

Conference Proceedings

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The following papers were presented at the Inaugural Wine Business Research Symposium, held at the University of Newcastle in December 2009. All papers were double-blind refereed prior to acceptance. The Symposium was hosted by the Wine Industry Research Collaborative as part of the Centre for Institutional and Organisational Studies, University of Newcastle. The quality and range of papers that follows in these proceedings demonstrates the symposium’s success in bringing together practitioners and scholars from the social sciences and humanities interested in wine regions, wineries and other wine-related entities and activities. The papers address issues such as, but not limited to, the impact of environmental considerations on business strategy, knowledge flow in wine regions, innovation, wine clusters and networks, information and communication technology, human resources management, links between entertainment, tourism and wine activities, contextual and historical influences on wine activities, sustainability in wine regions and activities, value chain factors influencing wine industry decisions.

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ECONOMIC DEVELOPMENT OF WINE IN NEW SOUTH WALES

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It has been said that ‘wine economics are little different than another industry’s economics. Wine is an agricultural by-product, an agricultural good, and must be treated as such...[but] it has large differences that separate it from most other agricultural products’.¹ According to Eyler and Correia, the factors making it different to other goods are as follows.

1. The market price of wine is usually found by subjective rather than scientific means;
2. The first yield for a wine grape crop occurs from three to five years after planting, so investment return is delayed (unless the so called ‘Australian method’ is used boasting a crop after eighteen months);
3. As an alcohol, wine is sold under commercial laws distinct from most agricultural products;
4. Determinants of the worth of wine involve a complex train of decision-making in the vineyard, including choice of plant stock, trellising style and the means of transport of grapes to winery.²

Following on from these factors are the processes of decision-making in the winery which both create and reflect a brand positioning within the marketplace.

Close attention to quality in wine manufacture costs more from the very first planting of the grape cuttings or rootstock through the care of the vines (how they are watered, pruned and picked) and on to fermenting styles and length of storage before release. Attention to quality in wine manufacture might be a larger financial risk but allows the maker/investor to charge more for wine if the marketplace agrees.

Meanwhile, wine economics research exists, geographically, alongside of the production-based sciences that cluster, in the English-speaking New World wine nations of Australia and the United States at least, near the largest wine regions. This makes sense since wine economics is

¹ R. Eyler and T. Correia, ‘Financial aspects of wine’ in Liz Thach and Tim Matz (eds), *Wine, A global business* (New York: Miranda Press, 2004), 123.

² Eyler and Correia, ‘Financial aspects of wine’, 123.

fundamentally aimed at predicting future trends to enable greater certainty in finance and investment in wine growing. In Australia, to date, this research and other studies related to wine have taken place mainly in South Australia, where the economy benefits from wine production.³ There are two companion works published by the Centre for Economic Studies, University of Adelaide: one detailing trends and cycles in the Australian wine industry to the year 2000, the other outlining trends in the world wine market from the early 1960s (during which time Australian wine production began to experience a renaissance after a marked decline in the early twentieth century) to 1996.⁴ Both are essentially collections of figures, which can be readily consulted alongside the Australian Bureau of Statistics numbers released annually.

The first of these also identifies five cycles of development in the Australian wine industry beginning after the very halting start to the industry prior to commercial wine growing in the 1860s up to the 1990s, when Australia shifted rapidly (within the space of a decade) from being a net importer of wine to experiencing an export boom. To be internationally competitive Australian wine makers have looked, from the first, to the British market. The cycles identified by Osmond and Anderson track the shift through modest success in colonial wine growing to a slump due to loss of demand in Britain in the inter-war years through to the 1990s boom, described in 2002 as a phenomenon ‘almost without precedent in the long history of wine...[during which] Australians are setting the pace worldwide’.⁵

Wine growing had been envisaged and encouraged from the earliest years of British work to turn the continent of Indigenous Australians into a ‘neo-Europe’.⁶ But, apart from research by historian David Dunstan (on Victoria), humanities, as well as other scholarship on wine in Australia has largely centred in South Australia (though the development of South Australian wine growing, not just individual companies and regions does not yet have its historian).⁷ What I am presenting here is the first attempt to bring together statistical data on New South Wales as a wine growing

³ Robert Osmond and Kym Anderson, *Trends and Cycles in the Australian Wine Industry, 1850 to 2000* (Adelaide: Centre for International Economic Studies, University of Adelaide, 1998), 21.

⁴ See previous note.

⁵ Osmond and Anderson, *Trends and Cycles*, 5-15. The quote is from Nicholas Faith, *Liquid Gold, The Story of Australian wine and its makers* (Sydney: Pan Macmillan, 2002), 3.

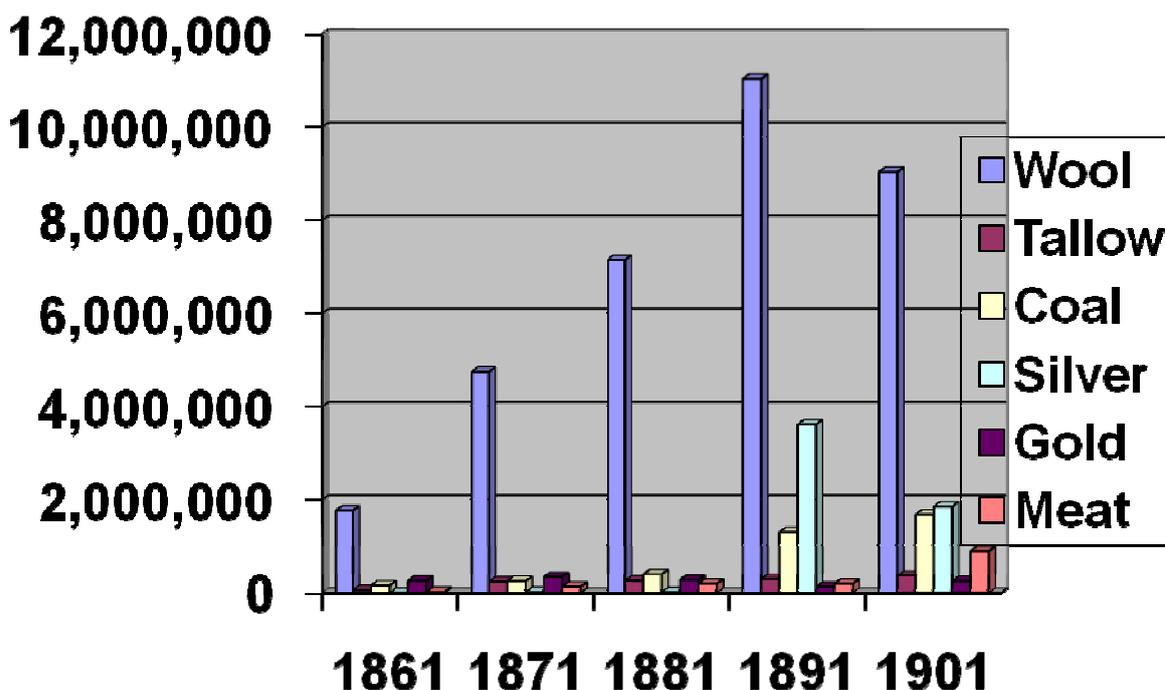
⁶ Julie McIntyre, ‘Camden to London and Paris: The Role of the Macarthur Family in the Early New South Wales Wine Industry’, *History Compass* 5 (2007), 427-438; McIntyre, Julie, ‘Not Rich and Not British: Philip Schaeffer, “Failed” Colonial Farmer’, *Journal of Australian Colonial History*, 11, 2009: 1-20. The term ‘neo-Europe’ was coined by Alfred Crosby describe the patterns of imperialism that saw the introduction of European plants and animals, as well as people, to the New World. See for example, Alfred Crosby, *Ecological Imperialism: The biological expansion of Europe, 900-1900* (Cambridge: Cambridge University Press, 1986), 1.

⁷ David Dunstan, *Better than Pommard! A History of Wine in Victoria* (Kew: Australian Scholarly Publishing, 1988).

colony-to-state to provide contextualisation for research being conducted on the Hunter region within New South Wales, and in turn in comparison with other regions and states within the national and global context. As a work in progress, this paper begins to look at the economic development of wine in New South Wales up to Federation (work on the period from Federation to the present is forthcoming).

There is no question that Australia’s economic development has been impressive and commodities such as wool (which naturally received early and detailed attention from historians) created much of the national wealth up to the 1970s.⁸ The extent to which this was the case in New South Wales to Federation can be demonstrated with the following.

Produce of New South Wales Exported, 1861 - 1901



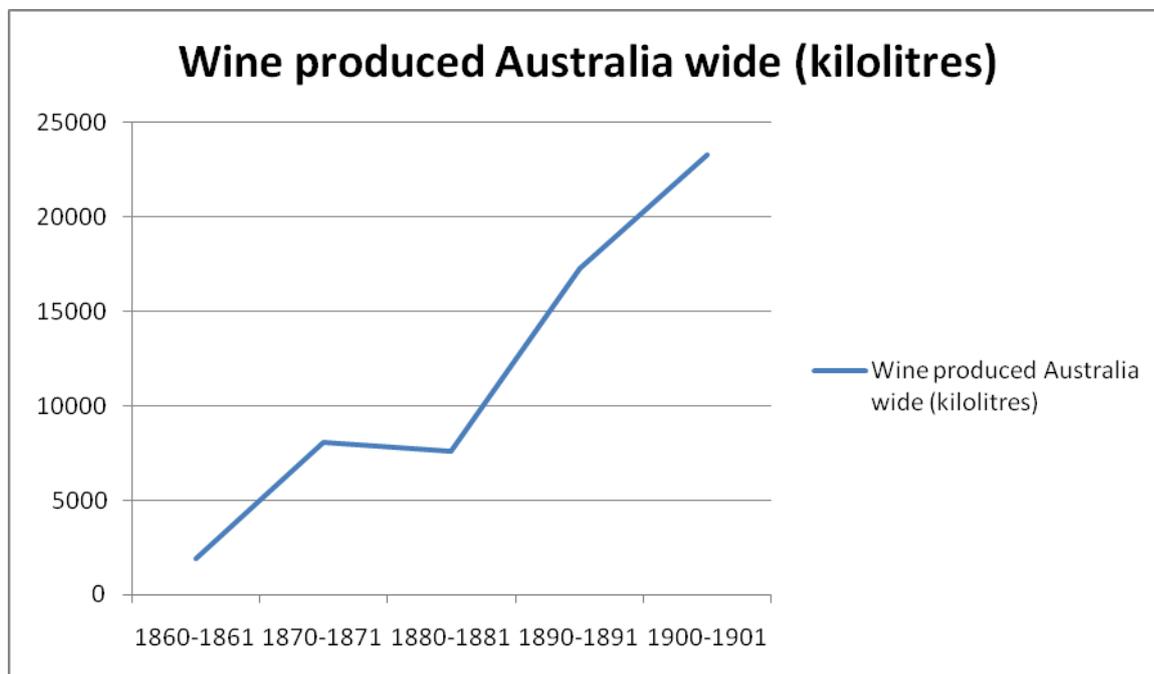
Graph 1 The numerical figures are in pounds (£). The statistics for silver include silver lead and ore, exclusive of spelt concentrates, etc; the figures for gold are exclusive of coin.⁹

⁸ Sheila Marriner, 'Economic Growth of Australia' in *Business History* 13, 2, 1971: 114-115.

⁹ H. C. L. Anderson, *New South Wales Statistical Register* (Sydney: William Applegate Gullick, Government Printer, 1908), 919.

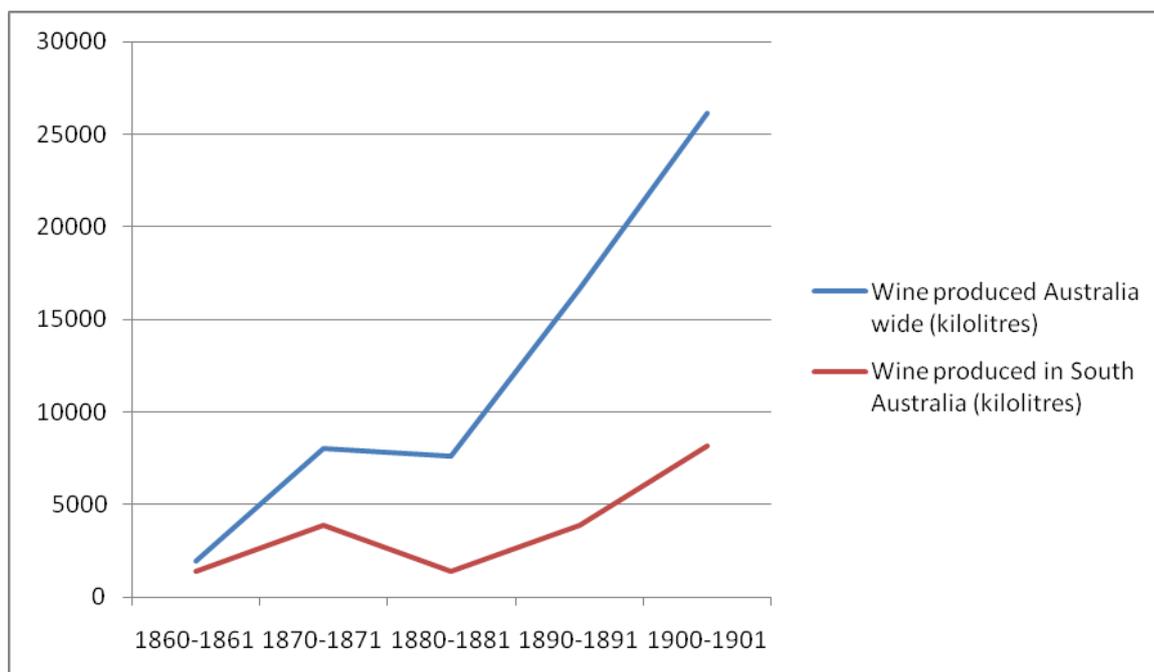
Wine exports from New South Wales were too small to register in the figures shown above.

Wine production in Australia overall was, however, progressive.



Graph 2¹⁰

To add in Osmond and Anderson's comparison of South Australia's share of wine production:

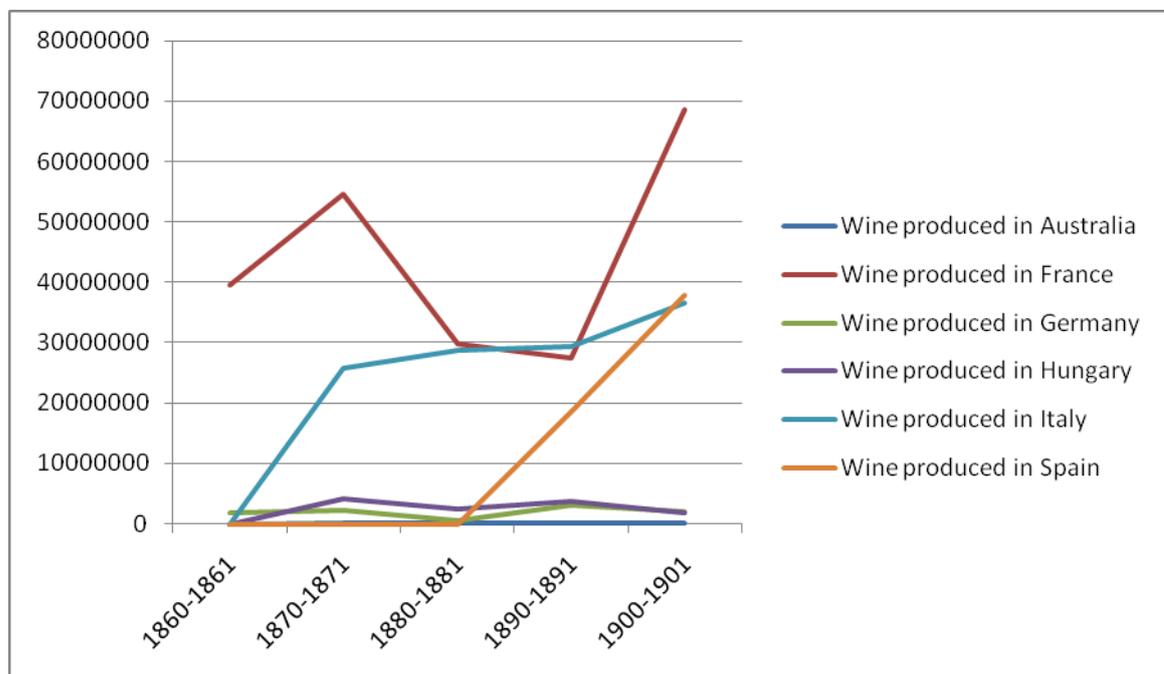


¹⁰ These figures are from Osmond and Anderson, *Trends and Cycles*, 40-43.

Graph 3¹¹

The South Australian share of production was high in 1860-1861 at 74% but sat at 31% in 1900-1901 as other colonies/states production contributed to the total. South Australian production dominated national production between the 1920s and the 1970s when sales to Britain fell and other states' production fell away. During this period the South Australian share was as high as 70% and 80%. A more even spread across the wine producing Australian states developed from the mid-1970s until South Australia's share dropped to around 45% at the turn of this century.¹²

The Australian contribution to world wine production in the colonial period was, however, a drop in the ocean compared with European output. Where Australian production was measured in tens of thousands of kilolitres, European production was measured in tens of millions of kilolitres. See Graph 4¹³:



The figures for Spain seem low at first due to records not being available until 1885. Clearly French and Italian (and Spanish) production far outstrips the other countries.

¹¹ As per fn 10.

¹² As per fn 10.

¹³ B. R. Mitchell, *European Historical Statistics 1750-1975*, second revised ed (London: Macmillan Press, 1981), 298-303.

Comparative figures of present production would show Australia performing better but not producing as significantly as the United States, data I will add in future, but, for now, this gives a more complete picture than would be possible without the European statistics. It also explains the derision with which French commentators greeted the Australian interest in attempting to produce enough wine to compete with European wine exports to Britain when phylloxera decimated European output from the late 1870s through to the mid 1890s. A retort about the quality and quantity of Australian wine, published in the *Gironde* of Bordeaux noted what others had long acknowledged, that regions of the Australian colonies had similar sunlight hours and weather to parts of Europe, such as the north of Spain and the south of France (but that Tasmania was a miniature Switzerland!). The article went on, however, to declare that colonial wines were made 'badly in general' and that, with respect to the true potential of the colonies to export wine to Europe, 'views of Australians, should, in our opinion be more modest'; the colonies were yet to make enough for home consumption let alone to send to Europe.¹⁴ And even if the means could be found to increase quality and transportability of the wines, only enough was produced to supply France for a single day!

Australian viticulture will never take, not the place to which it aspires, but the place it might occupy, until it succeeds by patient culture of vines suitable to the soils in correcting in the wines those faults which only disappear after many years of patient watching. The industry of cask-making is yet in its infancy in the colonies, and most of the vigneron put their wines in old port, sherry, or brandy casks, the produce of Europe, which tends to alter the character of the wines...[And] in spite of phylloxera the European vineyards are still fertile enough to satisfy the whole consumption of the old continent, as well as their clients over the sea, and that with conditions of cheapness and quality which defy all productions either of Australia or America.¹⁵

To return to the smaller picture: data was first collected on vineyard plantings in New South Wales in 1843. The first partially elected Legislative Council in New South Wales contained several members interested in wine growing. Of the twenty-four elected members, thirteen has some connection to vineyards and wine making.¹⁶ The Council ordered that statistics being taken throughout the colony include figures on vineyards, grapes and wine. Arguably, taking these first

¹⁴ Article from *Gironde* printed in *The Australasian* and reprinted in *Maitland Mercury*, 26 June 1883.

¹⁵ *Maitland Mercury*, 26 June 1883.

¹⁶ These members were: Alexander Berry, William Bland, Charles Cowper, Edward Cox, John Dunmore Lang, William Lawson, Hannibal Macarthur, William Macarthur, Thomas Mitchell, Alexander Park, William Charles Wentworth and Richard Windeyer.

figures in the Return of Vineyards had the effect of encouraging, at the very least, better record keeping relating to wine growing but possibly also greater attention to the activity itself. These are the early figures for New South Wales.

Year/production	Crop (acres)	Grapes (cwt) ¹⁷	Wine (gallons)	Brandy (gall.)
1843/4	483.5	408	29570	657
1845	559.25	5101	47856 ¹⁸	1018
1846	591.75	6045.5	51292 ¹⁹	1433
1847	743 ²⁰	12988 ²¹	52337	1396
1848	897.5	20302.25 (1015 tons)	54035	1402
1849	895.5	6420	90300	1123
1850	956.5	No figures	97408	1266

While much of this production occurred in the Hunter Valley, a considerable portion related to vineyards on the Cumberland Plain belonging to growers such as William Macarthur, a dominant figure in these years of the industry in New South Wales.

Taking, first, the comparative figures from earlier of Australian production in the late colonial period along with South Australian production, when New South Wales figures are added in the results look like this.

¹⁷ So many counties recorded 'unknown' for the weight of grapes harvested that these figures cannot be used to determined yields (harvest quantity/acreage). The best use that can be made of this part of the Returns is to conclude that record-keeping in grape growing was very rudimentary; even more so than in wine making, where at least some record was kept of the quantity of production.

¹⁸ Includes 40 gallons of wine reported for Bathurst in 1846 Returns but for 1845 because too late for that year.

¹⁹ This figure includes 12,000 gallons which was the previous year's Camden production; James Macarthur gave 1845 figures for 1846 because of drought which creates confusion in attempting to arrive at reliable data. The 29 pipes of wine made at Port Macquarie equalled approximately 3390 gallons.

²⁰ This figure has been rounded up from 742.91 as some of the reported vine acreages were in fractions of an acre.

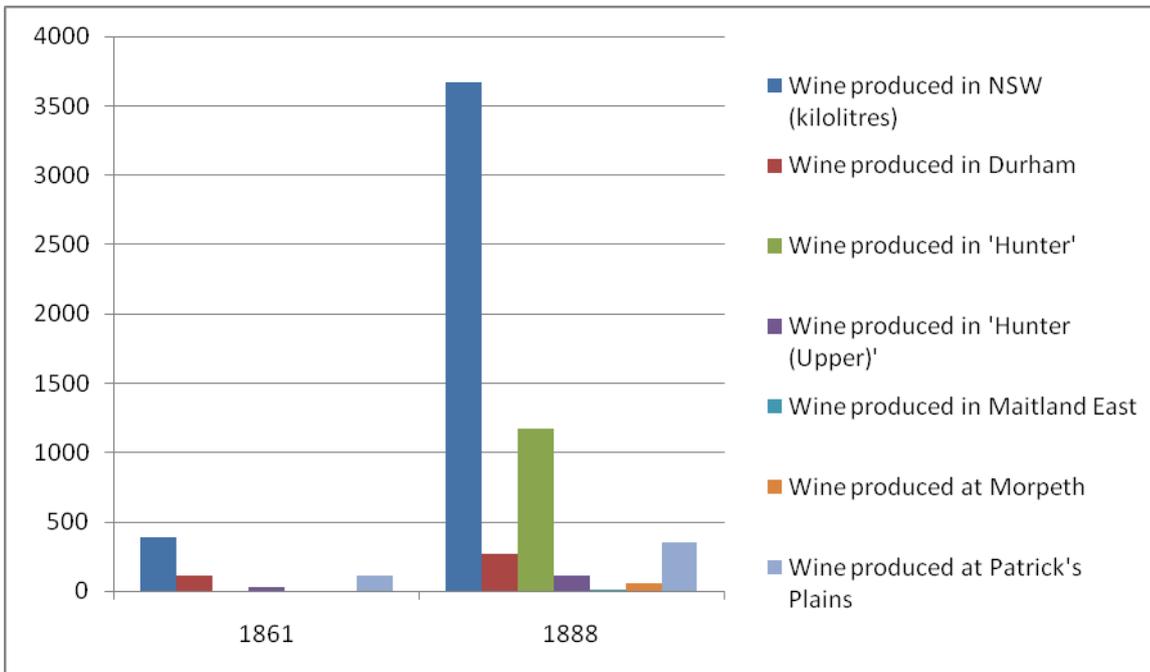
²¹ Includes the figure 240 cwt converted from 12 tons in the Returns (on the basis of 20 cwt equals one ton).



Graph 5²²

New South Wales cannot, then, claim to have contributed significantly to the sharp rise in Australian production observed in *Graph 2*. The figures available for more detailed analysis are considerable. At this stage, this more specific aspect of my research is still in progress, so I will look at two years in particular during the second half of the nineteenth century. Keeping in mind that the counties defined as belonging to the region which I would define now as ‘the Hunter Valley’ shifted during this period, though not sufficiently to prevent a comparison.

²² See fn 10.

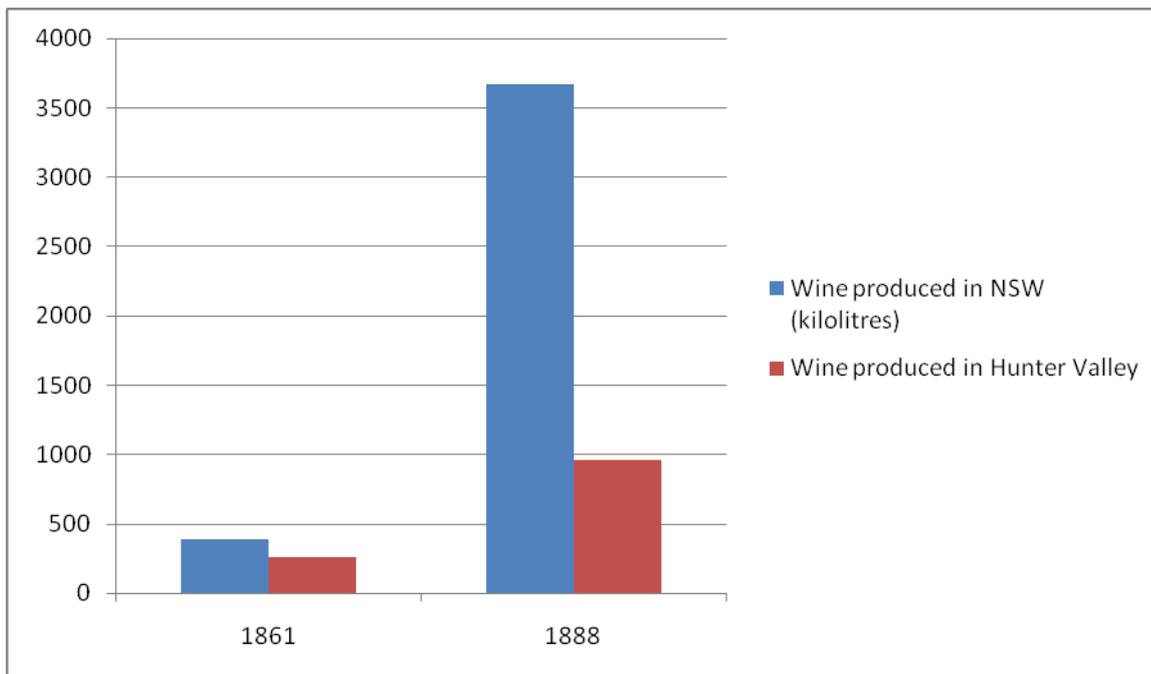


Graph 6²³

Categories use 1888 county divisions and 1861 figures are best approximations of these later boundaries. The 'Hunter' figure for 1888 reflects an increase in production from Pokolbin (inland from the Hunter, Williams and Paterson Rivers along which earlier plantings took place) and includes the large holdings at Patrick's Plains, present-day Singleton. Between 1861 and 1888 several factors had improved including access to skilled labour, reliable plant stock, smaller land holdings and modes of distribution and sales.

