

ONLINE WINE ECOSYSTEM: THE DIGITAL NARRATIVE OF SANGIOVESE

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Abstract

Purpose – This study investigates how grape varieties are narrated online by non-winery-owned sources in four countries: Australia, Canada, the United Kingdom and the United States. This study focuses on Sangiovese, the most important varietal of Italy.

Design/methodology/approach – Texts collected on the Internet underwent a software-assisted semantic clustering procedure based on text-mining techniques. Identified clusters were then qualitatively analyzed by content.

Findings – The digital narrative on Sangiovese is mainly technical and conveyed by adopting a professional slant that is suitable for knowledgeable consumers but less effective for common and unexperienced wine drinkers. Online information is concentrated in few websites that act as information gatekeepers.

Research limitations/implications — The results highlight the online wine ecosystem by investigating how Sangiovese-related information is provided by non-winery-owned sources on the Internet. The findings of this study may be useful for Italian wineries to communicate and promote Sangiovese-based wines in foreign markets. In addition to offering a multicountry investigation, this study limits the research to English-written online information.

Originality/value – This study represents one of the first attempts to investigate the online narrative of grape varieties by presenting a marketing perspective and investigating the characteristics of non-winery-owned online information, which may shape wine consumers' behavior

Keywords Online wine ecosystem, Grape variety, Sangiovese, Digital narrative Non-winery-owned information, Wine consumer.

Paper type Research paper

Introduction

Wine is considered one of the most complex products – requiring high levels of product knowledge on the part of consumers – rich in attributes and boasting a multiplicity of brands that individuals can buy among consumer goods (Mattiacci et al., 2010; Nosi, 2012). Lockshin and Hall (2003) have actually paralleled the complexity of wine to that of a car, pointing out, however, that cars are not purchased with a frequency comparable to that of a bottle. In addition, the variety of wines available at the point of sale is extremely high and growing over time. In the mid-2000s, Horowitz and Lockshin (2006) showed that in a standard supermarket, for each product category, three to ten different brands and approximately 50-70 product variants were available. In the wine category, there was a minimum of 300 brands and product variants, which could exceed 1,500 labels in specialized retail outlets. More recent data (Cinelli Colombini, 2016) tell us that in large-scale retail outlets, the number of wine bottles on the shelves has more than doubled in the last twenty years, reaching the very large figure of 3,600 labels.

Both product complexity and the plethora of existing wine brands end up overwhelming consumers, especially those with low product-knowledge, in their buying process. This is why, in the wine choice decision, consumers rely on multiple product cues and different information sources to reduce the perceived risk associated with their purchase experience (Barber et al., 2007; Famularo et al., 2010).

A large body of literature (e.g., Chrea et al., 2011; Laverie et al., 2011; Lockshin and Corsi, 2012; Pelet et al., 2017; Xiong and Li, 2017) has investigated how consumers form opinions throughout their entire buying process using the evaluation of intrinsic and extrinsic wine attributes. Among them, grape variety has been found to be important in informing the consumers' purchasing decisions (Jaeger et al., 2009). Grape variety is a determinant in influencing the sensory properties of the final product (Pérez-Lamela et al., 2007) and especially in the New World producing countries, consumers consider varietals as a major factor to discriminate and choose wines (Berenguer et al., 2009).

In relation to the information sources consumers rely on to buy wine, whereas many of these are controlled by wineries, the so-called owned- or paid-media, multiple sources are governed and managed by third parties. These are, for example, specialized press, wine guides, websites, blogs, forums, apps, etc. (Marlowe et al., 2017; Szolnoki et al., 2011), which do not hold a direct stake in the wine sale but are able to shape consumers' opinions and behavior constituting important touch points in their purchasing experience. Increasing numbers of information providers operate online and consumer information-seeking on the Internet has become the rule rather than the exception (Russo and Simeone, 2017). This has spurred wineries to pay increasing attention to the customer experience resulting from consumers interacting with their brands through multiple encounters, different channels and media, causing complex customer journeys which take place in ecosystems populated by networks of actors (Lemon and Verhoef, 2016; Velikova et al., 2016).

