

Cross-cultural design in wine destination websites

Cultural sensitivity and motivations in UI through investigation of
web interface design elements

ANNA AHL OBUCINA



UNIVERSITY
OF BORÅS

© Anna Ahl Obucina

Partial or full copying and distribution of the material in this thesis
without permission is forbidden

English title: Cross-cultural design in wine destination websites – Cultural sensitivity and motivations in UI through investigation of web interface design elements

Author: Anna Ahl Obucina

Completed: 2020

Abstract: This thesis sets out to investigate hedonic and cultural web interface design elements present on wine tourism destination websites. The thesis focuses on explaining several cultural frameworks and especially the notion of localization, globalization, culturability, and cultural markers, the high/low context theory as well as tenets of hedonics in user interface design. The aim of the thesis was to develop a better understanding and knowledge about which localized design elements that exist and are important in the cultural context of wine tourism destination websites. Hence, the patterns found can help understand how to create and design websites that are culturally sensitive and globally congruent, thus meeting the needs and behaviors of users across different cultures and backgrounds. A web design analysis was conducted to answer the research questions and results were analyzed qualitatively. The results from the web design analysis indicate several similarities and differences found in web interface design elements between the investigated websites. The results found, indicate that the use of hedonic and cultural web interface design elements present on the interfaces investigated are highly context-dependent. Meaning that the websites are preferably considered being culturally dependent, and to a greater extent reflect and are used to motivate the cultural context examined and regional differences. Hence, the patterns found in web interface design elements are considered to be culturally sensitive to the context of wine destination websites and marketing aims of the websites investigated. The findings can increase knowledge about hedonic aspects in cross-cultural design and can thus be used to help create culturally congruent and globalized interfaces for this specific context.

Keywords: Cross-cultural design, UI-design, localization, globalization, hedonic, wine tourism, culturability

Table of contents

1	INTRODUCTION.....	1
1.1	BACKGROUND	2
1.2	PROBLEM STATEMENT.....	3
1.3	AIM AND SCOPE OF THE THESIS	4
2	LITERATURE REVIEW	6
2.1	GLOBALIZATION AND USER INTERFACE DESIGN (UI).....	6
2.2	CULTURABILITY AND LOCALIZATION.....	6
2.3	HOFSTEDE’S CULTURAL DIMENSIONS.....	8
2.4	THE SYNERGY OF CULTURE AND WINE TOURISM.....	10
2.4.1	<i>Tourism destination websites, motivations for wine tourism and hedonic aspects</i> 11	
3	CONCEPTUAL FRAMEWORK.....	14
3.1	CULTURAL WEB INTERFACE DESIGN ELEMENTS.....	14
3.1.1	<i>Visual representation</i>	<i>15</i>
3.1.2	<i>Color</i>	<i>16</i>
3.1.3	<i>Links.....</i>	<i>17</i>
4	METHODOLOGICAL APPROACH	18
4.1	RESEARCH SAMPLE CRITERIA.....	18
4.2	DESTINATION WEBSITE SAMPLES AND MARKET SEGMENTATION	19
4.2.1	<i>South Africa and the regions of Darling, Tulbagh and Swartland</i>	<i>19</i>
4.2.2	<i>The USA and the regions of Willamette Valley, Umpqua Valley and Columbia Gorge</i> 21	
4.2.3	<i>France and the Bordeaux region</i>	<i>23</i>
4.2.4	<i>Germany and the Rheingau region.....</i>	<i>25</i>
4.3	WEB DESIGN ANALYSIS.....	28
4.3.1	<i>Units of analysis, variables of measurement and coding</i>	<i>28</i>
4.4	GOOD RESEARCH PRACTICE	29
5	ANALYSIS AND RESULTS.....	30
5.1	SCREENSHOTS AND EXAMPLES OF VISUAL REPRESENTATION	30

5.2	DARLING	31
5.3	TULBAGH WINE ROUTE.....	34
5.4	SWARTLAND WINE AND OLIVE ROUTE	36
5.5	HOCHHEIM AM MAIN.....	39
5.6	RUEDESHEIM	41
5.7	OESTRICH-WINKEL.....	43
5.8	THE MEDOC	45
5.9	GRAVES-SAUTERNES.....	48
5.10	ENTRE-DEUX-MERS AND HAUT BENAUGE	51
5.11	GORGE WINE	53
5.12	UMPQUA VALLEY	55
5.13	WILLAMETTE VALLEY	57
5.14	RECAP MARKETING SCOPES OF WINE DESTINATION WEBSITE SAMPLES	60
6	DISCUSSION	62
6.1	IDENTIFIABLE PATTERNS IN CULTURAL AND HEDONIC WEB INTERFACE DESIGN ELEMENTS.....	62
6.2	IDENTIFIABLE PATTERNS AND MOTIVATIONS FOR THE TOURIST EXPERIENCE	67
6.3	RESEARCH ETHICS AND REFLECTION ON GOOD RESEARCH PRACTICE	73
6.4	FUTURE RESEARCH	73
7	REFERENCES	75
	APPENDIX A: CODEBOOK	81

1 Introduction

This thesis focuses on localization, globalization and the identification of web interface design elements, or so-called cultural markers, in the context of wine tourism destination websites. The term localization, as used in this thesis, is based on the definition by Cyr and Trevor-Smith (2004), meaning that the design elements present on the user interface of a website should be adapted to fit the specific cultural locale of the target user.

Cultural markers are based on Badre and Barber's (1998) definition as the design elements most likely to be preferred and prevalent within a specific culture, therefore having a great impact on the usability of the web interface. In this study, cultural markers are preferably mentioned as cultural web interface design elements or simply just web interface design elements.

Wine tourism is a cultural activity involving hedonic motivations for undertaking these activities. Hedonics, in the context of wine tourism destination websites, is defined as the interface design elements that can help cater for appealing and enjoyable virtual experiences, hence motivating tourists to visit physically (Luna-Nevarez & Hyman, 2012, p. 94). The web interface design elements considered to be hedonic are visual appearance and color. Websites of destination marketing organizations (DMOs) as described by Rafetzeder (2019) should provide relevant content that is both inspiring and informational for the end-user. In this thesis, DMOs are referred to as wine tourism destination websites.

This thesis seeks out to identify patterns in web interface design elements present on twelve wine tourist destinations websites from four countries, Germany, France, the USA, and South Africa. The aim is to develop a better understanding and knowledge about which localized design elements that exist and are important in the cultural context of wine tourism destination websites. Hence, the design elements found can help create and design websites that are culturally sensitive and globally congruent, thus meeting the needs and behaviors of users across different cultures and backgrounds.

1.1 Background

According to the World Tourism Organization (UNWTO, n.d.-b), tourism is defined as a “social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business purposes”. Tourism exists globally and offers a broad array of activities motivating people from around the world to take part in exciting experiences (Benyon, Quigley, O’Keefe, & Riva, 2014, p. 1). Watkins, Ziyadin, Imatayeva, Kurmangalieva and Blembayeva (2018, p. 41) explain that the connection between tourism and the technological process has long existed and that the internet is the main source when searching and finding tourist-related information. The speedy evolution of the internet and simplification of transformation in how tourism information can be accessed through several digital technologies has transformed the tourism industry globally. Consequently and with increased possibilities, it is expected that tourist companies can develop new and exciting experiences anticipated by tourists. In this technological era, when the digital and physical worlds are becoming more intertwined, the notion of digital tourism has emerged. Digital tourism is concerned with the use of digital technology to help enhance the tourist experience. Digital tourism can thus create an understanding of digital spaces to help support the real-life tourist experience and to develop a great user experience for visitors (Benyon et al., 2014, pp. 1–2). One of these digital tourism mediums aiming at providing relevant and inspirational tourist information are websites of destination marketing organizations (DMOs) (Rafetzeder, 2019). DMOs can market a specific country, region, city, or state to potential visitors and can be divided into three levels: national, regional, or local (Luna-Nevarez & Hyman, 2012, p. 94). In this thesis, DMOs are mentioned as wine tourism destination websites.

In the context of digital tourism and the global nature of the internet, it has become obvious that website users, or consumers of tourist information, come from different countries, thus having different cultural backgrounds. Consequently, tourists are often immersed in cultural activities, therefore there is an evident connection between tourism and culture (Rafetzeder, 2019, p. 35). Hsieh, Holland and Young (2009, p. 712) explain that people from different cultures and backgrounds perceive and use web interfaces in diverse ways. People hold different mental models for design characteristics that influence web communication such as visual representation, navigation, layout, colors, multimedia, and more. It is therefore relevant that the interfaces of digital tourism spaces are developed or adapted to fit the needs of people from different cultures, and because DMOs are important tools for marketing destinations to prospective visitors (Rafetzeder, 2019, p. 35). Tourism destinations, whose digital spaces aim to attract visitors from different countries, must have cultural aspects in mind for them to be useful for its end-user (Rafetzeder, 2019, p. 36). To address the cultural needs of the specific user or target market, the design of

a website needs to be localized, meaning the features present on the website interface should be adapted to fit the user's local culture (Cyr & Trevor-Smith, 2004, p. 3).

According to UNWTO (n.d.) "global tourism is on the rise and competition between destination increases, unique local and regional intangible cultural heritage become increasingly the discerning factor for the attraction of tourists". One of these creative and cultural categories of tourism destinations, which can take advantage and benefit from having culturally congruent websites, are websites marketing wine tourism activities. The art of winemaking represents the regional and national history, traditions, and identity, and wine tourism can thus help promote local authentic experiences and destinations for tourists. UNWTO (n.d.) refers to wine tourism as taking part in activities such as visiting vineyards, wineries, tasting and consuming or buying wine near or at the source.

The author of the thesis is based in Cape Town, South Africa, and the thesis hence takes its starting point in South African winemaking and wine tourism research. According to regional trends presented by Western Cape Tourism, Trade and Investment Agency (Wesgro, 2017), the Internet along with Visitor Information Centers, are the main source of information when accessing information about wine tourism activities. For some regions, tourism centered services are the leading source of income. This is the case for wine tourism in the Cape Winelands, Western Cape, South Africa. Wine tourism as a motivation for leisure activity is a leading source of income locally and according to Wines of South Africa (WOSA, n.d.), about 36.1 billion gross domestic product from the wine industry was contributed towards the Western Cape economy in 2015. In research conducted by Goodman (2018), wine tourism is one of South Africa's fastest-growing industries, attracting and motivating a diversity of people with different backgrounds from around the world to visit every year. The top 5 foreign markets interested in wine activities are visitors from the UK, the United States, Germany, Netherlands and France (Goodman, 2018). Among these five countries interested in wine activities, Germany, France and the United States are likewise South Africa, large producers and consumers of wine (Karlsson, 2019). With this in mind, it is suggested that wine tourism in these countries, similarly to South Africa, is an important aspect for motivating and attracting tourists to visit. Based on the above the thesis is limit to examining wine destination websites from these four countries.

1.2 Problem statement

With the background in mind, it has become evident that with the development of the internet and the globalization of digital technologies, information has become readily available and accessible anywhere in the world. People come from different countries, have different cultural backgrounds, values and mental

models (Hsieh et al., 2009, p. 712). The interface design of websites is used and perceived in many different ways and therefore lends itself to vast cultural variabilities. The notion of cross-cultural design theory and specifically localization have meant that the interface design of websites across several different contexts needs to be culturally adapted. It is, however, important to understand that the goal of localizing is to enhance the user interface of a website to meet the needs and behaviors of users from different locales (Cyr & Trevor-Smith, 2004, p. 3). This means that web interface design elements found across several cultures can help create a more globalized and congruent website, thus meeting the needs and behaviors of users from several cultures. Cyr and Trevor-Smith (2004, p. 3) express this as having a web interface design that is culturally sensitive.

Furthermore, Singh et al. (2005), Cyr and Trevor-Smith (2004), Sun (2001), amongst many argue the importance to study cultural values and cultural markers based on theoretical frameworks in different contexts. Steenkamp (2001), as mentioned earlier by Singh et al. (2005), indicate that cultural frameworks should be applied to different contexts since it can help improve generalizability. Tigre Moura, Gnoth and Deans (2015, p. 3) point out that, while cross-cultural frameworks generally have been applied in contexts of corporate websites and e-tourism, limited knowledge exists about websites that trigger hedonic motivations, such as websites for tourist destinations. This predominant focus on differences in cultural values and utilitarian aspects of usability present on websites for e-tourism as argued by Tigre Moura et al. (2015, p. 3) suggest that hedonic qualities or hedonic design elements have been overlooked. Considering that tourism poses a form of hedonic experience that motivates people to take part in sensory activities that stimulate feelings, emotions and fantasies (Tigre Moura et al., 2015, p. 8), it would only be appropriate to expect that the design of a tourist destination website is aimed to stimulate, enhance, motivate and market the tourist experience fully for visitors.

1.3 Aim and scope of the thesis

A few of the articles researched in the literature review have focused on examining the hedonic aspects of web interface design elements. This thesis is therefore set out to include and identify hedonic aspects of cultural web interface design elements present on the user interface of twelve regional wine destination websites from four different countries, namely Germany, France, USA and South Africa. The chosen countries are primarily based on the top foreign markets and visitors interested in wine activities, and which are important for the local tourism industry in Cape Town (Goodman, 2018).

The thesis is limit to study the context of wine tourism destination websites. This is based on the problem statement arguing that there is a need to establish a

greater understanding of cultural web interface design elements present on websites that trigger hedonic motivations. This means that focus will be on identifying patterns in cultural markers or so-called cultural web interface design elements that are considered hedonic, such as visual representation and color. However, the thesis will also include identifying links as one other important element of web design. In research conducted by Neilson & Madill (2014) links as a design element have been identified as important factors that can help motivate wine tourism. The thesis aims to develop a better understanding and knowledge of what cultural web interface design elements, namely visual representation, color and links, exist and are important within the context of wine tourism destination websites. Hence, being able to create websites that are culturally congruent and sensitive, thus meeting the motivations, needs and behaviors of users across cultures globally.

The results from the web design analysis indicate several patterns found in web interface design elements present on wine destination websites that can help motivate wine tourism among users across different geographical locations and cultural backgrounds.

The research questions are as follows:

1. Looking at cultural web interface design elements, what identifiable patterns exist among wine tourism destination websites?
2. What can the identifiable patterns in cultural web interface design elements reveal about how these wine marketers understand their potential customer base(s) and their motivations for the tourist experience?

2 Literature review

The literature review focuses on previous research conducted in the area of cross-cultural design, culture and wine tourism. Concepts such as globalization, localization, culturability and cultural markers are introduced and their importance for user interface design is emphasized. Moreover, theoretical models used in cross-cultural design research and their application in web design are mentioned. The hedonic concept is explained in relation to tourism destination websites and further contextualization of culture, wine tourism and motivations for undertaking wine-related activities and their connection to web design are made.

2.1 Globalization and user interface design (UI)

With the background in mind, it has become obvious that the internet and technological process have transformed the global market and communication technology. Information can be accessed anywhere in the world and user interfaces lend itself to vast arrays of cultural variabilities. This is something that Brejcha, Yin, Li and Liu (2013, p. 357) agrees with. They express that in line with globalization users will encounter web interfaces that are designed specifically to communicate with groups from particular cultural backgrounds. This suggests that there is a growing need to adapt features present on interfaces that will help meet the expectations of users on a global level. Consequently, Brejcha et al. (2013, p. 357) argue that there is a need to adapt user interfaces to fit the expectations of users on a local level, hence focusing on aspects of cross-cultural design that can give insights about the targeted culture. Brejcha et al. (2013, p. 357), however, mention that methods for testing cross-cultural design are expensive and Chan, Chen and Fu (2014, p. 419) point out that only a few companies have the luxury to create designs that are adaptive to local markets.

2.2 Culturability and localization

Brejcha et al. (2013) conducted a qualitative pilot study focusing on mental models and preferences in user interfaces of Czech and Chinese users. Results from the study indicated that globalization influences something called cultural markers, however, in addition found many cultural differences in preferences for UI design elements such as color, layout and symbols.

Badre and Barber (1998, p. 1) coined the term culturability, meaning that cultural markers or localized design elements present on a website, which are preferred within a culture can have a direct impact on the performed usability of an interface. Culturability hence emphasizes the important relationship between culture and usability in web design. Badre and Barber (1998) were among the first to study culture in the environment of the “world wide web” and early

regarded the web as a global “space” whose content should reflect and target international audiences. Moreover, they argued that the design of an interface needs to reflect the cultural preferences of the targeted audience and that the identification of these localized elements can have great importance on determining notions of usability. In their research, Badre and Barber (1998) performed a systematic review of 168 websites from 18 different countries and among a variety of genres such as travel, news, and media, government and business. During the inspection, the authors identified numerous localized elements, generalized as cultural markers, and further found emergent patterns of these cultural markers specific to certain countries and genres. It is important to emphasize the definition of cultural markers. Cultural markers become cultural only when they are prevalent within a specific country, genre or group and less prevalent in another. The authors explain that the list of cultural markers found during their investigation is not exhaustive (Badre & Badre, 1998, p. 5-6). This suggests that cultural markers are flexible and that new patterns can appear depending on the websites and contexts that are being investigated.

The term localization, as used in this thesis, is based on the definition by Cyr and Trevor-Smith (2004), meaning that the design elements present on a website user interface should be adapted to fit the specific cultural locale of the target user. According to Sun (2001, p. 95), the act of localization involves adjusting features present on the interface to fit the expectations of the user on a surface level. Which means to adjust “the aesthetic appeal, images, colors, logic, functionality and communication patterns to conform to the target audience on the cultural level” (p. 95). Previously the act of localization has been limited to focus only on language translation and web design elements such as time, dates and currencies (Tigre Moura et al., 2015, p. 1). Rafetzeder (2019, p. 36) for example point out that with the global nature of tourism, language options such as English are a given in today’s age, however, language options do not automatically mean that a website is culturally adapted. English is considered a global language, however not all internet users understand English and other language options need to be considered to meet different cultural backgrounds.

Cultural design elements and cultural values have been studied extensively in different contexts. Cyr and Trevor-Smith (2004) researched the difference between web interface design elements found on Japanese, German and U.S. municipal websites. Cultural design elements, such as colors, symbols, graphics, language and content was analyzed and results showed significant cultural differences in website design between the countries examined. For example, findings showed that German and Japanese websites offer greater support for language translation than American websites. This result surprised the authors given that America has a multicultural population. Furthermore, Japanese and German websites to a greater extent used local and cultural symbols than American websites. However, a few of the cultural symbols identified on

German websites were easily understood by the American member rating the websites. The study by Cyr & Trevor-Smith (2004) indicates that three members or judges took part in the examination and each reviewed 30 websites from one country, hence examination did not overlap. However, the authors do not reveal the nationalities of the other two judges who took part in the examination. It was stated that the judge examining the German website samples was able to identify 90% of the cultural symbols present in these samples. This is interesting since a few of these symbols investigated was not previously understood. A pretest rating looking for consistency issues was done before the final examination, which could help explain the inconsistencies just mentioned. The findings in Cyr and Trevor-Smith (2004) study prove that cross-cultural design is a complex subject, however, in practice can help increase knowledge about the cultures examined. This knowledge can in turn help interface designers to establish guidelines of localization that can be applied to web interface design globally.