Total Hunter compared with New South Wales are represented below.

²³ *Statistical Register of New South Wales for the year 1861* (Sydney: Thomas Richards, Government Printer, 1862), 196-199; *Statistical Register of New South Wales for the year 1861* (Sydney: Charles Potter, Government Printer, 1889), 228-229.



Graph7²⁴

These results also reflect the movement of agriculture beyond early areas of colonial establishment limited by transport along rivers such as the Hunter, Williams and Paterson Rivers. Land reforms, improved transport and greater population led to opening up of wine regions such as the Riverina, Mudgee, New England and the Hastings Valley; regions that would again flourish from the 1970s on.

As a work in progress the process of narrowing down specific detail in early wine growing in New South Wales (and the Hunter) and following this through to the present is now underway. Questions arising from social and cultural research on New South Wales include why the state did not have a stronger wine industry than South Australia given that notions of its suitability dated back to first colonisation? And to what extent did ethnicity limited industry development, that is, British understanding of wine, in this period, began at the barrel, rather than in the vineyard or the winery compared with producers in South Australia and Victoria certainly with European wine producing countries. Factors in wine economics identified by Eyler and Correia assist in separating out key features of production for consideration. And fellow researchers in other disciplines, such as Business, examining more recent phenomena such as collaborative networks in the Hunter can also make use of the data being gathered in my research.

²⁴ See fn 23.

**THE ‘DIGITAL GRAPEVINE’ AND THE GLOBAL FLOW OF WINE:
A GRAVITY MODEL OF ICT IN WINE TRADE**

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ABSTRACT

Wine has always been traded over long distances. Global trade in wine has, however, experienced accelerated growth and change during the past quarter century. First, ‘New World’ wines from Australia, California and New Zealand penetrated markets that ‘Old World’ suppliers from Europe considered as theirs; later, other new entrants to the world wine market, such as Chile, South Africa and Argentina, added to global trade in wine. Moreover, wine traders ostensibly have employed ICT and modern transport technologies, and global wine supply chains have evolved.

What impact has the digital grapevine exerted on global trade in wine? Has it been commensurable with its impact on trade in other goods? We address these questions with a gravity model of international trade in wine that includes the major wine trading countries and covers the period from 1995 to 2008. The model explains the value of wine trade in terms of the adoption levels of internet access and mobile phone, and we include fixed telephone for nostalgic completeness. We control for a broad range of other factors that might also affect bilateral wine trade.

Results show that ICT variables have had varied impacts on wine trade, with the magnitudes varying between the different forms of ICT, between their effects in wine-exporting countries and wine-importing countries, and between near and distant trading partners. The two major positive impacts are of mobile phones in importing countries and internet effects in both sets of countries for remote trading partners. Fixed telephone usage, on the other hand, proved not to be a significant determinant of wine trade values.

THE 'DIGITAL GRAPEVINE' AND THE GLOBAL FLOW OF WINE: A GRAVITY MODEL OF ICT IN WINE TRADE

INTRODUCTION

Globalisation results when markets and industries become more integrated because of reduced transaction and transport costs. These costs have fallen over the long term because of sustained advances in transport technology and, even more dramatically, in information and communication technology (ICT). Improved transport and information technologies have been complemented by the modern global supply chain, an organisational innovation that leverages information and transport technology to improve the coordination of widely dispersed economic activity.

Communication costs tend to be a minor component of total transaction costs in international trade, and their share in total trading costs of any one shipment is smaller yet. Nevertheless, diffusion of digital ICT – the 'digital grapevine' – is believed to stimulate international trade to an extent that appears to be large in proportion to the share of ICT costs in trading costs.

Some of the information technology, such as satellite systems and network standards, are global commons and are available to all. Others, such as computers and wired networks, are exclusive goods. Because investment costs in computers and wired networks are significant, their diffusion across regions and countries is uneven. Moreover, the diffusion varies significantly across information technologies. For example, whereas PCs and the internet penetrated low-income countries only slowly, mobile phones are spreading rapidly in these countries.

CONVERGENT ICT AND INTERNATIONAL TRADE

Digital ICT is the product of the convergence of modern telecommunication technology and digital data processing technology (Economist 2006). The telecommunication technology used by convergent technologies is the internet; the devices themselves are computers which, in contrast to PCs, cannot be programmed at will by their users but which are limited to uses allowed or prescribed by their vendor, or by the network provider (Zittrain 2008).

The speed at which digital technology has advanced in the past is without precedent (Nordhaus, 2001). Moreover, convergent ICT is spreading much more rapidly than either conventional communication technology or PCs. Fixed-line telephone penetration in the world is nearly flat at about 1.3 billion users in the world in 2006 whereas mobile phone subscriptions, of which there were some 4.1 billion in the world in 2006, are growing at an accelerating rate (ITU 2009). The advance of the internet in the world, which stands at about 23 users per 100 inhabitants, pales in comparison with the mobile phone's 61 users per 100 inhabitants (ITU 2009), and, as UNCTAD

(2006, p. 3) observed, ‘Mobile phones are the only ICT in which developing countries have surpassed developed countries in terms of users.’ Hence, it is safe to say that advances in convergent ICT, rather than in transportation or in conventional PC plus internet technology, will drive the future development of global trade.

Given the rapid advance of convergent ICT it is tempting to predict, as many have done before us, the ‘death of distance’ (e.g. Cairncross 1997). We resist the temptation because two important factors keep distance economically alive. One is the fact that promises and reputation, on which most trades are based, are sticky and do not travel easily over large distances. The other is the uneven global diffusion of technological change which has turned the world into a spiky landscape of ICT availability (World Bank 2008a). Both sticky reputation and spiky access to ICT militate against the full extension of markets throughout the world.

While wine has always been traded over long distances, global trade in wine has experienced accelerated growth and change during the past quarter century. First, ‘New World’ wines from Australia, California and New Zealand penetrated markets that ‘Old World’ suppliers from Europe considered as theirs; later, other new entrants to the world wine market, such as Chile, South Africa and Argentina, added to global trade in wine. Moreover, wine traders ostensibly have employed ICT and modern transport technologies, and global wine supply chains have evolved. We propose that modern ICT has proven to be a more important factor in wine trade development among trading partners that are more distant from each other.

Sticky reputation and spiky ICT availability are but two causes that keep distance alive and there are many others. Brun et al. (2005) conclude from the results of a gravity model of international trade that ‘death of distance’ is largely a phenomenon that can be observed in bilateral trade between rich countries. The purpose of our paper is to explore some of the factors that are generally believed to have contributed to the extension and intensification of international trade in wine.

DETERMINANTS OF THE INTENSITY OF INFORMATION AND COMMUNICATION NEEDS IN INTERNATIONAL TRADE

The main determinants of the intensity of information and communication needs of products in international trade are:

- The extent of product differentiation
- Quality dimensions in the product and its technical complexity
- Supply accumulation and assortment
- Timeliness in supply at different levels in the supply chain

- Stability of relationships in distribution channels
- Environmental attributes in production and marketing
- Product safety
- Ethical issues in production.

Extent of product differentiation

Substantial variations are found in the range of preferences that consumers have about the mixture of characteristics they look for in a product. The greater the mixture, the more likely it is that communication and information strategies are crucial in meeting consumer demand at the retail level. The demand for information and communication further back along the supply chain is therefore likely to be greater for more highly differentiated products at the retail level.

Quality dimensions in the product

Products of heterogeneous quality are generally more difficult to value than homogeneous products, especially if quality variations are not easily quantified because the quality dimensions of the product cannot be measured at the point of purchase. In these situations, consumers typically make decisions about product quality in an uncertain environment using cues to form expectations about quality (Glitsch 2000). Each consumer is likely to use different quality cues, and attach different weights to each cue to estimate the expected quality. Providing cues to consumers to encourage them to purchase a particular product will require firms to provide detailed information about the product and, probably, considerable attention to communication flows. Branding products is a means of reducing uncertainty about quality, which demands attention to communication along the supply chain about the attributes associated with a particular brand.

Supply accumulation, assortment and sorting

Supply accumulation entails the collection of products from a number of producers to supply a target market. Assortment is the act of combining various products to meet the demands of consumers in the target market. Retailers of a number of products engage in deep assortment strategies, by stocking a wide range of particular types of the product, and broad assortment strategies, by stocking a wide range of related products. Sorting, or bulk-breaking, is the act of decomposing large volumes into smaller volumes as the product moves along the supply chain, also to meet the demands of consumers in the target market.

To facilitate these strategies, numerous agents at many stages in the supply chains are typically engaged in the accumulation of assorted and sorted products from all over the world. Synchronisation of the activities in these chains is a challenge, requiring complex management processes and a high level of collaboration among firms at different stages in the chain. Effective channels of communication among supply chain participants are a high priority.

Timeliness in supply at different levels in the supply chain

Effective channels of communication among supply chain participants are also a high priority to ensure certain products arrive at the retail level in a timely fashion. Both supply and demand effects can influence this timeliness. On the supply side, some products have a short shelf life and/or a long supply chain, making coordination in supply of paramount importance. On the demand side, consumer interest in purchasing a product may be for a limited time.

Timeliness requirements frequently interact with maintaining product quality for perishable products. The need to prevent, or at least minimise, quality deterioration while the product is in transit in the supply chain is especially stringent for fresh produce.

Stability of relationships in distribution channels

Relationships between firms in distribution channels that are constantly in a state of flux render information and communication flows more complex, and more difficult to get right. The demand for effective distribution tactics is greater in these circumstances than when more stable relationships prevail. ICT facilitates the implementation of these distribution tactics. On the contrary, the presence of vertical coordination and integration in the supply chain enables more established lines of communication and information flows that rely less on ICT.

Environmental attributes in production and marketing

Consumers are becoming increasingly concerned about the way in which the products they buy are produced and transported to the retail stores. In particular, they are concerned about environmental effects. An example has been the alarm spread about the adverse environmental impacts of the production of roses in the developing world (e.g. Maharaj and Dorren 1995). This trend has led to a demand for more, and more detailed, information about the environmental attributes attached to a product.

Product safety

ICT has not only facilitated international trade but created new risks in the supply chain associated with product safety (Deloitte 2007). While not a panacea to global supply chain risk, ICT can also help to limit risks to product safety by ensuring the flow of information about product status along the supply chain.

Ethical issues in production

Ethical issues in production are becoming increasingly of concern to consumers in a manner similar to their concerns about environmental attributes. See, for example, the description of labour conditions and the health of workers in the production of cut flowers in Colombia by Maharaj and Dorren (1995) and Meier (1999). This trend has led to a demand for more information about how ethically a commodity is produced and marketed.

ASSESSING WINE PRODUCTS FOR COMMUNICATION AND INFORMATION INTENSITY

Wine products are now assessed according to the above criteria on communication and information intensity. Figure 1 comprises a stylised continuum from products containing low levels of information and communication to those containing high levels of information and communication.²⁵ We rank wine among those products with high levels of ICT intensity, for the following reasons.

²⁵ It is acknowledged that some products identified at the low-intensity end in Figure 1 might have strong ICT demands on occasions. Environmental attributes and ethical issues in production and marketing of energy and mineral products are a case in point.

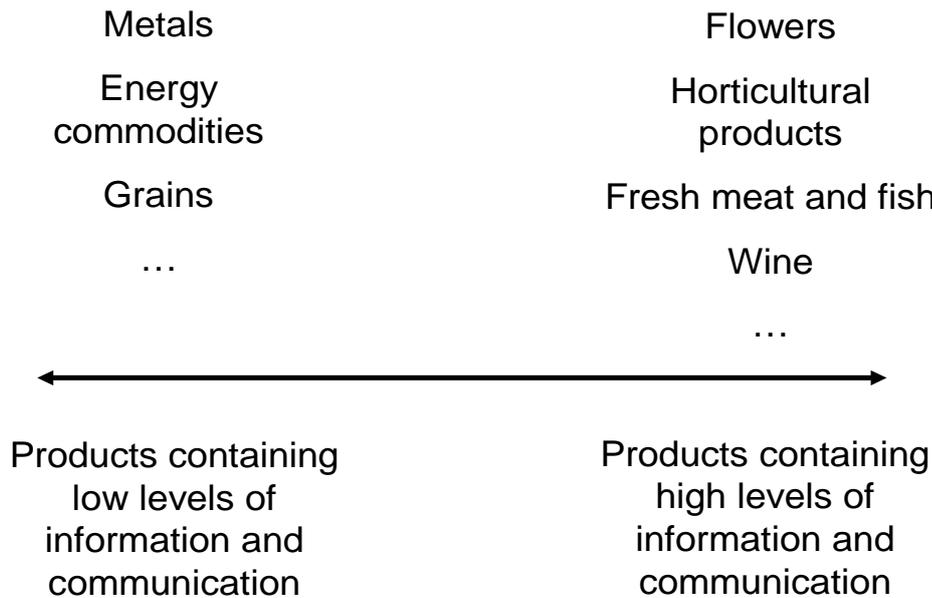


Figure 1 Stylised information and communication intensity.

First, wine products are highly differentiated. Brands typically comprise large numbers of wine types, each with their own specific features that need to be relayed to buyers along the supply chain. This condition places painstaking demands on information flows and effective communication processes within the chain.

Second, wine quality is extremely variable, and beliefs about quality are subjective. This subjectivity leads to specific perspectives among consumers and others in the supply chain about the merits of individual wines. Quality varies not only among particular wines but across seasons for the same wine. ICT is expected to play a major role in informing supply chain participants about wine quality.

Third, effective channels of communication among supply chain participants are crucial for the transfer of wine from producers to retail outlets in importing countries. Assortment is commonplace in the wine trade, with retail outlets engaging in both deep and broad assortment strategies conducted at the retail level that have secondary effects further back in the supply chain.

Graham (2009, p. 66) observed that:

Most modern freight forwarders operate ‘hub and spoke’ networks, where wine is collected by the forwarder from the premises – the spoke – and taken to a central warehouse in the producing region. There the individual consignments of wine will be grouped together to form larger loads and moved again to the central warehouse of the forwarder – the hub’. From here the wine will be despatched to the destination country.

Large consignments are usually broken up in the importing country and delivered to retail premises or wholesalers. Along the chain, Graham (2009, p. 66) points out that a number of important services are added such as ‘applying labels, distributing point of sale material to customers, stock control and warehouse management systems’. Modern track-and-trace methods rely on ICT to facilitate shipments and perform these services.

Fourth, on the surface it would appear that timeliness requirements are not a major issue for wine on the grounds that it is largely a non-perishable product. But Graham (2009, p. 69) reported that quality faults emanating from excessive heat are common. Weiskircher (2008) summarised the results of six studies on the temperature variation inside sea containers and its effects on wine quality. Controlling for quality for wine shipments at sea is an information-intensive task, but it is only a major concern for producers in exporting countries despatching wine on long sea voyages.

Fifth, the degree of stability of relationships in the wine distribution channels can influence the need for exporters to attract customers in importing countries. Stable relationships are less likely to require constant searching by exporting companies for new buyers. As a general rule, relationships among firms at different stages in the supply chain are relatively stable, with a fair degree of vertical coordination and integration at least among the large multinational wine companies that allow them to internalise a good deal of their ICT processes. Many retail chains selling wine now engage in direct marketing.

Sixth, Payne (2007) reported in respect of the environmental attributes of wine that:

Although much has been written about the subject, who is truly interested in carbon footprints? Supermarkets in Britain seem to be pushing the issue to gain a marketing advantage over their competitors. It is far from clear, however, that customers share the retailer’s concerns, but there is no doubt that the ecological good behaviour will ultimately be paid for by the suppliers.

Suppliers will have to convince the large retailers that their ‘green’ credentials are valid, which means they will need to convey credible information to these retailers. But the impact of ICT variables on the ease of providing this information is unlikely to be substantial.

Seventh, product safety is becoming of greater concern in the wine industry. Again, the impact of ICT variables on the ease of providing this information is unlikely to be substantial.

Finally, ethical issues in wine production might force producers to provide documentation on certain aspects of the production processes and, particularly, treatment of employees. As for the two previous sorts of information needs, however, the impact of ICT variables is unlikely to be great.

ICT can be expected to facilitate international trade in wine products chiefly through its effectiveness in enhancing strategies of product differentiation, ensuring product quality and dealing with

technical complexity, supply accumulation and assortment, and timeliness in supply at different levels in the supply chain. The latter three factors are expected to be particularly decisive influences on trade between distant trading partners. Other factors requiring ICT intensity in products are expected to be less crucial to successful international trade in wine. ICT is expected to be more to the fore in the trading activities of pairs of countries more distant from each other.

Products differ in terms of their directional needs for the flow of information and communication. In some instances, a more intensive flow is needed from the consumer back to the producer. In other instances, greater flow is required from producer to consumer. And the intensity of ICT needs differs according to the stage in the supply chain, particularly between the exporting and importing domains. For this reason, separate ICT variables need to be analysed separately for exporting and importing countries.

MODELLING THE IMPACT OF ICT ON INTERNATIONAL TRADE IN WINE

A gravity model of international trade in wine

We estimated a partial-equilibrium model of bilateral trade in wine, based on an unbalanced annual data set for the period from 1995 to 2008. The 21 major exporting and 23 major importing countries were selected on the basis of their share in the total value of the global wine trade. They provided a sample size of 5596 observations that accounted for over three-quarters of exports and imports of wine during the study period.

Several country characteristics in both the exporting country and importing country that vary over time are included as normal continuous variables. They include three ICT variables:

- telephone main lines in use per 100 inhabitants, specified in natural logarithms as $LTELX_{it}$ for exporting countries and $LTELM_{jt}$ for importing countries;
- internet users per 100 inhabitants, specified in natural logarithms as $LNETX_{it}$ for exporting countries and $LNETM_{jt}$ for importing countries; and
- mobile phone subscribers per 100 inhabitants, specified in natural logarithms as $LMOBX_{it}$ for exporting countries and $LMOBM_{jt}$ for importing countries.

The first of these variables is included to represent the traditional forms of telecommunication while the other two variables are included to represent modern digital ICT. All variables represent the likelihood that those involved in international wine trade have access to particular forms of ICT. But they are also used as proxies for the geographical spread of ICT within countries, the availability of applications associated with the technology, and the experience users would have

had, and the skills they would have developed, in applying it. Finally, they are useful proxies for the costs of information and communication tools because there is a high correlation between prices and the extent of penetration of each ICT category.

As we argue above, distance between trading partners is likely to be a factor influencing the usefulness of ICT. For this reason, we include distance dummy variables (*DDIST*) on the telephone and internet variables for trading partners more than 5000 kilometres distance from each other (approximating the mean distance between sampled trading partners).

Other continuous variables considered for inclusion are common to many previous models of bilateral trade flows. The natural logarithms of GDP per capita in importing country *j* in year *t* (*LGDCM_{jt}*) and GDP per capita in exporting country *i* in year *t* (*LGDCX_{it}*) were included to reflect the greater effective demand for wine with higher mean incomes per head in the importing country and exporting country, respectively. A positive sign is expected for the estimated coefficient of *LGDCM_{jt}* and a negative sign for the estimated coefficient of *LGDCX_{it}*. The natural logarithm of the product of populations of trading partners (*LPOP_{ijt}*) was also included to capture the tendency for greater trade to take place between countries with large populations.

We follow Baltagi et al. (2003) who included two main explanatory variables consistent with certain trade theories that feature gross domestic product (GDP) as a component: a similarity index of economic size between the trading partners (*LSIM_{ijt}*); and the absolute difference in relative factor endowments between the trading partners in time *t* (*LRFAC_{ijt}*). Egger (2000, p. 2) defined

$$LSIM_{ijt} \text{ as } \ln \left[1 - \left(\frac{GDP_{it}}{GDP_{it} + GDP_{jt}} \right)^2 - \left(\frac{GDP_{jt}}{GDP_{it} + GDP_{jt}} \right)^2 \right].$$

Countries with similar-sized economies

are expected to trade more with each other, although this relationship is likely to be stronger at the macroeconomic level than for a specific industry such as wine. *LRFAC_{ijt}* is defined by Baltagi et al.

$$(2003, \text{ p. } 393) \text{ as } \left| \ln \left(\frac{GDP_{it}}{capita_{it}} \right) - \ln \left(\frac{GDP_{jt}}{capita_{jt}} \right) \right|$$

where *capita_{it}* is the population in the exporting

partner country and *capita_{jt}* is the population in the importing partner country in year *t*. Those who believe that the ‘new trade theory’ models best depict international trade in products where scale economies prevail along with product differentiation would expect a negative sign on this variable (Baltagi et al. 2003). International trade in wine does indeed lend itself to scale economies, and product differentiation is rife, supporting the relevance of these models. Adherents of the classical Heckscher-Ohlin-Samuelson theory, on the other hand, expect a positive sign: the greater the difference between countries in relative factor endowments, the more likely they are to trade with

each other. While important at the macroeconomic level, the relevance of the Heckscher-Ohlin-Samuelson theory at the individual industry level is likely to be muted.

Wine outputs in exporting and importing countries were included as explanatory variables in natural logarithms ($LPDNX_{it}$ and $LPDNM_{jt}$). Because grapevines are perennial crops, it is assumed there is little opportunity for producers to vary output in the short run. Therefore, wine producers are assumed to have a fixed volume of wine grapes to make into wine for supply to the domestic and export markets in each year.

Second, a sub-set of time-invariant country- and trading partner-specific variables are included: an adjacent country dummy variable (ADJ_{ij}) for trading partners; a variable for the use of a common language between trading countries ($LANG_{ij}$) (Hutchinson 2002); a logged variable for distance between trading partners (discussed below); and a logged logistics performance index that is the product of the individual indices for exporting and importing countries (LPI_{ijt}). The effect on wine trade of mobile phone usage would likely be greater among trading partners with a common language. Interaction variables between mobile phone usage in importing and exporting countries and a dummy variable for common language ($LMOBX_{it}*LANG$ and $LMOBM_{jt}*LANG$) are tested for inclusion in the model. The coefficients of all these variables are expected to have a positive sign.

LPI_{ijt} comprises the seven elements of: efficiency and effectiveness of the clearance process by border control agencies; quality of transport and IT infrastructure for logistics; ease and affordability of arranging international shipments; competence in the local logistics industry; tracking and tracing of shipments; costs of domestic logistics; and timeliness of shipments in reaching their destination (World Bank 2007). This variable may vary over time but, because data are only available for one year of the study period (2007) and probably vary only marginally, the variable is treated as time-invariant for the purpose of this study.

Baltagi et al. (2003) pointed out that many country characteristics cannot be identified with specific data series. They stressed the need to account for interaction effects between pairs of countries in trade flow models, to reflect the heterogeneous relationships between exporting and importing countries not captured by other country-specific variables, and to account for changes in trading relationships over time. We follow their lead by including year effects and trading partner effects in the estimated model to depict various trading partner- and year-specific factors as either fixed or random effects.

We attempt to account for the cost of international shipment of wine by using two proxy variables that are applied to each bilateral trade transaction in each year. First, the importance of distance between two trading partners has been studied for over four decades (Egger 2008). We follow Feenstra (2004) in specifying a distance variable while controlling for the trading partner-specific

fixed effects, mentioned above, to obtain a consistent estimate of the average effect of trade frictions. This variable is used in natural logarithm form ($LDIST_{ij}$). Second, a continuous variable for fuel, also in natural logarithm form ($LFUEL_t$), is included to capture the effects of changes in the real fuel price on freight costs over the study period. A preferred option for transport cost would obviously have been the actual freight cost in shipping wine in real terms, but data on this variable are unavailable.

The model was estimated using *LIMDEP* as a fixed-effects model and a random-effects model (Greene 2002, p. E14-2), based on ordinary least squares procedures. The two-way effects models were estimated for trading partner and year effects. A Hausman test (Greene 2003, pp. 301-303) was conducted to decide between the fixed-effects and random-effects models.

Data on ICT, international trade in wine and control variables

Data on annual international trade values in wine in nominal US dollars were obtained from Comtrade (2009). The HS code 2204 was used to extract the data, which were translated into real values using the US GDP deflator. Data on wine production were obtained from OIV (2005) for the period from 1995 to 2005, and extrapolated for the years 2006-2008 on the basis of trends prior to 2006.

ITU (2008) was the source of data for the ICT variables included in the estimated model. The specific data sources used were telephone main lines in use per 100 inhabitants (ITU/MDG [code 13130]), internet users per 100 inhabitants (ITU estimates/SYB51, [code 29969]) and mobile phone subscribers per 100 inhabitants (ITU estimates [code 13110]).

The World Bank (2008b) database and UNCTAD (2008) were the sources of data on population and GDP. The GDP data in nominal US dollars were converted to real GDP estimates using the US GDP deflator. Mayer and Zignago (2006) provided the information from which we compiled the distance, adjacent country and common language data series. The mean annual Brent crude oil price in real terms was used as a proxy for fuel prices. The indices of logistics performance were obtained from the World Bank (2007).

Results

Results for the preferred estimated model are presented in Table 1. A series of hypothesis tests are reported in Table 2 on the merits of various model estimates computed by *LIMDEP*. Likelihood ratio test results show that a two-way effects model is strongly preferred to a model comprising solely the regressor variables, or either a trading partner effects model or a year effects model. On the merits of the fixed effects and random effects two-way models, the result of the Hausman test

strongly favours a fixed effects model for the trading partner and year effects (see Table 2) and estimates are reported only for this model in Table 1.