Considering these premises, the study provides an investigation on Sangiovese, the most important grape variety in the Italian ampelographic outline (OIV, 2017). This manuscript analyzes the network of actors that might shape the path of a customer looking for information on this varietal by investigating how it is narrated by non-winery-owned websites in four countries: Australia, Canada, the United Kingdom (UK) and the United States (US). The final aim of the study is to highlight the actors populating the online wine ecosystem and understand if and to what extent the digital narration of Sangiovese can be profitably exploited by Italian wineries to enrich their value offering and promote their wines in foreign markets.

Varietals and non-winery-owned information in consumer choice

As wine is an experience good (Hollebeek et al., 2007), where consumers start their buying decision process and find themselves in a situation of strong information asymmetry and high perceived risk (Velikova et al., 2016). This causes producers and retailers to direct great effort to simplify the purchasing experience, providing cues that can support the completion of an appropriate and satisfying choice. Simplification is carried out with the consideration that consumers aim to find information on a product that can provide useful elements to infer its quality (Atkin and Thach, 2012). When they are unable to evaluate ex-ante the goodness of their choice – the correspondence of the wine to expectations - individuals use surrogate indicators, following risk-reduction strategies with the aim of minimizing the possibility of making a mistake (Pauzi et al., 2017). Multiple studies (e.g., Chrea et al., 2011; Lockshin and Corsi, 2012; Lockshin and Hall, 2003) have investigated the use that consumers make of both intrinsic and extrinsic cues in their purchasing decisions. Whereas intrinsic cues are product attributes inherent to the product itself, such as grape variety or sugar content, extrinsic cues can be altered without changing the objective characteristics of the wine, and include attributes such as price, brand or label content (Veale and Quester, 2009). Among intrinsic cues, grape variety has been found to play a prominent role in shaping the wine purchase experience in different consumption occasions. Investigating on-premise purchasing, Cohen (2009) found that Anglo Saxon consumers give more importance to grape variety than the French when ordering a bottle of wine at a restaurant. In the same consumption setting, New Zealand wine drinkers value grape variety the most, together with the availability by the glass (Jaeger et al., 2010), while for Australian consumers, grape variety represents the key choice driver, followed by wine awards and price (Corsi et al., 2012). In relation to the wine selection criteria in a retail setting, consumers living in the Old World give more importance to grape variety and region of origin than those living in New World countries (Goodman, 2009). In the US, packaging attributes account for a relevant portion of wine price differences with grape variety, together with origin, label type and design being more important than bottle form and closure (Mueller and Szolnoki, 2012). For both traditional and New World imported wines, grape variety together with country of origin constitute the most important choice drivers for UK consumers (Felzensztein and Dinnie, 2006).

With relation to information-gathering along the wine purchasing experience, consumers rely on multiple sources (Lockshin and Corsi, 2012) that might be directly controlled by the winery, such as

packaging and labels, paid advertising, corporate websites and social media accounts, or crafted and managed by third parties, such as wine magazines and guides, online specialized portals and blogs, etc. (Szolnoki et al., 2011). Third-party-owned information sources play a particularly relevant role in shaping consumers' opinions, along with buying and consumption processes in the wine business, especially for those characterized by low levels of expertise or purchase confidence (Atkin and Thach, 2012; Hristov and Kuhar, 2015). Overcoming the dyadic relationship between consumers and enterprises, buying and consumption experiences are claimed to take place in ecosystems where networks of actors interact and where the digital component contributes increasingly to create the firms' value offerings (Lusch and Nambisan, 2015). Similar to other industries, in the wine business, the Internet has also become a source of paramount importance in influencing consumer decisions and the multiple online touch points through which individuals interact with products, companies and brands are governed by third-party entities (Forbes et al., 2015; Marlowe et al., 2017). In this scenario, wineries are confronted with accelerating media and increasing channel fragmentation, which have made the coordination and management of multiple organizations a critical success factor for staying competitive (Willems et al., 2016).

