could have created hypotheses that examined these subcultures. These hypotheses could have been used to investigate cultural differences in communities rather than just at the national level. We have realized that culture is more than just formations of

national characteristics, as our theories initially suggested. There are also subcultural and sub-subcultural differences, which need to be taken into consideration. These could stem from for example organizational culture, social media culture or brand specific culture, which we believe all interfere with the influence of national culture on communication on social media.

5.1.3 Computer-mediated Communication

In the following, we discuss our results in relation to the theory, and where necessary, the theory in relation to the medium. In this discussion, it makes sense to also consider theory on face-to-face communication (FTF) and computer-mediated communication (CMC), which will be outlined below.

The culturally dependent patterns in communication are not the same for face-to-face communication as for computer-mediated communication. This is because non-verbal communication cannot be mediated through most kinds of CMC, hence subtle cues in the communication are lost. It is usually impossible to read facial expressions, tone of voice or other types of non-verbal communication (Walther, 2011). Because of the anonymity that CMC provides, which is a strong drive behind online behavior, it does not cause the same social inhibitions as FTF interaction, which leads to expression of fewer interpersonal and cultural cues (Pflug, 2011). Since culture dependent communication is largely defined by such social inhibitions and communicational cues, the loss of these in CMC causes underlying cultural characteristics to be less prevalent in the communication. Furthermore, when non-verbal cues cannot be utilized, a communicator will attempt to adapt to the cues and communication tools available in the channel. On Facebook, an example of this could be the use of emoticons (Walther, 2011).

In the following, we will discuss theory of CMC in relation to the investigation of our hypotheses. As we have previously concluded that hypotheses H1-H4 are not reliably indicative of the cultural characteristics of communication, since they are concerned with the administrators rather than the users, we will exclude these hypotheses for the purpose of this discussion. The purpose of H1-H4 however is still important as they are applied in Implications for Practice.

You can make the argument that all activities on Facebook, be it interactional or discursive, are forms of communication pertaining to certain styles or types. This is why many of our hypotheses are based on Hall's theory on high and low context cultures, since it encompasses a

conceptualization of different communication styles. According to Hall, high context cultures express meaning through context. However, because of the impossibility of using non-verbal cues, messages cannot be as clearly conveyed through context in CMC. We hypothesized that high context cultures would be more prone to react to visual stimuli e.g. pictures and videos, since we believe that engagement with these content types is most reminiscent of context oriented communication. As can be seen in Figure 35, we observed empirical trends that supported hypotheses H5 and H8, giving credence to the prediction that users in high context cultures are more likely to react to visual content than users in low context cultures. This does imply that our reasoning is supported and that this part of Hall's theory is applicable to Facebook.

In contrast to high context cultures, Hall states that low context cultures transmit most of their information via explicit messages. In the post types statuses and links, information is vested in the actual message and does not usually rely on context or visual stimuli. Hence, we hypothesized that low context cultures would engage more with these types of content. Hypotheses H6 and H7 turned out to be unsupported as we actually found the opposite empirical trends of what they predicted. The reason for this could be found in the evident trend that high context cultures have greater engagement across all post types. The cause of this trend could be found in the unit of measure behind these hypotheses. From Figure 34, we can see that high context cultures post twice as often, but the high context walls generally have more fans. This results in low context walls posting 22.53 posts pr. 1000 fans against 8.14 for high context walls (Appendix B). This means, ceteris paribus, that the average post on high context walls should receive more engagement. However, while this is likely a reason for the higher engagement level, it might not be the only one.

Theory on CMC may also provide additional insight on another evident trend seen in Figure 35 that visual content receives more engagement than textual content overall. With the large amounts of information the brain has to process when navigating Facebook, users must be selective. Neuroscientists state that our brain has a filtering system called the Reticular Activating System (RAS), which sorts the most important information, and limits the attention span. This filter prefers sensory information such as visual stimuli to textual information because it is easier for the brain to process quickly. Several eye tracking experiments have also shown that people do not read texts thoroughly on the internet but merely scan them (Laja, 2012). This reinforces the fact

that visual content is prioritized by the brain and therefor draws the brain's attention. Since this is such an integral cognitive function, it probably overrules the influence of cultural preferences on user engagement. We believe that this could explain why visual content is preferred over textual content by both high and low context cultures.