Three variables are excluded from Table 1 because their coefficients were reported as fixed parameters in the fixed effects model and hence no estimated coefficients were presented for them in the *LIMDEP* output. They are fuel costs, adjacent countries and language.

The estimates of most coefficients reported in Table 1 are in line with expectations, but there are exceptions that are detailed below.

[Tables 1 and 2 here]

DISCUSSION OF RESULTS

ICT variables

A likelihood ratio test on the ICT variables confirms that, as a group, they have a significant impact on the value of wine trade (see Table 2). The individual results differ between the ICT variables, and between exporting and importing countries.

The penetration of telephone main lines does not appear to have been a significant positive factor influencing wine trade. A likelihood ratio test on the four telephone variables, including dummy variables for distant trading partners, indicates that, as a group, they do not have a significant impact on the value of wine trade flows (see Table 2).

Results for mobile phone usage vary starkly between exporting and importing countries. A 1 per cent increase in usage in importing countries is associated with an increase in the value of trade in wine of 0.231 per cent. The coefficient on this variable is significant at well below the 1 per cent significance level. The coefficient on the interaction variables between the language dummy variable and the mobile phone usage variable in importing countries is also of the expected positive sign, and significant at the 1.5 per cent critical value using a one-tail test.

In contrast to the result for importing countries, a 1 per cent increase in mobile phone usage in exporting countries is associated with a decrease in the value of trade in wine of 0.068 per cent, a highly unexpected result that is difficult to explain. The coefficient of a variable for the interaction between mobile phone usage in exporting countries and the distant trading partners dummy variable is greater than the negative base coefficient (see Table 2) but a test for a positive effect on trade of mobile phone usage among distant trading partners is only accepted at around the 20 per cent significance level using a one-tail test. This result suggests that the unexpected negative sign on this variable is a factor pertaining solely to trading partners that are nearer to each other, while mobile phone usage in exporting countries has no effect on trade values between distant trading partners.

The interaction terms between the mobile phone and language dummy variables provide mixed results. The variable for importing countries was significant at less than the 2 per cent significance level using a one-tail test. But the variable for exporting countries was insignificantly different from zero.

An initial likelihood ratio test on the internet variables indicated that neither the individual internet variables in importing and exporting countries nor the variables as a pair were a significant influence on wine trade values at the usual significance levels (see Tables 1 and 2). But the addition of the variables containing the interaction term between internet usage and distant trading partners yielded positive coefficients on exporting-country and importing-country variables of 0.061 and 0.065, respectively. These coefficients are significant at least at the 4 per cent and 1 per cent significant levels, respectively, using a one-tail test. That is, no effect of internet usage on wine trade appears to be present among nearer trading partners but significant effects are present among more distant trading partners, albeit at quite low magnitudes.

These results support the proposition that recent developments in the internet and mobile telephony have had a significant impact on the pattern of trade in wine. The impact of ICT has been greater for the digital sources of mobile telephone and internet usage than for the traditional communications source of telephone mainlines. But the impact of mobile phone usage has been felt only in importing countries, suggesting that the most crucial needs for this form of digital ICT occur once wine reaches port in the importing country.

Bilateral trade flow variables

Of the variables reflecting bilateral trade flows, the coefficient of $LGDCM_{jt}$ takes the expected positive sign and is strongly significant. A 1 per cent change in GDP per head in the importing country brings about a 1.137 per cent change in the value of trade in wine in the same direction. The global economic downturn commencing in late 2008 would therefore be expected to have a major influence on trade in wine, and current signs are that this influence is already having a marked adverse effect on wine exporters. A 1 per cent change in GDP per head in the exporting country brings about a 0.480 per cent change in the value of trade in wine in the opposite direction as wine is diverted from the international market to meet the growing domestic demand.

The coefficients for the wine production variables are also highly significant and of expected signs. A 1 per cent increase in wine production in exporting countries is associated with a 0.315 per cent increase in the value of wine traded between pairs of countries. A 1 per cent increase in wine production in importing countries is associated with a 0.347 per cent decrease in the value of wine traded.

The population variable has a strongly positive and large coefficient of 2.134, significant at less than the 1 per cent significance level. The positive sign on this variable can be explained by the fact countries with large populations tend to trade more with each other than do smaller countries.

The coefficient of $LSIM_{ijt}$ takes a negative sign, significant at below the 5 per cent significance level using a two-tail test. This result suggests that economies of different sizes trade more with each other in wine than do economies of similar size (after controlling for population size). The distinctive nature of wine trade is the most likely explanation of this result, reflecting the strong backward linkages developed by firms in large importing economies with producers in smaller wine-exporting economies.

Finally, the coefficient on the $LRFAC_{ijt}$ variable is significantly less than zero at the 1 per cent significance level using a two-tail test. This result lends support to the predominant effects of extensive vertical coordination and integration by firms in importing countries into the wine production industries in exporting countries, and the presence of scale economies and product differentiation in the wine industry. Its implication is that differences in factor endowments between countries do not encourage greater global trade in wine.

Freight costs

The distance variable included to capture the effects of freight costs on trade values of wine has the expected negative, and substantial, impact on the value of wine trade. Trade in wine is highly sensitive to the distance between trading countries: a 1 per cent increase in distance is associated with an estimated 9.579 per cent decline in trade values, significant at less than the 1 per cent significance level.

Trading partner-specific variables

As reported above, adjacency and a common language between countries that trade in wine are excluded from Table 1. In the classical OLS models where no one-way or two-way effects are included, these variables have the expected strong positive impacts, with the coefficients on both variables highly significant. But their effects are subsumed in the trading partner effects in the two-way fixed effects model.

Logistics performance

The t -ratio on the coefficient of the logistics performance index is low, indicating no significant impact on the value of bilateral wine trade. The absence of data for more than a single year has obviously diminished the ability to detect the effects of logistics performance on international wine

trade. It is nevertheless thought to be a relevant variable in the estimated model and it would be interesting to assess its impact when a longer data series becomes available.

CONCLUSIONS

We employed a partial-equilibrium gravity model of international wine trade that includes the 21 main exporting countries and 23 main importing countries, and covers the period from 1995 – when the World Wide Web and mobile phone technology were in their infancy – until 2008 when both technologies were available globally. The gravity model explains the value of wine trade between two countries in terms of the level of internet, fixed telephone line and mobile phone diffusion, and of a broad range of factors that might also affect bilateral trade. A two-way (trading partner and year) fixed effects model was found to be appropriate for estimation purposes.

Results from hypothesis tests of ICT effects on international trade in wine provide interesting findings, which vary between exporting and importing countries, and between near and distant trading partners. Mobile phone usage in importing countries is a significant positive factor influencing trade in wine. Internet usage was found to have no effect on wine trade when examined for the sampled trading countries as a whole. But when only distant trading partners were considered, significant impacts were found to exist for internet usage in both exporting and importing countries. The less fashionable fixed telephone usage, on the other hand, proved not to be a significant determinant of wine trade values.

These results provide support for the proposition that recent developments in the internet and mobile telephony have had a significant impact on the pattern of trade in wine. The impact has been greater for these digital ICT sources than for the traditional communications source of telephone mainlines. But the fact that the impact of mobile phone usage has been felt only in importing countries suggests that the most crucial needs for this form of digital ICT occur once wine reaches port in the importing country.

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Table 1: Estimated Model Coefficients for Trade in Wine

Variable	Coefficient	Standard error	t-value
Constant	70.327	14.034	5.011
<i>LGDCX_{it}</i>	-0.480	0.082	-5.851
<i>LGDCM_{jt}</i>	1.137	0.092	12.297
<i>LSIM_{ijt}</i>	-0.226	0.103	-2.201
<i>LPOP_{ijt}</i>	2.134	0.287	7.441
<i>LRFAC_{ijt}</i>	-0.225	0.074	-3.039
<i>LDIST_{ij}</i>	-9.579	1.974	-4.853
<i>LPDNX_{it}</i>	0.315	0.061	5.195
<i>LPDNM_{jt}</i>	-0.347	0.053	-6.595
<i>LPIM_{jt}</i>	0.464	1.127	0.411
<i>LNETX_{it}*DDIST</i>	0.061	0.034	1.814
<i>LNETM_{jt}*DDIST</i>	0.065	0.022	2.925
<i>LMOBX_{it}</i>	-0.068	0.014	-4.956
<i>LMOBX_{it}*DDIST</i>	0.092	0.032	2.900
<i>LMOBM_{jt}</i>	0.231	0.031	7.490
<i>LMOBM_{jt}*LANG</i>	0.110	0.050	2.185
<i>LTELX_{it}</i>	-0.241	0.222	-1.089
<i>LTELM_{jt}</i>	-0.332	0.174	-1.902
<i>LTELX_{it}*DDIST</i>	-0.072	0.322	-0.224
<i>LTELM_{jt}*DDIST</i>	0.121	0.193	0.626

Table 2: Likelihood Ratio Test Statistics for the Classical Model, Random Effects Model and ICT Variables

Model test	$\chi^2_{(5\%)}$	d.f.	Decision
Group effects only versus constant term only	12323.98	463	Reject H_0
x -variables only versus constant term only	4687.48	19	Reject H_0
x -variables and group effects versus constant term only	13796.92	482	Reject H_0
x -variables and group effects versus group effects only	1472.95	19	Reject H_0
x -variables and group effects versus x -variables only	9109.44	463	Reject H_0
x individual and time effects versus group effects only	83.89	13	Reject H_0
x individual and time effects versus x and group effects	9193.33	477	Reject H_0
Excluding all ICT variables	219.65	10	Reject H_0
Excluding all fixed telephone variables	9.20	4	Accept H_0
Excluding distant internet variables	15.72	2	Reject H_0
Random effects model (Hausman test)	348.27	19	Reject H_0

AN INNOVATIVE INDUSTRY FROM REGIONAL QUEENSLAND: OVERCOMING DISADVANTAGES IN DOMESTIC AND INTERNATIONAL MARKETS

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ABSTRACT

The Australian wine industry has achieved both domestic and international market success over the past three decades, most of this success having been achieved by wineries located in South Australia, Victoria, New South Wales and Western Australia. However, over the past decade, the Queensland wine industry has experienced a greater percentage growth than the national average in terms of the number of producers, tonnage crushed and the value of exports, though admittedly from a very low base. The aim of the exploratory research undertaken for this paper was to gain a better understanding of the factors aiding and inhibiting the Queensland wineries in achieving market success. The population for the study included all Queensland wineries (ANZSIC code 2183). The survey instrument was a questionnaire that was targeted at the Marketing Manager of each winery (the key informant). The major part of the study entailed a formal survey followed by quantitative analysis. The findings from the study indicate that the limitations in terms of the small size of the wineries and the lack of reputation of the Queensland industry have been overcome by

niche marketing, rising quality, identifying distinct wine regions (clusters), generating destination branding, and promoting wineries as part of the tourism and service industries, rather than as simply the wine making industry.

AN INNOVATIVE INDUSTRY FROM REGIONAL QUEENSLAND: OVERCOMING DISADVANTAGES IN DOMESTIC AND INTERNATIONAL MARKETS

INTRODUCTION

While many regional industries within Australia have experienced problems in recent years, the wine industry has shown a remarkable dynamism. Even though there was an oversupply of wine internationally for some years, the Australian wine industry succeeded in tapping into overseas markets. While \$17 million worth of wine was exported in 1983-84, within a decade it reached \$370 million, and by 2007 it reached nearly \$2.9 billion (DEFAT, 2008). Most of this success has been achieved by wineries located in South Australia, Victoria, New South Wales and Western Australia. However, over the past decade, the Queensland wine industry has experienced a higher percentage growth than the national average in terms of the number of producers, tonnage crushed and the value of exports. There are now over 100 wineries in Queensland, clustered into six wine tourist regions, or three regions based on geographic indicators (ABS, 2009).

Queensland remains a minor player in the Australian wine industry, constituting 0.1 percent of Australia's wine grape production in 2008 (ABS, 2009). In addition, in recent years, the Australian wine industry has been the victim of its own success, producing a surplus of 1.2 billion litres by 2008, contributing to reduced prices and profitability for many wineries (Palmer, 2008). This has been particularly challenging for Queensland wineries, as they face competition from larger, longer-established wineries and better-known wine regions.

The aim of this paper is to report on exploratory research undertaken to gain a better understanding of the marketing strategies adopted by the Queensland wine industry that have enable it to achieve its significant growth in recent years.. Firstly, it uses data from a survey sample of the wineries, as well as a number of interviews, to provide an overview of the industry, and to show how successful marketing strategies in both the domestic and international markets have been built on firm-specific strengths and management characteristics. In addition it examines the level of success of the industry in the development of wine regions, combined with the use of destination marketing and links to the tourism and service industries, major marketing strategies that have been adopted by the industry.

OVERVIEW OF RELATED LITERATURE

In terms of undertaking a holistic analysis of the degree of success of the Queensland wine industry, two areas of literature relating to the two broad sets of contributory factors mentioned above are considered. First, the literature related to export development as an innovative marketing strategy is reviewed, followed by the literature on regional identification of industry clusters and destination branding. While the former focuses mainly on the international market and the latter on the domestic market, the two areas are not mutually exclusive. For example, a firm's development of its domestic market has been identified as an important stage in its development of export markets. Similarly, while regional identification of industry clusters and destination branding are mainly described as domestic marketing strategies, their attraction of overseas tourists has implications for export marketing strategies.

Export development as an innovative marketing strategy

Exporting has been characterised as an innovative strategy of market expansion, assisting small firms to grow by achieving economies of scale, and enabling them to become more competitive in the wider marketplace (Bamberry, 2009). It is partly in this sense that the Queensland wine industry has been described as innovative in this paper. In an earlier study of the Australian wine industry, it was found that wineries collaborating with distributors to establish strong networks were able to enhance their competitiveness in overseas markets (Wickramasekera and Bamberry 2001, 96), while in a study of the wine industry in New South Wales, an innovative marketing strategy was observed where a group of five small-to-medium sized wineries established a joint venture under the name Penmara Wines to market their wines in national and international markets. This innovation allowed the new enterprise to achieve economies of scale by producing outputs well beyond the capacity of the individual wineries, and to achieve scale economies in marketing (Argyrous and Bamberry 2009; Penmara Wines website).

Despite the importance of exporting for the growth of the Australian wine industries, previous studies have shown that the importance of first developing the domestic market should not be underestimated as a significant stage in the broad process of growth through market expansion and improved competitiveness. In particular, a study of the wine industry in two major wine-producing regions in New South Wales has drawn attention to the significance of the regional stage in the

market development process, enabling wineries to progress incrementally into national and international markets (Argyrous and Bamberry 2009, 74).

For example, Westend Estate Wines, established on the outskirts of Griffith in 1945 by immigrants from Italy, and taken over in 1974 by the founders' son, built on its sixty-year history, moving over time from sales at the door of the winery, expanding into regional, national and export markets. (Westend Estate Wines, webpage). Similarly, DeBortoli Wines expanded its original cellar-door outlet by purchasing existing wineries in tourism-oriented regions including the Hunter, King and Yarra Valleys, and establishing other attractions such as function centres and restaurants at the newly-purchased wineries (see DeBortoli Wines webpage for photographs).

Other studies have reviewed the 'born global' concept where it was suggested that there is an increasing trend for firms to enter export markets within the first few years of their establishment. While it was found that it is possible for some forms to internationalise early in their development, this generally occurs in special circumstances, usually related to firm-specific and management attributes, and that a staged and incremental approach to internationalisation is more common (Argyrous , 1993, 2000; Rennie, 1998; Wickramasekera and Bamberry 2003b).

Several studies have identified that export development is more likely to be an innovation in a firm possessing certain "firm-specific" attributes that give it a competitive advantage than in one lacking them (see Aaby and Slater, 1989). Some writers have questioned whether firms initiate exports because of the confidence they have in their competitive advantage, while Philp (1998) looked at whether the firm had technological, marketing, financial or price advantages in entering export markets. An example of this is the case of DeBortoli Wines at Griffith in New South Wales. The firm initially decided to expand into international markets some years ago by selling wine in bulk to exporters who sold it under their own labels. Recognising the disadvantage of not establishing its own brand name, the firm, having confidence in its competitive advantage, and prepared to take a greater risk, withdrew from this arrangement and later entered the export market under its own name (Argyrous and Bamberry, 2009).

Lindgreen (2001) identified the importance of networks within the New Zealand wine industry in aiding exports. Similar findings have been made in the Australian wine industry (Wickramasekera and Bamberry, 2001). Other studies found that non-exporters perceive a greater number of barriers

to exporting than exporters (Bilkey and Tesar, 1977). However, as is the case with much of the internationalisation studies, the results tend to be contradictory in nature.

Other studies have identified the importance of managerial attitudes and characteristics in developing innovative strategies to develop international markets for a firm's products (Smith and Zeithaml, 1999; Calof and Viviers, 1995; Calof and Beamish, 1994). Senior management with a "foreign market orientation" (Cavusgil and Nevin, 1981) has been considered an important factor in explaining the export growth of firms. Other important managerial attributes identified are managerial perceptions of profit and costs (Simpson and Kujawa, 1974) and knowledge in export matters (Cavusgil and Zou, 1994). Simmonds and Smith (1968), used "international outlook" versus "national outlook" to classify managers while Roux (1987) considered this difference to be based on perceptions of risk; domestically-oriented managers being found to be more risk averse than internationally-oriented managers.

A good example of the importance of management attitudes in the development of international markets can be seen in the rapid growth of Casella Wines. Established by Italian immigrants who bought a farm near Griffith in 1965 and who established a winery in 1969, the firm, is now managed by the second and third generations of the family. After operating on a relatively small scale for many years, the second generation family management decided to make a concerted effort to expand into the export market, particularly in the United States, by producing its Yellowtail brand especially for that market, and by introducing it there before selling it in the domestic market (Argyrous and Bamberry, 2009). Its major success in the US market led to export sales worldwide, growing from 500,000 cases in 2001 to almost 11 million cases (132 million bottles) in 2006/7, with 8.5 million cases being exported to the United States in 2008 (Casella Wines, webpage; Daily Advertiser, 29 May, 2009).

One aspect of export marketing strategy where there appears to be greater consensus is the argument that exporting begins with "psychologically close" countries and extends to "psychologically distant" countries as the firm gains international experience. This was identified by researchers from the Uppsala School in Sweden (Johanson and Vahlne, 1977 and 1990), and has been confirmed in later studies such as those of Erramilli (1991) who identified market similarity between the home market and the international market as the major determinant of international market selection. Australian studies have shown that common language and cultural ties have been

significant in determining strategies for initial destinations of exports (Wickramasekera and Bamberry, 2001).

Regional identification of industry clusters as a marketing strategy

The second, though related area of literature covered by this review, is the combined use of regional identification of industry clusters, destination branding and linking the wine industry with tourism as a marketing strategy. While the main focus of this strategy is the domestic market, the links with overseas tourism also make it relevant for the export market.

Regional identification and its associated destination marketing have long been recognised as major marketing strategies. However, much more has been done in recent years to refine this approach to marketing, and synergies have been sought by linking industries and activities that complement one another to some degree. Identifying the precise boundaries of a region can be problematic, particularly when attempts are made to simultaneously delineate regions for more than one purpose. A broad definition of region that emphasises its origin as a “human construct” and its potential to be used with a wide variation of meanings is one where it is seen as:

...a concept that is used to identify and organise areas of Earth’s surface for various purposes. A region has certain characteristics that give it a measure of cohesiveness and distinctiveness and that set it apart from other regions. As a result, regions are human constructs, whose boundaries and characteristics are derived from sets of specific criteria (The Geographic Educational Standards Project 1994, 70-71, in Stoddard 1997, 167).

Two sets of criteria have been used for identifying and delineating regions: uniform criteria and functional criteria. Uniform regions are generally delineated on the basis of limited criteria such as the production of a particular crop, generally making it possible to map the regional boundaries clearly. On the other hand, functional regions are generally defined in terms of a combination of criteria including physical land-forms, crops, specific land use categories, road networks, and the hinterlands of major towns. They are described as having a community of interest, where the inhabitants identify themselves as living within a common region, often given a specific name (Stilwell 1992, 45).

It has been suggested that sectors such as the wine and tourism industries have the potential to develop networks where they are located in geographic proximity, particularly through the sharing

of a common set of customers (e.g. tourists and visitors), common logistics (e.g. transport routes, coach tours), common inputs and supplies (e.g. food and beverages) and common marketing programs (e.g. destination and tourism marketing). This sense of geographic proximity has been referred to as the development of industry clusters.

Of particular significance in the debate on industry clusters has been the work of Michael Porter (1998, 13) who has defined clusters as "geographic concentrations of interconnected companies and institutions, an array of linked industries and other entities, suppliers of specialised inputs, providers of specialised infrastructure." Swann et al. (1998, 3) also place strong emphasis on location in their definition of clusters, emphasising the existence of strong local demand, a pool of suitably-qualified labour, and networks of firms with complementary strengths. While clusters can foster collaborative relationships among firms in many areas, competition between the firms can still exist (Beer et al. 2003, 136).

Epps (1999, 3) in his reporting of the views of a number of overseas writers, argues that clusters generally develop where:

“a relatively densely packed community of organisations with shared interests will foster more rapid diffusion of innovations” (Harrison et al 1996, 235)

“agglomeration economies are linked to strategic inputs required by innovative firms” (Garfoli 1994, 387)

“the process of concentration of economic activity in a region further encourages new firm births to some degree” (Audretsch and Fritsch 1994, 363).

Lowe and Miller (2001, 185) have observed that economic clusters can develop in a number of ways including the following:

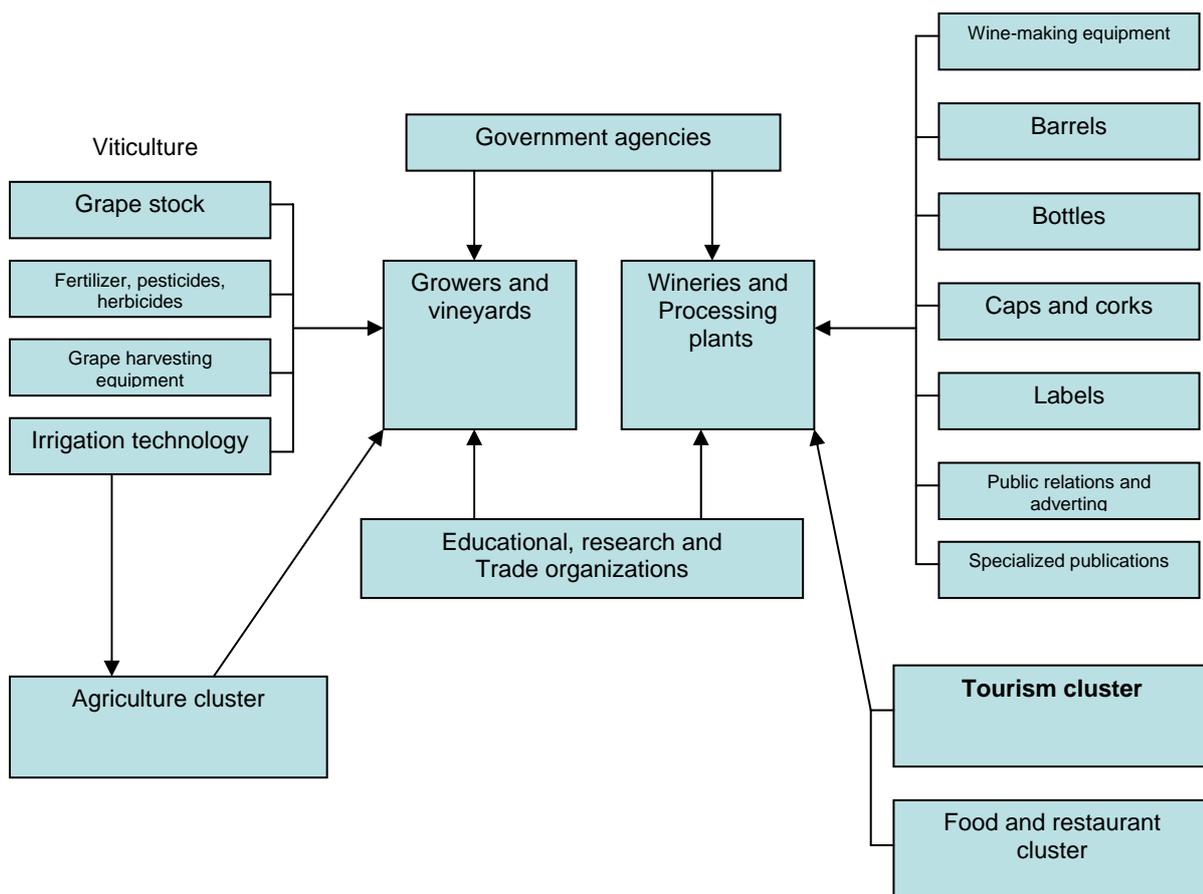
the development of a cluster often starts with an initial natural advantage or chance use of a location, leading to collaboration among several firms.

firms which attract common suppliers, or prove to be a magnet for customers to one location, attract firms that offer similar products.

firms within a cluster develop relationships which depend on close proximity and trust, facilitating transactions, and improving productivity and innovation.

research and training facilities associated with universities and TAFE institutes enhance the inventiveness and productivity of existing firms.

In Australia, as in other countries several industry clusters can be identified. James and Thomson (2003) identified diversified clusters such as Australian tropical foods, mineral processing, and defence to name a few. Other researchers have argued that formal as well as informal clusters can benefit from marketing and branding, including geographic clusters of firms within a particular industry such as the wine industry (Merrilees, Miller and Herrington, 2007). There is evidence from Australian and New Zealand regions to suggest that a partnership between the wine and tourism industries can be mutually beneficial. According to the Deputy Chief Executive of the New Zealand Tourism Board, Chrys Ryan, “wine tourism is helping rural regions like Marlborough and Wairarapa establish distinct identities, which are attracting visitors, both international and domestic...” (Manawatu Standard, 2007). Porter (1998) highlighted the California wine-industry as a good example of a successful wine cluster. This is illustrated in Figure 1.



Source: Porter (1998, p.78)

Many of the above characteristics can be identified in the major wine growing regions of Australia, such as the Barossa Valley in South Australia, North Eastern Victoria and the Hunter Valley in New South Wales. Researchers such as Morgan, Pritchard and Pride (2004) argue that “places currently offer the greatest untapped branding opportunities,” while Kotler, Haider and Rein (1993) believe that “a marketing approach to place development is the overriding response needed to compete effectively.”