Sangiovese in the Italian wine outline

Sangiovese is the most common grape variety cultivated in Italy. According to a recent report (OIV, 2017), the surface dedicated to this varietal currently represents 7.9% of the entire national undervine area, corresponding to approximately 54,000 hectares. In addition to its ampelographic relevance, Sangiovese boasts a great economic importance for Italy, being used – in its purity or blended – for the production of more than 200 DOCG, DOC and IGT wines. Some of these geographical indications are reserved for wines such as Chianti, Chianti Classico, Carmignano and Brunello di Montalcino, undisputed ambassadors of the Italian enology on the world markets (Laureati et al., 2014). Additionally, there seems to be growing interest in the Sangiovese varietal on the part of Internet users, as witnessed by the constant increase in the number of online researchers using Sangiovese as a keyword in searches at the worldwide level in the last five years.

Research design

The research provides a quali-quantitative method, combining text mining with content analysis. Text mining is a quantitative research technique, which does not simply "observe" texts, but enables the nontrivial extraction of implicit and previously unknown information (semantic categories, emerging themes, etc.) from unstructured textual data through the use of ad hoc software. The software used in the present research is T-Lab, release 9.1.5 (Lancia, 2014). Content analysis is, instead, a research method for studying communication artifacts, such as texts, photos or audio (Cho and Lee, 2014). In this study, a bottom-up semantic cluster analysis is performed on Sangiovese-related texts collected online, then obtained clusters have been qualitatively content analyzed.

Keywords and URLs selection

To identify the most common keywords used in research about Sangiovese on Google, the software Keyword Tool was employed. Relying on Google's autocomplete feature, Keyword Tool extracts the most popular search terms associated to a word and provides the related search volume. Eight keywords were selected representing 74% of the global research volume made in English. In addition to only Sangiovese, seven strings were chosen containing the term Sangiovese: wine, grape, taste, red wine, vs Chianti, Italian wine.

Setting the incognito mode web browsing, which erases prior browsing history that may affect search results (Aranzulla, 2018), and adjusting Google's geolocation system for each investigated country, the URLs appearing in the first four pages of each search were considered, as these results are claimed to account for approximately 80% of all the clicks (Sarcona, 2018). Investigated URLs were selected among organic results. Exclusively commercial websites and winery websites were

disregarded, thus only including in the investigation third-party-owned and information-rich sources. Each URL that appeared more than once in the results was considered only once. In total, 30 URLs were selected for Australia, 20 for Canada, 24 for the UK and 21 for the US, providing as many corpora to analyze.

Already at this level of the investigation, an important consideration about Sangiovese digital information sources could be made. Numerous URLs appearing in the pages of search results were the same. To provide an example, Table 1 shows the URLs that simultaneously appeared in the first two pages of results based on the search using Sangiovese as a keyword in the different countries. This means that, regardless of *where* Sangiovese-related online studies are made, some information sources are displayed more often in the most visible and clickable Internet results. As one could have expected, there are some websites which, thanks to effective SEO strategies, are able to appear in the first organic results from Google, optimizing the chance of being viewed by consumers.

Table 1 – Common URLs by country in the first two-page search results using Sangiovese as keyword

Source: own elaboration

The texts displayed in the relative pages were extrapolated, organized and prepared for analysis. The preparatory operations consisted of text cleaning, normalization, disambiguation and lemmatization. The collected corpora of each country were merged in single files and analyzed as unique documents. Table 2 shows the characteristics of the organized corpora.