Sun (2001) studied users from Brazil, Germany and China and their opinions about culturally preferred web design elements on global and local versions of two multilingual websites, Adobe and Lotus. The study aimed to get a greater understanding of localization by researching opinions about cultural markers and in extension learning how they can affect the usability of transnational websites. The study examined user's opinions on language, visuals, page layout and color through usability tests and interviews, and results indicated that the integration of these characteristics on the design of a website can increase usability since they can help the users to achieve their goals or tasks more effectively. Results by Sun (2001) indicate that users from different countries and cultural backgrounds prefer different cultural markers and their use in web design. During the usability testing, it was found that the German user was more satisfied with website functionality that had to do with page layout and ease of navigation. The German user preferred cultural markers related to the hierarchy of content and layout. Brazilian and Chinese users preferred, found comfort in and was more satisfied with web pages that hold a lot of color and visuals related to their culture. Sun (2001), as Cyr and Trevor-Smith (2004), draws on the complexity of integrating effective localization on websites and implies that additional research is required since cultural values are dynamic and exist in different cultural contexts.

2.3 Hofstede's cultural dimensions

Many works in the area of web- and interface design such as Hsieh et al. (2009), Cyr and Trevor-Smith (2004), Singh, Zhao and Hu (2005), and Marcus and Gould (2000) are based on the cultural dimensions developed by anthropologist Geert Hofstede. Many researchers involved in cross-cultural design have adapted their cultural frameworks or guidelines drawn with inspiration from Hofstede's theoretical model. The model is made up of five dimensions based

on cultural differences observed in a country's choice of symbols, values and heroes/heroines. The five cultural dimensions are Power-distance, Long- vs Short-term orientation, Femininity – Masculinity, Collectivism – Individualism and Uncertainty avoidance.

Marcus and Gould (2000) have applied Hofstede's dimensions in an attempt to illustrate its implications on user interface design and further to highlight the importance of information visualization. The research resulted in several questions about how cultural dimensions can influence design characteristics in different countries.

According to Singh et al. (2005, p. 133), the visualization of information and how information should be presented to people from different cultures proposes one of the biggest challenges on the web. Singh et al. (2005, p. 133) further point out that the type of information presented must be contextually considered and sensitive to communicating cultural differences. Singh et al. (2005) have used the model by Hofstede and the high/low context theory by Edward T. Hall as a tool for comparative analysis to depict cultural differences on websites local to a specific country to gain insights whether localization or standardization is to be preferred for web communication. The goal of the study was to explore cultural values in a local context to see if the cultural content depicted on the local website was prevalent for the country in question. To improve the generalization of the research, four different countries, China, Japan, USA and India, and two different contexts or industries were studied, namely electronic and automation (Singh et al., 2005). The results of Singh et al. (2005) study showed that the local website reflects the cultural values of the specific country, however, further implied that there are striking differences in cultural dimensions between the countries under investigation. Singh et al. (2005, p. 141) argue that their study validates the need for websites to be localized and adapted to fit the cultural values of the user or target group.

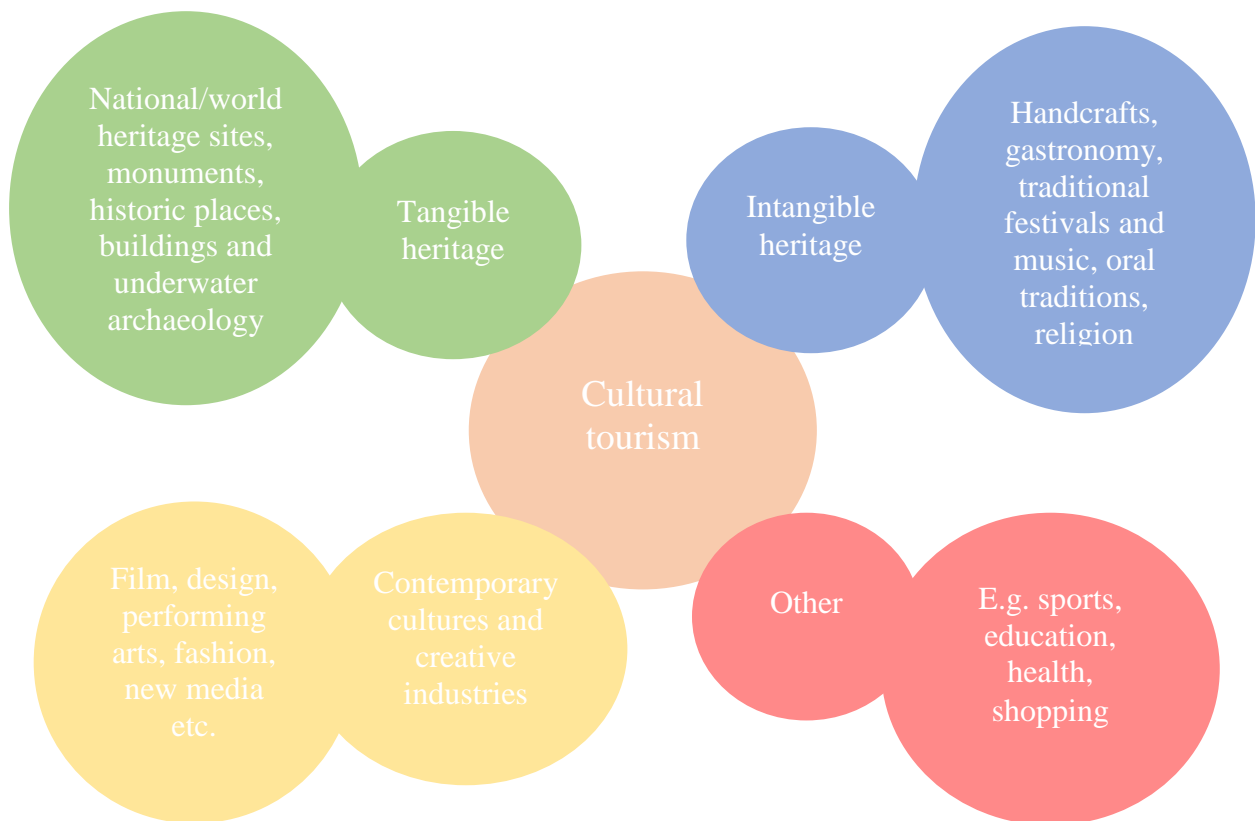
Previous research as outlined above has predominantly focused on value-based frameworks and cultural markers on a cross-national level. Countries such as Brazil, China, Germany, the United States, India and Japan have been examined extensively and results found in previous research indicate that cultural values are manifested in the countries national culture. As mentioned in section 1.1 Background, DMOs can market specific countries, regions, cities or states to potential visitors and can be divided into three levels: national, regional or local (Luna-Nevarez & Hyman, 2012, p. 94). Within this thesis, this will mean that aspects of localization and the design of websites need to take in mind several cultural levels and aspects depending on the market aim of the DMOs investigated.

2.4 The synergy of culture and wine tourism

Culture is a complex subject and the dictionary by Merriam-Webster holds six definitions let alone (Merriam-Webster, n.d.). As a starting point and as similar to the marketing branches of DMOs, culture as a generalization can be divided into international, national, regional, local and further into subcultures (Learning Lumen, n.d.). One such emerging subcategory of culture is cultural tourism. Tourism and culture have long been intertwined, however with globalization tourist activities have become less tangible and easily accessible (World Tourism Organization, 2018, p. 13). This new technological synergy between tourism and culture has meant that creative and intangible aspects of tourism have opened up doors for how cultural and heritage activities can be consumed and understood (World Tourism Organization, 2018, p. 13). Rafetzeder (2019, p. 36) point out that tourism information is dependent on the internet and is an intangible product. This has meant that tourists will not consume the tourist experience directly after purchase and will hence put in a lot of time and effort researching destinations ahead of traveling. The areas included in the definition of cultural tourism and as defined by UNWTO are tangible heritage, intangible heritage, contemporary cultures and creative industries, and others. The dynamic context of cultural tourism and its holding definitions are shown in Figure 1.

Figure 1

Definitions of cultural tourism as based on UNWTO.



The UNWTO classifies wine tourism as a subcategory of gastronomy tourism, therefore wine tourism is not represented in Figure 1 (UNWTO, n.d.). Veselá and Malačka (2015, p. 1) also draws on the synergetic relationship between wine, gastronomy and tourism, and argue wine tourism as an important aspect of regional growth. Wine tourism is defined as “a visitation to vineyards, wineries, wine festivals and wine shows for which grape wine tasting and/or experiencing the attributes of a grape wine region are the prime motivation factors for visitors.” (Hall, 2002, cited in Veselá & Malačka, 2015, p. 1). This definition offers an array of wine activities that can be undertaken visitors, however, Veselá and Malačka (2015, p. 2) as well as Neilson and Madill (2014, p. 4) point out that these activities might not be primary motivations for visiting a wine region. Visitors might seek to take part in other recreational activities related to the region such as exploring rural landscapes and natural environments, cultural heritage, or authentic gastronomy experiences. Visitors might seek relaxation and romance or take part in social activities such as meeting winemakers and learning about wine (Alebaki & Iakovidou, 2011, p. 124). As mentioned by both Alebaki and Iakovidou (2011, p. 124) and Veselá and Malačka (2015, p. 2) wine tourism offer a “regional bundle of benefits” because wine-related activities are closely linked to other historical, cultural and authentic attractions visitors can experience when visiting a wine region. Carrasco, Castillo-Valero and Pérez-Luño (2018, p. 181) further argue that winemaking reflects cultural traits and take root in the artistic and knowledge creation of the soil, terroir and grape varieties, which is passed down through generations hence forming a part of cultural heritage and identity. Therefore, the area of wine tourism can arguably be considered belonging to intangible heritage and as a part of the cultural and creative industry.

2.4.1 Tourism destination websites, motivations for wine tourism and hedonic aspects

Since tourism and culture go hand in hand, Rafetzeder (2019, p. 35) means that tourism destination websites, whose interfaces are culturally adapted, can benefit from this, thus creating a competitive advantage since it is easier to grasp potential visitors having culturally adapted interfaces. Any website aiming at reaching potential visitors must allow such visitors to obtain relevant information in an effective way to capture their attention (Luna-Nevarez & Hyman, 2012, p. 94). Websites, marketing different tourism destinations and tourism contexts, attract different types of visitors and it is, therefore, crucial to understand how the design of an interface can appeal to different cultures (Rafetzeder, 2019, p. 36). Something Luna-Nevarez and Hyman (2012, p. 94) agrees with, that tourism destination websites, regardless of their national, regional or local scope, must design appealing and enjoyable virtual experiences that meet the information needs and motivations of potential tourists.

One such context that can take advantage of having a culturally adapted interface that can help motivate a diversity of people to visit a certain region are websites aiming at providing wine tourism-related information, in this thesis mentioned as wine tourism destination websites. When accessing information about wine tourism and wine-related experiences, visitors have turned to the internet as the main source of information (Neilson & Madill, 2014, p. 3; Wesgro, 2017). Wine tourism destination websites should be regarded as tools for marketing wine regions, provide inspiring information about activities and influence visitors to plan their visit (Rafetzeder, 2019, p. 35). Wine tourism destination websites would also need to consider marketing other aspects of planning a trip such as providing information about accommodation, restaurants, maps, other activities and local events. Furthermore, wine tourism destination websites must have a sales objective, build brand identity and maintain relationships, however most important need to influence and motivate tourists to visit a region (Neilson & Madill, 2014, p. 3 & 6).

Being able to cater for these virtual experiences, having visually appealing and enjoyable web interfaces that motivate tourists to visit a specific country or region, mean that designers will have to go beyond traditional usability and study the impact and relevance of hedonic qualities (Diefenbach, Kolb & Hassenzahl, 2014, p. 305). Neilson and Madill (2014, p. 7), point out that the wine tourist in addition to what has already been mentioned above, “seek aesthetic and hedonic information to get a sense of what the wine tourism experience will be like”. Aesthetics and hedonic qualities such as images and form can help create a narrative for the wine tourist that emphasizes environmental settings, tells a story and appeals to the senses (Neilson & Madill, 2014, p. 7). In web interface design, hedonic elements which can be seen as culturally motivated are images, color, shapes, and which are important for the overall graphic feel of a website since they give users aesthetic and emotional appeal (Cyr, 2014). These aesthetics, giving the website design visual appeal, are in turn important for capturing potential visitors as well as enhancing tourist information (Luna-Nevarez & Hyman, 2012, p. 95).

In their study, Neilson and Madill (2014) conducted a systematic literature review of previous research focusing on determining factors that motivate wine tourism and tourism information needs that influence tourists to visit certain destinations. In their findings, Neilson and Madill (2014) define relationships between motivational aspects and their implication on web design. Based on their findings Table 1 below is used to demonstrate some of the most important aspects found in web design that can help meet tourist motivation and needs.

Table 1*Web design aspects motivating wine tourism needs based on Neilson & Madill (2014)*

General web design element	Factor	Preference for web design element meeting need
Photos and images	Information about wine origin and winery products	Photos of products, wineries, vineyards and local surroundings
	Geographical imagery of wine region	Photos of winery setting and region
	Aesthetical appeal and beauty of ground and winery setting. Ambiance and atmosphere. Simplicity and cleanness of winery. Privacy of tasting rooms for an authentic experience	Photos of winery setting and interior
	Incorporation of authentic experiences such as wine activities taking part at winery and tasting rooms	Photos of setting and activities occurring such as tastings, meeting winemaker. Photos of winemaker and employees
	Family activities, relaxation and socialization	Photos of people relaxing and socializing over wine at winery
Links and maps	Cultural activities at or near destination	Link to local cultural activities
	Cultural experiences of food, wine, setting	Links to local restaurants serving local wine
	Local events and other attractions	Links to other attractions and to websites of local tourist oriented events and festivals
	Accommodation, dining, entertainment and interaction	Links to local businesses and destination websites promoting and offering accommodation, local restaurants and experiences
	Maps and directions	Maps on site and location available on Google Maps

3 Conceptual framework

Based on the problem statement and the literature review this thesis seeks out to investigate cultural web interface design elements present on websites that are considered to trigger hedonic motivations. Therefore frameworks based on Badre and Barber (1998) have been considered appropriate for the research and are outlined below.

3.1 Cultural web interface design elements

In their research to identify cultural markers, Badre and Barber (1998) performed a systematic review of hundreds of websites from different countries, contexts and languages. Their results demonstrated that preferences in cultural design elements have implications for the usability and design of web interfaces. Badre and Barbers (1998) research resulted in a variety of web interface design elements having cultural implication such as icons, shapes, color, geography, sounds, fonts and more, and which are further broken down into smaller subcategories (Badre & Barber, 1998, p. 6). Many works interested in examining web interfaces design elements such as research done by Cyr and Trevor-Smith (2004), Hsieh et al. (2009) and Sun (2001) have based parts of their theoretical knowledge on the cultural markers identified by Badre and Barber (1998). Both Cyr and Trevor-Smith (2004) and Hsieh et al. (2009) have focused their research on all parts of Barber and Barbers (1998) cultural markers and defined them as language, visual representation, navigation, color, layout, multimedia, content and structure, and links. Sun (2001), however, focused on four major categories of cultural markers such as language, visual representation, color and layout.

This thesis is, however, limit to study and identifying web interface design elements such as visual representation, color and links. The choice in studying visual representation and color is predominantly based on Cyr (2014) and Neilson & Madill's (2014) argumentation that images, colors and shapes on the web are considered hedonic qualities that can be seen as culturally motivating and can create a narrative for the visitor. Links are chosen because links as web design elements in Neilson & Madill's (2014) study have been identified as important factors that have a positive effect on and can help motivate wine tourism and visitor's needs. These main categories investigated that being visual representation, colors and links are further broken down into subcategories to highlight examples of cultural web interface design elements that can exist within websites. Tables demonstrating these main- and subcategories of web interface design elements as based on the frameworks discussed above are presented in specific tables and sections below (see Table 2 Table 3 and Table 4).

3.1.1 Visual representation

Visual representation consists mainly of images and graphics related to the local culture, and in turn holding elements depicted such as icons, metaphors, symbols, geography, shapes, regional and architectural elements (see Table 2). Hung, Li and Goh (2013, pp. 208–209) express that web interface design elements are shaped by cultural expectations and social interactions. They mean that visuals, such as symbols, that are relevant for and reflect the local culture will communicate meaning and when applied in website design can help meet these cultural expectations. Symbolic meaning and the interpretation of symbols in a cultural context is deeply rooted in social interactions. Culture and symbolic interpretations are learned and constructed through social patterns, consequently, it is through these social constructs that people give meaning to the world and its objects (Hung et al., 2013, p. 210).

Considering that visual representation holds information and can convey meanings about what is being depicted, the appeal of an image can further induce hedonic qualities and emotions. According to Cyr et al. (2009, p. 4) image appeal refers to how well images present on a website are appropriately chosen and perceived accordingly to the expectations and interests of the user. Image appeal further refers to all images present on a website (Cyr et al., 2009, p. 4). It is therefore important that visuals are not only aesthetically pleasing, however also convey cultural and symbolic meaning since they can help capture the interest of visitors, thus enhancing information transfer about the tourist destination more effectively (Luna-Nevarez & Hyman, 2012, p. 95).

In the study conducted by Neilson and Madill (2014) and as shown in Table 1, photos as a web design aspect, were identified as important factors motivating wine tourism and people to visit. Websites whose interfaces include photos that depict important factors such as winery setting and geographical environment, products, wine activities and more will help influence and motivate tourists to visit.

Table 2

Examples of visual web interface design elements as adapted from Sun (2001) and Badre and Barber (1998)

Visual representation	
<u>Geography</u> Maps, globe, outline	<u>Architectural</u> Office, cityscape, house, church, state building
<u>Regional</u> Animals, landscape, water, desert, foliage	<u>Shapes</u> Arrows, lines, circles, squares, triangles, rectangles
<u>Icons/metaphors/symbols</u> Envelopes, homes, stamps, international, local, books, pages, musical notes, paper clips, newspapers, clocks, thumbtacks	<u>Flags</u> Native, foreign, multiple

3.1.2 Color

Color is an incredibly important aspect of web interface design since the visual appeal of color can affect user perception, thus stimulating emotional and behavioral reactions and intentions (Cyr, Head & Larios, 2010, p. 1). Even though color is emphasized as an important hedonic quality in interface design, both Cyr et al. (2010, p. 2) and Noiwan and Norcio (2006, p. 104) argue that research within the field of Human-Computer Interaction focusing on cultural color preferences in web interface design is insufficient. Hence, the need for further research examining color appeal and preferences in cross-cultural web design.