METHODOLOGY

The research reported in this paper investigated two areas. Firstly, a quantitative study, based on the administration of a questionnaire, was used to investigate export marketing strategies used by wineries, particularly the ways in which they took advantage of both firm-specific strengths and management characteristics and strengths, as well as the ways in which they dealt with factors inhibiting export development. Secondly, qualitative research involving interviews of a small sample wine industry leaders, government policymakers in the wine and tourism industries and winery managers was undertaken to investigate the marketing strategies adopted by the Queensland wine industry involving the creation of wine regions based on industry clusters, and undertaking destination branding through linkages with the more established tourism industry.

For the quantitative section of the research, the population included all Queensland wineries (N= 101), within the Australian and New Zealand Standard Industrial Classification (ANZSIC) code 2183. The survey questionnaire incorporated five-point Likert-type questions developed from the literature. The questionnaire was pre-tested, and after some modifications, was administered by post. The questionnaires were directed to the Marketing Manager of each winery (the key informant), either to fill out personally or to be directed to the person regarded as being responsible for the firm's decision whether or not to export. In total, a response rate of nearly 50 percent was achieved after a follow-up to the first mail out. Extrapolation method as suggested by Anderson was used to check for sample bias, and following this, together with comparisons with published data, it was found that the sample was reasonably representative of the population.

For the qualitative section of the research, a number of semi-structured targeted interviews with industry leaders, government policymakers and managers of a sample of wineries in selected wine regions were undertaken, together with document analysis of published data on issues related to the

development of the Queensland wine industry. Industry leaders interviewed included the President of the Wine Makers Federation of Queensland, while policymakers included senior personnel from Tourism Queensland. The main wine regions selected for the study included the Granite Belt and South Burnett Wine Regions, while other wineries were grouped as “other Queensland.” These regions were chosen because they represented the limited level of wine region delineation at the time.

Within these regions, a sample of five winery owners and /or managers was selected for interview on the basis of representativeness within the regions. The interviews were recorded on tape or videotape, and transcribed for analysis. The document analysis of published data included material such as the Queensland Wine Industry Development Strategy, the South Queensland Country Guide, and an extensive array of online information from both government and non-government sources.

FINDINGS AND DISCUSSION

The findings and discussion are divided into the two sections outlined above in the methodology. Firstly, the findings on the export marketing strategies used by wineries based on their firm-specific strengths, their management characteristics, and the ways in which they deal with factors inhibiting export development are outlined and discussed. This is followed by a discussion of the findings on the marketing strategies involving the creation of wine regions based on industry clusters and destination branding through linkages with the tourism industry.

Findings on export marketing strategies

Before analysing the findings on the marketing strategies based on firm-specific strengths and management characteristics, some of the background information obtained from the survey is outlined to provide a broad overview of the nature of the Queensland wine industry. Firstly, the survey showed that most of the wineries had been in the industry for a relatively short time even though the Queensland wine industry has a history dating back to the 1800s. Almost 28 percent had commenced operations within the past five years, over 80 percent had operated for 10 years or less (52 percent from 5 to 10 years) and, 90 percent have been in operation for less than 20 years.

Secondly, the survey showed that the Queensland wine industry consists of a very small number of medium sized wineries (3 percent), employing around 50 employees, and a large number of small wineries, (97 percent) employing fewer than 10 employees, (78 percent employ 5 or less). The medium sized wineries dominate the industry in terms of the value of exports. Queensland does not have large wineries.

As outlined in the review of the literature, developments in the domestic market were found to be an important stage in export market development. While approximately 21 percent of the wineries limited their market to their local region, twenty six percent had expanded their sales to their home state. A further 24 percent were targeting both Queensland and adjoining states, while twenty nine percent had extended sales throughout Australia. These results also indicate the strength of Queensland wineries in their well-established cellar door sales, a result of their successful integration into the tourism industry. This characteristic of the industry will be discussed in more detail in a later section of the paper.

It was also evident that the wineries that had expanded to a wider range of Australian markets were more likely to have developed international markets. More than 24 per cent of the respondents had an Internet site that was initially used for marketing their winery in the domestic market. In addition, 55 per cent used the Internet to undertake sales, potentially opening up opportunities for international sales.

Unlike what has been documented elsewhere, where the first market that most Australian wineries enter is the United Kingdom, or alternatively, New Zealand or countries in Europe and North America (Wickramasekera and Bamerry, 2003a), the findings in this survey showed that none of the respondents took this approach. The first markets included Iceland, Singapore and Japan. The countries listed in the earlier studies were considered to be “psychologically” close rather than geographically close, as in the case of Asian countries, for the Australian wine industry. However, in the case of Iceland, the choice was psychologically close as the wife of the manager had come from that country. However, follow-up interviews confirmed that the wineries were targeting markets that were familiar to the management team. Possibly, in the intervening period since the earlier studies, Asian countries are increasingly being seen as both geographically and psychologically close to Australia.

The most recently entered overseas markets listed by the survey respondents were the United Kingdom and United States. Other recently entered markets included Asian countries such as China, Singapore and Malaysia, though European countries such as Germany and Sweden were also prominent. While the expansion of the Queensland wineries into international markets appears to be at variance with previous findings on Australian wineries, follow up interviews confirmed that the first international market was to a country that was familiar to the winery manager (Erramilli, 1991).

In terms of the number of markets entered in the early stages of internationalisation, the strategy adopted by Queensland wineries in the survey appeared to be one of concentrating on fewer markets than was the case in the earlier Australia-wide study. The number of markets entered in the Queensland survey ranged from 1 to 9, the average being 4, while the number of markets entered in the earlier study ranged from 1 to 48, the average being 7 (Wickramasekera and Bamberry, 2003).

The results of the survey also indicate that as a result of their export strategies, Queensland wineries on average, derived 22 percent of their revenue from international markets, compared to a national average of approximately 49 percent (ABS, 2009). Given the smaller size of the Queensland wineries, this is not an unexpected finding, as most small wineries focus on meeting the demand from domestic customers before seeking additional sales overseas. However, the findings showed that the wineries had adopted some innovative strategies for servicing international customers. Some of the wineries were dealing directly with their overseas customers as indicated in the following comments.

“We forward to individual overseas customers in Singapore, Japan etc. cases of wine by airfreight. We don’t export in containers, but one day hope to.”

Other wineries were innovative in targeting niche international markets as shown in the comment:

“There are a lot of niche markets out there that the bigger companies as well as the French and the Italians tend to bypass. I’ll give you a little example; in Japan we are doing a lot of work with the duty free shops. We have a company setup in Japan; they can order when they are overseas or when they are going through the duty free shops, they can order and we deliver ex-Japan.”

The survey and interviews indicated that some form of planning was usually undertaken as part of the exporting strategy adopted by the wineries. One respondent commented that “to export successfully you need good strategic planning, then resource the plan.” One of the key planning activities mentioned was the selection of an overseas distributor.

Respondents were requested to indicate what they considered to be the benefits of exporting as a marketing strategy. Table 1 summarizes the findings. The most important benefits identified were the ability to diversify markets, and to exploit economies of scale. However, respondents stressed the need for wineries not to see international markets as a means of “off-loading excess booze”. They argued that there must be a long-term commitment to the international markets to be successful. While there was general agreement on the benefits of exporting, there was a significant difference of views between the exporters and non-exporters in terms of the benefits of exporting in diversifying markets and adding to overall profitability. The main difference was that wineries oriented to the domestic market saw cellar door sales (see Table 2) as a means of gaining a premium price for their wine, one considerably higher than they could expect to obtain in the export market. On the other hand, the larger wineries saw that they needed to expand their exports in order to sell their increasing output.

TABLE 1: BENEFITS OF EXPORTING

Q6 <i>Exports (would) allow a firm to:</i>	Non-exporters (n = 46)	Exporters (n = 6)	Total Mean (n = 52)	<i>t</i>	<i>df</i>	<i>p</i>
a. Diversify its markets	4.09 (0.87)	4.83 (0.41)	4.18 (0.87)	-2.04	49	.047
b. Utilise excess production capacity	3.89 (0.92)	3.33 (1.86)	3.83 (1.06)	0.72	5.33	.50
c. Reduce the impact of a domestic economic downturn	3.85 (0.97)	3.50 (1.64)	3.81 (1.05)	0.51	5.46	.63
d. Overcome a limited home market	3.74 (1.04)	3.33 (1.86)	3.69 (1.15)	0.52	5.42	.62
g. Exploit economies of scale	3.59 (1.11)	3.83 (1.47)	3.62 (1.14)	-0.49	50	.62
e. Add to its overall profitability	3.43 (1.05)	4.33 (0.82)	3.54 (1.06)	-2.02	50	.049
f. Gain a prestigious image	3.22 (1.01)	3.67 (1.51)	3.27 (1.07)	-0.97	50	.34

The survey respondents were requested to indicate the importance of eleven “firm-specific” factors that enhanced their competitiveness in the market place. These factors included: the product price; perceived high quality of the wines; uniqueness of the wines; quality packaging; marketing skills; good labour relations; reliable suppliers of raw materials; innovative production skills; well established network of distributors; well established cellar door sales; and the extensive range of wines produced. In Table 2, firm specific factors enhancing competitiveness are listed in the order of importance based on the cumulative frequency of “agree” or “strongly agree” responses to the questions.

TABLE 2: FIRM- SPECIFIC FACTORS ENHANCING COMPETITIVENESS

Q5 <i>Our product’s competitiveness in the marketplace is enhanced by:</i>	Non-exporters (n = 46)	Exporters (n = 6)	Total Mean (n = 52)	<i>t</i>	<i>df</i>	<i>p</i>
c. The uniqueness of our wines	4.30 (0.92)	3.83 (1.47)	4.25 (0.99)	1.10	50	.28
b. The perceived high quality of our wines	4.24 (1.04)	4.00 (1.55)	4.21 (1.09)	0.50	50	.62
j. Our well established cellar door sales	4.02 (0.99)	2.83 (1.47)	3.88 (1.11)	2.61	49	.012
d. Quality packaging	3.78 (1.01)	3.67 (1.75)	3.77 (1.10)	0.16	5.44	.88
e. Our well developed marketing skills	3.53 (1.08)	4.17(0.75)	3.61 (1.06)	-1.39	49	.17
a. The product’s price	3.49 (1.29)	4.00 (0.89)	3.55 (1.25)	-0.94	49	.35
h. Our innovative production skills	3.39 (1.13)	3.50 (1.05)	3.40 (1.11)	-0.22	50	.82
k. The extensive range of wines we produce	3.39 (1.13)	3.33 (1.03)	3.38 (1.110)	0.12	50	.91
f. Our firm’s good labour relations	3.28 (1.21)	3.50 (0.55)	3.31 (1.15)	-0.43	50	.67
g. Our reliable suppliers of raw materials	3.13 (1.05)	2.17 (1.17)	3.02 (1.09)	2.10	50	.041
i. Our well established network of distributors	2.31 (1.13)	3.50 (1.38)	2.45 (1.21)	-2.37	49	.022

Two of the firm-specific factors important for marketing strategy in enhancing competitiveness appear to be the quality and extensive range of wines produced, a finding that is consistent with other Australian studies. A comment by a respondent highlights the importance of quality.

“The Queensland wine industry has a few (wineries) pursuing technical excellence and complying fully with State and Federal regulations. Poor quality (wine) is difficult to export.”

Other factors believed to enhance a firm's competitiveness that emerged from the survey included innovative production skills, quality packaging, and the firm's good labour relations. Factors considered somewhat less important included the price of the wine and its uniqueness. As mentioned earlier, many of the smaller wineries were unable to achieve the economies of scale that would allow them to compete on price, particularly in the export market. The reliability of suppliers of raw materials was probably rated of low significance, not because suppliers were unreliable, but because most of the wineries in the survey grew their own supply of grapes, and therefore this was not considered a significant factor in enhancing their competitiveness.

Factors considered of relatively low importance in providing competitive advantage included the firm's marketing skills, the reliability of suppliers of raw materials, and the network of distributors available to the firm. The relative lack of confidence in their marketing skills, like price, is believed to stem from the economies of scale problem faced by small wineries, where many firms felt they could not afford to employ highly-paid marketing specialists, and included this function with other management roles.

Although a majority of the survey respondents indicated that they did not have a good network of distributors, one of the more successful exporters recognised the importance of this in the comment "the number one thing is to get the distributor right." A similar argument was made by Lindgreen (2001), indicating that Queensland wineries interested in expanding export markets will need to give more attention to developing a network of distributors.

The survey also contained a set of questions designed to investigate export marketing strategies based on ways in which the wineries dealt with factors inhibiting export development. The responses to these questions are listed in Table 3. The majority of firms identified the need to set low prices to gain volume sales in exports markets as the major barrier to internationalisation. This is possibly a reflection of the relatively small size of the wineries in Queensland in comparison with other Australian and international industry participants, and their inability to remain profitable without the premium price obtained in cellar door sales. This is reflected by the significant difference between the exporters (relatively larger wineries) and non-exporters (smaller wineries) based on the importance of cellar door sales (see Table 2).

TABLE 3: FACTORS INHIBITING EXPORT ACTIVITY

Q7 <i>Our firm's export activity is or could be inhibited by:</i>	Non-exporters (n = 46)	Exporters (n = 6)	Total Mean (n = 52)	<i>t</i>	<i>df</i>	<i>p</i>
f. Extremely low prices required to gain volume sales	4.39 (0.86)	3.20 (1.64)	4.27 (1.00)	1.60	4.24	.18
k. Problems in selecting a reliable foreign distributor	4.13 (0.89)	4.00 (0.89)	4.12 (0.89)	0.34	49	.73
i. Unfamiliar foreign business practices	3.87 (0.92)	3.67 (0.52)	3.84 (0.88)	0.52	49	.61
d. The lack of financial resources	3.84 (1.21)	3.67 (1.03)	3.82 (1.18)	0.34	49	.73
c. The limited quantities of stocks for market expansion	3.91 (1.16)	3.00 (1.67)	3.80 (1.25)	1.71	49	.09
g. Extensive legal and regulatory barriers	3.83 (0.93)	3.50 (1.38)	3.79 (0.98)	0.77	50	.45
j. Difficulties collecting payments from foreign markets	3.87 (1.00)	3.00 (1.41)	3.77 (1.08)	1.91	50	.06
b. Management's lack of knowledge and experience	3.58 (1.27)	2.83 (1.47)	3.49 (1.30)	1.33	49	.19
a. Low priority afforded to export market developments	3.53 (1.12)	3.00 (1.90)	3.47 (1.22)	0.67	5.47	.53
h. Exchange rate variability	3.42 (0.92)	3.33 (1.37)	3.41 (0.96)	0.21	49	.83
e. Limited government support to encourage exports	3.04 (1.17)	3.50 (0.84)	3.10 (1.14)	-0.92	50	.36

In relation to the question on “difficulties collecting payments from foreign markets,” there was a significant difference in the perceptions of exporters and non-exporters, with a greater number of non-exporters perceiving this to be an inhibiting factor compared to exporters.

On the question relating to limited government support in adopting exporting as a marketing strategy, less than a quarter of the wineries saw this as an inhibiting factor. Of the thirteen inhibiting factors listed in the questionnaire, this was identified as the least important, a result that is in contrast to findings in other states.

The literature reviewed earlier in this paper showed that the characteristics of a firm's main decision-maker influence the internationalisation strategies of the firm. In this study, information was collected on managerial attributes as outlined in Table 4.

Table 4: Managerial characteristics

	% ⁺
Completed tertiary education	82%
Worked overseas	55%
Received training in export matters	39%
Previously worked for a company that exported	35%
Fluency in foreign language(s)	18%

The above results are rounded to a whole %

+ = Average for the sample.

It was found that the respondents to the survey were highly educated managers, with almost 82 percent having tertiary education qualifications. Firms that were international market oriented (currently exporting or contemplating exports) had managers that were much more skilled in export matters. This is an important finding, as it indicates that export promotion agencies can help develop commitment to exporting by providing appropriate training and information on export matters.

Findings on marketing strategies based on wine regions linked to tourism

Document analysis indicated that in 2004 the Queensland Department of Tourism, Fair Trading and Wine Industry Development reviewed the state's wine industry and formulated a comprehensive strategy for its development. Major areas covered in the report included:

- Current and projected developments in viticulture
- Projected outputs in wine production
- The need for strategic partnerships with other industries
- The identification of the tourism and service industries as potential partners
- The need to identify distinct wine regions (clusters)

- The need to develop regional branding and marketing of the wine industry in partnership with the tourism and service industries

(Queensland Government, 2004).

The Strategy noted that the wine regions within Queensland were ill defined, with only two officially recognised regions based on geographic indicators, the Granite Belt and South Burnett and a third region that encompassed the rest of Queensland. A further six potential wine regions were identified by Tourism Queensland, including:

- Darling Downs
- Gold coast and Hinterland, Scenic Rim and Brisbane
- North Burnett
- Sunshine Coast and Hinterland
- Somerset Valleys and
- Western Downs.

In order to develop these regions, the Wine Industry Development Strategy (2004) suggested the following actions be undertaken:

- Appointing a minister for wine development (discontinued in late 2007)
- Scoping and costing winery road signage
- Building on existing tourism marketing programs such as the Great South East (a State wide TV program)
- Linking wine tourism experiences into destination management plans
- Developing event guides to include wine related concerts, fairs and related activities.
- Encouraging regional hospitality and tourism facilities to stock Queensland wine from their respective regions

Interviews with winery owners and/or managers showed that most of the wineries had made substantial progress in integrating their cellar door sales into the tourism industry. As one owner pointed out, “*most of our market is tourism.*” This level of integration has been shown to be higher in Queensland than in Australia as a whole, with 90 per cent of Queensland wineries having cellar door sales, while the national average is 73 per cent (Tourism Australia, 2007). This is an important

area that Tourism Queensland has effectively promoted in publications such as the South East Queensland Country Touring Guides. The first pages within the guides are dedicated to providing an attractive pictorial summary of the wine regions. A comprehensive coverage of the regions is provided in subsequent pages, including information on associated and supporting industries within the region and their attributes.

For example, the Granite Belt Touring Guide includes information on the Queensland College of Wine Tourism, details of restaurants using locally grown produce, as well as information on lavender farms and the region's art galleries.

By linking themselves with the tourism industry, some wineries have tapped into the well established international tourism markets within Queensland, and have developed innovative ways of servicing international customers. Examples of these approaches are summed up the following comments from interviewees.

While they do not buy a lot at cellar door because they have to carry, we can tell them "buy a bottle, buy a case and we will deliver it to your door."

We forward to individual overseas customers in Singapore, Japan etc. cases of wine by airfreight. We don't export in containers, but one day hope to."

In Japan, we are doing a lot of work with the duty free shops. We have an arrangement where they can order when they are going through the duty free shops or when they return home, and we deliver their purchases in Japan.

Some interviewees indicated that government support was encouraging their firms to become involved in exporting. For example, one interviewee indicated that exporting to the US came about in the following way.

There is a sister state relationship between Queensland and South Carolina and Premier Beattie only served Queensland wines at official functions. He happened to serve the Governor of South Carolina about six years ago, or probably longer, a bottle of one of our reds, and he was so thrilled with it that he wanted it in South Carolina. He wanted to know who was distributing it there.

CONCLUSION

Overall, the Queensland wine industry, guided by the Queensland Wine Industry Development Strategy, appears to be developing strategies that are assisting market growth. The rapid expansion of the industry at a time when it is facing stringent competition from the established wine regions in other states is a testimony to this. While external factors are important in assisting the expansion of the industry, drawing upon firm-specific strengths, including management strengths are equally important in the growth and success of individual firms.

The wineries have achieved success based on a quality product, marketed in a planned manner, focusing on niche markets and innovative entry modes, and capitalizing on the strength of well-established cellar door sales, often successfully integrated with the tourism industry. The main limiting factor to export expansion appears to be the low prices that need to be set to gain volume sales in export markets. However, there is the potential to overcome this as wineries grow in size, or by focusing on niche markets at the national and international level.

There is evidence suggesting that government support is assisting the development of wine-tourism regions (clusters) through the integration of the wine industry with the tourism industry, together with effective destination marketing. This approach taken by the Queensland wine industry has implications for other wine regions and industries. Where an emerging industry cluster is co-located with a more established cluster, the emerging cluster can leverage off the more developed one. In addition, where the firms within an emerging cluster are relatively small, and do not possess sufficient resources for marketing and promotional activities, they can gain economies of scale by promoting the destination rather than the individual players within the region.

The findings suggest that for sustained development of the industry, a strong partnership with tourism needs to be maintained and developed, creating clearly-defined wine regions that become well-known to the public, both in terms of general sales and tourism destinations. To achieve this, the wine clusters within these regions need to form strong linkages and work co-operatively.

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THE RECOGNISED SEASONAL EMPLOYER SCHEME AND GRAPE GROWING IN NEW ZEALAND

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ABSTRACT

Huge growth in New Zealand's horticultural industries post 1975 and the United Kingdom entry to the European Economic Community was built on a culture of quality assurance for customers. That has continued to permit New Zealand produce access to world supermarkets and liquor stores. That growth took place in spite of recurrent seasonal labour shortages and crises in the period 2000-2007. The provision of seasonal labour was always haphazard and was dependent largely on an increasingly unreliable and transient workforce. Major crop losses in 2005-2006 brought together government ministers and key industry representatives to develop a national strategy for all parts of horticulture and viticulture to prevent seasonal labour and employment issues derailing the spectacular economic growth which the horticultural industries, including grape and wine production, had achieved.

The Horticulture/Viticulture Seasonal Labour Strategy "Supporting Industries with Seasonal Labour Demands to Achieve Sustainable Growth" led to the development of the Recognised Seasonal Employer Scheme (RSE), through which 'approved' employers could bring in Pacific Island immigrants for a limited season to help with pruning, maintenance, picking and packing horticultural and viticultural work. Just prior to the development of RSE the New Zealand Government had been made aware of the need of Pacific Islands, with rapidly growing populations, for access to the labour markets of the two more developed countries of the Pacific, Australia and New Zealand, by Pacific leaders and the UN and the World Bank. These small, job poor but potentially employee rich, countries had a resource wanted by their rich, employee poor, but seasonally job rich, neighbours.

After initial teething troubles, the scheme appears to be working well, with RSE workers replacing other more transient and undependable foreign workers on different immigration schemes. A win/win/win outcome appears to have been obtained for horticulture and viticulture, with pruning for wine grapes having been satisfactorily completed in 2008 and 2009, work and income opportunities being created for Pacific Islanders, with substantial remittances to contribute to their economies, families and communities.

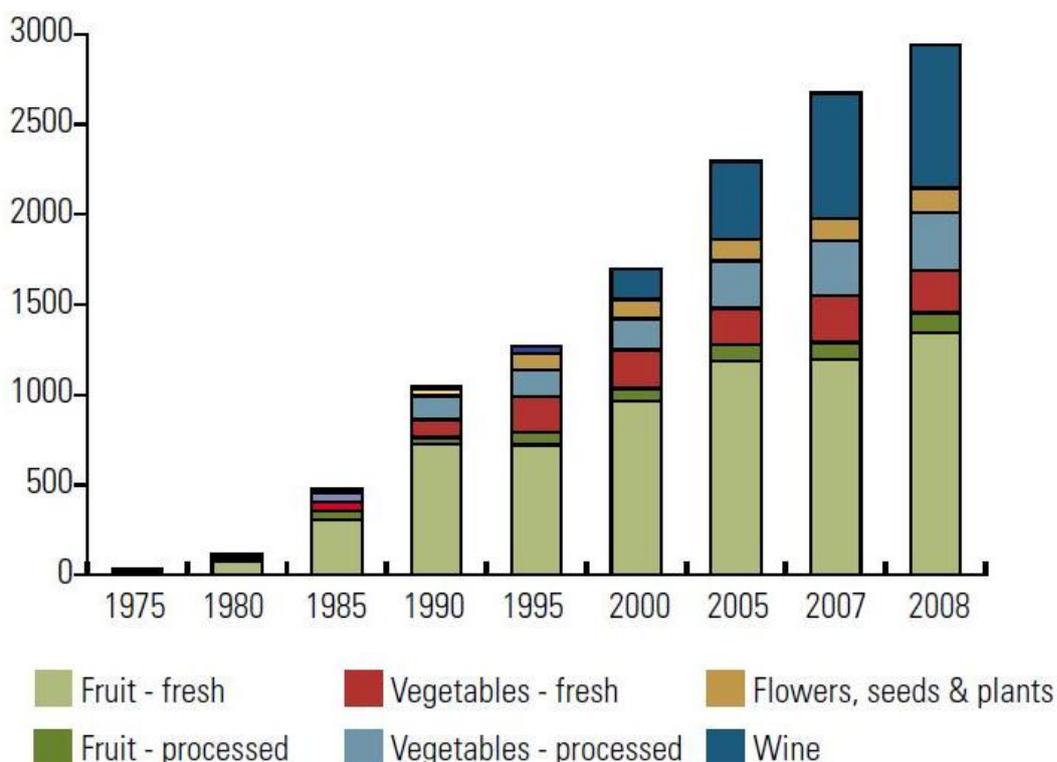
THE RECOGNISED SEASONAL EMPLOYER SCHEME AND GRAPE GROWING IN NEW ZEALAND

INTRODUCTION - NEW ZEALAND HORTICULTURAL INDUSTRIES

New Zealand is only a small country with 4 million inhabitants, situated some 2,000 kilometres to the east of its much larger neighbour Australia. It depends for its economic livelihood on its primary sector exports, but unlike Australia does not have as extensive mineral resources. Since the 1970s, and particularly since Britain's entry into the EEC, the horticultural industries in New Zealand have expanded almost exponentially with horticultural exports increasing from \$NZ115 million in 1980 to \$NZ2.9 billion in 2008. That was 2 percent of all New Zealand merchandise exports in 1975 growing to 6.9 percent in 2008 (Plant & Food Research, 2008). Kiwifruit exports with \$NZ870.7 (million, fob) was the major horticultural export, wine followed with \$NZ793.7 (million, fob) and apples followed with \$NZ344.9 (million, fob) exports (Figure 1).

Figure 1

Horticultural exports (\$ million, fob)



Source: *StatisticsNZ*

Traditionally apples were the major export, but they have been superseded by kiwifruit, which in turn is likely to be superseded by wine. All of these crops have large seasonal peak demands for labour, for apples and kiwifruit for pruning and picking and for grapes for pruning alone, although

grape varieties less suited to mechanical harvesting still need staff for grape picking. These needs vary regionally as well as by crop.