Table 2 – Corpora characteristics

Source: own elaboration

Text elaboration

A thematic analysis was run. The texts were analyzed through a semantic clustering procedure, adopting an unsupervised process, using a bisecting K-Means algorithm. Accordingly, a representation of the digital contents through a limited number of thematic clusters was realized. Each cluster consists of a set of elementary contexts characterized by the same keyword patterns and described through its most characterizing lexical units. Clusters constitute subsets of texts formed by groups of words that share the same contexts of reference, representing themes in the corpora. Afterward, a software-assisted qualitative content analysis of each cluster was conducted.

Thematic analysis

The clustering procedure provided different solutions. Whereas for both Australia (Cl_AU) and Canada (Cl_CAN), a four-cluster solution was obtained, in relation to the UK (Cl_UK) where a six-cluster solution and in the US (Cl_USA), a five-cluster solution were provided, witnessing a greater variety of treated themes (Table 3). In Table 3, the percentages represent the share of total text included in the cluster, meaning the greater the percentage, the higher the number of text fragments pertaining to the cluster. Thus, clusters of greater dimensions include themes that recur more often in the texts. The qualitative content analysis of the text fragments included in the clusters enabled the detection of five macro-themes.

Table 3 – Macro-themes and clusters by country

Source: own elaboration

Viticulture and winemaking

As one could have expected, as Sangiovese is a grape variety, this was a theme characterizing all collected texts concerning the agricultural practices adopted for cultivation and the winemaking techniques used to produce Sangiovese-based wines. A large part of the discourses is devoted to the vine living environment in Italy, mentioning specific elements and characteristics of the soil, such as composition (clay, marl), slope, exposure, altitude. Territories are meticulously described, not being limited to the portrayal of large areas, such as those covered by the administrative boundaries of geographical indications; but specific reference is made to sub-zones able to differentiate the quality of the grapes influenced by the local microclimate. Recurring mentions are made to specific regions and areas, such as Umbria, Lazio, Maremma, Montepulciano. Tuscany is broadly mentioned (while Emilia Romagna is relatively less mentioned), describing in detail the locally adopted growing techniques, recommended distance between plants, maximum yields, and also making explicit reference to some wineries and wines (Banfi, Biondi Santi, Montevertine, Fontodi, Le Pergole Torte, Flaccianello, etc.).

A further considerable part of the narrative concerns the ability of Sangiovese to adapt to environmental contexts outside the Italian borders largely enabled by the research made by foreign agronomists on the varietal DNA and the achievement of effective clonal selection processes. References are made to the so-called New World countries where Sangiovese is cultivated, such as the United States (Washington State, California), Argentina, Chile, New Zealand, Canada (Ontario, British Columbia), and most of Australia. In-depth descriptions are provided in relation to this latter country, describing the ability of Australian entrepreneurs to select clones capable of adapting to the soil and climate conditions of the local territory. While admitting some initial failures, it is noted that the vine has subsequently adapted well and has been able to provide the raw material for the production of high-quality wines. Emphasis is made on the style of the wines, the possible blends with local varieties and the ability to reproduce wines that are similar to the Italian, especially the Tuscan ones, and not just an Australian version considered too similar to local products, such as wines made from Shiraz. In relation to winemaking techniques, some discourses are devoted to the oenological practices aimed at producing wines based on Sangiovese but resulting from blends with other varieties, especially French, such as Cabernet Franc and Sauvignon, Pinot and Merlot.

A general consideration about the way information is displayed concerns the highly technical cut of the narration. While partly understandable given that Sangiovese is a varietal, the adopted communication style is crafted mainly in an instructive fashion, with wide use of specialist terms that might be easily understood by professionals or expert consumers, but is hardly comprehensible by the general audience.