In the investigation of hypothesis H9, we observed the strongest empirical trend of all the investigations. We believe this is in part due to the transferability of this dimension of Hall's theory to Facebook. Hall states that low context cultures are more elaborate in their communication and therefore we hypothesized that they would prefer commenting rather than liking or sharing. Even though high context cultures engage more with all post types overall, we still found that low context cultures' comment frequency is five times higher. From this, we also deduced that high context cultures use the engagement type "like" significantly more than low context cultures. This is also consistent with low context cultures' preference for conveying messages explicitly and with high context cultures' willingness to use the available tools to make up for the inability to communicate through context in conventional ways. A like, for example, can represent an implicit message, which caters to the communication style of high context cultures. Furthermore, the concept of Face may also partly provide an explanation. Face is about protecting honor, but by liking, you express something without threatening your Face. If you comment, another person can reply, which could contain a threat to your Face. However, there is no option for interacting with a like and hence you do not risk Face.

The last of our hypotheses utilizing Hall's theory is H10. This hypothesis reflects low context cultures' need to be explicit and hence more elaborate. Since context is used less to express meaning, members of low context cultures have to elaborate, explain and describe in order to convey their messages properly. Following theory on CMC, users in high context cultures could utilize pictures, emoticons and likes as a method for expressing meaning on Facebook, but users in low context cultures would be more likely to give detailed descriptions. We believed this would manifest itself in more factual and informative communication. Unfortunately, we had insufficient relevant data on high context cultures for a conclusive investigation of this hypothesis. Based on the data that we did collect, available in Figure 37, which displays the beginning of an empirical trend, we suspect that this hypothesis would have turned out to be supported. However, additional data is required.

Hypothesis H11 was based on Hofstede's dichotomy of individualist and collectivist cultures, and was focused on in-group dynamics of collectivist cultures. We believed that this culture type would have more engagement with in-group pictures. Although they did, our hypothesis was not supported because collectivist cultures simultaneously had similar engagement with non in-group pictures. Collectivist cultures did have more engagement with in-group pictures than individualist cultures, so there is still a cultural difference observable. The results do not disprove that in-group dynamics exist on Facebook, but they could indicate that our method of investigation was oversimplified. In-group dynamics are very complex, and a picture displaying an in-group might not necessarily evoke an association strong enough for the viewer to react. A possible explanation could be found in the dynamics of CMC. The anonymity of CMC decreases interpersonal relationships. Collectivist cultures thrive in close personal relationships and interpersonal contact is a necessity for establishing an in-group. The virtual distance between users could weaken the influence of in-group dynamics as a whole on communication on Facebook. We do however suspect that an investigation targeting different artefacts with more tangible in-group dynamics could have displayed a more significant empirical trend. For example, we could have investigated the level of sentiment in comments rather than merely engagement. Regardless, based on the results of our approach, Hofstede's dimension could not be conclusively applied to pictures on Facebook.

Hypothesis H12ab was concerned with culture specific cognitive functions based on Nisbett's original experiment where he investigated differences in attention and focus between Westerners and East-Asians. We attempted to replicate the experiment by analyzing comments on videos on Facebook. We concluded that H12b was supported but H12a was not supported. We can ascribe the same explanation to both parts of the hypothesis. We believe that the caption of a video has a strong influence on what the viewer focuses on. Therefore, if the caption of a video directs attention to the object, naturally the users will comment on the object. This would explain why both culture types comment more on the object than on the field. You might argue that culturally dependent cognitive functions should overrule this fact, which is likely why East-Asians actually comment more on the field than Westerners. However, we suspect that caption framing has a stronger influence on attention than culturally dependent cognitive functions and in many videos

the object was framed in the caption. Therefore, our results show that East-Asians also comment more on the object than on the field.

Another influence on the results of H12ab could be the setting of Nisbett's experiment. In his experiment, Nisbett framed the participants. The short video clips displayed one scene with several moving objects and the participants were asked to comment on the changes. Hence, Nisbett controlled the environment of the video, and by directing the focus of the participants towards the changes, he could describe their comments as being either field or object oriented. The captions in most videos do not direct viewer attention to change, but to an object, which is mirrored in the results. Furthermore, the videos on Facebook were compiled of several scenes and we could not control the environment. As a result, many of the comments were on neither the object nor the field, but just noise.

We believe that the above considerations may explain why the results of our investigation were not what we initially expected. There are several variables, which mediate and moderate the influence of national culture on communication on Facebook. The dynamics of CMC undermines conventional communication styles, thereby suppressing cultural characteristics in the communication. Additionally, subcultures with their own distinct values, norms, communication styles, behavior and patterns of thinking are formed on social media, which also contribute in distorting predicted behavioral patterns of users. We have indeed observed a certain degree of national cultural influence on communication on Facebook, but it is not as significant as we initially believed and hypothesized. It is possible that various subcultures take precedent to national culture in the communication process. In the introduction, we touched upon the notion of global online users/internet users. We believe that there is some truth to the idea that the social media transform users into more homogenized cultures with less distinct characteristics.