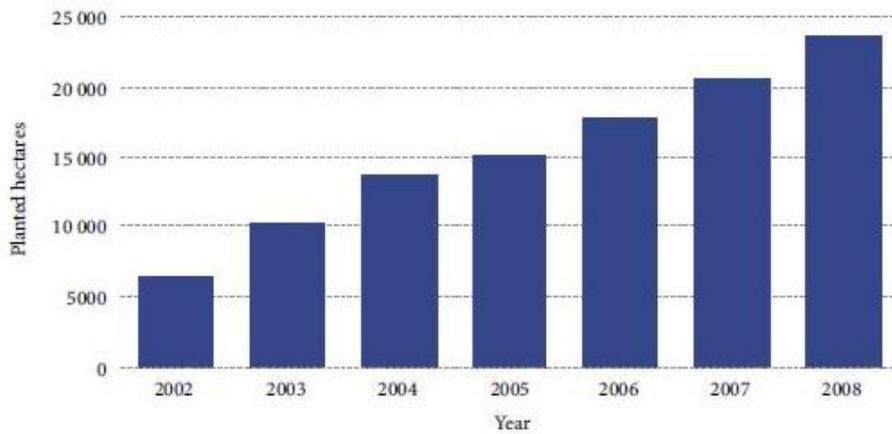
New Zealand wine exports to Australia have been undergoing remarkable growth too, which is now 35 percent of total wine exports, compared to 14 percent ten years earlier (SONZAF, 2009). New Zealand Sauvignon Blanc took the top position in Australia for white wine sales. This rapid growth is shown in increases in the planted area in Marlborough, the major production area for Sauvignon Blanc (Figure 2). But in 2009, for the first time since New Zealand Sauvignon Blanc achieved its international popularity, grape supplies exceeded demand for them.

Growth in New Zealand's horticultural exports and industries has been facilitated by a strong focus on quality production, whether of natural or processed product. Now to gain access to the world's supermarkets, the main channel to consumers in the developed world, producers must meet GLOBALGAP standards for fresh produce. Failure to do so can lead to exclusion from the main markets. *Horticulture New Zealand* has been very careful to maintain access through promotion and adoption of these standards, which is of such economic importance to growers and to the country.

Part of those standards relate to the labour employed in production, its conditions of employment, its safety and training. Any significant failures in these areas or rumours of bad practices could compromise major export opportunities and damage carefully nurtured product images or brands (Tipples and Whatman, 2009).

Figure 2 Recent Growth in Vineyard Planted Area for Marlborough, New Zealand

FIGURE 12.1: RECENT GROWTH IN VINEYARD PLANTED AREA FOR MARLBOROUGH, NEW ZEALAND



Sources Marlborough District Council 2008 and MAF.

Source: Ministry of Agriculture and Forestry, 2009

Employment in primary production

In the developed world, where farm work is no longer popular, finding the labour supply for seasonal production processes is difficult, especially when the overall population is as small as New Zealand's. Consequently, in much of the developed world, migrant labour is often utilised (De Zulueta, 2003; Rogaly, 2008). However, casual employment often presents compliance problems. Farmers are often tempted to operate a cash based, undocumented approach because it is easier in the short-run. Now, however, with the need to satisfy quality assurance schemes and audits for the right to supply international retailers such a casual and often illegal approach is unacceptable. In New Zealand, at the beginning of the new millennium, these two issues became apparent at the same time – the need to maintain duly certified quality production and the need to have the labour supply to deliver that quality product. This paper reviews what has happened and hopefully suggests some lessons for others approaching migratory seasonal employment schemes.

During the Labour led government in New Zealand from 1999 unemployment levels continued to fall as the economy boomed, to the point where there was little employable labour available for seasonal tasks such as in horticulture and viticulture. High seasonal peak demands for fruit picking, packing and grape vine pruning were exacerbated by the tight timelines for those processes needed

to maintain quality production and by the growth in total production, further complicated by the nature of the labour force utilised.

In the 1980s the seasonal labour force had operated with lots of students and local families, but by 2000 the task had grown and the work had become much less attractive to students. A review of Ministry of Agriculture and Forestry Research Reports on rural social affairs revealed the stresses in rural society, many of them about employment (MAF, 2000). In May 2001 the Central Otago District Council drew attention to the rapid growth in requirements for harvest labour and the difficulty of attracting labour when the limited accommodation facilities were also under pressure from tourists. In July 2002 a *Human Resources in Agriculture Workshop* resulted in Rotorua for the whole agricultural sector (MAF, 2002). It set out to define the problem, take stock of what had been done, identify gaps and suggest immediate and longer term initiatives. Horticulture representatives reported that they had been working on the issues of future horticultural employment with government for some time. On-going changes in the industry and the difficulties of retaining staff season to season were noted:

“...a lot of numbers are involved in harvesting, especially fruit harvesting, and in the foreseeable future this will stay a manual job, maybe even bigger due to the technical needs of the market. We still need the numbers, but we need the supervisors, and the QA people in pack-houses checking quality” (MAF, 2002, unnumbered).

They also noted the change in demographics and suggested the industry needed to undergo a culture change. A new organisation for governance was established: *Human Capability in Agriculture and Horticulture*, but its subsequent focus was more on the problems of full time staff across the sector. By 2002-2003 the emerging employment problem with the decline in the number of unemployed available for seasonal work and the falling skills base was being noted. There was a piecemeal response and crisis management of the seasonal problems over the period 2000-2004 (Silcock, 2005). Absent from the table at these initial discussions were representatives of the wine industry, although they were also becoming significantly affected by similar problems for grape vine pruning.

“With the massive expansion of planting in Marlborough and no major rises in the population or vineyard pay rates, the region suffers from a labor shortage in which most growers or wineries are lucky if they ever see a single worker from one year to the next [2004/05]. It doesn't take a genius to see how Marlborough got into this mess, but it may very well take one to get the region out of it... It doesn't help that hundreds of the workers... are known to be illegal or overstayers.” (Arnold, 2007, 185)

By 2004 regional discontent became national and the Minister of Immigration was put on the spot in a televised immigration debate by a squash grower who believed Thai immigrants worked better than New Zealand's unemployed. The Minister did not want the issue getting out of control at a sensitive time leading up to an election and called the heads of the relevant grower associations, including *New Zealand Wine*, and four other related ministers together to discuss the issue. Then followed a key meeting in which the Minister laid down the principles accepted by the Cabinet (Ramasamy *et al.*, 2008) upon which the government was prepared to help resolve the industry's problems. First, he outlined the respective roles of industry and government. Industry had to share responsibility for their labour needs, actively plan for the future, and attend to recruitment and retention through good employment terms and conditions, wages and staff training. Government would help through getting the mix of interventions right and help with the development of a strategy. Secondly, he differentiated between absolute labour shortages, with them being the concern of government and recruitment difficulties, short term concerns more for employers. Only for absolute labour shortages were immigration responses appropriate. Local labour had to have the priority and to be fully utilised. He urged that "...a standard, strategic approach is required to seasonal labour shortages rather than continuing to respond in an ad hoc manner" (Swain, 2004). He also outlined possible short-term (2004/05), medium-term (2005/06 – 2007-08) and long-term (2008/09 onwards) scenarios. Appropriate good recruitment (attempting to recruit locally, engagement with Work and Income (New Zealand's benefit and work broking agency), addressing housing and transport problems, use of lawful labour and credible agents) and employer practices (improved business compliance, such as health and safety) were outlined. Government responses to industry were to be contingent upon them working together, not just on the labour shortages but also developing industry skills and productivity. Finally he wanted a report on industry strategy development by Christmas 2004. However, that was to be Christmas 2005.

In the next season (2004/05), an election year, there were stories of fruit left to rot on the tree, coupled with tales of illegal immigrants because growers were so desperate. These were not 'good stories' for overseas buyers with New Zealand dependent on its export markets. Also, kiwifruit suffered serious production problems. Zespri estimated that the shortage of staff and poor quality had cost some \$20 million as well as other production damage through adverse weather conditions for total losses of \$100 million (Whatman, 2009).

An independent US journalist, Eric Arnold, 'embedded' himself in a winery in Marlborough in 2004/05, and summed up the relationship between poor labour outcomes and poor wine thus:

“Marlborough’s labor problems won’t get resolved any time soon. Many people suggested to me that they’ll get far worse before they improve as more and more uneducated laborers make themselves contractors overnight in order to... make a quick buck. But just as I discovered during the winter pruning season that the wineries and growers who put in the effort in the vineyards and treat their people well are the ones who make better wine... Good-tasting wine involves not only TLC with the vines, but also with the people who tend them...” (Arnold 2007, p. 225)

The path to Recognised Seasonal Employers

The path from this point is difficult to follow. There were a number of different threads developing at the same time and interacting, which have been reported elsewhere in more detail than is possible here (Hill, Capper & Wilson, 2005; Whatman, Wong, Hill, Capper and Wilson, 2005; Hill, Capper, Wilson, Whatman, & Wong, 2007; Whatman and Van Beek, 2008; Institute of Policy Studies, 2008; Carroll, Blewden & Witten, 2008; Spoonley and Bedford, 2008; Bedford, 2008 and Ramasamy, Krishnan, Bedford, R. and Bedford, C. 2008). The key ones will be outlined in turn.

1. Behind the specific seasonal labour shortage problems developing in New Zealand was a wider policy context of relations with New Zealand’s Pacific neighbours: New Zealand’s role in the South Pacific (Ramasamy *et al.*, 2008), the role of the World Bank, and the role of the United Nations. The latter two wanted to tackle some of the economic and demographic problems of Pacific countries by helping them gain access to the labour markets of the two major developed economies of the Pacific, Australia and New Zealand. In contrast to the ageing populations of Australia and New Zealand and their relatively low levels of unemployment, Pacific countries tended to be have fast growing more youthful populations and have relatively few employment opportunities (Bedford, 2008). Pacific leaders were advancing their case for access from 2004, which gained particular potency from a UN General Assembly debate in 2006, just before the Pacific forum met (Ramasamy *et al.*, 2008).
2. The quality problems of fruit harvesting and grape vine pruning had come to the fore and yet both processes seemed to be miraculously completed in time each year in spite of the increased labour market problemsⁱ. The standard top-down policy formulation out of Wellington via a literature review and limited discussion did not seem appropriate, but fortuitously the Co-Chair of the working party had an interest in an alternative form of policy development. It was more ‘bottom-up’ and ‘outside-in’ than a model system in approved Cabinet Office mode driven from Wellington. It came to be known as ‘practice

making' (Whatman *et al.*, 2005). Further, it was based on primary research. That research had been funded securely from an inter-departmental fund, thus avoiding early termination of the research.

3. The primary research was based in the field with workshops in industry training space in Hastings, in the middle of New Zealand's biggest area of horticultural production. The workshops:

"...involved practice-making by engaging the various regulators and all the elements of the industry – apple growers, contractors, quality controllers – to share knowledge about what happens on the ground and co-design the changes that industry needed to make, and the support for those changes by immigration and employment environment required to transform the apple industry...Without the primary research and understanding having been completed, it would have not been possible to respond quickly when the top down window of opportunity popped open." (Institute of Policy Studies, 2008, Appendix 1, p.66).

4. Participants in the 'practice making' exercise were exposed to multiple and conflicting perspectives, but managed to develop a real understanding of how the system of 'Appling', as it came to be called, really worked. That took time, but enough time was available to develop a shared understanding

"...that things looked very different in practice depending upon whether you were a low paid and poorly treated worker, the legitimate orchardist who was at a cost disadvantage compared to the shady operator, or the regulator worried about illegal and overstaying temporary workers, occupational health and safety issues, tax compliance and poor social assistance and housing issues." (Institute of Policy Studies, *ibid.*). So the harvest was no longer perceived as a miracle but a disaster.

5. One of the key moments in the workshops was when a quality controller perceived that there were:

"...disconnects between pickers rewarded on quantity, growers who were rewarded on quality, and a casualised, informal workforce; employers had no incentive to invest in productivity with a system that worked in that way. The key insight was that 'the moment that value is added or destroyed is the moment of choice by the individual

picker.”” (Institute of Policy Studies, 2008, p. 66) Thus to maximise crop value a sustainable trained workforce with the skills of repeat workers was essential.

6. Besides the ‘secure funding’ for the research, another key aspect was that it was facilitated and conducted by outside researchers (WEB Research) working with officials from the Department of Labour. It added a degree of independence and objectivity, as well as their evaluative skills, together with their knowledge of workplace learning (Hill *et al.*, 2007)

In parallel basic ethnographic research conducted by the Wine Industry Research Institute (Beer and Lewis, 2006) informed Government departments about labour supply problems in grape production through the multi agency Marlborough Viticulture Advisory Group. This work identified seven different groups of workers in the viticulture labour force and their respective contributions. Further it highlighted unpleasant features of working in the ‘sexy’ wine industry: long hours of repetitive work, with weather varying from blazing sun to cold frosty mornings, wet and dry, and demanding a high standard of basic physical fitness, as well as skill.

7. Another key feature was the risky role taken by a ‘policy entrepreneur’, who kept the project moving in the department, although there were regular changes in senior management and there were potential personal costs attached.
8. When the policy development process could have fallen down there were fortuitous political outbursts about seasonal labour shortages, and the minister called the Strategy Group to meetings. Because of the established mutual trust and understanding between industry and agencies, policy solutions quickly resulted.
9. A serendipitous moment was added by the eventual policy paper going to Cabinet at the same time as a paper on Pacific Labour Mobility, with the result that the RSE took on a more specific Pacific character, which is thought to have helped its progress from being just a possible policy to actually being implemented. It also assisted with the implementation of the RSE because of the previously developed relationships between the Pacific Island States and New Zealand, and the relative scale of undertaking a Pacific focussed RSE compared with a World-wide scheme.

10. Finally, the plans anticipated there would be problems in the first year of operation, and sufficient resources were available for a response to be made. As the Institute of Policy Studies concludes:

“Working together is hard and success is not guaranteed. Sometimes however, one plus one can equal five.” (Institute of Policy Studies, 2008, Appendix 1, p.67).

Two concrete policy outcomes from these intermingled threads stand out. First, the Seasonal Labour Strategy, which outlined how the problems would be tackled in short, medium and long-term on 8 December 2005 and the introduction of the Recognised Seasonal Employer scheme on 30 April 2007. To avoid having to discuss each in full, in this analysis the focus will be on labour contractors as employers, which were particularly important in viticulture, where full time employment was not a realistic possibility for many grape growers.

Labour contractors in the strategy

Contractors fill an unenviable position in viticulture. Historically contracting was a very informal industry with agreements by word of mouth and handshake rather than documentation. When committed to prune a vineyard the contractor might have appropriate staff on call, but whether they would still be there when it was time to do the job was always uncertain. Consequently they carried a high level of risk. Further, they had become more dependent on the continually shifting part of the labour force, the transients, whether back packers or working tourists, or the unemployed seeking a job until resuming full time employment. Such staff created compliance problems with Immigration and the Inland Revenue Department. Further, traditional sources of winter labour like freezing works were diminishing with the contraction in pastoral agriculture and the reduced ‘kill’. Keeping such a transient labour force with a high skill level was also problematic.

The problem of illegal labour had been highlighted in the Strategy (Objective 2, H&VSWG, 2005). Problems with contractors employing illegals and undercutting contractors trying to be compliant were reported particularly in viticulture. Whereas large companies like Pernod Ricard, employing some 1200 seasonal workers annually with some 750 employed over winter largely pruning, many smaller enterprises did not have the ability to keep those workers in sufficient work to make a living. Pernod Ricard also offered a refreshingly positive approach to employing seasonal staff that was facilitated by their scale of operation

(e.g. 9 vineyards in Marlborough and one in Canterbury), which permitted moving their staff around to wherever work was needed and thus keep them engaged. Their aims are

“...to employ all seasonal workers directly, but if this is not possible, individual vineyard managers will use contractors. The company prefers direct employment so that they can ensure all employees have correct permits and are properly trained and supervised.” (Department of Labour, 2006).

Under the Seasonal Labour Strategy, illegal labour was to be progressively eliminated but without disrupting the overall labour supply. The main section concerning contractors was Action Area 5.4 ‘Ensuring compliance and moving beyond compliance’. The competitive position of law-abiding growers and labour contractors was undermined by illegal activity. Illegals were fundamentally unreliable and compromised the quality, value and reputation of the industries. Consequently government agreed to progressively enforce standards and eliminate illegal behaviour, especially where it concerned serious exploitation and fraudulent activity.

To prevent the problems from re-appearing it proposed:

“Establishment of a National contractor registration or recognition process through new and existing contractor groups for seasonal labour. Most seasonal labour contractors and growers want to establish long-term sustainable businesses. The existence of ‘rogue’ contractors based on illegal labour undermines good business practice of law-abiding contractors and growers. The horticulture and viticulture industries will establish a national contractor registration or recognition process with the basis for registration or recognition being compliance with:

- Established minimum pay and conditions
- Immigration requirements
- Inland Revenue requirements
- Occupational safety and health requirements

There will be a progressive evolution of this registration or recognition process with incentives for contractors to become registered. This will be supported by the establishment of attainable standards and compliance timelines that takes into account individual situations and the impact of the initiatives in this strategy to increase the

numbers of legitimate workers...Agencies will focus their enforcement efforts against 'rogue' operators and provide support for the others to adopt legitimate practices...

Industry will promote the benefits associated with the use of registered or recognised contractors to the industry and actively work to remove the opportunity for illegal practices. The following benefits of the programme will be highlighted:

- Decreased risk of being prosecuted for tax, employment and immigration breaches
- Support with compliance with the conditions of market assurance programmes and standards e.g. EUREPGAP, British Retail Consortium standards
- Protection of the industries' reputation and image." (H&VSWG, 2005, Action Area 5.4)

Master Contractors and the RSE scheme

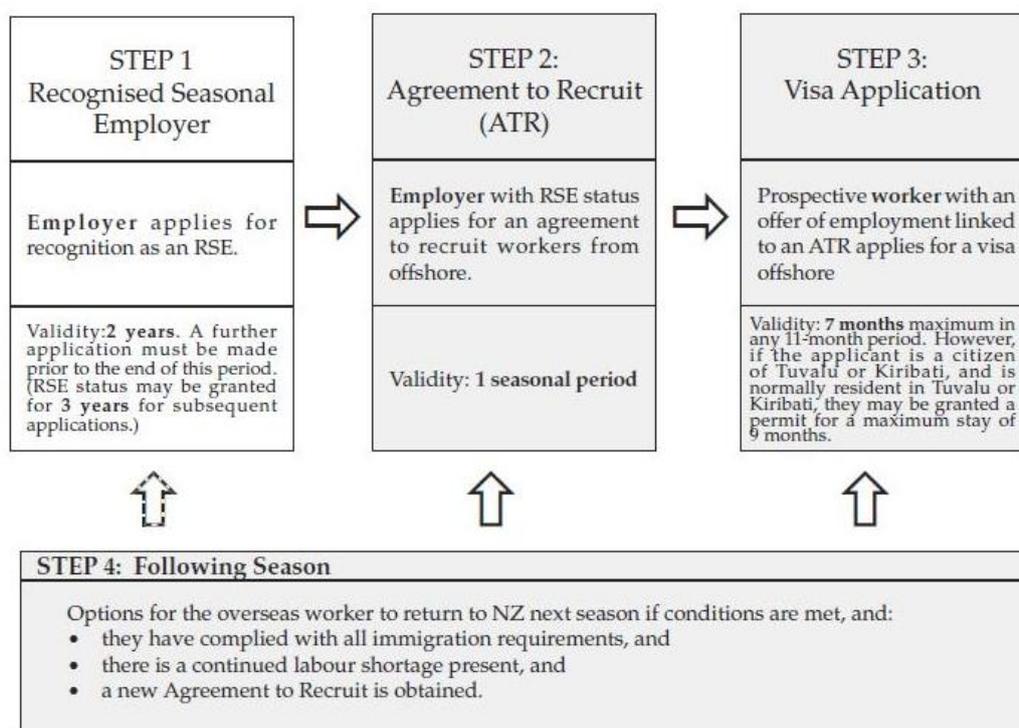
The roots of a Master Contractor's association had been laid in the Bay of Plenty (the main kiwifruit area) back in 2003 among contractors who wanted to differentiate themselves as compliant compared to others. New Zealand Kiwifruit Contractors Inc had about 70 members, who wanted recognition for their excellent business practices and ethics (Wood, 2007). This pattern was readily accepted nationally in 2006 and the Associate Minister of Immigration, Shane Jones, launched New Zealand Master Contractors Inc (NZMCI) in March 2008, to aid the Seasonal Labour Strategy and RSE (Beehive, 2008). It had not only compliance as one of its objectives but also industry 'best practice' (Kuiper, 2008). To ensure adequate standards NZMCI established a Code of Conduct and an audit procedure. The Code not only advances best practice but also focuses on employment law, and the health and safety of its staff (NZMCI, 2009). Throughout its intention has been to raise the quality and compliance bar in the industry (Wood, 2008). Further work is being considered by industry on improving the business models and productivity of contractors, using tailored business training developed with Government funding for productivity research and development. In viticulture, particularly in Marlborough, uptake has been slow. Two contractors' associations existed and neither had huge membership from viticulture contractors. At 30 September 2009 13 contractors were members of NZMCI and working in Marlborough, while 22 were approved RSE employers. Eleven were in both groups. Overall there were thought to be about 120 contractors working in the vines in Marlborough then, but many of them may just have been individual self-employed operators. Five wine producers had achieved RSE status.

The Recognised Seasonal Employer Scheme

The product of the extensive policy development process eventually had come into effect on 30 April 2007. To become a RSE employer six requirements had to be met (Department of Labour, 2009):

- To meet the policy definition of a New Zealand employer
- To have a high standard of human resource policies and practices
- To have good work practices
- To be committed to recruiting and training New Zealanders
- To be in a sound financial position
- To be willing to pay market rates and ‘take care’ of their RSE workers

Figure 3 RSE Work Policy Process



Source: Ramasamy, 2008, p. 179.

Employers also had to be responsible for:

- Paying half the travel costs for workers flying to and from New Zealand
- Paying for at least 240 hours work
- Providing at least 30 hours per week work over the period of their employment

- Providing evidence of pastoral care of their RSE workers e.g. suitable accommodation, translation, transport, availability of suitable churches to attend, recreation facilities, and an introduction to life in New Zealand
- A commitment to pay at full market rates
- A commitment to contributing to the cost of removal of overstayers, if that should arise (Department of Labour, 2009).

RSE status is approved for two years but has to be accompanied by an Agreement to Recruit (ATR). Applications for ATRs are dependent on applying in the approved form, paying the fee and supporting the case with evidence showing the requirements are met. These relate to the jobs to be filled, their terms and conditions and from where they are to be filled. With RSE status and ATR approved, they begin their own recruitment. RSE officers are available to help where necessary. To be suitable for recruitment workers must be:

- At least 18 years old
- Have an employment agreement
- Have a return ticket
- Satisfy health and character requirements, and
- Be able to show they only want to stay in New Zealand temporarily (Department of Labour, 2009a).

Pacific countries are given priority in providing potential RSE recruits.

These include Federated States of Micronesia, Papua New Guinea, Nauru, Palau, The Republic of the Marshall Islands, Solomon Islands, and Kiribati, Tonga, Tuvalu, Samoa and Vanuatu, the Pacific ‘Kick Start’ states, which were helped to take advantage of RSE through New Zealand’s Department of Labour helping develop pre-departure training and the setting up of work-ready pools of potential recruits (Department of Labour, 2009b), . Recruiting from elsewhere requires demonstrating that a reasonable attempt had been made to recruit from the Pacific, or that they had a previous relationship with another country. While the number of potential workers was originally capped at 5,000, that depends on the state of the New Zealand labour market and whether there are any Kiwis seeking jobs. The cap was raised by the previous government to 8,000. In *Winepress* (May, 2009, p.23), it is reported that 500 RSE workers from Thailand were included in a figure of 1700 who could be brought in to Marlborough. Previous employment arrangements with Thai

workers, perhaps under the AIP and Seasonal Work Permit schemes must have existed for that to be permissible.

3,994 workers came to New Zealand over the initial period (2007-2008), 74 percent from 'kick-start' countries in the Pacific, 6 percent from another non 'kick-start' country and 20 percent from other countries, mainly Asian. 273 workers had returned home at 30 April 2008 and 3,721 were still in New Zealand (Department of Labour, 2008). Just over a year later (28 May 2009) 5,408 RSE workers were in New Zealand and 5,327 had gone home. They had been employed by 411 approved employers (134 RSE and 277 Transitional RSE) (Department of Labour, 2009c).

Initial Outcomes of the Recognised Seasonal Employer Programme

While it is very early to speculate on the longer-term success of this programme there are already some very positive indicators that it is indeed supplying the Win:Win:Win outcome suggested earlier. First, the World Bank initiated some tough evaluative studies of the scheme. A survey of 2,000 Tongans revealed that the RSE scheme had opened up the prospect of seasonal migration opportunities to many poor, rural households in Tonga. Some 20 percent of men of working age were offering themselves as part of a work-ready pool, with some 800 having the chance to work in New Zealand (Gibson, McKenzie & Rohorua, 2008). Of those who wanted to come from Vanuatu, those with better health records, more work and overseas experience, and with better English literacy tended to be favoured. They tended to be males between late 20s to early 40s, with some relatives in New Zealand and less likely to smoke or drink. More than 1,600 ni-Vanuatu had been allowed to work in New Zealand by May 2008. Poor information had discouraged some prospective applicants and returned RSE workers were suggested for briefing new contingents. Workers had a predominance of financial and individual motives and a desire to have the chance to learn English (McKenzie, Martinez & Winters, 2008). In terms of short term financial gains the households of Tongan participants of the RSE scheme had per capita income increased by almost \$US 300, but there was no apparent impact on their consumption (Gibson and McKenzie, 2008). Households in Tonga had been able to adjust smoothly to absent RSE workers. They had only small dietary changes, no changes in child schooling and less hard physical labour, while remittances were getting back to Tonga. Vanuatu's remoteness and poorer infrastructure proved more of a problem. Diets became less varied and families had more health issues. Less than 40 percent of families received remittances while the RSE worker was away and only 25 percent had regular communications from them. The latter shows areas needing further refinements in RSE processes (Rohorua, Gibson, McKenzie & Martinez, 2009).

Informal comment suggests that remittances, which vary widely from a maximum of about \$NZ16,000 in one Tongan case and an average of \$NZ7,000, have made real differences for things like siblings' education rather than conspicuous consumption (DoL, 2008). Besides the remittances taken home and their economic multiplier effects, there are also the formal work skills that may be transferable; also, the other social skills and informal learning from being in a different and more developed country. Then there are the less tangible benefits of eyes being opened to a different reality, choices extended, of human capabilities being built up (Sen, 1999), and enhanced self esteem having travelled, flown, and lived in New Zealand.