Physical, chemical and organoleptic characteristics

A further macro-theme concerns the physical-chemical and organoleptic characteristics of Sangiovese-based wines. Considering some of the most famous Italian denominations (Brunello, Morellino, Chianti Classico, Chianti, Carmignano, etc.) and the aging and fining processes they undergo, emphasis is given to the versatility of Sangiovese and the diversity of finished products. Reference is made to aromas, flavors, colors, the organoleptic and chemical traits of Sangiovese-based wines (violet, garnet, pepper, tobacco, thyme, cinnamon, strawberry, cherry, marjoram), tannins, acidity, freshness, as well as herbaceous and spicy notes, earthiness, and a purplish color. While maintaining the focus on Tuscan wines, this macro-theme also includes a few references to other Italian regions (Marche, Lazio, Umbria) and other countries (Corsica, Argentina and the US – California), pointing out that, depending on the area of production, wines gain different physical-chemical and organoleptic characteristics. It is interesting to note that Sangiovese di Romagna or references to the production of Sangiovese in the Romagna region are very marginal. The potential

of the vine to give rise to high quality wines concerns, in the vast majority of cases, the hectares planted in Tuscany, where some of the most prominent denominations of the Made in Italy oenological outline are produced. Similar to the first macro-theme, the narrative of this one is also characterized by a highly technical and professional slant.

Origin and name

This macro-theme concerns the origins of Sangiovese, its genetic heritage and the different names with which it is labeled in the different areas where it is grown. Some of the topics are treated from a technical perspective and a recurring reference is made to scientific research conducted on the DNA of the grape variety and the theories of its origin and evolution over time. Multiple mentions are made of the link that Sangiovese might have with varietals grown in southern Italy, given the research shows that its genetic heritage has common traits with Calabrese Montenuovo (Calabria, Campania), Tuccanese (Puglia), Susumaniello (Salento), and Corinto nero (Lipari).

Other discourses emphasize, instead, the mythological aspects of Sangiovese, referring to stories and traditions, also using a more direct and colloquial tone. Here, information is characterized by a more emotional type of narrative and deviates from the technical tone of agronomic and oenological nature widely used in other thematic contexts. Several text fragments speak of the etymology of the term Sangiovese and refer to the ancient Romans and Etruscans. Reference is made to vitis vinifera, cultivated for millennia by the Assyrians, Babylonians, Sumerians and Egyptians. Mention is made to the etymological origin of the word Sangiovese (Sanguis Jovis, i.e., the blood of Jupiter) that refers to Zeus and the Greek mythology, not without some trivialization such as "Jupiter, the number one god of the Romans". Even if more ordinary, the tone of this type of information appears friendlier and more comprehensible by the general audience, who are less knowledgeable and expert in the oenological and agronomical fields, and possibly more willing to read less challenging and complex texts.

Food pairing

The food pairing macro-theme is absolutely typical and peculiar of the United Kingdom as it cannot be found in any of the other examined countries. The theme concerns food matching and is characterized by suggestions on which dishes (pizza, pasta, ribollita, ragù, roasts) to accompany with Sangiovese-based wines. The detail of recommended pairings is surprisingly high, differentiating suggested dishes based on the wine blend, period of aging, type and size of containers of aging and fining (new or used barrels, barriques, tonneaux, etc.). Despite the meticulousness of the descriptions, which are evidently of an instructive type, this thematic cluster also provides topics that might interest and be easily read by a general audience not boasting of specific knowledge in the oenological field.

Super Tuscans

Finally, this macro-theme has also been found in the corpora of a single country, the US. The two most representative words of this cluster are "blend" and "Super Tuscan", clearly referring to a category of Tuscan wines which have met an extraordinary notoriety and market success especially outside of Italy. It is, indeed, believed that the term "Super Tuscan" was coined by Robert Parker, one of the most authoritative wine critics in the world, for describing wines that started to be produced in Tuscany at the beginning of the 1970s. Combining Sangiovese with Bordeaux varieties (Cabernet Sauvignon, Cabernet Franc, etc.) these wines were commercialized as table wines because they did not comply with the requirements imposed by the production code of local geographical indications and enjoyed success above all in foreign markets, particularly in the US (Woodard, 2018). Whereas in the US corpora, the information concerning Super Tuscans is larger

and characterizes almost one fifth of the overall analyzed text fragments incidentally cited and described in other semantic clusters.