Colors are influenced by psychological, environmental and emotional aspects (Cyr et al., 2010, p. 2) and can further denote symbolic meaning (Badre & Barber, 1998, p. 2). Choices in color appeal to different cultural backgrounds. Different cultures have their associations and symbolic meaning with different colors, hence the need for interface designers to understand the implications of color, taking cultural variability into account in the design of web interfaces (Noiwan & Norcio, 2006, p. 103). Table 3 holds examples of colors that are

culturally specific and commonly used within web interfaces (Badre & Barber, 1998, p. 2). The table further holds colors that are HTML specific as according to Badre and Barber (1998, pp. 5–6).

Table 3

Examples of color as web interface design elements from Badre and Barber (1998)

Color	
<u>Primary and secondary</u>	<u>HTML specific</u>
Red, blue, yellow, green, pink, purple, orange, black, white, gold, teal, multiple	text color, background color

3.1.3 Links

Links as cultural web interface design elements refer to embedded, stand-alone, internal and external links. Furthermore, they also refer to the color of a link and when the link is clicked on and thus visited (Badre & Barber, 1998, p. 5-6). Links are generally used as site features to create easy and effective navigation for users. Links can help enhance movement around a website and can help aid site interaction via communication in the interface more effectively (Cyr & Trevor-Smith, 2004, p. 7). In the study conducted by Neilson and Madill (2014) links as factors motivating wine tourism were found to have great importance for visitors. Winery websites whose interfaces included external links to accommodation, dining, other attractions and events in the region will influence tourists to visit. Winery websites that do not provide links will fail to capitalize on benefits from wine tourism (Neilson & Madill, 2014, p. 15).

Table 4

Examples of links as web interface design elements from Badre and Barber (1998)

Links	
	<u>HTML specific</u>
Embedded, stand-alone, internal, external	Link color, visited link color

4 Methodological approach

This section of the thesis discusses the overall methodological approach used, hence the justification for the chosen research methods. The research questions are important for the process of the project since the questions in mind can help guide the researcher about what research design and what methods of data collection that can be suitable (Bryman, 2012, pp. 10–11). The chosen methodological approach was primarily based on the research questions and the approach did not follow traditional methods of data collection. The nature of the research questions meant that the investigation and identification of cultural web interface design elements present on wine tourism destination websites were conducted through a web design analysis.

4.1 Research sample criteria

The chosen countries being investigated were based primarily on the fact that Germany, France and the USA are the top foreign markets being interested in wine activities and thus essential for the local wine industry in South Africa (Wesgro, 2017). Germany, France and the USA are likewise South Africa large wine producers and have an established wine industry. Primary criteria when assessing appropriate research samples meant that wine regions in these specific countries must have destination websites that are informative and commercial promoting local or regional wine tourism and wine-related activities. Informative-commercial websites according to (Luna-Nevarez & Hyman, 2012, p. 96) should provide both information about the destination and commercial activities. The informative-commercial aspect is very much in line with the motivations for undertaking wine tourism where visitors want to be able to access information about a destination, places and attractions to visit, however also aspects of planning a trip such as booking accommodation or dining. The second criterion was that the research samples, meaning the wine tourism destination websites investigated, were attracting a larger share of domestic visitors. These criteria, having the aim of the thesis in mind, suggest that the destination websites that promote regions that attract a larger share of domestic visitors already have interfaces that are somewhat adapted to fit the local culture and context. However, the wine destination websites still need to take in mind the international market share to be able to promote the wine tourism experience fully and to motivate visitors from different parts of the world to visit.

The approach to finding relevant research samples and criteria is similar to what Bryman (2012, p. 422) call generic purposive sampling. Generic purposive sampling is an inductive method for establishing research samples and are usually implemented sequentially or fixed before the research is conducted. Criteria for samples or cases may be decided beforehand, may be unforeseen or both, however, the approach to sampling and criteria should be informed

concerning the research question (Bryman, 2012, p. 422). This have meant that the two research criteria as outlined above act as starting points for finding representative research samples and which have been based on the research questions, however, also informed by the problem statement and aim of the thesis. Therefore, sampling have been done in two steps where 1) areas of investigation have been identified and fixed criteria outlined and 2) based on the criteria in step one sequential sampling have been employed to find representative research cases, meaning the websites investigated (see 4.2 Destination website samples and market segmentation).

To increase the accuracy of the findings twelve wine destination websites were analyzed, three equally covered for each of the four countries investigated. In qualitative research Bryman (2012, p. 425) point out that it is often a bit tricky to establish relevant sample sizes, however, the researcher needs to consider time and cost constraints. Due to the time limit of the study, a sample size of twelve websites was considered appropriate. The web design analysis was also conducted on the entire website, hence not limited to focus for example only on the starting page of the websites investigated.

4.2 Destination website samples and market segmentation

To find representative destination website samples based on the criteria outlined above, an overall analysis in four levels was conducted on the internet. First, the four countries were searched to establish a basic knowledge about existing wine regions. Second, the regions were looked at to find information about which regions predominantly attract domestic visitors and visitor profiles were identified. Third, the identified regions were searched online to find out whether they had a wine tourism destination website or not. Fourth, three wine destination websites for each country were chosen for the web design analysis.

4.2.1 South Africa and the regions of Darling, Tulbagh and Swartland

South Africa was researched first and according to Wesgro (2017, p. 2) the greater regions of the Cape Karoo, Cape Garden Route and Weskus regions were predominantly visited by the domestic market between 2016 and 2017. The share of wine travelers visiting the Cape Karoo for wine tasting purposes was 94.4 % domestic share versus only 5.6 % visitors with an international origin. However, when further researched it showed that the Cape Karoo only has one wine destination website promoting the region and the Weskus region was, therefore, looked at. The Weskus region attracts an 80.9 % share of domestic visitors versus a 19.1 % share of international visitors (Wesgro, 2017, p. 2). The Weskus or Coastal Region is referred to as an overarching region and can further be broken down into smaller regions and districts (Wines of South Africa, n.d.-d).

According to (Wines of South Africa, n.d.-b) the districts belonging to the Coastal region are Stellenbosch, Paarl, Wellington, Franschhoek, Tulbagh, Swartland, Darling and Lutzville Valley. In the research conducted by Wesgro (2017) and which the statistics above refer to, Tulbagh, Swartland, Darling and Lutzville Valley belong to the Weskus region whereas the districts of Stellenbosch, Franschhoek, Paarl and Wellington belong to the Cape Winelands region. Therefore, the wine destination websites of Tulbagh, Swartland and Darling were chosen. The age profile of both domestic and international wine travelers coming to South Africa are those predominantly aged between 36-50, closely followed by age group 51-70 and further visitors aged between 21-35 years (Wesgro, 2017, p. 3). Visitors mainly travel in pairs and international visitors to a greater extent stay overnight whereas the domestic market is largely comprised of day visitors. Travelers, both international and domestic, who are interested in wine tasting in the Weskus region are also interested in additional activities such as culture and heritage, cuisine, scenic drives, craft and food markets, and other events (Wesgro, 2017, p. 10).

Winemaking in the Cape Town area goes back three centuries when former Dutch governor Simon van der Stel planted the first vineyard on his farm Constantia (Wines of South Africa, n.d.-c). Groot Constantia was born and the first wine estate established in South Africa. Groot Constantia still exists today and is one of the main attractions in the Constantia wine region. In the 1680s, French Huguenots settled in South Africa and brought with them winemaking skills and traditions from Europe. French Huguenots predominantly settled in an area called the “French Corner” (Wines of South Africa, n.d.-c), today known as Franschhoek, the culinary capital of South Africa. Most winegrowing areas in South Africa have a Mediterranean climate with warm summers and cool winters creating ideal conditions for winemaking. South Africa is a part of the “New World” and the Cape winegrowing region is one of the most beautiful in the world with impressive mountain backdrops and ocean views. Every single district has their own unique and diverse terroir and macroclimate creating ideal conditions for specific grape varieties (Wines of South Africa, n.d.-a).

Darling is situated near the Atlantic Ocean and has a cooler climate than the neighboring regions of Tulbagh and Swartland. Darling is favored for delicate cultivars and is known for making excellent Sauvignon blanc, Shiraz, Merlot and Cabernet Sauvignon. Darling is surrounded by lush green hills, wheat-filled farmlands and is during spring surrounded by beautiful displays of colorful flowers (Wines of South Africa, 2015, p. 44), a spectacle attracting loads of people to visit the area every year. Swartland compared to Darling has a warmer climate and is known for making delectable full-bodied reds such as Pinotage, Shiraz and Cabernet Sauvignon, and fortified wines (Wines of South Africa, 2015, p. 48). Pinotage is South Africa’s proud heritage cultivar and is a cross between Cinsaut (previously known as Hermitage) and Pinot noir. The website

investigated for Darling was <https://www.hellodarling.org.za/>. Swartland has lately become known for its independent and youthful wine farms producing energetic and award-winning Chenin Blancs and Mediterranean style blends. The name of the region comes from the indigenous plant called rhino bush, a bush that turns the landscape dark when in season. Swartland is Afrikaans and can be translated “the black land”. Swartland is also known for growing beautiful olives and is surrounded by majestic mountains and riverbeds (Wines of South Africa, 2015, p. 48). The website investigated for Swartland was <https://swartlandwineandolives.co.za/>.

Tulbagh lies within a valley of mountains and is surrounded by orchards and wheat fields. Tulbagh is settled in a unique geographical location where the mountains form a “cold bubble” perfect for making beautiful white wines such as Chenin blanc, Colombard and Chardonnay. Tulbagh has lately become famous for making award-winning Methodé Cap Classiques, South Africa’s version of champagne, and further make excellent Pinotage, Shiraz, Cabernet Sauvignon and Merlot. The website investigated for Tulbagh was <https://www.tulbaghwineroute.com/>.

4.2.2 The USA and the regions of Willamette Valley, Umpqua Valley and Columbia Gorge

According to Garibaldi, Stone, Wolf and Pozzi (2017, p. 53) most tour operators offer wine tours in Napa Valley (California) and Willamette Valley (Oregon). Research conducted by Destination Analyst Inc. in 2018 state that 19.2% of the visitors coming to the Napa Valley are international tourists (Destination Analysts, 2019b, p. 10), compared to Willamette Valley which attracts only 1.5% international visitors of total visits (Destination Analysts, 2019a, p. 40). Hence, the wine tourism destination website of Willamette Valley was chosen for web design analysis since they, as in line with the criteria outlined above, attract a larger share of local visitors. Oregon as a major wine region was further looked at. Based on finding a recent study done by Rhodewalt, Drlik-Muehleck, Puleo, Shinnars and Matonte (2019), who researched visitor demographics in Oregon’s three major wine regions, the Umpqua Valley, Columbia Gorge and Rogue were further looked at. Respondents taking part in the study’s survey responded living within or near the region for which they responded. Visitors are thus mainly concentrated around their respective region, essentially domestic visitors. Out of the surveys 5,420 total respondents only 35 answered living abroad. During further investigation it turned out that the wine destination website for Rogue Valley was under construction and not accessible, therefore the wine destination websites of the Umpqua Valley and Columbia Gorge region were chosen together with Willamette Valley.

The first grapevines in Oregon were planted in the 1880s by German immigrants, however, winemaking first took off in the 1960s when the first Pinot noir vines

were planted at Hillcrest Vineyards in the Umpqua Valley (Oregon Wine, n.d.-d). Even though the Oregon wine region is considered a young winegrowing area this region has grown quickly and 769 wineries have been established during the last six decades (Oregon Wine, n.d.-c). Oregon's winegrowing areas such as the Willamette Valley, Umpqua Valley and Columbia Gorge are referred to as American Viticulture Areas (AVAs) since they have their unique climate and terroir (Oregon Wine, n.d.-b).

Willamette Valley is Oregon's largest AVA and is surrounded by mountains, hills and thriving rivers. The name comes from the river running through the region and the Willamette Valley has similar to the Coastal Region of Darling in South Africa a cooler climate with wet winters yet dry summers due to the proximity to the Pacific Ocean. This climate makes ideal conditions for growing cool-climate white varieties such as Chardonnay, Pinot Gris and Pinot blanc, however, the valley is famously known for making excellent Pinot noir (Oregon Wine, n.d.-e). The average age of the Willamette Valley visitor is 51.5 years and the visitor is affluent with a mean household income of \$113,436. The Willamette Valley visitor identified as 85.5% Caucasian while 6.6 % of the respondents as non-Caucasian. Moreover, the visitor is likely to be married, have a bachelor degree and are frequent consumers of wine (Destination Analysts, 2019a, pp. 13–14). The Willamette Valley wine tourist come to the region for its wine and its scenic beauty and is further interested in other activities such as wine tasting, dining, winery tours, shopping, breweries and distilleries and outdoor activities (Destination Analysts, 2019a, pp. 43–48). Top motivations for visiting the region are previous visits, visiting family or friends, wine events, information from wine club, wine magazine or wine store (Destination Analysts, 2019a, p. 40). The website investigated for Willamette Valley was <https://willamettewines.com/>.

The Umpqua Valley similar to the Willamette Valley is named after a river flowing nearby and is tucked between two mountain ranges. The Umpqua Valley has several unique climate zones with both cooler and warmer areas. The cooler northern area is ideal for producing Pinot noir and delicate white wine varieties similar to the Willamette Valley. The Southern area has a warmer climate making it ideal for growing red wine varieties that can take the heat such as Tempranillo, Shiraz and Merlot (Oregon Wine, n.d.-d). The Umpqua Valley predominantly attracts older visitors with 35 % being aged between 55-64 and 29 % aged 65+. The rest 16 % are aged between 45-54, 12 % 35-44 and 7% 21-34. The Umpqua Valley visitor, likewise Willamette Valley is affluent, 89 % of the visitors identify as white and drink wine frequently (Rhodewalt et al., 2019, pp. 20–23). Umpqua Valley attracts 44 % local visitors and 56 % non-local. Non-locals are visitors traveling more than 50 miles to visit a winery (Rhodewalt et al., 2019, p. 28). The primary purpose to visit the area for both locals and non-locals is to visit wine farms, however, non-locals likely have other motivations

to visit such as hiking, fishing and swimming (Rhodewalt et al., 2019, pp. 37 & 40). When visiting the region the Umpqua Valley visitor likes to take part in additional activities such as dining, shopping, outdoor recreation, breweries and distilleries, other events or festivals (Rhodewalt et al., 2019, p. 36). Top motivations and factors for an enjoyable wine experience are hospitality, ambiance and social atmosphere, presentation and wine knowledge of the host and opportunities to taste and discover new wine producers (Rhodewalt et al., 2019, pp. 44–45). The website investigated for Umpqua Valley was <http://www.umpquavalleywineries.org/>.

Columbia Gorge is located further inland and is settled next to the dramatic Columbia River. Winemaking in the Columbia Gorge region dates back to the 1880s and the region has two unique climate zones, very much similar as to the Umpqua Valley. The west has a cooler climate whereas the east has a warmer desert climate, which both make ideal conditions for growing classic grape varieties such as Pinot Gris and Chardonnay (Oregon Wine, n.d.-a). Columbia Gorge generally attracts a younger pool compared to Umpqua Valley and Willamette Valley, still 51 % of visitors are older than 55 and the rest 49 % 54 years or younger. The Columbia Gorge visitor, likewise Umpqua Valley is affluent, 89 % of the visitors identify as white and drink wine frequently (Rhodewalt et al., 2019, pp. 20–23). The primary purpose to visit the area for both locals and non-locals is to visit wine farms, however, non-locals likely have other motivations to visit such as hiking, canoeing and fishing (Rhodewalt et al., 2019, pp. 37 & 40). When visiting the region the Columbia Gorge visitor likes to take part in additional activities such as dining, shopping, outdoor recreation, breweries and distilleries, other events or festivals (Rhodewalt et al., 2019, p. 36). Top motivations and factors for an enjoyable wine experience are hospitality, the natural beauty of the setting, ambiance and social atmosphere, affordability of the experience and presentation and wine knowledge of the host (Rhodewalt et al., 2019, pp. 44–45). The website investigated for Columbia Gorge was <https://www.gorgewine.com/gorge-wine>.

4.2.3 France and the Bordeaux region

According to statistics from Gironde Tourisme (n.d.), the Bordeaux region in France is the most visited region with 4.3 million visits per year. Of these 4.3 million visits, 28% are local Girondins, 41% French nationals and the rest 31% international tourist visiting the area. The Bordeaux region is made up of five greater appellations or wine routes: The Medoc, Blaye and Bourg, The Libournais, Entre-Deux-Mers and, Graves and Sauternes. The appellations are further broken down into several smaller sub-regions and a total of 26 wine destination websites promoting these regions were identified (Vins De Bordeaux, n.d.-d). No information about which wine route is more popular could be accessed. Hence, the three wine destination websites analyzed were chosen randomly with a random number generator, from top to bottom as presented on

Vins De Bordeaux (n.d.-d) website, and in two steps. In the first step, one website for each wine route was randomly selected in the generator, thus resulting in five samples covering all appellations. In a second step, three out of the five samples were randomly selected with the generator, resulting in the wine destination websites analyzed for France. The randomly selected wine destination websites for France are presented in the table below. The wine destination websites investigated represent the Medoc, Entre-Deux-Mers and Graves and Sauternais appellations of the Bordeaux region.

Winemaking traditions in the Bordeaux region date back to Roman time and are today a UNESCO world heritage site. The Bordeaux region is considered one of the world's most important regions and Bordeaux grape varieties are famed across the globe. The Bordeaux wine route has a rich heritage with historical villages and vineyards, so-called chateaux, which offer wine tastings, cultural and gourmet experiences. Bordeaux is probably most famous for producing full-bodied Cabernet Sauvignons, Cabernet Francs and Merlots, however, some common white wine varieties are grown such as Colombard, Sauvignon blanc and Semillon (Masterclass, 2019). The wide selection of grape varieties is due to the proximity to the Atlantic Ocean and the different soil types of the region. The region has a maritime climate with mild winters and moderately warm summers and every appellation has a unique microclimate. The Garonne river divides the region and the left respective right banks have their own soil types which creates ideal conditions for growing certain varieties based on trapping water or storing heat (IG Wines, 2011). The Medoc appellation is situated at the left bank of the Garonne and is predominantly an area focusing on producing red varieties such as Cabernet Sauvignon, Merlot, Petit Verdot, Cabernet Franc and Malbec (Vins De Bordeaux, n.d.-c). The website investigated for the Medoc was <https://www.medoc-bordeaux.com/>. The Graves-Sauternais appellation is situated south of the Medoc and on the left bank of the Garonne. The Graves-Sauternais produce red varieties such as Merlot and Cabernet Sauvignon, and white varieties both dry and sweet such as Semillon, Sauvignon Blanc and Muscadelle (Vins De Bordeaux, n.d.-b). The website investigated for Graves-Sauternais was <http://www.bordeaux-graves-sauternes.com/>. The Entre-Deux-Mers appellation is at the right bank of the river and focuses on producing sweet and dry whites as well as full-bodied reds (Vins De Bordeaux, n.d.-a). The website investigated for the Entre-Deux-Mers was <https://www.bordeaux-haut-benauges.com/>.