5.2 Implications

The results of our investigation have implications for research and for social media practice including case specific implications. We have observed cultural differences in communication patterns on Facebook, thereby narrowing an existing knowledge gap within the fields of intercultural communication and social media studies. By presenting empirical evidence of culture's presence in communication on social media, we have laid a foundation for future research.

5.2.1 Implications for Research

In academic circles, there has been an interest in testing the applicability of established cultural theories in the context of social media. Although to a varying degree of success, the validity of Hall, Hofstede and Nisbett's theories have been tested on a new medium. Our thesis serves as a demonstration that research on Big Social Data is viable and that traditional fields of interest in the social sciences, such as the question of the extent of culture's influence on communication, can be applied in the setting of a medium. Further research is needed, but our framework and methodology can be replicated and modified to fit the context of other social networks. Finally, the large amount of data we have collected can serve as an empirical basis for new research.

5.2.2 Implications for Practice

In our introduction, a call for an understanding of why companies struggle in individual countries was made. The specifics of these challenges were not provided, but our research does show implications for practice that could be significant. We have found that culture at least to some extent is reflected in communication on Facebook. Therefore, companies wishing to optimize communication with and engagement of customers need to adjust their social media strategy to reflect relevant cultural characteristics in the best way possible.

Looking at Figure 35, we have seen that the post type picture is the most popular overall followed by videos, links and then statuses. The order of popularity is similar for the two culture types we have investigated, but the individual levels of engagement differ. By knowing which post types give the most engagement, we can provide recommendations for practice in relation to a wall's current post frequencies (Figure 34). It is not, however, the primary purpose of this thesis to concern itself with content management, as plenty has already been written about this subject, but we will mention a few things in the following.

As previously mentioned, we have observed that videos are especially popular measured by engagement, only second to pictures, yet it is the least used of the post types. Increasing the amount of videos posted should yield a considerable increase in engagement. Of course, videos are not as easily produced as the other types of posts, but the disparity between engagement and post frequency suggests it would be worth the effort. Furthermore, we believe companies in high context cultures especially would benefit from decreasing the amount of status posts, since these receive the least engagement.

Regardless of any hypothesized preference for textual content, pictures seem to overrule any such cultural predispositions in terms of engagement level as can be seen in Figure 35. Consequently, we believe that instead of only posting a link or a status, adding a picture would also increase engagement with these post types. To this end, our results highlight characteristics of the type of pictures that should be focused on. In collectivistic cultures, our results indicate an increased engagement with in-group pictures. Increasing the frequency of these over non in-group pictures should provide additional engagement. Individualistic cultures however show no signs of preference between in-group and non in-group pictures

The results of hypothesis 12a showed that East-Asian cultures comment more on the field than Westerners (Figure 39) suggesting that using elaborate and complex backgrounds in videos would cause more engagement with East-Asians. We have seen many videos that use graphics instead of real footage, resulting in a linear visual experience. A great example of this is the case of Legoland Malaysia that on the one hand is among those that post videos most frequently (Figure 34), yet receive almost no engagement (Figure 35).

Textual content is comprised of status posts, text accompanying link posts and captions to videos and pictures. Only hypothesis H10 can be said to highlight a trend regarding the relationship between cultural characteristics and textual content. Although our investigation of this hypothesis turned out to be inconclusive due to the lack of data, we did observe the beginning of an empirical trend. Based on our results, it would be advisable for companies in low context cultures to ensure that any textual content is sufficiently detailed and comprised of factual information. On the other hand, we have observed that high context cultures do not necessarily prefer insufficient details or factual information, but they do not rely as heavily on elaborate information as low context cultures. Here, our previous recommendation of accompanying textual content with pictures is especially applicable, as pictures can be used to direct users' attention. Furthermore, throughout our analysis we found that captions are often used to encourage users to engage. Typically, this is done to encourage users to participate in contests or when announcing new amusements. As mentioned earlier, we found that high context cultures are prone to engage through likes and low context cultures through comments. As a result, when encouraging users to engage, we believe it would be advisable to motivate high context cultures to engage via likes and low context cultures via comments.

5.2.3 Recommendations for Case Companies

The recommendations for practice also apply specifically for our two case companies. In addition, through our analysis we have observed that pictures containing known brand characters or objects with strong brand association caused a higher level of engagement. Examples are pictures containing Mickey Mouse or Lego Star Wars, though especially Disney's characters seemed effective. In continuation of this, it seems that pictures with humans wearing costumes of brand characters are more relatable, hence receiving more engagement than pictures of animated brand characters. We specifically observed that Legoland Malaysia posted many commercials with animated characters, which in turn had less engagement than for example pictures displaying the most important in-group, the family. This was also observed in the case of Legoland Florida in relation to pictures that appear staged and contained commercial messages.