Discussion

The research has studied the online wine ecosystem to investigate the information on Sangiovese, the most important grape variety in Italy, provided by non-winery-owned sources on the Internet. In addition to analyzing the characteristics of the online wine communication environment, the study aimed to understand if and to what extent the digital narration about Sangiovese can be profitably exploited by Italian wineries to enrich their value proposition and promote Italian wines on the foreign markets.

Regarding the information sources which consumers rely on to buy wine, the study has highlighted the digital wine ecosystem, confirming that it is constituted by a network of actors which can potentially contribute to shaping consumer decisions (Lemon and Verhoef, 2016; Velikova et al., 2016). Surfing the Internet along the information-seeking process, wine consumers can interact with multiple touch points that can be owned by wineries or governed and managed by third parties (Marlowe et al., 2017; Szolnoki et al., 2011). Although they do not hold a direct stake in the wine sale, these parties are able to influence consumers' opinions and behavior constituting important touch points in their purchasing experience (Russo and Simeone, 2017). Therefore, wineries need to pay increasing attention to the online channel, being aware that it might play a relevant role in consumer buying decisions.

Regarding the contents and perspective adopted to narrate Sangiovese, some considerations can be made. First, the majority of online discourses relate to the technical aspects of the varietal: Agronomy, ampelography, oenology, physical-chemical and organoleptic characteristics of Sangiovese-based wines. Consequently, a large part of the digital information provided adopts a professional slant. While partly understandable given that Sangiovese is a grape variety, the adopted communication still appears to be highly rational, crafted in an instructive fashion, and uses specialist terms of the industry-specific jargon. Only marginal references are made to culture, history, folklore and legends. In short, the digital narrative of Sangiovese is far removed from storytelling (Maydoney and Sametz, 2003). Whereas such a communication might be suitable for expert and knowledgeable wine consumers, recognized for being a high-spending market segment (Brunner and Siegrist, 2011), it could be less effective for common, less involved wine drinkers (Hollebeek et al., 2007). To involve the general audience, storytelling might be more effective as it is recognized to be a powerful means to influence, inspire and engage people (Kelley and Littman, 2006). The literature (Brodie et al., 2011) acknowledges that touch points generate memorable and engaging experiences when they impact the cognitive as well as the emotional spheres of consumers. Building collaborative relationships with the identified sources on the part of Italian operators might lead to partially reshaping the conveyed online contents, also emphasizing the emotional aspects of the narration.

Second, the greatest part of the references to Italian Sangiovese involve Tuscany and only relatively few involve Romagna. Whereas this evidently gives the advantage to Tuscan wineries, as their wines are considered real points of reference by foreign oenologists who are said to struggle to make Sangiovese-based wines with similar characteristics, producers located in the Romagna region appear to be partially neglected. While understandable, given that worldwide, Tuscany is recognized to be one of the best Italian wine-producing regions with high export levels, this would suggest that Romagna wineries should make a greater effort to increase the notoriety and awareness of their oenological production.

Lastly, a consideration concerns the number of sources that can potentially be consulted by consumers looking for online information on Sangiovese. Based on the analysis, there seems to be a high "concentration" of sources. Regardless of the country where the research occurred, numerous retrieved URLs were the same, many of them being different links to unique websites. Therefore, the pages that are read with the highest probability by Internet surfers looking for information on