According to Afonso (2017, p. 12), Bordeaux is one of the world's most popular destinations for wine tourism and continues to boom. To continue to attract wine tourists major wine producers are open all year round and offer wine activities by trained employees. Afonso (2017) conducted a study regarding wine tourists return intention to a specific wine region and focused her investigation on Bordeaux, Rioja and Porto. In her study, Afonso (2017, p. 69) found that wine

tourists having visited the Bordeaux region previously and intend to return are aged between 35-44 years, closely followed by those aged between 45-54 years. Those intending to return have a higher level of education and are furthermore affluent responding to having high or a very high monthly income (Afonso, 2017, pp. 72–74). The wine tourist is interested in core wine experiences such as learning about winemaking, the product and meeting the winemaker. Visiting wineries and cellars for wine tastings are very or extremely important. The visitor further wants to escape routine, enjoy the rural landscape and scenery, socialize and relax with family or friends and take part in new activities (Afonso, 2017, pp. 87-89).

4.2.4 Germany and the Rheingau region

German wine tourism was researched extensively. Most of the information and statistics presenting visitor demographics were only accessible in German. This made it difficult to find resources conveying data about which wine regions in Germany that attracts a larger share of domestic visitors. However, a study about the segmentation of tourists in the Rheingau region conducted by Szolnoki, Mueller Loose, Tari and Iselborn (2016, p. 542) was found and indicated that the Rheingau region to a greater extent is visited by German domestic tourists than international tourists. The general profile of visitors to the Rheingau region and segment referred to as the “Wine & Rheingau lovers” by Szolnoki et al. (2016, p. 542), 98 % are German visitors and the rest 2 % foreign nationals. This segment visits the region frequently and 47.7 % of the visitors return between 4-6 times a year and 51.3 % return more than 6 times a year. The Rheingau region predominantly attracts an older segment with 42.3 % of the visitors being referred to as generation baby boomers (those born between 1946-1964), followed by 36.7 % Gen Y (those born between 1977-1995), and 21 % Gen X (those born between 1965-1976). The German tourist that travel frequently to the region has a higher level of education and which further correlates with having a higher income (Szolnoki et al., 2016, p. 543). The German wine tourist, which include segments referred to as the wine oriented tourist and wine and Rheingau lover, are generally more interested in wine activities whereas the foreign visitor is interested in cultural experiences (Szolnoki et al., 2016, p. 544).

The Rheingau region has a long history of winemaking dating back to the 1200s when Cistercian monks founded monasteries and viticulture started to develop. The Rheingau region is a small winegrowing area, however a popular tourist region and famous for its historical and cultural surroundings with medieval monasteries and castles. The region is further famed for making beautiful late-harvest varieties such as Riesling Spätlese and Spätburgunder (Pinot noir). This is due to the surrounding Taunus Hills, which protects the area from cold fronts and create ideal conditions for trapping heat. The region further has a moderate climate with mild winters and warm summers (Wines of Germany, n.d.). The region belonging to Upper Middle Rhine Valley is a UNESCO World Heritage

site and the ten towns or municipalities making up the region are Eltville, Flörsheim, Geisenheim, Hochheim Main, Kiedrich, Lorch, Oestrich-Winkel, Ruedesheim, Walluf and Wiesbaden. These towns or municipalities have their own rich heritage and are considered winegrowing towns. All towns have their own websites, however, most of these are municipal websites predominantly aiming at providing information for citizens and general tourist information. All ten websites were looked at and the German samples that were considered to have a predominant tourism-oriented focus were chosen. This meant that the websites chosen are those that predominantly provide information about the destination and commercial activities, hence taking in mind both informative and commercial aspects of tourism. The German research samples examined are Hochheim am Main, Oestrich-Winkel and Ruedesheim. The website examined for Hochheim am Main was <https://www.hochheim-tourismus.de/>. The website examined for Oestrich-Winkel <https://www.oestrich-winkel.de/> whereas the website examined for Ruedesheim was <https://www.ruedesheim.de/>.

Table 5*Research samples examined during the web design analysis*

Country	ID	Region	Website
South Africa	1	Darling	https://www.hellodarling.org.za/
	2	Tulbagh Wine Route	https://www.tulbaghwineroute.com/
	3	Swartland Wine & Olive Route	https://swartlandwineandolives.co.za/
Germany	4	Hochheim am Main	https://www.hochheim-tourismus.de/
	5	Ruedesheim	https://www.ruedesheim.de/
	6	Oestrich-Winkel	https://www.oestrich-winkel.de/
France	7	The Medoc	https://www.medoc-bordeaux.com/
	8	Graves & Sauternes	http://www.bordeaux-graves-sauternes.com/
	9	Entre-Deux-Mers	https://www.bordeaux-haut-benauge.com/
USA	10	Gorge Wine	https://www.gorgewine.com/
	11	Umpqua Valley	http://www.umpquavalleywineries.org/
	12	Willamette Valley Wine	https://willamettewines.com/

4.3 Web design analysis

A web design analysis of wine tourist destination websites has been conducted. Similar methods, such as content analysis on the web, have previously been proven successful in research investigating cultural values on tourist websites, such as Luna-Nevarez and Hyman (2012) and Tigre-Moura et al. (2015). These studies however as mentioned above, have for most parts focused on examining cultural values on the web and have thus based their investigation on Hofstede's cultural framework and Edward T. Hall's high versus low context theory. Rafetzeder (2019), however, used cultural design elements as units of analysis with the purpose to establish knowledge about what design elements can help create congruent tourism destination websites. Sun (2001) applied web interface design elements to evaluate users' opinions about these elements to increase knowledge about cultural sensitivity.

4.3.1 *Units of analysis, variables of measurement and coding*

To evaluate and examine cultural web interface design elements present on the wine destination websites, units of analysis, variables of measurement and units of coding were defined before the analysis was conducted. The complete wine destination websites were looked at, thus the entire website makes up the unit of analysis. The cultural frameworks and tables as proposed in the conceptual framework are referred to as the variables of measurement, hence the three broad categories and sub-categories of cultural web interface design elements that being visual representation, colors and links, define the variables of measurement. To define a set of rules for coding the variables of measurement a codebook was created (see Appendix A: Codebook). The codebook was created to act as a guide for the web design analysis and to determine definitions for the variables measured. The variables measured, namely the main-and subcategories of cultural web interface design elements, and their definitions were predominantly based on knowledge gained from the conceptual framework. Some of the author's basic experiences about these concepts were however applied. This meant for example that units of analysis such as color were categorized into primary and secondary use, hence color was measured during an ocular inspection and primary colors are those that are prominently used and occur frequently in main areas of the website. Secondary colors are those that in an ocular inspection is less prominent, however, still used frequently throughout the website. Colors of HTML specific elements that do not exist in Badre and Barber (1998) framework were added during the analysis, such as the color of buttons, headers and footers. During the web analysis, it was often found that headers, footers and buttons hold specific colors, and that primary and secondary colors were identified in these main areas of the websites. Hence header, footer and buttons were added as color-specific HTML elements.

4.4 Good research practice

According to the Swedish Research Council (2017, p. 7), research ethics and good research practices are not static phenomena. Similarly, to other aspects of globalization, as drawn upon in previous chapters, the dynamics of research ethics have changed. New questions concerning methods, materials analysis and research problems arise and which are predominantly touching aspects of legitimacy. This reasoning is especially applicable in this thesis where the methodological approach, that of a web design analysis, can be regarded as a fairly new strategic method for collecting and analyzing data. Similar to content analysis, as applied by Tigre Moura et al. (2015) and Luna-Nevarez & Hyman (2012), the web design analysis meant that the research samples were reviewed with knowledge drawn from the conceptual framework. Thus, a codebook (see Appendix A: Codebook) was developed to establish coding values and definitions that were applicable during the analysis. The web design analysis is thus regarded as a qualitative approach. In qualitative research, the “self or I” is closely involved in the research, and questions concerning the quality and reliability arise (Denscombe, 2017, p. 327). To increase the reliability of the study general principles of good research practice as outlined by the Swedish Research Council (2017) and Denscombe (2017) have been followed. Firstly, the methods used, results and documentation has been described and reported in an exhaustive manner. The process of finding representative research samples, and as based on relevant research criteria, have been discussed and openly accounted for. The criteria for finding relevant research samples meant that factors regarding authenticity have been met, since the research samples are representative and sensitive to the research context (Bryman, 2012, p. 393). Furthermore, documentation of results and the analytical approach has been described clearly. Emphasis has been put on transparency. Concepts underpinning the interpretation of the web analysis and further how the analysis was conducted have been openly explained and documented. This, however, raises concerns regarding objectivity. Considering that qualitative research and methods often are interpreted based on the researcher's values, knowledge and beliefs, the “self” cannot entirely be eliminated (Denscombe, 2017, p. 329). To ensure objectivity and to limit the “self”, this has meant a need for the researcher to fully immerse herself in the concepts and contexts underpinning the research process and that clear criterion for finding relevant samples have been established. To ensure objectivity, meant that all of the research samples analyzed was identified before the web design analysis was conducted, hence not to influence findings that possibly could give in to similar explanations. To increase generalizability, several research samples or cases representative of the context analyzed were examined.

5 Analysis and results

The web design analysis was conducted through an ocular analysis or inspection. The ocular inspection meant that the units analyzed was scanned for visually, hence focusing on identifying the following main categories of cultural design elements, that being color, links and visual representation, and their associated subcategories. As mentioned in section 4.3 Web design analysis the main categories make up the variables of measurement and which are defined and can be read with the corresponding codebook (see Appendix A: Codebook).

The codebook acted as a guide during the web design analysis and each of the examined research samples was analyzed in the order as seen in Table 6. This meant that the research sample with website ID 1 was analyzed first and the research sample with website ID 12 was analyzed last. The research samples were analyzed in four steps. Color was analyzed first, links second and visual representation third and last. Based on the codebook a coding sheet was developed. The coding sheet was used to document findings during the web design analysis and findings relevant to each of the examined research samples are presented in individual sections below.

5.1 Screenshots and examples of visual representation

Consent to use screenshots has been sent out to all the research samples included in the analysis. At the time of writing, consent has been given from 4 out of 12 research samples, hence consent is still awaited from eight websites. Examples of visual representation and subcategories are shown in figures in sections below and only used when consent has been given. Screenshots seen in figures have been used to clarify reasoning regarding the results and to illustrate subcategories of visual representation that give in to similar explanations.

5.2 Darling

Table 6

Web design elements identified on Darling website

Main category of cultural web design element	Subcategory of cultural web design element	Cultural web design element found during analysis
Color	Primary	Orange
	Secondary	Green and red
	HTML specific	Orange, green, black, white
Links	Embedded links	Yes
	Stand-alone links	Yes
	Internal links	Yes
	External links	Yes
Visual representation	Regional/nature	Foliage, landscape and regional setting, animals, social, agriculture, ground setting, cuisine, produce
	Architecture	City scape, church, Dutch heritage houses
	Geometric	Squares, rectangles
	Geographical	Google Maps
	Icons	Calendar, letter, phone, search, social media
	Symbols	Coat of arms, vines

The research sample and website examined for the Darling region was <https://www.hellodarling.org.za/>. The website is run by the Darling Tourism Bureau, and further investigation shows that the website is owned by Swartland Local Municipality (Western Cape Government, 2019). The website promotes the small town of Darling and the local region. The website promotes local businesses such as wine farms, shops, restaurants, accommodation, real estate, markets and other tourism-oriented businesses such. The website further offers information about other regional, local, cultural and historical attractions and activities visitors can take part in when in the area such as festivals, events and sports. Hence, links are used extensively to promote local and regional offerings and experiences. The website furthermore offer support for easy navigation and use embedded, stand-alone and internal links. Embedded links can be found in images and these are predominantly internal, however, embedded links are not common. Stand-alone links are consistently designed as buttons and can for example be read as “view”, “read more” and “explore more”. Stand-alone links are furthermore used as internal links.

The colors used on the website are orange, green, red, white and black. Orange is identified as the primary color, hence used more widely. Green and red are secondary colors, however green are more prevalent than red. Colors of HTML specific elements such as buttons, links and visited link colors are used interchangeably. This means for example that a button, which is identified as green, will change color to orange when a user interacts with it and vice versa. The same reasoning applies to links. The background color is white and the footer black. The header is white and orange, and text black.

The website was scanned for visual web interface design elements, which in table 7 are referred to as regional/nature, architectural, geometrical, geographical, symbols and icons. The website was found to be relatively content-heavy and uses plenty of images to convey meaning about the cultural context. Elements found on the website belonging to regional/natural aspects were identified as foliage, landscape and regional setting, animals, social, agriculture, ground setting, cuisine and produce (see Table 7). Some of these elements found are self-explanatory such as foliage, cuisine and animals however, most need further explanation. Landscape and regional settings refer to the imagery that depicts local, natural and geographical surroundings and environments. Ground setting refers to images that depict the setting and/or interior of for example a wine farm, tasting room, restaurants and other attractions, and which help to convey ambiance and atmosphere. The web design element mentioned as social refers to images that depict people taking part in social activities associated with wine such as wine tastings, meeting with winemaker, festivals and events. The social aspect further involves people taking part in other tourism-oriented activities and attractions. Agriculture refers to images that depict processes of making wine such as employees taking part in harvest and production. Produce

relates to images that show for example the produce of a wine farm and other local products. The website shows off a wide variety of regional/natural visuals related to the different areas it aims to promote. Visuals hold some social aspects such as people taking part in sports, wildlife, wine tastings and other recreational activities. The website, however, predominantly uses visuals that show off ground settings of restaurants and wine farms to convey ambiance and atmosphere. Visuals depicting the natural scenery with rolling green hills and lush grapevines are commonly used and the website further offers many visuals related to produce such as wine bottles, olives, sweets, arts and crafts and how these products are produced.

Architectural web design elements identified are cityscapes, churches and Dutch heritage houses. Geometric shapes identified are rectangles and squares however, these shapes appear through photos, buttons and online forms. Icons found during the analysis are the calendar, letter, phone, magnifying glass for search and social media icons linking to social accounts related to the website. Symbols identified during the web design analysis are the coat of arms and vines.

5.3 Tulbagh Wine Route

Table 7

Web design elements identified on Tulbagh Wine Route website

Main category of cultural web design element	Subcategory of cultural web design element	Cultural web design element found during analysis
Color	Primary	Green
	Secondary	Black and beige
	HTML specific	Green, black, beige and grey
Links	Embedded links	Yes
	Stand-alone links	Yes
	Internal links	Yes
	External links	Yes
Visual representation	Regional/nature	Foliage, landscape and regional setting, agriculture, produce, ground setting
	Architecture	Chapel, Dutch heritage houses
	Geometric	Squares, rectangles, stars
	Geographical	Google Maps
	Icons	Parking, Wi-Fi, disabled access, phone, people, wine bottle, glass, no smoking, umbrella etcetera
	Symbols	Vines

The research sample examined for Tulbagh Wine Route was <https://www.tulbaghwineroute.com/>. Tulbagh Tourism Bureau runs the website and further investigation shows that the website is owned by Witzenberg Local Municipality (Western Cape Government, n.d.). The website promotes the Tulbagh Valley and specifically the Tulbagh Wine Route. The website has a clear wine focus and predominantly focuses on promoting wine estates along the wine route and which of these estates that offer accommodation, dining and wedding options. The website promotes local businesses such as restaurants, spas, breweries and specialty shops. The website further offers information about other regional, local, cultural and historical attractions and activities visitors can take part in when in the area such as festivals, events, art galleries, museums and plenty of outdoor activities. Hence, links and information are used to promote local and regional experiences, however, focus mainly surround wine-oriented experiences. The website furthermore offers support for easy navigation and use embedded, stand-alone and internal links. Embedded links are commonly used as internal links and can be found in images. Stand-alone links exist both as textual links and as buttons and can be read as “read more” and “explore”. Stand-alone links are furthermore used as internal links.

The colors used on the website are green, black, beige and grey. Green is identified as the primary color, hence used more widely. Black and beige are secondary colors, however black is almost used to the same extent as green. Beige is used for internal links in the main navigation and can further be found in geometrical shapes such as rectangles. The background color is grey and the footer and header are both black. External links are green and change color to black during the interaction.

The website was scanned for visual web interface design elements and was found to be relatively content-heavy. The starting page especially uses plenty of images to convey meaning about the cultural context. Elements found on the website belonging to regional/natural aspects were identified as foliage, landscape and regional setting, agriculture, produce and ground setting (see Table 7). The website for Tulbagh Wine Route, unlike Darling, does not depict any social aspects and visuals predominantly focus on showing the natural scenery of the landscape, winery surroundings and ground settings of the wine estate. The geographical elements found are Google Maps. Architectural web design elements identified are chapels and Dutch heritage houses. Plenty of icons were found during the analysis and icons are commonly used to convey what services and facilities are available at a specific wine estate such as Wi-Fi, restaurant, wine tasting and sales, outside seating, disabled access, parking, smoking allowed/not allowed, bar area and more. Standard icons such as the phone were identified, however, no social media icons were found. Symbols with potential symbolic meaning found during the web design analysis are vines.