5.3 Limitations

During the process of our investigation, we have encountered certain limitations imposed by our approach. Some of these limitations have been addressed in their respective passages or when necessary and logical. The most important limitations will be outlined in the following.

Since we have only utilized Facebook, we have only analyzed a social medium that was developed in the western part of the world. It could have been interesting to investigate the way culture influence local social media such as the Chinese social networks RenRen and Sina Weibo. A similar limitation is that we only had western coders, although it is advisable to rely on coders from differing cultures. Given the amount of analysis required, acquiring external coders was not possible.

Another limitation was the issue of translation. We had to rely on our network for translating the Cantonese, Malaysian, Japanese and French parts of the textual content. Unfortunately, the amount of data for translation was too extensive. Therefore, we decided to limit the efforts to hypothesis H12 because of the smaller amount of data required. Instead of the method described under Translation Methodology, the comments were translated directly from the videos to the coders. For hypothesis H10 on factual communication, we managed to analyze the Malaysian wall, since their comments were mainly in English with only a few written in Malay.

For our work with the social text hypotheses (H10-11), we had to impose certain limits due to the sheer amount of data available for analysis. For H10, this meant that we analyzed half a year's

worth of data. For H11 we analyzed every picture available on each wall with two exceptions. We could not access the timeline pictures on Disneyland Paris, which was therefore not included in our testing of the hypotheses. Additionally, Walt Disney World had more pictures than any other wall, so we processed an amount from it similar to that of the other walls.

5.4 Future Work

The above discussion could be an incentive for future work. Since our approach has been largely focused on investigating the influence of what can be called national culture, one possible point of departure for future research could be in a more nuanced investigation of the different aspects of the notion of culture. Researchers could focus on different types of cultures, such as subcultures and organizational cultures, in order to investigate the way that different types of cultures interact and influence communication on social media. Such approaches could also include considerations of other cultural theory such as Inglehart's concepts of traditional, modern and postmodern cultures (Inglehart R. , 1997; Inglehart & Baker, 2000) or Trompenaars and Hampden-Turner's 7 Dimensions of Culture (Trompenaars & Hampden-Turner, 2002). Thus, forming hypotheses based on different theory and applying them to the same data could provide further perspective on the relationship between culture and communication on Facebook. To this end, the hypotheses that were never operationalized (Appendix D) could also have been used, as this would have provided different aspects of the applied theories.

It would also be interesting to examine if our hypotheses and findings are applicable in the context of other social networks such as LinkedIn, Twitter and Instagram. We suspect that cultural presence decreases with smaller and more specialized social networks. Using the same methodology on other social networks and comparing the results could provide additional insight.

In correlation with this, future research could also focus on local social media sites such as the Chinese RenRen and Sina Weibo, since users on localized social media may behave differently from what we observed on Facebook. However, future work should not be limited to just other social networks but also include investigations of other types of digital social media, such as forums and blogs. It would be interesting to examine the prevalence of culture on these digital media in comparison with the social networks.

Since we have been limited by time and the amount of data we collected was so extensive, we could not analyze all of it. Replications of our research could include the remaining data and even add more. Our hypotheses and theories could be investigated in the context of data collected from different brands, which may yield different results. We believe that results may change depending on for example the professional orientation of the analyzed brands (e.g. national vs. organizational culture). Furthermore, other cultures could be examined, for example African or South American culture. In our research, cultures have not been equally distributed between the dichotomous classifications we operate with. The majority of the cultures we investigated were western cultures (e.g. low context, individualist), and adding additional high context and collectivist cultures would strengthen the basis of comparison under this approach.

Future research would benefit from including coders with different language skills from different cultures. In addition, future researchers could include linguists as coders to analyze the impact of language on culture. It would be interesting to examine if communicating in a language that is not your vernacular influences how cultural characteristics manifest in communication. For example, many of the comments on the Legoland Malaysia Facebook wall were in English. You could compare these comments with responses on a similar Facebook page communicating in Malay.

Facebook is a complex social medium comprising many underlying aspects and factors that may influence an examination such as ours. Many of these aspects have been unknown to us, which may in turn have influenced our methodology, and consequently our results. To increase understanding of underlying factors, a recommendation for future research would be to include experts with specific knowledge of this area in the research process.

Finally, during the process of this investigation, we have observed a number of empirical trends, but we have arguably been unable to draw decisive statistical conclusions from them. Further research could supplement the statistical legitimacy of our work by validating the empirical trends we have observed.

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7. List of Appendices

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