Sangiovese in English, even if located in different countries and continents, are crafted and managed by the same entities. In short, there is a group of information gatekeepers, able to control a large part of the Sangiovese-related digital information and convey their owned-created contents. Given that the Internet is a worldwide network, such a result is consistent with the geographical/administrative location of websites being irrelevant for research purposes. What truly matters is the optimization of websites, i.e., SEO (Search Engine Optimization), which allows them to be proposed first and appear in the first pages of provided results by search engines, increasing their probability of being consulted (Ledford, 2008). From the perspective of Italian wineries, these findings could however be valuable for different reasons. The identified sources represent external, third-party-owned digital touch points, independently managed, but able to shape consumer decisions (Kannan and Li, 2017). Having a picture of the online network of entities which, thanks to their search engine positioning, end up being the most popular information sources – seemingly the most authoritative from a consumer perspective - constitutes an important market insight for crafting effective promotional strategies. First, given the popularity of these sources, they may constitute effective outlets to place paid ads enabling commercial operators to benefit from the high levels of inbound traffic of possibly already interested consumers. Furthermore, whereas at this stage these sources represent independent media, constituting third-party-owned touch points, thanks to appropriate initiatives aimed at building collaborative relationships with them, they could become partner-owned touch points (Lemon and Verhoef, 2016). In this way, online conveyed contents could be shared and agreed upon, such as in the form of traditional publicity largely used in the wine business (Ferro and Benito Amaro, 2018), fulfilling the communication needs of both producers and information providers.

Limitations and hints for further research

Along with providing a multicountry investigation, the study has limited the research to English-written information and just one grape variety. Future investigations could profitably enlarge the spectrum of the research by examining both further idioms and geographical contexts, as well as other varietals. Additionally, since the study has revealed the existence of a group of entities that are able to control and manage the most popular and accessed digital information contents on Sangiovese, future studies could investigate the phenomenon adopting research tools – such as Web crawlers – and techniques – such as network analysis – to highlight the comprehensive architecture of the online information network. Finally, whereas this study has analyzed the online conveyed information contents adopting the perspective of information providers, future researchers could beneficially adopt the consumers' perspective and investigate their attitude, intention and behavior once exposed to specific information stimuli.

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Table 1 – Common URLs by country in the first two-page search results using Sangiovese as keyword

Common URLs	USA	Canada	UK	Australia
Common URLs 4 countries	4	4	4	4
Common URLs 3 countries	6	8	8	2
Common URLs 2 countries	3	7	5	1
Single URLs	7	1	3	13
Total	20	20	20	20

Source: own elaboration



Table 2 – Corpora characteristics

Country	Corpora	Tokens (words)	Types (lexical units)	Hapax (words with frequency = 1)	Lemmas	Min. freq. in texts	Lemmas under analysis	Elementary contexts (text fragments)
Australia	30	12,531	2,842	1,514	2,439	>= 4	368	288
Canada	20	14,217	3.141	1,764	2,760	>= 4	375	322
UK	24	13,023	3,097	1,835	2,647	>= 4	358	293
USA	21	13,257	3,080	1,768	2,627	>= 4	365	300
Source: or	wn elabord							

Table 3 – Macro-themes and clusters by country

Country			Tacro-themes		
	Viticulture and	Chemical, physical and	Origin and name	Food pairing	Super Tuscans
Australia	winemaking Cl AU 1 (22.6%)	organoleptic characteristics Cl_AU_3 (33.7%)	Cl_AU_4 (24.0%)		
Ausualia	Cl_AU_1 (22.6%) Cl_AU_2 (19.8%)	C1_AU_3 (33.770)	CI_AU_4 (24.070)		
Canada	Cl_CAN_1 (20.9%)	Cl_CAN_3 (37.1%)	Cl_CAN_2		
	Cl_CAN_4 (20.3%)		(19.3%)		
UK	Cl_UK_1 (19.8%)	Cl_UK_6 (12.6%)	Cl_UK_5 (18.1%)	Cl_UK_4	
	Cl_UK_2 (24.2%) Cl_UK_3 (11.3%)			(13.6%)	
USA	Cl_USA_1 (20.7%)	Cl_USA_3 (29.7%)	Cl_USA_4 (17.0%)		Cl USA 5
	Cl_USA_2 (14.3%)		0001(17.070)		(18.3%)