5.4 Swartland Wine and Olive Route

Table 8

Web design elements identified on Swartland Wine and Olive Route website

Main category of cultural web design element	Subcategory of cultural web design element	Cultural web design element found during analysis
Color	Primary	Grey
	Secondary	Blue, green, yellow
	HTML specific	Green, blue, yellow, black, grey
Links	Embedded links	Yes
	Stand-alone links	Yes
	Internal links	Yes
	External links	Yes
Visual representation	Regional/nature	Foliage, landscape and regional setting, animals, social, agriculture, ground setting, cuisine, produce
	Architecture	Dutch heritage houses
	Geometric	Squares, rectangles, circles
	Geographical	Google Maps, Wine route map
	Icons	Social media, compass, olives, wineglass, calendar, phone, pin, letter
	Symbols	Vines, basket press, coat of arms

The research sample examined for Swartland Wine and Olive Route was <https://swartlandwineandolives.co.za/>. The website is privately owned and is sponsored by local insurance company Santam. The website, unlike those of Darling and Tulbagh, is not centered around one town and is aimed to promote a larger geographical area that includes several towns and surroundings. The website promotes regional and local wine and olive producers and predominantly focuses on promoting members of the wine route such as wine estates, private and independent cellars, wine merchants and co-operatives. The website offers a quick informational overview of restaurants and accommodation, however, it does not provide links to such facilities or services in the main navigation. Plenty of the members of the wine route offer for example accommodation and dining options and can be booked as wedding venues. This type of information can be found in inspirational blog posts and in their news section, however, can only be booked directly via the member's official websites. The website promotes other tourism-oriented businesses such as tourism bureaus and tour operators focusing on wine and food experiences. The website furthermore offers information about other regional, local, cultural and sporting activities such as festivals, markets and events that has a strong focus on local produce and agriculture. The visuals found on the website relating to regional and natural aspects are foliage, landscape and regional setting, animals, social, agriculture, ground setting, cuisine and produce. The visuals found are very much in line with aspects the website is aiming to promote. Visuals largely depict the social aspects of wine such as people taking part in wine tastings, meetings with winemakers, enjoying festivals, events and markets and other recreational activities. Visuals to a great extent depict local geographical landscapes, winery surroundings and ground settings to show off atmosphere and ambiance. Visuals further depict elements relating to produce and agriculture such as processes and traditions of winemaking, winemakers and employees, and local produce.

Figure 2

Examples of produce on <https://swartlandwineandolives.co.za/>².



¹ Consent for use of screenshots from <https://swartlandwineandolives.co.za/> given by J. Janse van Rensburg, Manager Swartland wine route.

² Consent for use of screenshots from <https://swartlandwineandolives.co.za/> given by J. Janse van Rensburg, Manager Swartland wine route.

Figure 3

Left to right, example of architectural element, example of foliage and example of ground setting and winery setting to show atmosphere and ambiance present



Figure 4

Examples of landscape and regional setting



Embedded links are commonly used as internal links and can be found in images. Stand-alone links exist both as textual links and as buttons and can for example be read as “read more” and “load more”. Stand-alone links are furthermore used as internal links and are grey when designed as buttons. Colors used on the website are green, blue, yellow, black and grey. Grey and tones of grey are used as primary colors and can be found in main areas of the website such as the header, main navigation and footer. Grey is used for other HTML specific elements such as buttons and as the background color. Buttons linking to social media accounts are either blue, green or yellow. Blue is used for links and does not change color during an interaction.

Architectural elements found are predominantly Dutch heritage houses and geometrical shapes similar to those found on the Darling website are photos taking the form of rectangles and squares. Symbols found that potentially could have symbolic meaning are vines, coat of arms and a basket press which is used as the logo for the Swartland Wine and Olive Route. Standard icons such as the phone, letter, calendar and pin have been identified. Icons for social media accounts are commonly used, which are circled, and other contextual icons such as olives and wine glasses have been identified. Geographical elements identified are Google Maps and a wine route map depicting locations of its members.

5.5 Hochheim am Main

Table 9

Web design elements identified on Hochheim am Main website

Main category of cultural web design element	Subcategory of cultural web design element	Cultural web design element found during analysis
Color	Primary	Green
	Secondary	Brown
	HTML specific	Green, black, brown, white
Links	Embedded links	Yes
	Stand-alone links	Yes
	Internal links	Yes
	External links	Yes
Visual representation	Regional/nature	Foliage, social, ground setting, landscape and regional setting
	Architecture	Churches, monuments, cityscapes, squares, old timber houses
	Geometric	Squares, rectangles, circles
	Geographical	Google Maps, event and festival maps, wine map
	Icons	Social media, camera, clock, search, grapes, flags, YouTube
	Symbols	Vines, the Madonna

The research sample examined for Hochheim am Main was <https://www.hochheim-tourismus.de/>. The website is run by the Magistrate of the city of Hochheim am Main and can be accessed via <https://www.hochheim.de/>. The website is hence part of a municipal website, however is aimed to market local tourism and wine-oriented activities centered around the city. The website promotes wine tourism however have a strong focus on culture, heritage and history and offers plenty of information about the city's history and traditions of winemaking. The website hence promotes experiences surrounding local attractions such as churches, monuments and museums. The website promotes local events such as wine festivals, cultural festivals, weekly markets and Christmas markets. These markets and festivals in turn promote local businesses such as wine producers, shops, restaurants and other local produce. The website further promotes accommodation, outdoor activities and offer a directory to wineries in the area. Information about dining options such as cafes, restaurants, farm shops and bars available at wineries can be accessed through the directory only. Internal and external links are hence used to promote local experiences and attractions and have a predominant focus on cultural, leisure and wine-oriented activities. The visuals found on the website are very much in line with the aspects the website is aiming to promote. Visuals predominantly depict foliage, ground setting, social and architectural elements. Images that depict architectural elements such as churches, timber houses and monuments also depict the ground setting of these attractions. Visuals largely depict social aspects such as people taking part in wine tastings, festivals, events, markets, outdoor activities and other recreational activities such as visiting museums and other local attractions.

Embedded links are commonly used as internal links and can be found in images. Stand-alone links are predominantly used buttons and can for example be read as "details". Colors used on the website are green, brown, black and white. Green is used as the primary color and can be found in the logo, buttons, links, and part of the footer and some of the headings. Brown is used as the background color for sections of the start page and text. Black is used for links and white for background, header and footer.

Geometrical shapes similar to those found present on other research samples are photos taking the form of rectangles and squares. The website uses incomplete circles to circle symbols and icons. Symbols found with potential symbolic meaning are vines and the Madonna present as a statue. Standard icons such as the camera, clock and magnifying glass for search have been identified and icons for social media accounts exist, which are circled. The British and German national flags have been identified to offer language options. Geographical elements identified are Google Maps and several maps of festival and market areas.

5.6 Ruedesheim

Table 10

Web design elements identified on Ruedesheim website

Main category of cultural web design element	Subcategory of cultural web design element	Cultural web design element found during analysis
Color	Primary	Red
	Secondary	Yellow
	HTML specific	Red, yellow, white and black
Links	Embedded links	Yes
	Stand-alone links	Yes
	Internal links	Yes
	External links	Yes
Visual representation	Regional/nature	Foliage, social, ground setting, landscape and regional setting, cuisine
	Architecture	Monuments, cityscapes, squares, old timber houses, monasteries/churches
	Geometric	Squares, rectangles
	Geographical	City map, hiking map
	Icons	Search, flags, calendar, info, social media, YouTube
	Symbols	Vines, Germania

The research sample examined for Ruedesheim was <https://www.ruedesheim.de/>. The website is run by Ruedesheim Tourist AG and in partnership with City of Ruedesheim (Stadt Rudesheim, n.d.). The website offers tourist information, bookings and services in and around the city of Ruedesheim as well as the Rheingau region. The website has a broad tourism focus and promotes local and regional attractions and experiences such as wine-oriented experiences, events, museums, churches and monasteries. The website promotes plenty of wellness, tours and outdoor activities such as hikes, cable cars, guided tours, walking, biking, cycling and more. The website promotes local businesses such as accommodation, shops, restaurants, and offer plenty of information about wine-oriented experiences such as wineries, tastings, wine walks, bars and taverns. Internal and external links are hence used to promote local and regional experiences, attractions and activities and as mentioned have a broad tourism-oriented focus, that is not only concentrated around wine tourism. Hence, the visuals that are present on the website are very much in line with the aspects the website is aiming to promote. Visuals depict an array of elements and have a strong focus on social aspects and architectural elements. Architectural elements found are monuments, cityscapes, squares, old timber houses, monasteries and churches. Regional/nature elements found are foliage, social, ground setting, landscape and regional setting and cuisine. Images depicting architectural elements often depict both ground setting and landscape settings of these attractions and social elements include people taking part in wine-related activities as well as other recreational activities.

Embedded links are used as internal links and can be found in images and stand-alone links exist, are textual and can be read for example as “here”. Colors used on the website are red, yellow, white and black. Red is used as the primary color, which can be found in the header and footer and is further used for links and headings. Yellow is used for the logo and for buttons, black for text and white as background. Furthermore, an image depicting red grapes is used throughout the interface as a background element. The image enhances the contextual feeling and gives color to the website.

Geometrical shapes similar to those found present on other research samples are photos taking the form of rectangles and squares. Symbols found with potential symbolic meaning are vines and the statue of Germania. Standard icons such as calendar, info, magnifying glass for search and social media icons have been identified. The German, British and Chinese national flags have been identified to offer language options.

5.7 Oestrich-Winkel

Table 11

Web design elements identified on Oestrich-Winkel website

Main category of cultural web design element	Subcategory of cultural web design element	Cultural web design element found during analysis
Color	Primary	Green
	Secondary	Blue
	HTML specific	Green, blue, black, white, pink
Links	Embedded links	No
	Stand-alone links	Yes
	Internal links	Yes
	External links	Yes
Visual representation	Regional/nature	Foliage, social, ground setting, landscape and regional setting
	Architecture	Monuments, cityscapes, squares, old timber houses, monasteries/churches
	Geometric	Squares, rectangles
	Geographical	Google map, city map
	Icons	Calendar, search, phone, letter
	Symbols	Vines, wine loading crane

The research sample examined for Oestrich-Winkel was <https://www.oestrich-winkel.de/>, which is run and owned by the Magistrate of the City of Oestrich-Winkel. The website is a municipal website and offer citizen information and information about city administration, economics and politics. A section of the website is however used to promote tourism in the city. The website promotes and offer information about dining options, accommodation, events, winetasting stands and other tourism-oriented businesses. The website promotes cultural and natural experiences such as city tours, museums, cemeteries, castles and hiking and further offers information about sports and leisure facilities. The website further offers historical information about winemaking traditions, neighborhoods and the city's Jewish roots. The website however predominantly promotes tourism via external links to other websites and businesses.

Compared to the other research samples the website to a greater extent conveys information and communication through text. Regional/natural elements found are foliage, social, ground setting, landscape and regional setting. Architectural elements found are monuments, cityscapes, squares, old timber houses, monasteries and churches. The visuals found predominantly depict architectural elements and their setting, landscape and social aspects relating to leisure and outdoor activities such as people walking, biking and swimming.

No embedded links have been found. Some stand-alone links have been found as buttons reading "more", however are not commonly used. The website uses plenty of external links and which are clarified with the external link symbol and if pressed a pop-up will show warning the user that they will leave the site if agreeing. The colors used on the website are green, blue, pink, black and white. Green is used as the primary color and is used for the header, footer, logo and buttons. Blue is used for headings, links and sections grouping content. Pink is used for headings, white as background color and black for text and links.

The logo used for the website depicts a wine loading crane and other symbols found with potential symbolic meaning are vines. Geometrical shapes similar to those found present on other research samples are photos taking the form of rectangles and squares. Standard icons such as calendar, search, phone, and letter exist however, no icons for social media have been identified. The only geographical element found present is Google Maps.

5.8 The Medoc

Table 12

Web design elements identified on Medoc website

Main category of cultural web design element	Subcategory of cultural web design element	Cultural web design element found during analysis
Color	Primary	Burgundy red
	Secondary	Pink
	HTML specific	Burgundy, pink, white
Links	Embedded links	Yes
	Stand-alone links	No
	Internal links	Yes
	External links	Yes
Visual representation	Regional/nature	Foliage, ground setting, landscape and regional setting, agriculture, produce
	Architecture	Castles, manor, churches, towers, barns
	Geometric	Squares, rectangles, circles
	Geographical	Regional map, outlined map, Google Maps
	Icons	Pin, printer, globe, wine bottle, castle, search, wine glass, grape, plane, phone, link, compass
	Symbols	Vines

The research sample examined for the Medoc was <https://www.medoc-bordeaux.com/>. The website is owned and run by Conseil des Vins du Médoc, a viticultural organization aimed to collectively promote Medoc wines and the region's wine producers (Medoc Wine Council, n.d.). The website, similar to the research sample of Swartland, is aimed to promote a larger geographical area that includes several appellations. The website offers statistical data, history about winemaking and viticulture in the region and its appellations. The website further offers information about grape varieties grown in the region and famous vintages. The website promotes and offer practical information about large cooperative cellars, historical wine estates and smaller independent producers in the Medoc region. The website compared to other research samples offer a tourist guide with information about accommodation, restaurants, wine bars, shopping, events, sporting activities and other attractions to visit in the region. The Medoc vineyard destination guide can be downloaded from the website or available in tourist offices. The website uses plenty of visuals that depict regional/nature elements such as foliage, ground setting, agriculture, produce, landscape and regional setting. Plenty of visuals depicting architectural elements have been found such as castles, manors, churches, towers and barns. Castles or chateau's, refer to estates, cooperative cellars or independent wine farms where visitors can enjoy wine tastings and other activities. Visuals depicting castles often depict ground setting such as tastings rooms and interior of the place and further the produce available. The website has a strong focus on visuals that depict geographical settings and landscapes, natural elements such as grapevines, soils and grape varieties, process and traditions of winemaking. No visuals depicting social aspects have been identified.

Figure 5

Examples of landscape and regional setting on <https://www.medoc-bordeaux.com/>³



³ Consent for use of screenshots from <https://www.medoc-bordeaux.com/> given by J. Vignault, member of Council of Vins du Médoc.

Figure 6

Examples of architectural elements landscape



Embedded links are used as internal links and can be found in images. No stand-alone links have been identified. The colors used are burgundy, pink and white. Burgundy is used as primary color and pink as secondary. Burgundy is used for text, links, header and buttons. Pink is used for links, headings and can be found in the logo whereas white is used for background, buttons and footer. The website uses a lot of icons referred to contextual to convey information such as castles, wine bottles, globe, grapes and more. The website uses standardized icons such as the phone, magnifying glass for search, plane, links, compass and pin. No icons for social media or flags have been identified, however, the website has links to social media and offers English and French language options. Similar to other research samples vines have been found as a symbol that could potentially have symbolic meaning. Geometrical shapes such as squares and rectangles are conveyed through images. Circles have been identified and are used as diagrams to convey statistical data. Google Maps have been identified and regional maps are used to show the geographical placement of appellations in the Medoc region.

5.9 Graves-Sauternes

Table 13

Web design elements identified on Graves-Sauternes website

Main category of cultural web design element	Subcategory of cultural web design element	Cultural web design element found during analysis
Color	Primary	Pink
	Secondary	Burgundy, blue, red, orange, green, purple, black
	HTML specific	Pink, burgundy, blue, red, orange, green, purple, black, white
Links	Embedded links	Yes
	Stand-alone links	Yes
	Internal links	Yes
	External links	Yes
Visual representation	Regional/nature	Foliage, ground setting, landscape and regional setting, produce, social, cuisine
	Architecture	Castles, manor, churches, towers, barns
	Geometric	Squares, rectangles, circles
	Geographical	Google Maps
	Icons	Pin, map, heart, search, castle, bed, grapes, restaurant, bike, keys, flags, calendar
	Symbols	Vines, vine feather pen for logo

The research sample examined for Graves-Sauternes was <http://www.bordeaux-graves-sauternes.com/>. The website is owned and run by The Bordeaux Wine Route in Graves and Sauternes, and in partnership with several municipalities, tourist offices and councils present in the Bordeaux and Gironde region. The website similar to the research sample for Medoc promotes a larger geographical area, which includes several appellations. The website offers tourist information, bookings of accommodation and services such as packaged deals and a course creator for visitors to create their own individual travel packages. The website, similar to the research sample for Ruedesheim, has a broad tourism-oriented focus and promotes attractions and experiences local to both appellations and the region. The website promotes the wine route of Graves-Sauternes and have a strong focus on wine tourism and wine-oriented activities such as wine tastings, meeting with winemaker, vineyard and estate tours, workshops, food and wine pairings, winemaking classes and more. The website promotes accommodation, dining options, bars and events. The website further promote plenty of outdoor, nature and leisure activities such as walks, hikes, horse riding, boat cruises, golfing and biking. The website furthermore promotes several heritage- and cultural activities and attractions such as visits to museums, historical gardens, castles, monuments and churches. Internal and external links are hence used to promote local and regional experiences, attractions and activities and as mentioned have a broad tourism-oriented focus, that is not only concentrated around wine tourism. Hence, the visuals that are present on the website are very much in line with the aspects the website is aiming to promote. Visuals depict an array of elements and have a strong focus on social aspects and architectural elements. Architectural elements found are castles, manors, churches, towers and barns. Regional/nature elements found are foliage, social, ground setting, produce, cuisine, landscape and regional settings. Images depicting architectural elements often depict both ground setting and landscape settings of these attractions and social elements include people taking part in wine-related activities as well as other recreational activities mentioned previously.

Figure 7

Examples of social elements present on <http://www.bordeaux-graves-sauternes.com/>⁴



Embedded links are used as internal links and can be found in images. Some stand-alone links exist and read for example “read more”, however are not commonly used. Buttons with arrows depicted are commonly used instead as internal links and to indicate to users that they can take part in more content and information. The primary color used is pink and multiple secondary colors have been identified such as blue, burgundy, orange, green, red and purple. The colors are used to each indicate a different category of tourist information that can be found on the website, which are vineyards, where to eat, where to sleep, heritage, nature & activities, diary and holiday. Icons, such as castle, bed, keys and bike are used in a similar way to indicate categories of tourist information.

Geometrical shapes similar to those found present on other research samples are photos taking the form of rectangles and squares and circles are commonly used as buttons. Symbols found with potential symbolic meaning are vines and a vine feathered pen as the logo. No icons or links to social media have been identified, however some standardized icons exist such as calendar, magnifying glass and pin. The British and French national flags have been identified to offer language options.

⁴ Consent for use of screenshots from <http://www.bordeaux-graves-sauternes.com/> given by J. Renaux, Route des Vins de Bordeaux en Graves et Sauternes.

5.10 Entre-Deux-Mers and Haut Benauges

Table 14

Web design elements identified on Haut Benauges website

Main category of cultural web design element	Subcategory of cultural web design element	Cultural web design element found during analysis
Color	Primary	Orange
	Secondary	Peach
	HTML specific	Black, white
Links	Embedded links	No
	Stand-alone links	No
	Internal links	Yes
	External links	No
Visual representation	Regional/nature	Foliage, landscape and regional setting
	Architecture	None
	Geometric	Squares, rectangles, abstract
	Geographical	Google Maps, regional map
	Icons	Wine bottle, wine glass, calendar, people
	Symbols	Vines

The research sample examined for Entre-Deux-Mers was <https://www.bordeaux-haut-benauge.com/>. The Haut Benauge Syndicate runs the website, which is a union promoting harvesters and wine producers in the Haut Benauge appellation belonging to the Entre-Deux-Mers region. The website, unlike the other research samples examined for France, thus only promote a single appellation. The website and syndicate's mission is to support winegrowing members and to promote the appellation through partnership and cultural events. The website offer historical information about viticulture, information about the vineyard and statistical data about the appellation. The website further promotes local events and offers contact information to wine producers in the appellation. The website does not have any external links promoting other tourism-oriented activities and attractions and content is used very sparingly. This applies to both textual information and visuals, and the website is considered very content light compared to other research samples investigated. Only six visual elements have been found on the website where two out of these visuals depict the geographical location of the appellation within the Entre-Deux-Mers region. The other four are images depicting wine grapes and landscapes with foliage and grapevines. The few images found have abstract geometrical shapes unlike any of the other research samples examined.