Besides the benefits to workers, growers and employers have also benefitted. Initial teething troubles threatened to undo the scheme in the first year but the organizers had allowed for problems and were prepared for difficulties. A 2008 review of RSE by Marlborough grape growers and contractors begins:

“RSE has been a success, we must not forget that. The vines in Marlborough have been pruned, much earlier than in previous years. And the staff that will return from the Islands next year, will bring with them valuable experience. But...” (*Winepress*, ‘RSE Reviewed’, September, p.19)

Contractors, the middlemen of the industry, were not happy by the high up-front costs of the ‘investment’ required in the first year. They also found the ‘pastoral care role’ a bit much, having failed to realise the cost of being a ‘best practice’ employer and the need to look after the whole worker, not just the time while at work. Health and hygiene issues had been an unexpected issue and while having pre-migration health checks, other medical issues needed insurance cover. The level of physical fitness required often took several weeks to achieve, another lesson for future years. Orientation was found wanting in a number of areas, but employers wanted staff who were work ready from Day 1. Otherwise they were carrying the costs of these other requirements. Local infrastructure and transport weaknesses in Marlborough had also been issues. Unfavourable comparisons were made between the way RSE workers were treated in terms of transport, accommodation and pastoral care and local Kiwi workers. However, it must be observed that if Kiwi contractors had started thinking about such things for Kiwi workers earlier there might not have been the need to bring in RSE workers at all. The provision of accommodation has always been one way in which employers can attract seasonal employees. It really depends on how serious the contractor or employer is about recruiting staff. Contractors were also unhappy about RSE workers performing below rates necessary to earn the New Zealand Minimum Wage and having to

top up their wages until they did. Further, they were concerned about the loss of experienced supervisors when other work permit schemes came to an end because of the RSE Scheme. Finally, they were not happy about being the ones funding the Government's foreign aid policy, as some saw it.

Other employer groups like Central Otago's *Seasonal Solutions* have been established to take advantage of the possibilities that the RSE Scheme offers to Otago growers (Goodman, 2009). This cooperative venture acts as the employer of RSE staff and sub-contracts them to growers who pay a management fee to the coop. The major advantage that is perceived is that the growers have been enabled to recruit a new type of worker "...who comes back season after season" (Goodman, 2009, p.1). Further, it has also facilitated their financial growth and putting large teams into Marlborough both for winter pruning and also for summer vineyard work.

A colleague taking a Lincoln University student field trip to the Central Otago apple growing and wine producing area in April 2008 reported that the workers had learned how to get time off work for injuries received in work accidents at public expense and the growers encountered had tales of woe. After the similar trip in 2009, his report was quite different. Growers had suddenly discovered the virtues of the scheme with a certain workforce, returning workers who did not have to be trained again, and who could help their 'new' colleagues get to grips with the work and living. Further, there were also stories of New Zealand growers making efforts to help the impoverished communities from which their workers came.

So, the RSE scheme seems to be achieving a Win:Win:Win outcome, which will be more thoroughly investigated with the passage of time. A positive official *Summary of Evaluation findings from Recognised Seasonal Employer (RSE) Policy – First Season (2007-08)* was published in May 2009. Evaluation of the 2008-09 season will take place from May to July 2009 and be reported in October 2009.

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ENDNOTES

1 Farm labour shortages have been the subject of political and legislative action at least since the Medieval Statute of Labourers (1352), which attempted to control the price of labour in England, when labour had been decimated by the Black Death. The typical sequence of events is first a realisation that there may be a shortage, which has two implications – work will not get done and wages will rise. Political agitation by farmers and growers results which highlights the employment opportunities available, draws in possible workers, and may lead to policy changes such as freeing up immigration to supplement the labour available. Subsequently the work gets done, wages probably fall from what is then an oversupply of labour and farmers or growers are happy because their needs have been met (Tipples, 2004). Many examples of such developments could be given, the most recent being the farm labour ‘crisis’ of 2000. Research at the time showed more believed there was a labour shortage than had actually had difficulty recruiting labour (Tipples and Morris, 2002). The pruner shortage in Marlborough post 2000 looks like another example through which Marlborough grape growers have been ‘saved’ by the Recognised Seasonal Employer Scheme. In 2008 a need for 3000 pruners seems to be ‘cured’ by the recruiting of 594 RSE (*Winepress*, 2008), when other traditional permit

holders were no longer available. Then in 2009 there was a general increase in those wanting work (Kiwis) and a decline in the number of employers looking for staff (*Winepress*, July 2009, “Labour Update”). The Marlborough RSE coordinator attributed the change to the large number of contractors who had brought in RSE workers rather than declining demand the recession

HISTORICAL NETWORKING AND KNOWLEDGE SHARING: WINE MAKING IN THE HUNTER

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History as a research discipline has traditionally focused on nation-building; evidence of how nations such as Australia have achieved modernity. That is, prosperity through industrialisation and democracy in governance. This paper focuses on a commodity that has not been nation-building - like wool, meat and minerals have been – though it has become economically and cultural significant in the past twenty years. And, given the global significance of wine production, distribution and consumption, in exploring evidence from the past relating to ‘wine’ in all of its guises - as agricultural product, manufactured alcohol, object of trade, subject of tourism and marker of cultural identity – my research has been both trans-national (that is, beyond the creation of Australia as a nation using its own borders as the defining framework) and trans-disciplinary in that this paper introduces aspects of Hunter wine history which relate to existing research in the disciplines of Business and Tourism.²⁶

Wine grapes – from the cultivar *vitis vinifera* - are not native to Australia but wine has been a key product in western culture, both within the Biblical and Classical traditions, so it is not surprising that there was wine as well as plant stock to grow grape vines on the First Fleet; the beginning of British colonisation and the transplantation of European plants and cultural values on the continent of Australia, in the summer of 1788. Other reasons there was vine stock on the First Fleet – purchased at the then Dutch colony the Cape of Good Hope at the southern tip of Africa – was that the patterns of colonisation in other parts of the so-called New World involved plantation

²⁶ The central point that has led to this trans-disciplinary conversation is that, in the Hunter Valley, networking and collaboration among wine growers preceded the formation of wine ‘businesses’, which may go some way to explaining early and ongoing successes in production and styles of knowledge sharing among growers in the Hunter wine region. See, for example, Lindy Henderson, Jennifer Waterhouse, Rebecca Mitchell, John Burgess, ‘Key features of the Hunter Valley Wine Cluster’ Wine Business Research Symposium, December 2009, Newcastle, Australia

agriculture to feed burgeoning industrialisation in Great Britain.²⁷ Cotton from the New England colonies on the east coast of the North America for the cotton mills of Britain; sugar from the West Indies and so on. There was vine stock on the First Fleet to see how it would grow in the unknown soil of New South Wales. And I perceive a dual purpose: the possibility of plantation-sized vineyards such as those in France and in the colonial ports of Madeira, the Canary Islands and the Cape of Good Hope – none of which were British colonies in the late eighteenth century – and also the possibility of grape vines in gentleman’s estate-style gardens, for the first British colonists did not plan to ‘go native’ but to ‘civilize’ the environment they colonised as quickly as possible with the familiar plants and plant products of ‘civilization’- within colonial discourse, that is, Britain and Europe.

By the 1820s, New South Wales was conceived by the British as covering the entire eastern section of Australia though in reality the actual colony was still based largely around Sydney town, Parramatta and the Hawkesbury with some settlers taking up land through grants and purchase in areas accessible by water such as the Hunter region (which is defined here as stretching from modern-day Newcastle up inland to Denman and including the river flats of the Paterson and Williams Rivers as well as the Hunter River). The pattern of colonisation that had emerged in New South Wales by this stage was that well-capitalised British colonists gradually took control of land of these river flats and grazed particular breeds of sheep and cattle, to produce wool for export and meat for domestic consumption on native pastures. These stations had no fences and relied on convict shepherds.

Colonists with sufficient capital usually moved into very temporary accommodation until they built grander homes to mimic British rural success. This process of mimicking British elite ‘habitus’ (as Bourdieu called it; habits of mind and body, social practices reproduced through imitation and reiteration²⁸) led to the creation of estate-style stations where a convict workforce of perhaps twenty men and women would undertake the physical labour and domestic service required to meet the needs of the master, mistress and household as well as feed the convict labourers and other seasonal workers. Horticulture was a significant part of this habitus. The growing of fruit trees and viticulture – grape growing – naturally occurred alongside the planting of grain crops for both estate purposes and potential commercial use.

²⁷ Richard Waterhouse, *The Vision Splendid, a Social and Cultural History of Rural Australia* (Fremantle: Fremantle Arts Centre Press, 2005), 18.

²⁸ See Linda Young, “‘Extensive, Economical and Elegant’: The Habitus of Gentility in Early Nineteenth Century New South Wales”, *Australian Historical Studies* 124 (2004): 202.

The first grapes planted in the Hunter were a hotch-potch of eating (or table) grapes and wine grapes from vine stock obtained at the Cape of Good Hope, verdelho from Madeiras and some French varieties which had by no means been adequately identified. The process of networking between individual colonists trialling viticulture during the early nineteenth century began the long process of determining which grape varieties were more suitable for wine than table; which varieties were most suited to the particular micro-climates of the region and what these particular varieties were called. Knowledge sharing occurred initially through social networks among wealthy British settlers establishing prosperous colonial enterprises focused on wool growing but usually simultaneously trialling plantation-style crops such as tobacco (which was a familiar source of wealth from the British colonies in North America) or wine grapes.

It was not unusual for social or professional networks to be transplanted to New South Wales in the same way as European grape vines. Some early military colonists had shared experiences in the American War of Independence, others in the Peninsular Wars.²⁹ Some of the Hunter's early settlers migrated together or shared, at least, certain social practices and status in a colony still otherwise largely populated by convicts, ex-convicts and the military. Take for example George Wyndham, for whom the existing Wyndham Estate at Branxton is named. Wyndham came from English gentry and migrated to New South Wales in the late 1820s with his wife, part of his inheritance and a small flock of sheep.³⁰ His wine growing efforts can be read through the diary or daybook he kept from 1830 to until the economic downturn of the early 1840s.

At first, in addition to growing wheat and maize, Wyndham ran sheep and cattle, bred horses to work the farm (and later for racing), raised pigs, experimented with tobacco and hops and used his own timber - sawn on site - for buildings and fences. Dalwood and the later land purchases of Fernhill and Bukkulla at Inverell were shaped to be partly self-supporting as well as profitable.³¹ A small number of grape vines were grown in Dalwood's kitchen garden, in keeping with elite colonial practice to this point and then Wyndham set about planning a vineyard. A variety of grapes were to be planted, for wine, eating at table and for drying. Both Fernhill and Bukkulla were also later planted with vines in addition to their development as pastoral runs.³²

²⁹ Detailed in Julie McIntyre, 'Not rich and not British: Philip Schaeffer, "failed" colonial farmer', *Journal of Australian Colonial History* 11, 2009: 1-20.

³⁰ Judith Wright McKinney, 'Wyndham, George (1801-1870)', in Douglas Pike, ed., *Australian Dictionary of Biography (ADB)*, vol. 2, (Melbourne: Melbourne University Press, 1967), 630-631.

³¹ Wyndham weathered the economic downturn of the 1840s by diversifying his investment in land. He established other pastoral properties including Bukkulla in the New England district, at Inverell. See McKinney, 'Wyndham, George (1801-1870)', *ADB*, vol. 2, 630-631.

³² D. G. S. Wilkinson, 'Dalwood House: its Importance and its Associations', (Sydney: the author, 1986), n.p.

In mid-1830, Wyndham ‘began to clear the river bank for vines purchased from the Busby collection’ and the first vines were planted at Dalwood on September first of that year. His brief notes at the end of the 1830 entries lamented ‘very few of my vines took, put out above 600. They were dead before I got them’.³³ Undeterred, he travelled to Sydney in late Autumn 1831 to purchase fruit trees to add to the sizeable orchard at Dalwood and also called at Gregory Blaxland’s vineyard at Brush Farm to collect grape vine cuttings that had been advertised both in James Busby’s *Manual of Plain Directions* for viticulture in New South Wales and the *Sydney Gazette*.³⁴ Colonial publications and the colonial press provided much of the colony-wide knowledge sharing in this period.

In January 1832, Wyndham’s vines numbered 1400. He and his convict labourers worked to protect the growing vines while preparing more land and a fence around a ‘future vineyard’. Neighbours Captain Wright and Captain Pike delivered vine cuttings in early August, most likely recently pruned from their own vines.³⁵ By June 1833 there were four acres of vineyard at Dalwood and planting continued in July, presumably of varieties listed in the diary under ‘Captain Wright’. Vines from George Townshend, obtained in August, were mainly eating grapes. Those from Captain Pike included also included a ‘good eating white grape [and] Large oval purple raisin’.³⁶ The array of vines and doubling up on some varieties serves to demonstrate the extent to which Wyndham had to trial vines in Dalwood soil in the local climatic conditions.

It takes at least three years for vines to first bear fruit and, in early February 1835, Wyndham began his first vintage. He ‘filled the pipe with must of Black Cluster.’ The process clearly fascinated him. A day later, on the tenth of February, he recorded ‘[n]o appearance of fermentation’ but on the eleventh a froth was rising and in the afternoon a ‘head [was] forming thick, and a vinous smell’. A day later the must was ‘fermenting strongly’ and Wyndham constantly monitored the fermentation temperature. When the atmospheric temperature rose he removed blankets used to keep the must warm in the fermentation barrel, presumably to slow down fermentation, but then replaced them the following day. Soon ‘a more violent fermentation commenced, the froth broke through the head [of compacted grape solids] and filled up to running over the 4 or 5 inches to spare. [T]ook off the blankets but kept head covered’. Within days ‘the head had sunk and sweet taste gone. [a]nd instead a harsh vinous taste. Drew it off and filled a

³³ Diary of George Wyndham, ML B1313. The figure of ‘600’ was not written clearly and may be misleading. No other document is available to resolve what the exact figure could have been.

³⁴ Diary of George Wyndham, ML B1313.

³⁵ Diary of George Wyndham, ML B1313.

³⁶ Diary of George Wyndham, ML B1313.

hogshead [and another container] with it'. The fermentation continued, violently: 'tried to stop it with sulphuring but too late. It is sharp and promises to make good vinegar'.³⁷ A disappointing outcome but one he likely shared with his social network.

Wyndham's diary demonstrates his membership of an informal network of fellow wine growers from whom he received vine cuttings and surely also advice on methods of planting and dressing his vines, harvesting his grapes and making wine. Regular visitors to Dalwood and associates of Wyndham who were involved in wine growing as well as the establishment of the large Hunter region estates included names such as Dumaresq, Pike, Cory, Townshend, Ogilvie, Webber, Glennie, Wright and Caswell. Wyndham also received visitors who played key roles in the establishment of the colony of New South Wales with strong links to wine growing: the Reverend Samuel Marsden who planted grapes at his western Sydney property; Australian Agricultural Company head, Edmund Parry, who was based at present-day Tanilba, Port Stephens; and Port Macquarie commandant Archibald Innes. Wyndham also visited Hunter properties synonymous with colonial wine growing: the Kelman's Kirkton where James Busby's famous duplicate collection of European vines was sent in the early 1830s to add to existing vine plantings; and, with Dumaresq, James King's Irrawang which boasted a vineyard and pottery.

Geographical proximity played a key role, which made sense given limitations of transport and shared conditions of production such as soil types and weather, compared with the other key wine growing region in the colony at this stage encompassing earlier-settled parts of Sydney and the Cumberland Plain, south-west of Sydney. Any wine purchased in this period continued to be imports from Europe and victualling stations such as the Cape on the voyage to New South Wales. In the absence of commercial pressures among colonists trialling wine grapes, the sharing of plant stock and knowledge seems to have occurred without any sense of competition (though there is later evidence that James King of Irrawang was not necessarily as ready to compare notes on wine growing as some others³⁸). Growers such as Wyndham had income from other sources, chiefly wool growing. The free-flowing exchange of vine stock and knowledge, coupled with a rise in the 1830s and 1840s of readily available publications supporting wine growing - such as books by Busby and articles in the avidly-consumed colonial press - surely laid the ground work for the growth of early Hunter wine growing. Newcomers could readily plug in to the informal Hunter network. When Richard Windeyer established his country estate at Tomago, from 1840, he loaned

³⁷ Diary of George Wyndham, ML B1313.

³⁸ Colonial Secretary Correspondence 1844-1851 Returns of Vineyards, State Records of New South Wales MS 4/7263.

James King an unnamed book on wine and a few years later King offered Windeyer vine cuttings in the same way that Wyndham's network shared cuttings with him.³⁹ William Caswell, who built up a fruit preserving business at his estate, offered to bottle Windeyer's Tomago wine.⁴⁰

Wine growing continued to be largely a 'hobby' in the Hunter in the early 1840s especially during the hardship of the severe economic depression of this period.⁴¹ After the mid-forties, with the return of prosperity and an increase in the extent to which settlers were established on their land and able to turn their attention again to business experiments, the formalisation of knowledge sharing could begin to serve a vital role in improving colonial wine growing. An evaluation of these early efforts to grow wine grapes in the Hunter involves not only an understanding of the basic requirements for viticulture and viniculture but a sense of the specific factors that must be present to promote production. A list of basic requirements or conditions of practice (or production) in wine growing can be adapted from work by United States-based agricultural economist Benjamin Sexauer who described the 'inputs' necessary for eighteenth century agricultural output in Britain and France as 'land, labor, capital, technology, and agricultural organisation'.⁴² 'Inputs' for colonial viticulture can be used as monitors for points of historical change (as opposed to continuity) and it is significant in the pace of the development of a wine industry in New South Wales that it took much longer to put these inputs in place for colonial wine growing than for the production of other commodities (such as grain, fruit and meat) which had largely been adapted to New South Wales conditions by 1821.⁴³ The key factor here is the idea that colonial viticulture did not (and probably could not) become established – leading to personally capitalised family wine businesses and then a wine industry in the Hunter or anywhere else in the Australian colonies – without agricultural organisation.

The first of the colonial agricultural societies in New South Wales formed in the 1820s but faltered due to periods of instability in colonial income and labour availability which forced station owners to allocate time to matters other than formalising networks to compare products and share knowledge about production. Although wine growing had been trialled since 1788 in New South Wales, the first organised groups aimed specifically at wine growing actually formed at the other

³⁹ James King to Richard Windeyer, 18 September 1838, ML 5221 X/1; James King to Richard Windeyer, 5 July 1841, ML 5221 X/1.

⁴⁰ William Caswell to Richard Windeyer, 18 August 1841, ML 5221 X/1.

⁴¹ It was first described as a 'hobby' by W.P. Driscoll, *The Beginnings of the Wine Industry in the Hunter Valley*, Newcastle History Monographs No. 5 (Newcastle: Newcastle Public Library, The Council of the City of Newcastle, 1969), 25.

⁴² Benjamin Sexauer, 'English and French Agriculture in the Late Eighteenth Century', *Agricultural History* 50, no. 3 (1976): 492-93.

⁴³ Geoff Raby, *Making Rural Australia: An Economic History of Technical and Institutional Creativity, 1788-1860* (Melbourne: Oxford University Press, 1996), 21.



side of the continent. The Western Australia Vineyard Society first met in 1842 and established an experiment to test vine cultivars which members hoped would become a model.⁴⁴ These colonists believed they could benefit from accumulated colonial knowledge and attempted to bypass the hard-earned experience of other settlements. The western colony may have had a perceived blueprint to follow about establishing European agriculture and pastoralism in Australia but it could not fast track the actual process and before too long faltered dramatically.

In New South Wales, meanwhile, circumstances for formal agricultural organisation were hardly favourable for many years; 'few of the larger settlers could have been in any position to contemplate forming agricultural societies at a time when they were struggling to remain solvent'.⁴⁵ Separate societies were formed in the most settled districts from 1827 when the Hunter River Farmers' Club promoted agriculture, including viticulture. Its inaugural president, James Webber, was a known vine grower from Tocal. But, the first specialist society formed before the revival of the New South Wales Agricultural and Horticultural Society in 1857, was the Hunter River Vineyard Association, in 1847. The New South Wales Vineyard Association (NSWVA) followed in mid-1850, though it did not enjoy the success of the Hunter group.⁴⁶

The HRVA grew out of the Hunter River Agricultural Society (HRAS) when members divided over supporting viticulture. A chief dispute related to payment of farm workers in wine at farms with vineyards which allegedly attracted non-convict labourers - who were in very short supply - away from other properties. Hostility arose at a Society dinner in 1846 when grape grower Henry Carmichael declared grape vines a more important crop than wheat. A year later similar comments caused an uproar among members not growing grapes. Carmichael claimed wine had no less importance than the 'now much vaunted main staple, wool' and declared an acre of vines could be as profitable as a thousand sheep; ten acres of vines, ten thousand sheep.⁴⁷ The fall-out led to a division in agricultural organisation.

Carmichael subsequently formed the Hunter River Vineyard Association and its first meeting attendees were high profile growers from the district: James King, William Kelman,

⁴⁴ Merab Harris Tauman, 'Lochee, Francis (1811-1893)', *ADB*, vol. 2, 121-122.

⁴⁵ Brian H. Fletcher, *The Grand Parade, a History of the Royal Agricultural Society of New South Wales* (Sydney: The Royal Agricultural Society of New South Wales, 1988), 35.

⁴⁶ Fletcher believed this was due to wine growers being more dispersed on the Cumberland Plain whereas the Hunter had a greater 'identity of interest' in wine growing. Fletcher, *The Grand Parade*, 41-42. Just as a point of comparison, further east, across the Pacific, in former British settler society and New World wine country the United States, the first society exclusively for grape growers did not begin until 1849. It was in Missouri; next was the American Wine Growers' Association, chartered in Cincinnati in 1851. Pinney, *Wine in America*, 217. The first group was the Gasconade Grape Growing Society of Hermann, Missouri.

⁴⁷ Driscoll, *The Beginnings of the Wine Industry*, 50.

Andrew Lang, Archibald Windeyer, William Burnett, Edwin Hickey and others. Membership excluded those not involved in wine growing – a key difference from the New South Wales Vineyard Association. All members were to contribute to the combined knowledge of the Association at least once a year and provide at least four bottles of wine each year to be tasted and discussed by the group. Through joint efforts the wine growers aimed to promote ‘the culture of the vine’ and turn its products to ‘the most profitable account.’⁴⁸ In 1850, a Perth newspaper glowingly anointed the HRVA as the most successful institution established to develop and exploit colonial resources. This success reportedly stemmed from its narrow focus and business-like approach.⁴⁹

By 1855, the HRVA claimed, during a visit by Governor William Denison to the Hunter, that their collective efforts had indeed borne fruit. The Association presented Denison with a copy of a tract by King summarising their achievements (though King wrote mainly about himself) and declared, further, that their success had come through faith in the suitability of the region for wine growing, ‘the outlay of a large amount of capital’ and ongoing experimentation so that some of their wines were now comparable with those of France.⁵⁰ This last claim was hopeful rather than substantial but this aiming to emulate the perceived excellence of French fine wine remained an important feature of wine growing among British colonists, as distinct from early German growers in New South Wales and South Australia, Swiss growers in Victoria and the few Italian wine growers in colonial and early Federation Australia.

Of the late colonial era wine regions in New South Wales, and there were several, the Hunter most effectively retained its link to wine production through the very lean years of the twentieth century from 1920 to the 1950s. Families such as Tyrell’s, Drayton’s and Tullochs - who were not large station-owner hobbyists-turned-wine growers, or medical doctor-turned-entrepreneur like Henry Lindeman but farmers in the Pokolbin district of the Hunter, just outside Cessnock -survived by diversifying into mixed farming. Their commitment to retaining their land allowed them to return to wine growing after the 1960s renaissance in wine in Australia led to the gradual rebuilding of work begun in the nineteenth century.⁵¹ They participated in networking and knowledge sharing among Hunter wine growers a culture present since the earliest years of viticulture and viniculture in the region.

⁴⁸ ‘Regulations of the Hunter River Vineyard Association, instituted 19th May, 1847, for the Purpose of Promoting the Culture of the Vine, and Turning its Products to the Most Profitable Account’ in *Historical Summary of the Proceedings and Reports of the Hunter River Vineyard Association, from its Origination to its First Annual Meeting in the Year 1853* (Sydney: W.R. Piddington, 1854), 3-4.

⁴⁹ *The Perth Gazette*, 29 March 1850.

⁵⁰ *Maitland Mercury*, 21 April 1855.

⁵¹ This is based on interviews conducted for the radio documentary *Vintage Stories*, co-producers Julie McIntyre and Phillip McIntyre (ABC Statewide Radio NSW, 2009).

‘SMALL IS BEAUTIFUL’ AND CHALLENGING IN *THE HUNTER VALLEY*: WINE HISTORIES AND IDEAS – PAST, PRESENT AND FUTURE?

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ABSTRACT

“History makes us...” goes the saying but understanding what has happened over time, let alone, what might happen remain open questions. Leaving aside, for the moment, the challenges presented by the diverse faces in the Hunter Valley of industrial, mining and residential activity, which continues apace, viticulture, winegrape growing and the complex of farming/agrarian ventures present especial niche opportunities.

Understanding the development of the production, distribution and consumption of speciality produce, namely, the histories of wine and food, could well shed useful light upon the past and assist in illuminating future potential. History, socio-geography and economy all play key roles in shaping the Hunter Valley’s high quality, mostly small to medium scale winemaking and viticulture enterprise. The excellence of these ventures is arguably the key to the future of the wine industry in the Hunter. Moreover, excellence and a spirit of hard-working enterprise, albeit with many a turn and tumble, stretch back to James Busby’s seminal, late Georgian optimism and venturesome practical spirit embedded in the title of his agricultural report: “*Journal of a recent visit to the principal vineyards of Spain and France:...with observations relative to the introduction of the vine into New South Wales*” (London, 1834).

What kinds of historical understanding could be useful in “The Business of Wine” and its non-identical twin, “The Wine Industry”? First, the historical legacies and traditions associated with wine, viticulture and winemaking remain central to the rise of Mediterranean-wide/Black Sea civilizations and Western traditions of thought. Second, Wine Industry practices and traditions as well as innovations grow in the presence, conscious or otherwise, of history, people, geography and the land. Note, “Wine Country” is an affectionate tasting and welcoming badge in The Hunter Valley – at once evoking ideas of locale and produce. Third, the contemporary histories and practices of viticulture, winegrape growing and winemaking need to harness the histories – social,

economic and cultural/geographic of wine in society and culture through time. Markets and ideas of market-trading are as venerable as the ancient Mediterranean and certainly prefigure the pathfinding work of Adam Smith (as Smith himself was aware)*, and yet the dynamics and locale of markets remain both elusive and challenging. Wine is certainly a beverage but it is much more: wine accompanies histories, cultures and traditions, and it is a possessive and exchangeable commodity. Wine is a cultural food taken through history and over time.