The colors used are orange, peach, white and black. Orange is the primary color and is used for buttons, icons, headings and some text. Peach is used for footer and as abstract graphical elements. Black is used for text and internal links and white for background color. Symbols found with potential symbolic meaning are vines, which is similar to other research samples examined. Standardized icons found are the calendar and icons depicting groups of people. Contextual icons found are a wine bottle and wine glass, however, no icons or links for social media have been identified.

5.11 Gorge Wine

Table 15

Web design elements identified on Gorge Wine website

Main category of cultural web design element	Subcategory of cultural web design element	Cultural web design element found during analysis
Color	Primary	Black
	Secondary	Grey
	HTML specific	Green, black, white
Links	Embedded links	Yes
	Stand-alone links	Yes
	Internal links	Yes
	External links	Yes
Visual representation	Regional/nature	Foliage, landscape and regional setting, cuisine, social
	Architecture	None
	Geometric	Squares, rectangles
	Geographical	Google Maps, regional map
	Icons	Social media, Vimeo, letter
	Symbols	Vines

The research sample examined for Gorge Wine was <https://www.gorgewine.com/>. The website is run and owned by the Columbia Gorge Winegrowers Association, which is a non-profit organization. Their mission is to promote the Columbia Gorge winegrowing region, its members and the wine. Members are local wineries and vineyards, grape producers and wine-related businesses located in the Columbia Gorge region (The Columbia Winegrowers Association, n.d.). The website hence promotes its members, other wineries and vineyards in the region and offer practical information about these. The website furthermore promotes local businesses and hospitality partners such as businesses offering wine tours, accommodation and dining options. Website visitors can read about the Gorge Wine region, about the association and can access a calendar with upcoming events. The association provides links to social media accounts and icons for social media are the only icons identified on the website.

Visuals are used sparingly however, every section of the website uses large banners to grab visitor's attention. Visual elements found are foliage, social, cuisine, landscape and regional setting. Similar to other research samples examined these visuals are in line with what the website is aiming to promote and depict people enjoying wine, cuisine, the geographical setting of the region and natural elements such as grapevines and grapes. No architectural elements have been identified and geometrical shapes similar to other research samples occur via the use of images.

The colors used are black, grey, white and green. Black is used as the primary color and for the footer, headings, text and navigation. White and grey are used for background and green for buttons and links. Few embedded and stand-alone links have been identified. Stand-alone links occur as buttons and can for example be read as “learn more” and embedded links are used as internal links. Symbols found with potential symbolic meaning are vines. Google maps have been identified and the website offer visitors to download a map over the winegrowing region.

5.12 Umpqua Valley

Table 16

Web design elements identified on Umpqua Valley website

Main category of cultural web design element	Subcategory of cultural web design element	Cultural web design element found during analysis
Color	Primary	Grey
	Secondary	Red
	HTML specific	white, grey, red
Links	Embedded links	Yes
	Stand-alone links	Yes
	Internal links	Yes
	External links	Yes
Visual representation	Regional/nature	Foliage, landscape and regional setting, cuisine, social, agriculture, ground setting
	Architecture	Cottage
	Geometric	Squares, rectangles, wave, arrow
	Geographical	Wine route map, regional map
	Icons	Social media, Vimeo, letter, clock, heart, paper plane, corkscrew, wineglass, grapes
	Symbols	Vines

The research sample examined for Umpqua Valley was <http://www.umpquavalleywineries.org/>. The website is run and owned by the Umpqua Valley Winegrowers Association and is similar to Gorge Wine a non-profit member organization. The website promotes family-owned wineries and vineyards located in Douglas County, Oregon (Umpqua Valley Winegrowers Association, n.d.). The website promotes other local and regional businesses and attractions such as accommodation, dining options, real estate, banks and farmers. The website further promotes several outdoor and cultural activities such as visits to the Crater Lake, wildlife safaris, biking and natural museums. The website offers plenty of historical information about the winegrowing region, wine facts, statistical data and research. The website promotes several events such as wine tours, food and wine pairing galas and musical events.

Visual elements found are foliage, landscape and regional setting, cuisine, social and agriculture. Visuals found have a strong wine-oriented focus and similar to other research samples are used to enhance promotional aspects of the region. Visuals depict social aspects such as people taking part in winetasting, meetings with winemakers and vineyard tours. The website however uses plenty of visuals that have a strong focus on natural aspects such as images depicting geographical settings of the region and wineries, grapevine plantings, grapes and foliage. The website, in addition to static visuals, uses a video to promote an array of natural attractions and social activities visitors can take part in when visiting the region. Architectural elements found are cottages and the website further offers a wine route map and regional map.

The website uses textual stand-alone links, which can be read as “read more” and “here” and embedded links are used for internal navigation. The colors used are grey, red and white. Grey is used as the primary color closely followed by red, which is used as a secondary color. Grey is used for textual elements, for links, footer and as the background color. Red is used for buttons, visited links and as headings. White is also used for backgrounds and can further be found in the header. Geometrical shapes found are waves, arrows, rectangles and squares, which mainly occur as images and for grouping different kinds of content. The website uses both standardized icons and contextual icons such as social media, letter, clock, wine bottle, glass and corkscrew.

5.13 Willamette Valley

Table 17

Web design elements identified on Willamette Valley website

Main category of cultural web design element	Subcategory of cultural web design element	Cultural web design element found during analysis
Color	Primary	Grey
	Secondary	Red, blue
	HTML specific	Beige, blue, red, grey
Links	Embedded links	Yes
	Stand-alone links	Yes
	Internal links	Yes
	External links	Yes
Visual representation	Regional/nature	Foliage, landscape and regional setting, ground setting, cuisine, social, agriculture, produce
	Architecture	Barn
	Geometric	Squares, rectangles, arrow
	Geographical	regional map, vineyard map
	Icons	Social media, search, tag, map, directory, phone, heart, comment, external link
	Symbols	Vines

The research sample examined for Willamette Valley was <https://willamettewines.com/>. The website, similar to the other two samples examined for the USA, is run and owned by an association, namely the Willamette Valley Wineries Association. Their mission is to promote the Willamette Valley AVA, its wines, members and community. Their aim is further to promote tourism and especially to increase wine-focused visitation (Willamette Valley Wineries Association, n.d.). The website hence has a broad wine tourism-oriented focus and promote other tourism-related activities and businesses in the region. The website offers extensive wine-related information about the valley such as the valleys history, wine origin, terroir, facts about wine production and varieties. The website have a strong focus on sustainability, inclusion and equality and provides information to other industry and hospitality partners. The website promotes local and regional businesses such as designers, accommodation, restaurants, tour companies, wine bars and shops. The website offers seasonal packages from hospitality partners and promotes several events that support local organizations and communities. The website further promotes festivals and events that show off wines of the region and local produce.

Visuals depict an array of elements and have a strong focus on social aspects, agriculture, landscape and regional settings. Regional/nature elements found are foliage, ground setting, cuisine, social, agriculture, produce, landscape and regional setting. The visuals that are present on the website are very much in line with the aspects the website is aiming to promote Visuals depict social aspects such as people taking part in several wine-oriented activities as well as other recreational activities. Images depict geographical settings, landscape of the region and plenty of natural elements. Images further depict processes of winemaking, wine-related produce, setting and interior of wineries and cuisine.

Figure 8

Example of landscape and regional setting on <https://willamettewines.com/>⁵



⁵ Consent for use of screenshots given by R. Warren, Executive Administrator, Willamette Valley Wineries Association.

Figure 9

Examples of cuisine



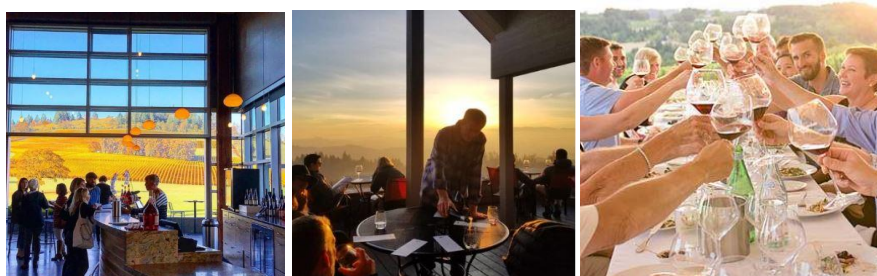
Figure 10

Examples of agricultural elements



Figure 11

Examples of ground setting, winery setting and social element to show atmosphere and ambiance



Embedded links exist and are used for both internal and external navigation. Stand-alone links exist, are both textual and used as buttons and can be read for example as “read more”. The colors used are grey, red, blue and beige. Grey is the primary color and is used for text, headings, header and sections of the background. Red is used for buttons and links and blue for links in the main navigation and as visited link color. Beige is predominantly used as a

background color. Geometrical shapes found are arrows, rectangles and squares, which mainly occur as images and for grouping different kinds of content. The website uses plenty of standardized icons such as icons for social media, magnifying glass, tag, map, directory, phone, heart, comment and external links. Geographical elements found are an interactive regional map as well as a vineyard map.

5.14 Recap marketing scopes of wine destination website samples

The results from the web design analysis indicate several similarities and differences between how the research samples are run, owned and therefore their marketing scope. The American research samples examined are all owned and run by winegrowing associations. Two of these, namely Umpqua Valley and Gorge Wine, are non-profit organizations. The research sample examined for the Medoc is similar to the American research samples run by a viticultural organization. The research sample examined for Swartland is privately owned and the website examined for Entre-Deux-Mers is run by a syndicate union. The remaining six websites analyzed are owned by or in partnership with municipalities and there are differences in how they are run. The research sample examined for Graves-Sauternes is for example run by The Bordeaux Wine Route and in partnership with several municipalities and tourist offices. The research samples examined for Tulbagh, Darling and Rudesheim are run by tourism bureaus and the websites of Hochheim am Main and Oestrich-Winkel are run solely by their respective municipality.

Depending on the ownership of the research samples investigated there are also differences and similarities in their marketing scope, meaning their marketing reach and promotional aim. As mentioned in section 1.1 Background, DMOs can market specific countries, regions, cities or states to potential visitors. The research samples investigated for Darling, Rudesheim, Hochheim am Main and Oestrich-Winkel are mainly aimed to market local tourism and businesses centered around their respective cities. The websites of Darling and Rudesheim compared to the websites of Hochheim am Main and Oestrich-Winkel however, have a broader scope and offer information that promotes local and regional experiences and tourism activities which are not only focused on wine tourism. There is also a difference between the two municipal-owned websites where Hochheim am Main to a greater extent promote local tourism and wine tourism compared to Oestrich-Winkel which has a stronger focus on providing information to citizens.

The websites belonging to Tulbagh and Graves-Sauternes are both aimed to promote wine routes and their members, hence having a strong wine-oriented focus. Graves-Sauternes promote a larger geographical area, which includes

several appellations, and similarly to Darling and Rudesheim have a broader tourism-oriented focus that is not only concentrated around wine tourism compared to Tulbagh.

The research samples of Swartland, the Medoc, the Umpqua Valley, Gorge Wine and Willamette Valley all promote larger geographical areas and the most noteworthy similarity between these websites are their promotional focus. The mission of these research samples is to promote their respective winegrowing regions, their members, communities and the wine. All of these websites investigated have a strong wine focus and are essentially aiming to promote wine tourism to increase wine-focused visitation. All of these websites further offer information and promote other tourism-related activities and businesses available in their respective regions.

The research sample examined for the Entre-Deux-Mers region is the only website run by a syndicate union. The website promotes a single appellation, hence a smaller geographical area. Their mission is to support winegrowing members, harvesters and wine producers and to promote these and the appellation through partnership and cultural events. The website promotes local events and offers contact information to wine producers in the appellation. However, the website does not promote other tourism-oriented activities and attractions.

6 Discussion

Based on the problem statement this thesis was set out to investigate cultural web interface design elements present on websites that trigger hedonic motivations, hence limited to study the context of wine tourism destination websites. Focus went on analyzing and identifying patterns in web interface design elements considered hedonic such as visual representation and color. The thesis also included investigating further aspects of web interface design elements considered cultural such as links, since links can help create interfaces that are culturally adapted thus allowing visitors to obtain relevant information more effectively. The overall aim of the thesis was to develop a greater understanding about what cultural web interface design elements exist and are important in the context of wine tourism destination websites to be able to create culturally sensitive websites, thus meeting the needs and behaviors of users across cultures globally and to motivate wine tourism. Based on the problem statement and aim of the thesis the following two research questions were defined:

1. Looking at cultural web interface design elements, what identifiable patterns exist among wine tourism destination websites?
2. What can the identifiable patterns in cultural web interface design elements reveal about how these wine marketers understand their potential customer base(s) and their motivations for the tourist experience?

6.1 Identifiable patterns in cultural and hedonic web interface design elements

The evidence found indicate that the findings for the preferred use of web interface design elements present on the interfaces investigated are highly context-dependent. As explained by Badre and Badre (1998) cultural web interface design elements can be prevalent within a specific genre or group (p. 7). This suggests that web interface design elements are flexible and that new patterns can appear depending on the websites and contexts that are being investigated. Findings in hedonic web interface design elements such as color and visual representation are preferably considered being culturally dependent, hence applied within the context in which they are located. This means that the patterns found in web design elements to a great extent are used to reflect or brand the cultural product of wine tourism, hence considered new patterns.

One pattern that emerges is the use of color on the websites investigated. As described in section 4.2 Destination website samples and market segmentation, the websites belonging to different wine growing regions cultivate and are

famous for producing specific grape varieties. When looking at the evidence most of the websites examined have applied colors, specifically red and green, to convey communication and the identity of their specific wine-growing regions. The Medoc region is comprised exclusively of red wine varieties and the website uses warmer tones of red such as burgundy and pink to communicate its brand. Rudesheim, Hochheim am Main and Oestrich-Winkel either use red or green as primary colors which are possibly be connected to the Rheingau region being famous for producing excellent Riesling and Pinot noir. Tulbagh is famous for crisp white varieties and uses green as a primary color. Umpqua Valley and Willamette both use red which is most likely connected to them producing Pinot noir and full-bodied reds.

As further described in section 4.2 Destination website samples and market segmentation, each of the research samples examined promotes a specific winegrowing region. Each of the research samples examined promote wine-growing regions that have their own specific environmental traits and are surrounded by either rivers, lush hills, mountains or fields. As expressed by Cyr et al. (2010) colors are influenced by environmental aspects and the colors identified have most likely been applied to give the websites aesthetic appeal (p. 16). As mentioned by Neilson and Madill (2014) applying aesthetics and hedonic qualities such as color can help create a narrative for the wine tourist that emphasizes environmental settings (p. 11). The colors identified are very much associated with the context of wine and natural aspects surrounding viticulture. The colors used on the wine destination websites, hence depict regional associations and help convey imagination and communication about the identity of these wine regions and their cultural context. This reinforces Noiwan and Norcio's (2006) argument that cultural variability and implications of colors have been taken in to account into the design of the wine destination websites investigated since they are considered to be culturally dependent (p. 16).

As proposed by Badre and Badre (1998) cultural markers become cultural only when they are prevalent within a specific genre or group and less prevalent in another. Color as a hedonic quality has been applied to enhance the cultural product of wine tourism. Colors have been applied based on their symbolic associations and are on a context-dependent level associated with the natural heritage surrounding viticulture and the branding of the wine experience. With the above in mind, it is however suggested that the websites use some colors more or less frequently depending on what experience they are branding. For example, it seems that the samples that use green and red as primary colors more frequently do so to brand and promote the grape varieties which they are famously known for producing. Looking for example at The Medoc that exclusively produces red wine and thus exclusively uses tones of burgundy to convey cultural meaning and to give emotional appeal since colors are used to brand the cultural product of wine tourism in that specific region. Where green

and reds are less prevalent, it is however suggested that colors are used to brand other aspects of natural heritage that are not only focused on cultivars.

The interfaces of the research samples were scanned for images and graphics depicting elements related to the local culture and the cultural context of wine tourism. First, similar patterns in visual elements referred to as regional elements were found. When it comes to regional elements all of the wine destination websites analyzed holds images depicting natural elements such as foliage and landscape and regional setting. As with colors, these visuals have likely been applied to give the websites aesthetic appeal to help create a narrative that enhances environmental settings, hence motivating wine tourism since tourists from the images will get a sense of what the wine tourism experience will be like. All of the websites, except the research samples examined for Entre-Deux-Mers and Gorge Wine, hold elements that depict ground settings. It is considered that regional elements mainly have been applied to fulfill the hedonic experience of wine tourism and have been used as a hedonic quality to help stimulate cultural expectations and sensory emotions, feelings and fantasies of the potential tourist (p. 7). Since different regional elements are prevalent within all of the websites investigated, these elements are seen as conventional aspects that are important for wine tourism destination websites. This is very much in line with Neilson and Madill (2014) research where the aesthetic appeal of hedonic qualities such as images have great implications in web design since they can help meet tourist motivation and visitor needs (p. 12).

During the analysis, a new category of visual representation became apparent, labeled social. The social aspect as mentioned in section 5.2 Darling refers to images that depict people taking part in social activities associated with wine such as wine tastings, meetings with winemakers, festivals and events. The social aspect further involves people taking part in other tourism-oriented activities and attractions. Most of the wine destination websites analyzed uses visuals that are categorized as social, however, there are differences to what extent the different research samples use these visuals. The websites of Rudesheim, Hochheim am Main, Oestrich-Winkel, Swartland, Graves-Sauternes and Willamette Valley to a greater extent use visuals that depict social aspects, which is especially applicable for the German research samples. The remaining research samples to a greater extent prefer using regional visuals related to landscape, environmental settings, produce and agriculture thus conveying traditions of winemaking in the regions and their natural heritage. The research samples of Tulbagh, the Medoc and Entre-Deux-Mers do not depict any visuals related to social elements.

Furthermore, interesting similarities and differences have been identified in the use of architectural elements depicted on the wine destination websites. Research samples belonging to German, French and South African wine-growing regions

frequently use images that portray historical architectural buildings. Dutch heritage houses and churches in South Africa and castles, monasteries, churches and traditional timber houses are frequently portrayed in German and French culture. Nothing significant was found in architectural use on the American wine destination websites other than one image portraying a barn. Looking back at section 4.2 Destination website samples and market, both the Rheingau and Bordeaux region have historical traditions of winemaking dating back to medieval times. Both regions are famous for their rich heritage with historical surroundings and buildings such as chateaux and monasteries offering wine tastings and other cultural experiences. Winemaking in South African wine-growing regions dates back to the 1600s when European settlers started to produce wine. Viticulture in South Africa is hence influenced by and has deep roots in European winemaking. This is likely to explain the frequent use of visuals related to architectural elements on research samples belonging to South Africa. Winemaking in Oregon started with German immigrants, however took off first during the 1960s. Oregon is thus considered a young and modern winegrowing area. With the above mentioned, the use of architectural elements are highly influenced by regional and historical culture, thus conveying the cultural values and symbolic meaning in the society in which it interacts. This implies that visuals depicting historical architecture are important in South African and European cultures and in the context of wine tourism. However, that does not imply that the American wine tourist is not interested in or motivated by historical architecture for undertaking wine-oriented experiences.

The above suggest that portraying social aspects and architectural elements are more or less important in certain cultures, however looking at section 4.2 Destination website samples and market segmentation, the wine tourist coming from different countries as are interested in several aspects for undertaking the tourist experience. This is something that Veselá and Malačka (2015) as well as Neilson and Madill (2014) mention that the wine tourist has different primary motivations for visiting a wine region and might seek different experiences (p. 11). Wine tourism destination websites must therefore apply and adapt their interfaces to include hedonic qualities that offer a “regional bundle of benefits” that is closely linked to other historical, cultural and authentic attractions since this will help meet the expectations of potential tourists globally. The prevalence of visual representation such images are hence important aspects of web design in wine tourism destination websites since they will convey the hedonic meaning which is important for culturally motivating tourists to visit a certain region and specifically taking part in wine tourism.

All of the research samples use some kind of map and Google Maps is commonly used. Swartland, Hochheim am Main, the Medoc, Entre-Deux-Mers, Gorge Wine, Umpqua Valley and Willamette Valley further use maps that are related to the context of wine such as regional maps, vineyard maps and maps depicting

wine routes. As expressed by Neilson and Madill (2014), maps are important aspects of web design since they can help meet tourist motivation and needs (p. 12). The websites that have adapted their interfaces to use localized design elements will communicate the context of wine tourism more effectively to their users since they have taken cultural and local aspects in mind.

Geometrical shapes have been identified and exist within each of the wine destination websites investigated. Geometrical shapes such as rectangles, squares, circles and arrows have been found, however, no specific pattern has appeared other than that rectangles and squares are used frequently in all of the examined cultures. Squares and rectangles appear predominantly as photos. Geometrical shapes are hence seen as standardized UI-design elements and do not have anything to do with cultural specificity.

Icons and symbols are used frequently throughout the interfaces of the wine destination websites analyzed. Each of the websites analyzed uses icons that are considered UI standards, meaning icons that are established and commonly used across interfaces globally such as the letter, phone, search and pin. Seven of the research samples use social media to communicate and promote their brand or organization. Icons representing UI standards and social media accounts are commonly placed in the header or footer and throughout the interfaces analyzed. Likewise, seven of the examined websites use contextual icons, meaning that they are most likely used to communicate and enhance the cultural context of wine tourism. One interesting pattern that appears which is also similar to the research conducted by Cyr and Trevor-Smith (2004) is the use of flags to offer language options. Hochheim am Main, Ruedesheim and Graves-Sauternes use national and international flags to convey language options. The Medoc and Oestrich-Winkel do not use any icons to express language options, however offer English versions of their websites. The German and French websites offer greater support for language translation compared to South African and American websites. Even though English is a given today's age and is considered a global language it does not automatically mean that the websites are culturally adapted. Not all internet users understand English and other language options need to be considered to meet the different cultural backgrounds of those users.

Links as mentioned by Neilson and Madill (2014) are important factors for motivating wine tourism and tourism-related information needs that can influence tourists to visit a certain destination (p. 12). This is especially applicable for internal and external links present on the samples since they can be used to market different aspects of wine tourism and other tourism-related factors that are important for visitors when they plan a trip, such as providing links to accommodation, restaurants, local and cultural activities and events. All of the websites examined, except Entre-Deux-Mers, to provide external links

that promote other tourism contexts. Entre-Deux-Mers compared to the other research samples uses only internal links.

6.2 Identifiable patterns and motivations for the tourist experience

The results from the web design analysis indicate several patterns found in web interface design elements present on wine destination websites that can help motivate wine tourism among users across different geographical locations and cultural backgrounds. As expressed by Cyr and Trevor-Smith (2004) the design of a website needs to be localized to be able to address the cultural needs of a specific user or target market (p. 2). However, it is important to understand that the goal of localization is to enhance the user interface of a website to meet the needs and behaviors of users from different locales, hence the web interface design elements found across the websites investigated can help create more congruent websites that are sensitive to users globally.

As mentioned previously by Luna-Nevarez and Hyman (2012) any website aiming at reaching potential visitors must allow such visitors to obtain relevant information in an effective way to capture their attention. Tourism destination websites should regardless their scope provide information about the destination and commercial activities (p. 11). A primary criterion when assessing appropriate research samples was that the websites examined to some extent had the informative-commercial aspect in mind. With this in mind, all of the websites examined are regarded as tools for marketing wine tourism destinations since they to some extent provide tourist information that can influence and motivate tourists to visit a specific region or city. Although all of the websites examined are considered to have an informative-commercial focus there are differences between how well the websites market other aspects of planning a trip and furthermore how well the web design elements found can help motivate the tourist experience fully.

Based on the findings it is considered that all of the websites investigated have applied web design elements to motivate wine tourism. All of the websites use imagery, colors and links as factors to market their own business context and/or other aspects that are motivating wine tourism needs, such as depicting winery or landscape settings or linking to other local businesses. Based on the findings it is however considered that some of the investigated websites use a design that can motivate tourism better since they to a greater extent have applied web interface design elements that are culturally sensitive and which are aimed at meeting their customer base.

As described in section 4.2 Destination website samples and market segmentation, the wine tourist is interested in core wine experiences such as

tastings, meetings with winemakers, cellar and vineyard tours. The wine tourist is further interested in outdoor activities, cuisine, heritage and cultural experiences, shopping and visiting local breweries. The wine tourist also likes to take part in other events, festivals and markets. The wine tourist seeks relaxation, to escape routine, want to socialize and enjoy rural landscape and sceneries. The wine tourist is hence not only interested in core wine experiences but several tourism-related experiences. The wine tourist coming from different countries hence have diverse motivations and interests for undertaking wine tourism. Wine tourism destination websites as a marketing tool must therefore take in mind several aspects of tourism and this can be done by applying web design elements that are relevant for and can help meet tourist motivation and needs.

As described in section 6.2.1 South Africa and the regions of Darling, Tulbagh and Swartland, the wine tourist, both the domestic and the international visitor are interested in core wine experiences however also in additional activities such as culture, heritage, cuisine, scenic drives, craft and food markets, and other events (p. 20). This means that the samples of the websites investigated for the South African segment need to take in mind and use web design elements that represent these aspects of tourism. Firstly, when it comes to depicting elements of visual representation and especially images that convey regional/natural there are differences between the investigated samples. The samples investigated for Darling and Swartland compared to Tulbagh to a greater extent depict images holding elements that are important for motivating the wine tourism experience. Darling and Swartland compared to Tulbagh for example use visuals that depict cuisine and social elements. As described in 4.2 Destination website samples and market segmentation, the American, French and German wine tourists are interested in social aspects of wine tourism such as meeting with the winemaker and wine tastings. The American, French and German tourists are also part of the top five foreign markets interested in taking part in wine activities when visiting South Africa. The website of Darling and Swartland are therefore seen to have interfaces that to a greater extent are culturally sensitive since they hold hedonic qualities that in Neilson and Madill (2014) research have shown to have great implication for tourist motivation and visitor needs (p. 12).

As mentioned previously the German and French websites offer greater support for language translation compared to South African and American websites. Even though English is considered a global language is it surprising that the American and South African websites do not offer better support for language options since both of these countries have multicultural populations. As stated by Goodman (2018) the top five foreign markets interested in wine activities in South Africa are visitors from the UK, the United States, Germany, Netherlands and France. It is obvious that the websites of Darling, Tulbagh and Swartland attract a global audience and they need to take in mind other language options to be able to meet the different cultural backgrounds of their target groups. The

websites of Darling, Tulbagh and Swartland are regarded as tools for marketing their respective wine growing regions hence they need to take language options into consideration for them to be able to reach potential visitors and allowing them to obtain relevant information more effectively.

When it comes to the American segment the wine tourist as mentioned in section 6.2.1 USA and the regions of Willamette Valley, Umpqua Valley and Columbia Gorge are interested in an array of activities when visiting a wine region. The Willamette Valley wine tourist as mentioned by Destination Analysts (2019a) comes to the region for its wine and its scenic beauty and is further interested in other activities such as wine tasting, dining, winery tours, shopping, breweries and distilleries and outdoor activities (p. 24). The Umpqua Valley wine visitor as well as the Columbia Gorge visitor according to Rhodewalt et al. (2019) have similar motivations for visiting a wine region. Local and non-local visitors primarily visit wine farms to taste wine, seek wine knowledge, ambiance and social setting. The Umpqua Valley and Columbia Gorge visitor furthermore like to take part in additional activities such as dining, shopping, outdoor recreation, breweries and distilleries, other events or festivals. Non-locals compared to locals to a greater extent seek outdoor activities (pp. 24-25). Based on the above it is considered that the websites of Willamette Valley and Umpqua Valley compared to Columbia Gorge are better at using hedonic qualities that portray visuals that show off an abundance of information that is important for their specific target group. Meaning that the websites of Willamette Valley and Umpqua Valley compared to Columbia Gorge to a greater extent uses imagery such as regional/natural elements that depict what the wine tourism experience will be like and how it can be enjoyed. Image appeal as mentioned by Cyr et al. (2009) and Luna-Nevarez and Hyman (2012) is incredibly important for information transfer since the cultural expectations of the visitor that are appropriately met will help capture the interest of the visitor as well as help stimulate sensory emotions, feelings and fantasies of the potential tourist (p. 7). None of the American websites analyzed offer any other language options other than English. The same reasoning as made with the South African segment applies, however the American websites compared to the South African attract a small share of international tourists as mentioned in section 6.2.1 USA and the regions of Willamette Valley, Umpqua Valley and Columbia Gorge. This might help answer why better opportunities for language translation are not used, however by offering greater opportunities for language translation they will become more culturally sensitive which might help with reaching potential visitors. Furthermore, the websites of Umpqua Valley neither Columbia Gorge depict any architectural elements whereas Willamette only depicts one image holding an architectural element. As mentioned previously the use of architectural elements is highly influenced by the regional and historical culture which implies that historical architecture might not be as deeply rooted in American wine culture as within European and South African. However, that

does not necessarily mean that the American wine tourist is not interested in or motivated by historical architecture when undertaking wine-oriented experiences when visiting regions abroad. Experiences relating to culture and heritage as mentioned in section 6.2.1 South Africa and the regions of Darling, Tulbagh and Swartland, are important motivations for international tourists when visiting South African wine regions, however, architecture might not be is most likely not a primary motivation for visiting a wine-growing region in Oregon. The wine tourist when visiting Oregonian wine regions has other primary motivations and interests for undertaking wine tourism.

According to Afonso (2017), the wine tourist that intend to return to the Bordeaux region is interested in core wine experiences such as learning about winemaking, the product and meeting the winemaker. The wine tourist further wants to escape routine, enjoy the rural landscape and scenery, socialize and relax with family or friends and take part in new activities (p. 24). Of the French research samples investigated the website of Graves-Sauternes compared to The Medoc and Entre-Deux-Mers to a greater extent use photos and imagery that show off an abundance of information and is enjoyable for tourists globally. The Graves-Sauternes website is therefore seen to have an interface that is more globally sensitive since it to a greater extent holds hedonic qualities that are important for visitors coming from different parts of the globe having different cultural backgrounds. The Graves-Sauternes website has a broad tourism-oriented focus, however is still mainly focused on promoting wine tourism. This might help explain why the Graves-Sauternes website holds an abundance of hedonic qualities relating to visuals representation since they do not only attract wine tourists but tourists in general that come to the Bordeaux region to seek other experiences. The website investigated for Entre-Deux-Mers use hedonic qualities very sparingly and could improve immensely to be able to influence and motivate tourists to visit. The website investigated has a sales objective and promotes harvesters and wine producers belonging to the syndicate, however, need to consider other marketing aspects of planning a trip such as providing external links to accommodation, restaurants and activities. The website of Entre-Deux-Mers furthermore needs to apply more hedonic qualities such as visual elements since tourists according to Neilson and Madill (2014), “seek aesthetic and hedonic information to get a sense of what the wine tourism experience will be like” (p. 12).

The Medoc website holds visuals that depict foliage, ground settings, landscape and regional settings, agriculture, produce and architectural elements. The visuals present on the website investigated for The Medoc are very much in line with the interests and activities that Afonso (2017) mentions as primary motivations for tourists visiting the Bordeaux region. However, the Medoc website does not portray any social elements hence not taking in mind social aspects which are very important for the wine tourist visiting Bordeaux and for

their return intention. To become more culturally sensitive towards their target group and visitors globally The Medoc website need to consider applying hedonic qualities such for example images depicting cuisine and social elements since these aspects will help convey what the wine tourism experience will be like.

According to Szolnoki et al (2016), the German wine tourist is interested in wine activities. Foreigners visiting the Rheingau region are furthermore interested in cultural experiences. The German websites investigated are all owned or run in partnership with their respective municipality and are thus aimed at marketing local tourism and businesses centered around their respective cities. Ruedesheim compared to the websites of Hochheim am Main and Oestrich-Winkel is owned by a tourist bureau, hence having a broader scope that promotes local and regional tourism. Even though the websites of Hochheim am Main and Oestrich-Winkel are considered to provide local information aimed at citizens they have a lot in common with other websites investigated. They both use plenty of visuals and imagery that show off an abundance of hedonic information and are enjoyable for tourists as well as citizens. The hedonic qualities found on the German website samples depict elements that are important for their specific target groups such as providing that portray social aspects, architectural elements, regional settings and ground setting. Above those aspects, the website of Ruedesheim uses elements that depict cuisine which as mentioned previously are important aspects for visitors coming from other countries. The biggest difference between the German samples is that the website of Ruedesheim uses plenty more visuals to convey what the tourism experience will be like, which might be explained by them having a broader marketing scope and different promotional aim than Hochheim am Main and Oestrich-Winkel.

To summarize, some of the websites investigated have taken in mind a broader array of aspects that according to Neilson and Madill (2014) research have shown to be important factors motivating wine tourism needs. This is especially applicable for visual representation where for example Swartland, Darling, Ruedesheim, Graves-Sauternes, Umpqua Valley and Willamette Valley, uses photos and imagery that show off an abundance of information and is enjoyable for tourists since they through what is being depicted can get a sense of what the wine tourism experience will be like. Image appeal as mentioned by Cyr et al. (2009), Luna-Nevarez, and Hyman (2012), and similarly argued by Hung et al. (2013) is incredibly important for information transfer since cultural expectations that are appropriately met will help capture the interest of the user (p. 10).

Wine tourism as mentioned by both Alebaki and Iakovidou (2011) and Veselá and Malačka (2015) offers a “regional bundle of benefits” because wine-related activities are closely linked to other historical, cultural and authentic attractions

visitors can experience when visiting a wine region. Wine tourism destination websites hence need to consider marketing other aspects of planning a trip and this can be done by applying web design aspects that have great implication for tourist motivation and visitor needs (p. 12). One such web design aspect is to provide links. When it comes to the use of links on the websites investigated similar reasoning as with hedonic qualities applies where some of the research samples uses links to market a wider variety of factors found to be motivating for the wine tourist. Some of the websites investigated have a broader tourism oriented focus such as Ruedesheim, Darling, and Graves-Sauternes and it is considered that these websites provide information and link to local businesses that offer a greater variety of activities and experiences tourists can undertake while visiting a specific region that is not solely focused on wine tourism. However, all of the websites investigated, except Entre-Deux-Mers, as mentioned previously provide external links or offer information that promote other aspects of wine tourism such as local shops, cultural institutions, restaurants, accommodation, outdoor experiences and more. It is considered that all of the websites, except Entre-Deux-Mers, have interfaces that take in mind links as a design aspect that in Neilson and Madill (2014) research have shown to be an important factor for motivating wine tourism needs.

Evidence shows that there are great similarities found between the research samples investigated even though the websites are owned by and have different marketing aims. Results indicate that the web interface design elements found and applied are highly context-dependent and take in mind regional variations and cultural aspects rather than national culture. However, some findings suggest that wine tourism is constructed differently in different countries. For example, South African research samples similar to those of France and Germany show off historical architectural elements which suggest that the wine industry is defined by European traits. Regardless of their marketing scope it is considered that the websites investigated take in mind web design aspects that motivate wine tourism needs. Based on the results it is considered that most of the examined research samples have applied web interface design elements to create enjoyable virtual experiences that can help meet the information needs and motivations of potential tourists globally. The web design element aspects found are used are applied to enhance tourist information and to culturally motivate wine tourism needs by using hedonic qualities that tell a story and appeals to the senses. It is obvious that wine tourism and culture go hand in hand. The websites investigated have interfaces that use web design elements that are culturally adapted and in line with the motivational needs of their specific target groups. Websites that take in mind local aspects as well as having an interface that is culturally adapted will gain a competitive edge since the interface will allow potential visitors to obtain relevant information more effectively.

6.3 Research ethics and reflection on good research practice

Cross-cultural design and especially culture has proven to be complex subject areas. In practice, research about cross-cultural design can help increase knowledge about the cultures examined. The focus for this thesis has been to investigate the preference for hedonic and cultural web interface design elements present on wine destination websites. Thus concentrating on researching cultural frameworks present in contexts other than websites predominantly focusing on utilitarian aspects of interface design. As mentioned previously in section 2 Literature review by Steenkamp (2001), Singh et al. (2005), Cyr and Trevor-Smith (2004), and Sun (2001) research about cultural frameworks applied in different contexts can help improve generalizability (p. 7).