* Vivenza, G. (2002). *Adam Smith and the Classics: The Classical Heritage in Adam Smith's Thought* (Oxford: Oxford U.P.)

**‘SMALL IS BEAUTIFUL’ AND CHALLENGING IN *THE HUNTER VALLEY*: WINE
HISTORIES
AND IDEAS – PAST, PRESENT AND FUTURE?**

The history of wine in Australia, not unlike wine’s closely related social and economic passages-in-society, has had a roller-coaster ride.ⁱⁱ History, culture, economics and demography all have import. From the very beginnings of European agricultural practices in Australia the vine, *vitis vinifera*, was present and its experiential learning curve – agriculture in viticultural practice – has been long, hard and remarkable. Dr A. C. Kelly, 1861, *The Vine in Australia*, well captured Australian experience:

*If the influence of direct sunlight is so important to the perfect ripening of the grape, we may rest assured that in this respect there is no portion of Europe that can equal the Australian colonies. To the inhabitant of a gloomy and cloudy climate, the description of our clear skies “where the sun shines for six or eight months with unclouded splendour in the northern heavens,” – may appear very glowing and delightful in imagination; but the Australian settler, who feels the reality, would gladly see this splendour somewhat veiled, and a few more cloudy days.*ⁱⁱⁱ

In the case of the Hunter Valley and its viticultural cultivation (“vine cultivators” after A.C. Kelly, p.18), this is a wish/fulfilment statement.

This paper will seek to explore, generally and by way of a preliminary overview, the rise of fine winemaking, its agricultural practices and vision through recent Australian history and its contemporaneous practices but with an especial eye to traditions of thought and their long-lived histories.

The Hunter Valley: distance, historical time and traditions of viticulture/farming: Past and Present

Alii in praedia sua proficiscuntur ut locupletiores** revertantur, ego ut pauperior. Other people visit their estates to come away richer than before, but I go only to return the poorer.* (Pliny the Younger, Book VIII.2, trans., Betty Radice, Loeb Classical Library: Harvard U.P., 1975; first printed, 1969).

* landed-estates or farms

** with general emphasis upon wealth or substance

There is much more to Pliny's and other ancient authors' knowledge of the practical, theoretical and on-going experiential world and activities – socio-cultural/economic and historical – of viticultural and winemaking than witty and insightful remarks and aphorisms – as will be further outlined.

However, first much more attention should be paid to the utility of long-lived, educative, historical, scholarly writing which was essentially, often didactic, and remarkably pre-scientific in its agrarian/natural world explorations, descriptions, analyses, even qualitative reasonings, and of course, plain curiosity driven enquiry.^{iv} If one were to put these ideas firmly in their argumentative place, it would be with the following observation: 'we', namely, writers, critics and practitioners of the art, or 'arts and sciences' under discussion, dismiss knowledge, let alone, information and insights into and of the past, darkly, ironically and unwisely, at the expense of the present. Taking this point a little further, the infamous phrase, "the dustbin of history" when attached to people of ideas and terms such as 'economic', 'agrarian', and their once contemporaneous personalities and minds, often rounds upon its later or 'more modern minds' (read relevant – an almost a priori urgency of ideas-in-the-present), blissfully unaware, and preoccupied with their own 'present time' and its often equally subjective demands – alas blind to the past and its potential for other perspectives and understanding.^v

Ancient and Modern histories and forces in play...

The ancient and modern worlds of winemaking and mixed agriculture/viticulture are littered with examples of speculative activities which by turn have promoted and undermined the very long-term character (indeed Annales school of 'long term' historical forces in play... la longue durée) of viticulture/winemaking enterprise.^{vi} Small family based farms and companies have been subject to these forces, both voluntarily and unwillingly/unwittingly but they were not, by any means, the only farming enterprises to face such pressures and opportunities. One need only, in recent times, mention the names, Southcorp and Rosemount and Fosters... to capture the scale and indeed reductive character of events in the Australian agrarian/regional viticultural and winemaking scene, and indeed well beyond.^{vii}

It is well worth reconsidering or taking long historical views to frame or rather capture the social dynamics which have contributed to the contemporary challenges in working productive, small

viticultural/winemaking ventures in a complex of competing regional pressures, land-usage and environmental/sustainability concepts and practices.

Operating in a world simultaneously subject to the forces of nature and agrarian/human activity is inherently challenging.^{viii}

Consider, for a moment, the following elemental list:

- weather, climate...in its macro-regional and micro-agrarian and environmental forms;
- the particular and general character of the foregoing in human and scientific, and humanist terms-in-practice;
- the intricate and intimate related biological/organic activities and their systems of life (recall the phrase “web of life”, its imagaic character and presence);
- dynamic geographies and geology, literally and physically, forged in complexity; given the above – competing, complementary, innovative and traditional social, economic and cultural economic drives, forces and motives – remain clearly present;
- and emphatically last, none of the above elements should be viewed as static.

Separating out these forces is, of course, both possible and necessary but viewing them in academic, rational and practice/practical senses in-the-end outside or truly apart from their social and economic geographies and living environments would be unwise...self defeating. Comparative studies and interdisciplinary studies (economic, historical, scientific and social...note the alphabetic bias) committed to the foregoing conceptual worlds *in praxis*, that is, theory and practice in action, are not only necessary but imperative.

Acquiring new knowledge perspectives can build both social utility and intellectual strength in cultural terms and in productive society. Viticulture and wine remain, at once, social, cultural and economic kin-in-society, that is, many forms of exchange take place in this political/cultural economy of interests.^{ix} Values are derived, given and exchanged.^x

In the current highly competitive and immediate, driven environment for winemaking and all related, productive activities – marketing, scales of activities, size/scale and quality (or otherwise) of winemaking – an eye to history is often lacking with its long term perspectives upon land, labour (in all its complex agrarian and economic senses), and the particular and general economic and

social worlds which gave rise to, and continue to work in smaller and larger environments, namely, the worlds in which viticulture and winemaking is positioned.^{xi} History does not guarantee the correctness or otherwise of human decisions in society in time but it can offer insight and comparative depth and weight in reaching decisions which produce a cultural good for particular, partial and general elements of a vibrant society or societies.^{xii}

We grow and produce for ourselves and others...

Thinking outside the proverbial box and adaptability: responses to **always human business relationships in good times and bad...*

* Whatever scholars and writers think about Nietzsche, this turn of phrase is apposite.

Viticulture and agriculture in the contexts of business and economic activity or vice-versa can be characterized by the following terms: *experiential, elemental, experimental and traditional*.

Moreover, these forms of small agricultural enterprise, knowingly or not, are subject to history and seasonality, namely, larger, smaller and even micro-historical and environmental conditions and forces, and the ever complex fashions of visitors and travellers as conscious and opportune ‘buyers’ of wine/food/culture. Dynamic is an apposite term here but its weight is as truistic as it is ironic and historical. The sovereign worlds or rather quilted universe of farmers, farming and agriculture in which viticulture and winemaking is historically embedded is, at its best, conservative and conserving. Yet, these material, social, environmental and cultural relations of production-in-society (a plurality of worldly economic relations) are dogged by, and remain, inherently risk-laden propositions.^{xiii}

These worlds of production and life, or rather, production-in-life wrestle with hope and risk, gain and loss. Viticulture and winemaking are places of ideas, knowledge in theory and practice, and consciously or not a residence for traditions of thought, of history and science, and philosophical encounter.^{xiv}

Observations and lessons/didacticism from the Greco-Roman Mediterranean: Two ‘reports’

Thales of Miletus, circa 600 B.C., a world famous Greek philosopher, a founder figure of philosophy, one of the Greek Sages, mathematician and scientist – an originator in pre-scientific or ancient (once contemporary) scientific thought – is a key evidentiary case-in-point.

Of course, truth is possibly stranger than reportage in this account in Aristotle's *Politics*, 1259a, written view two centuries later. However, what matters here are perceptions not only of what intellectuals do and are capable of but how material (quite literally) life in agrarian society can be turned to personal advantage (if a philosopher/citizen chooses) in terms of monetized exchange and utility/use-values in Greek 'city-state' (polis) societal existence.

Reading Aristotle's interest in Thales (Aristotle, *Politics*, 1258b39-1259a21): 'things' that might be gained – processes of knowledge being applied to material 'wealth-getting/formation' – as encapsulated in Aristotle's innovative expression, *khêmatistikê*:

*There are books [practical works with particular 'industries' (*ergasiai*) and work/crafts in mind] on these subjects by certain authors, for example Charetides of Paros and Apollodorus of Lemnos have written about both agriculture and fruit-farming, and similarly others also on other topics, so these subjects may be studied from these authors by anybody concerned to do so; but in addition a collection ought also to be made of the scattered accounts [*sporadên*: to make a collection of all the scattered materials] of methods that have brought success in business [processes of making or getting-wealth: ...*khêmatizomenoi*, that is, those practices which have succeeded in wealth-making] to certain [some] individuals. All these methods are serviceable for those who value wealth-getting [wealth-getting/formation: *khêmatistikê*], for example the plan of Thales of Miletus, which is a device for the business of getting wealth, but which, though it is attributed to him because of his wisdom [*sophia*: wisdom], is really of universal application [*katholou*: of general/universal applicability]. Thales, so the story goes, because of his poverty [*penia*] was taunted with the uselessness of philosophy [*philosophia*]; but from his knowledge of astronomy [*astrologia*]* he had observed while it was still winter that there was going to be a large crop of olives, so he raised a small sum of money and paid round deposits for the whole of the olive-presses in Miletus and Chios, which he hired at a low rent as nobody was running him up; and when the season arrived, there was a sudden demand for a number of presses at the same time, and by letting them out on what terms he liked he realized a large sum of money so proving that it*

*is easy for philosophers to be rich if they choose, but this is not what they care about. Thales then is reported to have thus displayed his wisdom, but as a matter of fact this device of taking an opportunity to secure a monopoly is a universal principle of 'business' ['wealth-getting' /formation of wealth-making: *khêmatistikê*];...*

* What remains equally remarkable and, generally speaking, of utility here is, however 'philosophically reluctantly', Thales combination of 'business'/economic opportunity acumen, the usage of theoretical knowledge in forecasting or 'predicting' a possible future event, and generally the acknowledged interactions between 'man', human society, the environment and the cosmos. Yet, after Peter L Bernstein, we would be well advised, when dealing with the complexities and challenges of land and its usage, of environments large and small, of micro- and macro-interactions and dynamics to pay attention to Leibniz's sharp observation:

"Nature has established patterns originating in the return of events, but only for the most part."

(Peter L. Bernstein, *Against The Gods: The Remarkable Story of Risk*. New York: John Wiley & Sons, 1996, p.329).

Given the foregoing commentary, this venerable terrain remains significant terrain for historians of thought and well worth further comparative and interdisciplinary study. Traditions and origins of ideas, in particular, 'economic ideas' and related practices or behaviours, and their transmission or transmutation into later human societies remain pivotal to understanding the evolutionary social and human complex still known as *homo economicus*, the *economic human being*. Of course, the idea of *economics/economy and economic behaviour* under study here is not constituted by any pure or exclusive academic phenomena: economic behaviours are suffused in history, society, culture, and politics, and in turn, by psychological phenomena/states-of-mind/*mentalities*.^{xv}

Reading Aristotle's interest in Thales: Observations

- Intellectuals/philosophers are able and can do things in the real world. 'Making' and 'doing' things have real world implications whether or not philosophers with

their intellectual preoccupation with the nature of knowledge and wisdom (*sophia*) wish or intend to go down a material road...

- Significantly, Aristotle recognized the disparate and specialized practical field-guides which existed on agriculture and its diverse, specialized interests/productive activities.
- True to knowledge, generally speaking, and with particular reference to fields of practical knowledge and their wealth-making potential – theoretical and applied today – their extensive, ‘specialist’, and more particularly, ‘scattered or diverse spread and character’, then and now, called for a more systematic collection of these materials: ...*ta legomena sporadên* (Aristotle, *Politics*, 1259a3-4). Of course, Aristotle was referring to the formative centuries and state of applied pre-scientific/scientific enquiry.
- Aristotle recognized the saliency of apparently highly theoretical work in *philosophia*^{xvi} (philosophy/wisdom in its fullest sense and extent/knowledge) and *astrologia* (astronomy) but equally that philosophers cared seriously or earnestly (Aristotle’s term: *spoudazousin*, 1259a18) about matters other than the process of becoming rich. Indeed, Thales ‘proved’ that it is easy to become rich: ...*radion esti ploutein*, Arist. *Pol.* 1259a17, by taking out a ‘futures contract’, a controlling position (risk/insurance) in terms of access to all olive presses in Miletus and on the island of Chios, that is, in essence, a hedge taken in advance of a favourable seasonal event with the use and deployment of advanced, theoretical knowledge.

Intellectual and philosophical irony is manifest here. However, its practical results signalled another order of behaviours and applied applications in the world of doing business and forming wealth-getting processes and stratagems in the seasonal agrarian realm of olive-oil harvest predictive capacity and behaviours, and the subsequent production, processing and price-setting activities and behaviours which followed on from Thales’ (to take what was and remains a signal example of a general principle) scientific knowledge, his practical insight, and initiative in producing agricultural wealth.

Understanding that a general principle (*katholou*: something of general or universal applicability) was in operation here, whether Aristotle or Thales approved or not (note, Arist. *Pol.*, 1259a5-9 and 1259a18-20ff), when it came to the processes or formation of wealth-getting/making behaviours in society – was what mattered.^{xvii} This meant recognizing that what was occurring in this apparently but not really incidental context of Thales’ demonstration of taking theoretical knowledge into the realm of practice was not only possible but also that its applicability or utility had extensive and general relevance rather than being of use in one particular set of circumstances, or indeed, field of production/economic activity.

Reading Pliny: Human relationships are business relationships and are often as variable as the seasons, weather and climate in which viticulture and winemaking is elementally situated...

This detailed and complex letter – presented in extract form below – written after Pliny had famously witnessed the eruption of Mt Vesuvius in 79AD, stands almost like a mirror, and certainly a longstanding reminder of how the ‘pointy end’ of the business of wine never loses contact with its agricultural space, seasonality/climate and the many-sided business relationships which swirl around, and constitute a ‘world’ of viticulture and winemaking.

Book VIII.2

Letter of Pliny To Calvisius Rufus

Other people visit their estates to come away richer than before, but I go only to return to the poorer. I had sold my grape harvest to the dealers, who were eager to buy (Vendideram vindemias certatim negotiatoribus ementibus), when the price quoted at the time was tempting and prospects seemed good. Their hopes were frustrated. (Spes fefellit.) It would have been simple to give them all the same rebate, but hardly fair, and I hold the view that one of the most important things in life is to practise justice in private as in public life, in small matters as in great, and apply it to one’s own affairs no less than to other people’s...Accordingly I returned to everyone an eighth of the sum he had spent so that “none should depart without a gift of mine.”[Aeneid V.305]...Then I made a special provision for those who had invested very large sums in their purchase, since they had been of greater service to

me and theirs was the greater loss. I therefore allowed everyone whose purchases had cost him more than 10,000 sesterces a tenth of anything he had spent above the 10,000, in addition to the original eighth which was a sort of general grant...

Moreover, in view of the fact that some people had paid down large instalments of what they owed, while others had paid little or nothing. I thought it most unfair to treat them all with the same generosity in granting a rebate when they had not been equally conscientious in discharging their debts. Once more, then, I allowed another tenth of the sum received to those who had paid. This seemed a suitable way both of expressing my gratitude to each individual according to his past merits, and of encouraging them all not only to buy from me in the future but also to pay their debts.

My system—or my good nature—has cost me a lot, but it has been worth it. The whole district is praising the novelty of my rebate and the way in which it was carried out, and the people I classified and graded instead of measuring all with the same rod, so to speak, have departed feeling obliged to me in proportion to their honest worth and satisfied that I am not a person who “holds in equal honour the wicked and the good.” [Iliad IX.319]

From the grape harvest (*vendemia /vendage*) to the weather/climate,^{xviii} from prices gained and lost, to négociants/merchants (*negotiatores*) and the flight or success of selling the seasonal harvest, much of this ancient Mediterranean world (perhaps better characterized as empires of the mind, sea and land) still seems strikingly familiar in 2009.^{xix}

¹ The intricacy and complexity of winemaking in the contexts of people, place, geography and region with industry and survival well in view has been caught in its many-sided individuality in Max Lake, *Hunter Winemakers: Their Canvas and Art* (Sydney: Jacaranda Press, 1970). The lesson here, if you will allow, is no wine industry without people who are creatively committed to the land and viticulture, and to the vine in the region. Small scale winemaking is often a qualitatively different phenomenon to industries (production facilities) of considerably more scale and size. However, ideally quality itself should not be a prisoner of scale. See further, for perspectives, then and now, on the ever-changing wine industry scene, James Halliday, *A History of the Australian Wine Industry, 1949-1994* (Adelaide: Winetitles/Australian Wine and Brandy Corporation, 1994), and note current (2007/8) “overview” in *The Australian & New Zealand Wine Industry Directory* (South Australia/Adelaide: Winetitles, 2009), pp.1-16ff.

¹ See the still prescient work, A.C. Kelly, *The Vine in Australia*, in Dennis Hall & Valmai Hankel, eds. (Sydney/Hunters Hill: The David Ell Press, 1980), p.19. Kelly’s study of vines generally, and climate and soils, remain compelling and useful historical records. Viticulture is no exception: economic success is built upon informal understanding(s) of the past and the present.

¹ Consider a few remarkable, detailed and general as well as particular examples from Greco-Roman and Punic-Carthaginian Mediterranean antiquity: note, Pliny *Natural History*, Book 14.2ff (Cambridge, Massachusetts: Harvard U.P., Loeb Classical Library, 1945, first reprinted, 1952); Columella, *On Agriculture [De Re Rustica]*, Book 1.1ff (and its preface). See further, the lifelong work and thoughtful exploration of H.P. Olmo, “The Origin & Domestication of

the Vinifera Grape”, in Patrick E. McGovern, Stuart J. Fleming & Solomon H. Katz (editors), *The Origins and Ancient History of Wine* (Philadelphia: The University of Pennsylvania Museum of Archaeology and Anthropology, Gordon & Breach Publishers, 1995), pp.31-43. Volume 11, in *Food and Nutrition in History and Anthropology*, University of Pennsylvania.

¹ For inspiration in the craft of history and its general utility or capacity for “perspectivism”, see Marcus Greil, *The Dustbin of History* (Cambridge, Massachusetts: Harvard U.P., 1995).

¹ To take one broad example, namely, Australia’s speculative confusion in the drive to produce “commodity wine” and the long and short term potential for high quality fine wine rather than “premium” branded wines which merge into a morass of brands and bottles almost indistinguishable from beer markets and marketing. See Brian Croser, “The Australian fine wine industry, irrelevant or neglected?”, *The Australian and New Zealand Wine Industry Journal*, Vol.21.6 (November/December, 2006), pp.16-20. See further, Brian Croser, “Decanter wineman of the year” in *Decanter Magazine*.

¹ See generally the numerous articles in the *Australian Financial Review* re these companies and struggles corporate, familial...and always in this marketplace...of people and ideas, and values.

¹ Informative work is usefully summarized in the preface of Robert E. White, *Soils for Fine Wines* (New York: Oxford U.P., 2003), and see generally for thoroughness and detailed research re soil, *terroir* and much more.

¹ One way of presenting such arguments is contained in the fine work of Emile Peynaud, *The Taste of Wine [Le Goût du Vin]: The Art and Science of Wine Appreciation*, trans. by Michael Schuster (New York: John Wiley & Sons, 1996; first published in French, 1983). Jacques Blouin worked closely with Peynaud in the making of this second edition. See further, a broader but complementary work, Harold McGee, *On Food and Cookery: The Science and Lore of the Kitchen* (London: George Allen & Unwin, 1986; first pub., 1984).

¹ Again, see the exploratory work in Gloria Vivenza, *Adam Smith and the Classics: The Classical Heritage in Adam Smith’s Thought* (Oxford: Oxford U.P., 2001); see also, the equally challenging and exploratory, Scott Meikle, *Aristotle’s Economic Thought* (Oxford: Clarendon Press, 1995; 1997).

¹ For one view of the complexity of wine and its markets/‘marketability’, see Larry Lockshin, “The schizophrenic nature of wine”, Vol. 20.1 (Jan./February, 2005), pp.32-33. Far more than a “duality” of wine consumers/drinkers is at stake, and again terms such as ‘premium’ and ‘super premium’ can only confuse. Wine is a commodity but it is a commodity with ‘attitude’: history, philosophy, beverage/food, culture, indeed anthropology, and shelf spaces or cellar door/vineyard locations, and combinations thereof, are the stuff of the wine trade.

¹ See especially for a detailed study of traditions of vine and wine, of education and culture in social context and external/internal crises in the wine trade from vigneron to table and café and well beyond, Harry W. Paul, *Science of Vine and Wine in France, 1750-1990* (Cambridge: Cambridge U.P., 2004); see also, the enduring thoughtfulness in Max Lake, *Classic Wines of Australia* (Brisbane: Jacaranda Press, 1966) and *Cabernet: notes of an Australian wineman* (Adelaide: Rigby, 1977).

¹ See the insightful essay by Peter L. Bernstein, “Facing The Consequences” [bernsteinsp.pdf](#) (Jan., 2000) or *National Association for Business Economics – Abramson Awards*, Washington D.C. It is no surprise that Bernstein’s close friend was Robert Heilbroner of *The Wordly Philosophers* fame.

¹ If there is a “political economy” of wine and the wine industry it should, indeed must, include questions of philosophy and science and, of course, these questions must necessarily include the productive worlds of viticulture and the land. Theory and practice, experiment and questioning are elemental: see for engaging examples, Matt Kramer, “The Notion of Terroir”, Harold Tarrant, “Wine in Ancient Greece: Some Platonist Ponderings” and “Warren Winiarski, “The Old World and the New: Worlds Apart?” in Fritz Allhoff (ed.), *Wine & Philosophy: A Symposium on Thinking and Drinking* (Oxford: Blackwell Publishing, 2008).

¹ Besides the intense current interest, fashionable and useful interest in behavioural economics (Schiller, et al.), note also, the long rise of the French, and now world-wide, influence of the Annales school of social and economic history: Peter Burke, *The French Historical Revolution: The ‘Annales’ School 1929-89* (Cambridge, Polity Press, 1990). See also, the sage essay by Ralf Dahrendorf, *Homo Sociologicus* (London: Routledge & Kegan Paul, 1968; 1973).

See further, two recent articles by Robert J. Schiller: “Challenging the Crowd in Whispers, Not Shouts”, *The New York Times, Economic View* – [nytimes.com](#) (November 2, 2008), and “Can talk of a Depression Lead to One?”, *Economic View* – [nytimes.com](#) (February 22, 2009).

¹ One very useful way to view Aristotle and matters Aristotelian: G.E.R. Lloyd, *Aristotelian Explorations* (Cambridge: Cambridge U.P., 1996).

¹ See, Peter L. Bernstein, *Against The Gods: The Remarkable Story of Risk*, p.307, and generally chapter 18. See further, G.E.R. Lloyd, *Aristotelian Explorations*, “The idea of nature in the Politics”, pp. 184-204.

¹ For enduring perspectives on adverse vintage conditions, climate and social history, note Pliny the Younger’s following letters, his wit and the descriptive power of his writing: Book VIII.15; VIII.17; Book X.8.

¹ Inspiration should be acknowledged: see the insightful, Nicholas Purcell & Peregrine Horden, *The Corrupting Sea: A Study of Mediterranean History* (Oxford: Blackwell, 2000).

THE FRENCH IN THE AUSTRALIAN WINE INDUSTRY: 1788 – 2009.

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ABSTRACT

The transformation of grapes into wine is a miracle that has fascinated humans for thousands of years. From its humble beginnings in ancient civilizations to the global phenomenon that it is today, wine has adapted itself to new societies, conditions and continents. Over the centuries wine has found a place at the tables of the world, from Europe to Africa, through Asia, Oceania and the Americas.

Part of the “new world” of winemaking, Australia’s wine industry has been influenced by numerous different cultures, developing production methods, wine styles, tastes and consumption habits. This historical study traces the dispersed yet influential presence of the French in the Australian wine industry. As there is little information published on the subject, it brings together information from texts detailing the French in Australia and those concerning the history of Australian wine industry, while also drawing on the socio-cultural history of Australian society.

From the first failed attempts at employing “French expertise” in the form of P.O.W.’s in 1800 to the successful development of sparkling wine production in western Victoria and the successful French-owned brand *Jacob’s Creek*, the Gallic presence has been small yet constant. Another constant is the notion of the pre-eminence of French wine in the Australian psyche, both in production and consumption. French wine has enjoyed a superior status that can still be seen in contemporary professional discourse, the media and attitudes towards consumption.

This perpetuation of the French stereotypes with regard to wine raises a number of complex questions: In the 21st century, how is that the reputation of French wine as the best in the world is still so strong? Why is that by virtue of being French a method, technique or brand is considered superior? Why does this stereotype persist, despite the fact that Australia produces some excellent wines and has a growing export market? This study is a first step towards investigating these questions concerning contemporary Australian attitudes to French wine and wine in general.

THE FRENCH IN THE AUSTRALIAN WINE INDUSTRY: 1788 – 2005

- I. Context: A Brief history of wine in Australia
- II. The French Presence and Influence in the Australian Wine Industry
 - A. In the beginning ... : 1788 - 1900
 - B. Death and rebirth : 1900 - 2005
 - C. From strength to strength : the industry today
- III. Conclusion

I. CONTEXT: A BRIEF HISTORY OF WINE IN AUSTRALIA

The story of wine in Australia has been influenced by many cultures since its inception more than two centuries ago. With the arrival of the British in 1788 came the idea that wine could be a profitable export product from the new colony. However the first attempts to grow grapes and produce wine came to nothing. Around 1820, three colonials, Gregory Blaxland, William MacArthur and James Busby⁵², all three passionate about wine, began cultivating *vitis vinifera* (the grape variety used for wine production) in New South Wales, in the full knowledge that there was not a single viticulturalist in the colony or on the continent, equating to “*an almost entire absence of practical acquaintance with its details*” (Dunstan 3).