Furthermore, cross-cultural research can help improve the generalizability of the cultural frameworks applied considering that contexts that have not previously been fully explored are investigated. This has been the case for this study where not only the context analyzed can help increase generalizability, however, focusing on aspects of UI that trigger hedonic motivations to a greater extent. Culture is however interpreted and defined differently by different researchers. As mentioned previously by Hung et al. (2013), interpretation of culture and symbolic meanings are learned and constructed through social interaction (3.1.1 Visual representation, p. 15). This means that culture is shaped by a wide range of phenomena such as norms and values, and which are deeply rooted in the cultural expectations and social background of the person observing. Social constructs relating to the “self”, are in many ways unavoidable and as discussed previously regarding good research practice, has meant that the production of analysis and results completely cannot be separate from the researcher's own interpretations (4.4 Good research practice, p. 29). To ensure objectivity, the researcher has been mindful of the research process and have thus during the analysis and presentation of results fully considered cultural context as well as the concepts underpinning the research. To avoid issues regarding objectivity and the “self” in cross-cultural research and to demonstrate that the findings regarding the similarities in hedonic web interface design elements are accurate, further research might be required. To increase the credibility of the findings one proposal is that the findings are tested relative to user's opinions as suggested in the section below.

6.4 Future research

This study has focused on examining twelve wine destination websites from four different countries. The wine destination websites researched are considered representative of the context in which they exist. However, to improve generalizability or transferability of the results found in the study it is further

suggested that additional representative cases are examined through web design analysis.

To increase knowledge about the cultures examined and to test the validity of the results found it is further suggested that research about user's opinions is conducted. Users, that are representative of the cultures examined, would be asked for their opinions about the results found in hedonic web interface design elements. Asking for user's opinions would give the researcher valuable insights and knowledge about the cultures examined. This would help increase the accuracy of the findings since the researcher would be able to answer questions whether the hedonic web interface design elements identified depict the cultural expectations of the user or not. Furthermore, whether cultural considerations have been taken in mind, which in turn can help increase cultural congruency and sensitivity of the websites examined since they will meet the needs and behaviors from users from different locales.

7 References

- Afonso, C. (2017). *Wine tourism consumers: Who are they and what motivates them? A field work applied to Porto, Rioja and Bordeaux*. http://www.greatwinecapitals.com/sites/default/files/resources/downloads/wine_tourism_gwc_final_0.pdf
- Alebaki, M., & Iakovidou, O. (2011). Market segmentation in wine tourism: A comparison of approaches. *Tourismos*, 6(1), 123–140.
- Badre, A., & Barber, W. (1998). Culturability: The Merging of Culture and Usability. *Proceedings of the 4th Conference on Human Factors & the Web*, 1–10.
- Benyon, D., Quigley, A., O’Keefe, B., & Riva, G. (2014). Presence and digital tourism. In *AI and Society* (Vol. 29, Issue 4). <https://doi.org/10.1007/s00146-013-0493-8>
- Brejcha, J., Yin, G. H., Li, H., & Liu, Z. (2013). A Cross-Cultural Comparison of UI Components Preference between Chinese and Czech Users. In P. L. Patrick Rau (Ed.), *Cross-Cultural Design. Methods, Practice, and Case Studies. CCD 2013. Lecture Notes in Computer Science, vol 8023, Las Vegas, NV, USA, July 21-26* (pp. 357–365). https://doi.org/https://doi.org/10.1007/978-3-642-39143-9_40
- Bryman, A. (2012). *Social Research Methods* (4th ed.). Oxford University Press.
- Carrasco, I., Castillo-Valero, J.-S., & Pérez-Luño, A. (2018). Wine Tourism and Wine Vacation as a Cultural and Creative Industry: The Case of the Bullas Wine Route. In M. Peris-Ortiz, M. R. Cabrera-Flores, & A. Serrano-Santoyo (Eds.), *Cultural and Creative Industries. Innovation, Technology, and Knowledge Management*. (pp. 181–195). Springer, Cham.
- Chan, S., Chen, G., & Fu, L. (2014). Understanding Emerging Markets by Applying Lean UX. In Pei Luen Patrick Rau (Ed.), *Cross-Cultural Design. CCD 2014. Lecture Notes in Computer Science, vol 8528, Heraklion, Crete, Greece, June 22-27* (pp. 417–426). Springer. <https://doi.org/10.1007/978-3-319-07308-8>
- Cyr, D. (2014). Emotion and website design. In *The Encyclopedia of Human-Computer Interaction* (2nd ed.). Interaction Design Foundation. <https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/emotion-and-website-design>
- Cyr, D., Head, M., & Larios, H. (2010). Colour appeal in website design within and across cultures: A multi-method evaluation. *International Journal of Human Computer Studies*, 68(1–2), 1–21. <https://doi.org/10.1016/j.ijhcs.2009.08.005>
- Cyr, D., Head, M., Larios, H., & Pan, B. (2009). Exploring human images in website design: A multi-method approach. *MIS Quarterly: Management*

- Cyr, D., & Trevor-Smith, H. (2004). Localization of web design: An empirical comparison of German, Japanese, and United States web site characteristics. *Journal of the American Society for Information Science and Technology*, 55(13), 1199–1208. <https://doi.org/10.1002/asi.20075>
- Denscombe, M. (2017). *The Good Research Guide: For small-scale social research projects* (6th ed.). Open University Press.
- Destination Analysts. (2019a). *Profile of Wine Tourists to Willamette Valley*. <https://industry.oregonwine.org/resources/reports-studies/2019-oregon-winery-visitor-profile-study-report/>
- Destination Analysts. (2019b). *The Napa Valley Visitor Profile 2018*. <https://www.cityofnapa.org/DocumentCenter/View/5257/2018-Napa-Valley-Visitor-Profile>
- Diefenbach, S., Kolb, N., & Hassenzahl, M. (2014). The “hedonic” in human-computer interaction. In ACM & SIGCHI (Eds.), *DIS '14: Proceedings of the 2014 conference on Designing interactive systems*, Vancouver, Canada, 21-25 June, 2014 (Issue March 2015, pp. 305–314). ACM Press. <https://doi.org/10.1145/2598510.2598549>
- Garibaldi, R., Stone, M. J., Wolf, E., & Pozzi, A. (2017). Wine travel in the United States: A profile of wine travellers and wine tours. *Tourism Management Perspectives*, 23, 53–57. <https://doi.org/10.1016/j.tmp.2017.04.004>
- Gironde Tourisme. (n.d.). *Some figures*. Retrieved June 11, 1 B.C.E., from <https://www.gironde-tourisme.fr/espace-pro/oenotourisme/quelques-donnees-chiffrees/>
- Goodman, L. (2018). *Wine Tourism in the Western Cape* (Issue January). http://portal.vinpro.co.za/wp-content/uploads/2018/05/DOC_Wine-Tourism-Study-2017Final-1.pdf
- Hall, E. T., & Hall Reed, M. (1990). *Understanding Cultural Differences: Germans, French and Americans* (1st ed.). Intercultural Press.
- Hsieh, H. C., Holland, R., & Young, M. (2009). A theoretical model for cross-cultural web design. In M. Kurosu (Ed.), *Human Centered Design: Proceedings of the First International Conference, HCD 2009 Held as Part of HCI International 2009, San Diego, CA, USA, July 19-24, 2009: Vol. 5619 LNCS* (pp. 712–721). https://doi.org/10.1007/978-3-642-02806-9_83
- Hung, Y.-H., Li, W.-T., & Goh, Y. S. (2013). Integration of Characteristics of Culture into Product Design: A Perspective from Symbolic Interactions. In P. L. Patrick Rau (Ed.), *Cross-Cultural Design. Methods, Practice, and Case Studies. CCD 2013. Lecture Notes in Computer Science, vol 8023, Las Vegas, NV, USA, July 21-26* (pp. 208–217). Springer, Berlin,

Heidelberg. https://doi.org/https://doi.org/10.1007/978-3-642-39143-9_23

IG Wines. (2011). *Bordeauxs climate and terroir*. <https://www.igwines.com/content/investment/bordeaux-climate-and-terroir/>

Karlsson, P. (2019). *World wine production reaches record level in 2018, consumption is stable*. <https://www.bkwine.com/features/more/world-wine-production-reaches-record-level-2018-consumption-stable/>

Learning Lumen. (n.d.). *Levels of culture*. Retrieved June 10, 1 B.C.E., from <https://courses.lumenlearning.com/culturalanthropology/chapter/levels-of-culture/>

Luna-Nevarez, C., & Hyman, M. R. (2012). Common practices in destination website design. *Journal of Destination Marketing and Management*, 1(1–2), 94–106. <https://doi.org/10.1016/j.jdmm.2012.08.002>

Marcus, A., & Gould, E. W. (2000). Crosscurrents: cultural dimensions and global Web user-interface design. *Interactions*, 7(4), 32–46. <https://doi.org/10.1145/345190.345238>

Masterclass. (2019). *What Is Bordeaux? Learn About the Grapes, Wine, Region, Terroir, and Pairings*. <https://www.masterclass.com/articles/what-is-bordeaux#is-bordeaux-a-grape>

Medoc Wine Council. (n.d.). *Contact Us*. Retrieved June 23, 1 B.C.E., from <https://www.medoc-bordeaux.com/contactez-nous/>

Merriam-Webster. (n.d.). *Culture*. Retrieved June 10, 2020, from <https://www.merriam-webster.com/dictionary/culture>

Neilson, L., & Madill, J. (2014). Using winery web sites to attract wine tourists: An international comparison. *International Journal of Wine Business Research*, 26(1), 2–26. <https://doi.org/10.1108/IJWBR-07-2012-0022>

Noiwan, J., & Norcio, A. F. (2006). Cultural differences on attention and perceived usability: Investigating color combinations of animated graphics. *International Journal of Human Computer Studies*, 64(2), 103–122. <https://doi.org/10.1016/j.ijhcs.2005.06.004>

Oregon Wine. (n.d.-a). *Columbia George AVA*. Retrieved June 11, 2020, from <https://www.oregonwine.org/discover-oregon-wine/place/columbia-gorge/>

Oregon Wine. (n.d.-b). *Place*. Retrieved June 11, 2020, from <https://www.oregonwine.org/discover-oregon-wine/place/>

Oregon Wine. (n.d.-c). *The Early Years*. Retrieved June 11, 2020, from <https://www.oregonwine.org/discover-oregon-wine/people/>

Oregon Wine. (n.d.-d). *Umpqua Valley AVA*. Retrieved June 11, 2020, from <https://www.oregonwine.org/discover-oregon-wine/place/umpqua-valley/>

- Oregon Wine. (n.d.-e). *Willamette Valley* AVA. Retrieved June 11, 2020, from <https://www.oregonwine.org/discover-oregon-wine/place/willamette-valley/>
- Rafetzeder, A. (2019). Mind the Culture Gap: A Cross-Cultural Analysis of Tourism Destination Websites in Austria and the United Kingdom. *Journal of International Business Research and Marketing*, 4(6), 35–41. <https://doi.org/10.18775/jibrm.1849-8558.2015.46.3004>
- Rheingau-Taunus Kultur und Tourismus GmbH. (n.d.). *Hochheim/Main*. Retrieved June 13, 2020, from Rheingau-Taunus Kultur und Tourismus GmbH
- Rhodewalt, A., Drlik-Muehleck, A., Puleo, B., Shinnars, D., & Matonte, J. (2019). *Oregon winery visitor profile* (Issue October). <https://industry.oregonwine.org/resources/reports-studies/2019-oregon-winery-visitor-profile-study-report/>
- Singh, N., Zhao, H., & Hu, X. (2005). Analyzing the cultural content of web sites: A cross-national comparison of China, India, Japan, and US. *International Marketing Review*, 22(2), 129–146. <https://doi.org/10.1108/02651330510593241>
- Stadt Rudesheim. (n.d.). *Rudesheim Tourist AG*. Retrieved June 23, 2020, from <https://stadt.ruedesheim.de/texte/seite.php?id=151058>
- Steenkamp, J.-B. E. M. (2001). The role of national culture in international marketing. *International Marketing Review*, 18(1), 30–44.
- Sun, H. (2001). Building a culturally-competent corporate web site: An exploratory study of cultural markers in multilingual web design. In S. Tilley (Ed.), *Communication in the New Millenium: Proceedings of the 19th annual international conference on Computer documentation - SIGDOC '01, Santa Fe, United States, 21-24 October, 2001* (pp. 95–102). ACM Press. <https://doi.org/10.1145/501516.501536>
- Swedish Research Council. (2017). *Good Research Practice*.
- Szolnoki, G., Loose, S., Tari, K., & Iselborn, M. (2016). Segmentation of visitors in a German wine-growing region: the rheingau and its tourists. *9th Academy of Wine Business Research Conference Proceedings, 17 - 18 February 2016 University of South Australia, Adelaide, Australia, February*, 540–548. <http://cat.inist.fr/?aModele=afficheN&cpsidt=15814686>
- The Columbia Winegrowers Association. (n.d.). *About George Wine*. Retrieved June 24, 1 B.C.E., from <https://www.gorgewine.com/cgwa>
- Tigre Moura, F., Gnoth, J., & Deans, K. R. (2015). Localizing Cultural Values on Tourism Destination Websites: The Effects on Users' Willingness to Travel and Destination Image. *Journal of Travel Research*, 54(4), 528–542.

<https://doi.org/10.1177/0047287514522873>

- Umpqua Valley Winegrowers Association. (n.d.). *Media & Trade*. Retrieved June 24, 1 B.C.E., from <http://www.umpquavalleywineries.org/media-trade/>
- UNWTO. (n.d.-a). *Gastronomy and Wine Tourism*. <https://www.unwto.org/gastronomy-wine-tourism>
- UNWTO. (n.d.-b). *Glossary of Tourism Terms*. <https://www.unwto.org/glossary-tourism-terms>
- Veselá, J., & Malačka, L. (2015). *Use of the Wine Tourism in the Region Development: the Comparative Study*. May. <https://www.researchgate.net/publication/277304861>
- Vins De Bordeaux. (n.d.-a). *Entre-Deux-Mers*. Retrieved June 13, 2020, from <https://www.bordeaux.com/gb/Our-Terroir/Entre-Deux-Mers>
- Vins De Bordeaux. (n.d.-b). *Graves and Sauternais*. Retrieved June 13, 2020, from <https://www.bordeaux.com/gb/Our-Terroir/Graves-and-Sauternais>
- Vins De Bordeaux. (n.d.-c). *The Medoc*. Retrieved June 13, 2020, from <https://www.bordeaux.com/gb/Our-Terroir/The-Medoc>
- Vins De Bordeaux. (n.d.-d). *Wine Tourism - The Wine Route*. Retrieved June 11, 1 B.C.E., from <https://www.bordeaux.com/us/Our-Terroir/Wine-Routes>
- Watkins, M., Kingdom, U., Ziyadin, S., Imatayeva, A., Lecturer, S., Kurmangalieva, A., & Blembayeva, A. (2018). *Economics and Management of National Economy Digital tourism as a key factor in the development of the economy*. 169, 40–45. <https://doi.org/10.21003/ea.V169-08>
- Wesgro. (2017). *Cape Winelands Regional Trends*. <https://www.wesgro.co.za/tourismtradeandmedia/resources/cape-winelands-visitor-trends-annual-2017>
- Western Cape Government. (n.d.). *Tulbagh Tourism Bureau*. Retrieved June 20, 2020, from <https://www.westerncape.gov.za/facility/tulbagh-tourism-bureau>
- Western Cape Government. (2019). *Darling Tourism Bureau*. <https://www.westerncape.gov.za/facility/darling-tourism-bureau>
- Willamette Valley Wineries Association. (n.d.). *Membership and Mission*. Retrieved June 24, 1 B.C.E., from <https://willamettewines.com/membership/>
- Wines of Germany. (n.d.). *Rheingau - Pure Joy of Life*. Retrieved June 14, 2020, from <https://www.germanwines.de/tourism/wine-growing-regions/rheingau/>

- Wines of South Africa. (n.d.-a). *Climate*. Retrieved June 10, 2020, from <https://www.wosa.co.za/The-Industry/Terroir/Climate/>
- Wines of South Africa. (n.d.-b). *Maps links*. Retrieved June 10, 2020, from <https://www.wosa.co.za/Multimedia/Maps-Links/>
- Wines of South Africa. (n.d.-c). *Three Centuries of Cape Wine*. Retrieved June 10, 2020, from <https://www.wosa.co.za/The-Industry/History/Three-Centuries-of-Cape-Wine/>
- Wines of South Africa. (n.d.-d). *Wine of Origin Scheme*. Retrieved June 10, 2020, from <https://www.wosa.co.za/The-Industry/Wines-Of-Origin/Wine-Of-Origin-Scheme/>
- Wines of South Africa. (2015). *Aspect the Winelands of South Africa - In-depth information & detailed topographical maps*. <http://capewine.org/Aspect/html5/index.html?&locale=ENG&pn=13>
- World Tourism Organization. (2018). *Tourism and Culture Synergies*. In *Tourism and Culture Synergies*. <https://doi.org/10.18111/9789284418978>
- WOSA. (n.d.). *Statistics*. <https://www.wosa.co.za/The-Industry/Statistics/World-Statistics/>

Appendix A: Codebook

Codebook				
Main category	Label subcategories	Definition of categories	Coding values	Type of data
Color	Primary	In an ocular inspection the color that is prominently used and occur frequently in main areas of the website	Blue, Red, Yellow, Green, Orange, Beige, White, Black, Brown, Grey, Pink, Burgundy	Category data
	Secondary	In an ocular inspection the colors that are less prominent, however still used frequently throughout the website		
	Text color	Predominant color used of HTML specific elements. Button is defined as <button> in inspection, or when <a> is used and designed to look like a clickable button element in html code. Link color is textual links such as links in navigation, outgoing and internal links. Visited link color is defined as when a textual link is clicked or hovered and thus changing color.		
	Background color			
	Predominant button color			
	Link color			
	Visited link color			
	Predominant color of headings			
	Nav/header color			
	Footer color			
Logo color	Color found in logo	Multiple (where several colors are used equally throughout and element in the interface. No primary or secondary color is used)		
Links	Embedded links	Here defined as links embedded in images. Can either be internal or external.	Yes/No	
	Standalone links	Standalone links are links that belong to a specific content but is separated with whitespace. Stand-alone links are usually presented as "Read More", "Click here"	Yes/No	
	Internal links	Link that navigate to another page of the same domain	Yes/No	
	External links	Links present on the website that navigate the user to another domain	Yes/No	
Visual representation	Regional/nature elements depicted	Visuals such as landscape and regional setting, foliage, animals, cuisine, produce, ground setting, social	Yes/No	Single selection
	Architecture phenomena depicted	Visuals such as houses, churces, offices and cityscapes are depicted	Yes/No	
	Geometric figures/shapes applied	Use of geometrical shapes is applied such as arrows, circles, lines, squares, triangles and rectangles	Yes/No	
	Geographical elements depicted	Maps, outlined maps or globes are depicted	Yes/No	
	Icons depicted	Icons, standardised, contextual, social media and flags	Yes/No	
	Symbols/metaphors depicted	Symbols or metaphors common in the specific country or cultural context is depicted such as flags, coat of arms, animals, trees and more. Regional, architecture, icons, colors, and their use, can make up symbolic and cultural meanings. However, they are represented as individual subcategories in this table.	Yes/No	