The publication of several books on the subject of growing grape vines and producing wine (such as James Busby’s *A Manual of Plain Directions for Planting and Cultivating Vineyards, and for Making Wines in New South Wales* in 1830, and George McEwin’s *The South Australian Vigneron and Gardeners’ Manual* in 1843) followed by the arrival of a number of European emigrants helped the industry to make some progress during the 19th century, but this progress was very slow. This early part of the century saw the beginning of viticulture in South Australia and Western Australian (Faith 31), and during the 1820s, Australian winemakers managed to produce some wines deemed worthy of a medal from the Royal Society of Arts in London (Oz Water Into Wine). However the second part of the century brought with it a number of problems: the absence of a market for wine, due to a small Anglo-Saxon population who much preferred beer over wine;

⁵² **Gregory Blaxland** (1778-1853) planted vines at Brush Farm in the Parramatta region in 1816. **William Macarthur** (1880-1882), with his brothers John and James, imported vines from France and Switzerland, planting them at Camden Park in 1820. These vines became an important source of cuttings for other vineyards. **James Busby** (1801-1871) arrived in Australia in 1824 and founded the Hunter Valley region. (Oz Water into Wine)

the attitude that colonial wine was inferior to European wine; and the appearance of the vine aphid *phylloxera* in 1877 which had devastating effects in most of Australia's wine growing regions.

Despite the negative effect of the Great Depression of 1929, the 20th century heralded a more positive era for the Australian wine industry. Marketing of Australian wine both overseas and in Australia, the continental influence of the Second World War, and the consequent arrival of significant numbers of European emigrants, encouraged Australians to drink wine. Advancements in distribution, especially the invention of the "bag-in-a-box", increased consumption as wine became much more accessible to the general public. From the 1970s onward, the industry has continued to expand, resulting in an industry that is one of the world leaders in wine research and technology, and is, according to James Halliday "*lean, mean and tough, but vibrantly diverse*" (60).

II. THE FRENCH PRESENCE AND INFLUENCE IN THE AUSTRALIAN WINE INDUSTRY

Having briefly summarised the broad history of the Australian wine industry, we will return the beginnings of the industry in order to reveal the French presence therein.

A. IN THE IN THE BEGINNING ... : UNTIL 1900

At the time when the first vines were planted in Australia, there was a total lack of viticultural expertise. Having been settled by Anglo-Saxons, for whom wine production was not part of the culture or traditions of the population, the Australian colonies required European expertise if the industry was to take shape. In this era (and largely so today), France was considered to be the preeminent wine-producing country and thus initially Australia tried to import some of this French expertise. The first examples of this "import" were Antoine Landrien and François de Riveau, French prisoners-of-war brought to Australia by the English in 1800 as "vine technicians" (Stuer 62). Unfortunately, both for the industry and the two men concerned, their French blood did not guarantee their expertise in wine growing, and they were unable to carry out their mission. Having served their time and produced only undrinkable wine, they returned to France.

Failures of this nature prompted the colonisers to try a different method of obtaining expertise: training British colonials in France in to order to implement the newly acquired expertise

in Australia. This method is apparent in the publications of James Busby⁵³, a tireless promoter of wine as an ideal industry and beverage for Australia. He spent time in France learning French grape- growing and winemaking techniques with a view to establishing viticulture in Australia. Between 1825 and 1833 he published three instruction manuals for wine production, from the vine to the glass, designed for those who knew nothing about wine. A large proportion of his writings were translations of French texts, many by the Comte de Chaptal⁵⁴.

In the late 1830s, Didier Joubert, a Frenchman carrying with him vines from France, and Charles La Trobe, director of the colony of Port Philip (modern Melbourne) arrived in Australia. The influence of the latter on the wine industry was partly due to his personal interest in wine, but more as result of his wife, Sophie, a native of Neufchâtel in Switzerland. They assisted many Swiss, particularly winemakers, to emigrate to the area around Melbourne. During the 1840s, at least five Swiss winemakers settled in Port Phillip: J.H. Dardel helped the Ryrie brothers to prune their vines and produce wine at their vineyard *Yering*, planted in 1838 and the first commercial winery in Victoria (Dunstan 17); David Louis Pettavel and Frédéric Breguet introduced viticulture to the Geelong region in 1842 at their vineyard in Pellock's Ford; and John Belperroud planted his in the Barrabool Hills around the same time (Stuer 64). The writings of Belperroud and Pettavel were published together in 1859 under the title *Essays on the vine with instructions for its cultivation in Australia and how to make wine*.

The Swiss influence can also be seen in the Yarra Valley. In 1862 Baron de Pury planted Yeringburg (which was replanted in 1968 by his grandson Guil de Pury after a long period of neglect). The renowned Hubert de Castella established his vineyard *St. Hubert's* in 1868 where he planted 20,000 Cabernet sauvignon cuttings taken from Château Lafite in Bordeaux – in 1876 *St. Hubert's* was the biggest vineyard in the Yarra Valley (Dunstan 88) and De Castella's aim was to produce quality French-style wines. For the entire period he spent in Australia, De Castella tried to promote wine while fighting against the beer and spirit culture, but the colonial influence on Australian society at the time was too strong. It would take a century for his ideas to enter into the Australian psyche.

While the Swiss influence was most apparent in the Geelong and Yarra Valley regions, other regions experienced a French influence despite the small number of French in Australia. De

⁵³ *A Treatise on the Culture of the Vine and the Art of Making Wine* (Sydney, 1825); *A Manual of Plain Directions for Planting and Cultivating Vineyards and for Making Wine in New South Wales* (Sydney 1830); *Journal of a Tour Through Some of the Vineyards of Spain and France* (Sydney, 1833); *Journal of a Recent Visit to the Principal Vineyards of Spain and France* (London, 1834);

⁵⁴ Chaptal, Jean-Antoine (1756 – 1832), French chemist and politician who developed the technique of adding sugar during the fermentation process to increase the final alcohol content of a wine, now called *chaptalisation*.

Castella, whilst Swiss by birth, was a naturalized French citizen and his attitude towards wine was the very much influenced by the French. In a sense he bridged the gap between the Swiss and French winemakers in Australia. In 1871 there were only 2,500 French citizens in Australia, undoubtedly as a result of the French government encouraging its citizens to migrate to French colonies. Australia was not a particularly attractive destination for the French at this time, and as the writer Braché said, “*the French made but indifferent colonists upon any other but French territory*” (Dunstan 14). Hence the small number of French in Australia at the time, and only a handful investing in or owning their own vineyard. However, despite their tiny numbers, the French exerted a very strong influence on the development of the wine industry in Australia.

In central Victoria, the Frenchman Ludovic Marie, became the director of Tabilk in 1860 and planted 65 acres of vines that year. Marie was followed by a line of French employees: A. Joubert and Joseph Gassies (viticulturalists), François de Coueslant (director). Tabilk (later *Château Tahbilk*, and today *Tahbilk*) is one of the rare wineries that has been in continuous production since its creation until the present day. In 1862, Marie established a vineyard in the same region for the *Goulburn Valley Vineyard Company* (Stuer 98).

In this developmental stage, most of the French in the Australian wine industry were involved in sparkling wine and Australian sparkling wine owes its existence to the very influential French presence. In 1863, Jean Pierre Trouette and Emile Blampied produced the first *méthode champenoise* at St. Peter’s in the Great Western region ([Australian Wine – Uncorked!](#)). Hans Irvine, an Australian, purchased St. Peter’s in 1887, but having trained in France himself, he continued to employ French viticulturalists: Pierlot, Grellet, Berneot, Bouchet and Thomas (Dunstan 141). The Great Western region, thanks to the French influence, is to this day one of Australia’s most renowned sparkling wine regions.

In 1873, François Gaston Longe Frère, a winemaker from Bordeaux, was employed by J.T. Fallon near Albury, to make a *méthode champenoise*. Evidently Fallon did not understand that *champagne* does not come from Bordeaux! Frère’s own winery *St. Hilaire*, was unsuccessful (Dunstan 132), as were his experiments using barrels made from eucalyptus timber (Stuer 120). On the contrary, August D’Argent, an expert in *méthode champenoise* arriving in Australia in 1877, triumphed in this fledgling industry. He made the first Australian sparkling red wine for the Victorian Champagne Company in 1881 (Dunstan 133) and is recognised as the founding father of this distinctly Australian wine style.

Thus we see that until the end of the 19th century the French made their presence felt, however the new century would change this.

B. DEATH AND REBIRTH: FROM 1900 TO 2005

There is very little information on the French in the Australian wine industry during the 20th century. We can suggest some possible explanations for this: first, that there were simply not many French in Australia at the beginning of the 20th century, possibly due to generally negative descriptions of Australian society by French writers – they wrote about beer, spirits and alcoholism (Fauchery 190) – hence Australia was hardly an attractive destination for French winemakers; later, after the Second World War, France experienced a period of strong economic expansion, and therefore the French did not want to leave their country; in addition, Australian wine was not mentioned in post-war French literature nor in travel guides, most probably because it was a very small industry.

Secondly, after the devastation of many winegrowing regions by the parasite *phylloxera* at the end of the 19th century, the Australian wine industry produced almost exclusively sweet and fortified wines until the 1960s (Fosters Group). Spanish and Portuguese in origin, the dominant production of these wine styles undoubtedly contributed, once again, to a lack of interest in Australia by the French in general, and more specifically as a destination for winemakers.

Finally, the lack of information concerning the French in both Australian documentation and advertising could be explained by a desire by the Australian wine industry to create its own identity. Until the mid 20th century, its identity rested on German, Italian, Swiss and French efforts and know-how, however the second half of the century saw the emergence of an Australian style of wine production and presentation (including authorisation for the Australian Wine Board to promote wine in Australia) and thus an Australian wine identity. Although there appears to have been an effort to deny the French influence and savoir-faire, in practice the industry recognized, albeit begrudgingly, the value of French expertise. Put bluntly by an old winemaker speaking of François de Castella (employed as government winemaker in 1907) “*another bloody Frenchman, but he made his presence felt*” (Faith 132).

It was not until the 1950s that wine began to find its place on the tables of mainstream Australia. Linked to an increasing European and French influence, due in part to European emigration after the Second World War. Australian soldiers returning from the war in France had become used to their daily ration of wine which contributed to the increase in everyday wine consumption. This decade also saw the emergence of French restaurants (Halliday 17) who took advantage of the reputation of French cuisine. George and Mirka Mora, Parisians, opened the doors

of the *Mirka Café* in 1954, followed by the restaurant *Balzac* in 1958. *Balzac* became an institution for Melbourne artists – actors, writers, painters, etc. – and reinforced the stereotype of French culture, sophisticated and elegant. In addition, the international spotlight was on Melbourne for the 1956 Olympic Games and served to establish its status as a cosmopolitan capital.

At this time, French wine was fashionable and considered chic and sophisticated – the Melbourne Club was proud to serve only French wines (Halliday 18), and Sydney's first international hotel, the *Hotel Chevron*, had no doubts as to the superiority of French wine, beginning the cellar description by stating that “*in addition to all the top French wines...*” it also contained some Australian wine (Halliday 18). There were some who took advantage of the this image of French class – Hermann Thumm, a German, christened his winery using the French term *château*, producing the first wine at *Château Yaldara* in 1950. Australian winemaker Owen Redman chose the French translation of his name, *Rouge Homme* when he bottled his first Coonawarra reds at the end of the 1950s. Neither was French, but looking through a list of Australian wine labels from the last 50 years, many winery names had (and have) a French association in their name. Whether it was a conscious or subconscious decision, it shows that the notion of the pre-eminence of French wine culture persists.

The popularity of French culture combined with the European influence helped to re-establish an interest in wine, and consequently an interest in France. In 1950 Max Schubert, chief winemaker at Penfold's, travelled to Spain to study sherry. He returned via Bordeaux where he tasted some excellent aged wines, and subsequently returned to Australia determined to produce a red wine of equal quality (Halliday 7). There is no doubt that he reached his goal in *Penfold's Grange Hermitage* (now *Penfold's Grange*), but ironically it is made from shiraz grapes matured in American oak rather than the Bordeaux blend of cabernet sauvignon and merlot in French oak.

During the 1960s the Australian wine industry began to expand and a small number of French became interested. Most notably in the Pyrenees region in Victoria's west several French interests replanted revivalist vineyards (The World Feast). Among them was *Rémy Martin* (now *Rémy Cointreau*) who established *Blue Pyrenees* in 1962 and, in the words of the current owners “*developed one of Victoria's great wine businesses*” (Blue Pyrenees Estate). Apart from a brief flirtation with Annie's Lane in the Clare Valley between 1981 and 1987, *Blue Pyrénées* was *Rémy Cointreau's* only Australian interest and after 40 years was sold in 2002 to an Australian group.

After many years of hard work, the tides turned for the Australian wine industry in the mid-1970s: the continental influence surpassed the colonial influence on the Australian way of life. For the first time coffee consumption (continental) was greater than that of tea (colonial) (Halliday 37-

38) and wine became a everyday beverage in Australian society. This shift in attitude signalled the start of an incredible period of expansion in both production and consumption of wine in Australia which is still visible today. The strong influence of French cuisine continued: the number of French restaurants multiplied, it became the norm to drink wine in restaurants, and French wine remained the point of reference. In 1965, Len Evans, director of Australian wine promotion, in congratulating Australian wine on its achievements, also conceded that of course it was not of the same quality as French wine (Australian Wine – Uncorked!). French language, like the wine, embodied sophistication, and the use of French words on wine labels was quite common, for example, the term *vin ordinaire* was perceived as much more chic and mysterious than the English equivalent *ordinary wine*.

The French influence is also apparent in Australian wine industry regulations – in 1989 a label integrity program was introduced. To comply with this program, producers must keep appropriate records in order to verify the details of the wine as stated on the label. This regulation has existed in France for many years, but became essential for the Australian wine industry in 1993 when Australia signed a wine trade agreement with the European Union. Australia was the first country outside Europe to sign such an agreement, which in itself shows the international orientation of the Australian wine industry.

C. FROM STRENGTH TO STRENGTH: THE INDUSTRY TODAY

Although Australia produces some excellent wines that win international prizes, for most people French wine remains the benchmark. To verify the quality of an Australian wine, the question is often asked: is it as good as a French wine? Even when speaking of success, it is often remarked that a particular Australian wine was victorious against the French in a competition, forgetting that other countries also produce excellent wines.

The concept of success and merit in Australian wine journalism and literature is also defined, in part, in reference to France. Renowned Australian wine writer, James Halliday, on the first page of his Australian Wine Companion 2004 highlights the fact that he contributed to the *Larousse Encyclopedia of Wine* (an eminent French publication) despite having contributed to more than 50 publications (i). *Gourmet Traveller WINE* often has a feature article (and always at least one article), concerning French wine and France, reinforcing the idea that to be a quality magazine it must discuss French wine.

In terms of winemaker training and many other professions with the wine industry, it has become almost obligatory to spend some time in France. For many, if not most winemakers, this time in France is not part of their formal training. However universities are not underestimating the importance of France: the Diploma of Wine Marketing at the University of Ballarat includes three months in Bordeaux; the University of Adelaide, the most renowned for wine studies in Australia, teaches technical French for winemakers. Thus, it is apparent that France continues to exert a strong influence on the Australian wine industry.

This influence can be seen in the current trend by boutique wineries to use traditional French winemaking techniques. For example, Alan Johns of *Yering Farm* (Yering Farm Wines) in the Yarra Valley uses traditional methods and bases his winemaking philosophy on the French idea of *terroir*. Rick Kinzbrunner of *Giaconda* (Giaconda Vineyards) has planted exclusively French varieties and transforms his grapes into wine using traditional methods from Bordeaux and Burgundy. Gary Farr of *Bannockburn* spent several vintages in Burgundy, an experience which he says has strongly influenced his wine style (Bannockburn Vineyards), while *Torbrecks* wine has been likened to an excellent *Côte du Rhône* (Wine Star). At *Wantirna Estate* (Wantirna Estate), to the east of Melbourne, there is a passion for the idea of *terroir*, and the wine is produced using traditional French methods, both in the vineyard and in the winery. These examples show a return in a certain sector of the industry to traditional French methods and a new respect for the very French idea of *terroir* (so French it can't be translated into English) – that all aspects of soil, aspect, climate and the human factor must be carefully balanced in order to make good wine.

French winemakers working in Australia also contribute to the French influence on the Australian wine industry. At present there are around a dozen French winemakers working in Australia armed with French training and adapting their skills to Australian culture and *terroir*:

- Celine Rousseau found it difficult as a young Frenchwoman to secure a job in France in a male-dominated industry (Halliday, Winepros) but at *Chalkers Crossing* (Chalkers Crossing) in the Hilltops region near Canberra she has found her niche and won the 2002 Qantas Young Australian Winemaker of the Year.
- Clémence Hazelgrove, having worked for some time in the Coonawarra, is now chief winemaker at *Forest Hill Wines*, W.A.
- Sandrine Gimon, a graduate of the University of Reims is winemaker at *Rymill* (Rymill) in the Coonwarra.

- Emmanuelle Requin-Bekkers has been making wine for *Chalk Hill Wines* (Chalk Hill Wines) since 2001 and now also has her own wine consulting business (Oenologie-Requin).
- Alain Rousseau makes wine for *Frogmore Creek Wines* (Frogmore Creek Wines) in Tasmania. He was previously at the Queensland winery *Sirromet* (*Sirromet* is in fact the name of the owner, T.E. Morris spelled backwards, but it sounds much more chic like this pronounced with a French accent than *Morris* with an Australian drawl)
- David Baldet from the Loire Valley makes sancerre style wines at *Sabotage Wines* (Sabotage Wines) on the Mornington Peninsula.
- Dominique Portet, arrived in Australia in 1976 to work for Taltarni in the Pyrénées. After 22 years at Taltarni, Dominique started his own winery, *Dominique Portet*, in 2000 in the Yarra Valley (Dominique Portet).
- Gilles Lapalus makes French style wines for *Sutton Grange*, a boutique winery south of Bendigo (Sutton Grange Wines).
- Loïc Le Calvez took over the winemaking reins at *Taltarni* when Dominique Portet left in 2000, continuing the French connection (Taltarni Vineyards).

There are possibly more French winemakers on Australian soil, but like a Parisian in August, they keep themselves hidden deep in the countryside.

In addition to these individuals, there are some French companies with Australian interests and vice versa.

- Orlando Wyndham, one of Australia's big three wine companies, and owner of Jacob's Creek, Australia's biggest wine brand, is owned by Pernod Ricard (France).
- Fosters (Australia), the world's biggest drinks company, owns the French wineries *Champagne Lanson* and *Herrick*
- Moët & Chandon have their Australian project in the Yarra Valley – *Chandon Australia* and *Green Point*.
- *M.Chapoutier* (M.Chapoutier), prestigious Rhône Valley wine company began their Australian wine project at Mount Benson, S.A., in 1997. They have since sold this interest and have two vineyards in Victoria (Pyrénées and Heathcote), and several collaborations with Australian winemakers.

- *Château Lynch-Bages* and *Champagne Bollinger* have a collaborative project with Brian Croser, producing wines from the Adelaide Hills, Fleurieu Peninsula and Wrattenbully.

It is interesting to note that French winemakers, companies and those using French methods are well known in the Australian wine industry despite their tiny numbers relative to the industry as a whole.

III. CONCLUSION

The transformation parts of Australia into a fertile viticultural *terroir* is as fascinating as the transformation of grapes into wine. The French have been involved in the creation and (re)invention of the wine industry throughout its 200 year history, and have had significant influence on both production and consumption habits. Historically, the French presence has never been great, from its humble beginnings at the start of the 19th century through to the modern industry, where the current production volume places Australia among the top ten wine producing countries in the world. Hubert de Castella is probably the most well-known French winemaker in Australia, due to his efforts to promote wine in the 19th century and his publications, while the Trouette-Blampied family at Great Western left their mark on the Australian sparkling wine. The rest were dispersed throughout the country, the majority working as employees. At present there are less than a dozen French winemakers in Australia, and only one who has established his own winery. The French companies Domaine Chandon and Pernod Ricard, despite having significant operations in Australia, for the most part employ Australians to make their wine.

Despite the small number of French professionals in the Australian wine industry, the reputation of French wines adds weight to their presence and continues to bestow a certain superiority on those with French connections.

While the French presence in Australia is minimal, the French influence exerts its power through the image and cliché of France and French wine. French wine is still the point of reference for the Australian wine industry, an idea that has been present since the beginning – Australian winemaking is compared with that of France in terms of methods, experience, style and quality. This image of France had its greatest impact during the second half of the 20th century with the return of soldiers from the war in Europe, significant European emigration to Australia, and Australian society aspiring to the refinement of France. Wine became a symbol of this elegance and as a consequence found its place at Australian tables. Since then, the Australian wine industry has

gone from strength to strength, a created its own identity in the wine world, however for many French wine holds its status as the authority on wine and the best in the world.

It remains to be seen whether the French influence on the Australian wine industry will continue through the 21st century. During the last 20 years, the Australian wine industry has become increasingly stronger thanks to a desire to learn from the experience of old Europe and to adapt this experience and savoir-faire to the Australian environment. A tradition of innovation and embracing of technology has facilitated this marriage of cultures and has resulted in the production of quality wines at a significantly lower costs than France is able to produce. This situation presents a threat to the French wine industry, especially in export markets, as its producers are limited by the strict regulations of the Appellation d'Origine Contrôlée system.

Nevertheless, it will take time for the dominant image of French wine in Australia to change. Even though, according to the experts, Australian wine is among the best in the world, French wine will not readily relinquish its reigning position in the popular imagination. Stereotypes can be modified with experience and knowledge, but while representatives of the French industry continue to reinforce the values and constraints of their wine tradition, it will be difficult to change these ideas that are so entrenched in Australian thinking. When will the balance be found between French tradition and Australian innovation, and a consumer culture that values quality above all else?

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A MICRO-APPROACH TO UNDERSTANDING MACRO-DIFFERENCES: EXPLORING COMMON VALUES AND INDUSTRY CULTURE IN ‘OLD’ & ‘NEW’ WORLD WINE REGIONS

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ABSTRACT

This paper forwards the proposition that, explaining the contrasting approaches of ‘Old’ and ‘New World’ wine producers in the context of formal institutional differences (e.g. regulation), with cursory reference to cultural differences from which such institutions are, in part, derived, may limit our understanding of underlying differences that exist between ‘Old’ and ‘New World’ producers. A bottom-up approach to analysis is proposed, starting with an understanding of the human values systems (Schwartz, 1992) of individuals working or producing in the industry. This paper argues that differences in human values between ‘Old’ and ‘New World’ producers may better explain the sources and consequences of the contrasting ‘rules of the game’ (North, 1990) experienced across the global wine industry. We also propose that commonalities in values should be understood at a regional level, as regional ‘industry bounds’ (Peng, 2006) are the most fitting form of industry demarcation.

INTRODUCTION

Drawing on institutional theory as an explanation for the socially-embedded rules that have historically shaped industry norms, this paper examines the contrasting fortunes of producers in the global wine industry (Hodgson, 2006; Scott, 1995; North, 1990). Extant analyses of wine production internationally have forwarded cultural, normative and regulatory explanations for contrasting approaches to value creation in the industry. From production techniques to distribution and branding, significant variations in formal regulation and cultural-based values around the production and consumption of wine have imposed dissimilar institutional constraints on producers in different countries (Bartlett, 2002; Jenster, *et al* 2008).

To date, these analyses have predominantly taken a top-down approach explaining the contrasting approaches of ‘Old’ and ‘New World’ producers in the context of formal institutional differences (regulation), with cursory reference to cultural differences from which such institutions are, in part, derived. Moreover, when underlying differences are considered they are crudely (Garcia-Parpet, 2008) aggregated to a ‘world’ level (i.e. Old Vs New), so that our understanding of difference remains at a macro-level (albeit packaged as a micro understanding).

We argue that a better understanding of underlying differences between producers from the Old and New World might be achieved with a bottom up approach to analysis, starting with an understanding of human values systems of individuals working or producing in the industry and aggregating to the industry level. Such an approach, it is argued, will also enable ‘insight into how the wine industry perceives its wider environment, the varieties of interpersonal relationships and intra-industry structures and processes’ (Phillips, 1994: 385). We argue that commonalities within a ‘regional industry’ can be measured and informed by the most micro of measures; namely human value systems. As the human values systems of individuals act as guiding principles in the selection, interpretation and justification of behaviour (Schwartz, Sagiv and Boehnke, 2000), differences in human values (which are pertinent to production e.g. conformity and tradition (Schwartz, 1992) between Old and New World producers may better explain the sources and consequences of the contrasting ‘rules of the game’ (North, 1990) experienced across the global wine industry. As ‘blurred industry boundaries’ (Peng, 2006) make it difficult to make comparisons at ‘world’ level we propose a regional bound for industry analysis.

DIFFERENCES BETWEEN THE ‘OLD’ & ‘NEW’ WORLD: AN INSTITUTIONAL PERSPECTIVE

Institutions, according to North (1990:3), are the “rules of the game” or “humanly devised constraints that shape human interactions.” Scott (1995) explains that these economic institutions include regulative, normative and cognitive structures and activities that provide stability and

meaning to social behaviour. Formal and informal institutional constraints “guide and sustain individual identity... and ways of behaving” (Bellah *et al* 1991:40) and in turn govern societal transactions formally, in the case of law or regulation, and informally in the case of norms and attitudes (Peng, 2008). Peng (2006) highlights that institutions effect decision-making by indicating which conduct is acceptable or legitimate, as defined by both formal and informal institutions. In the case of the latter, it is acknowledged in both the literatures on institutions (Hodgson, 2006; Scott, 1995; North, 1990), and the literature on national culture (Hofstede, 2005), that formal institutions reflect the ‘mental programs’ or culture (Hofstede, 2005:19) of inhabitants of the economy. De Montesquie (cited in Hofstede 2005:19) explains that, ultimately, legislators follow the spirit of the nation when enacting laws, indicating that cultural values (‘informal institutions’; or the ‘mental programs’ of the nation) drive formal institutions, just as they are guided by them post enactment (Scott, 1995; Hofstede, 2005).

Literature examining the global wine industry has very explicitly linked ‘industry growing culture’ in the old world with the enactment of a variety of regulations and policies guiding ‘behaviour’ around the production of wine (Garcia-Parpet, 2008). More recently, prescription to combine the ‘artistic’ and economic aspects of wine production, through a better understanding of the factors that influence consumers (Bisson, Waterhouse, Ebeler, Walker and Lapsley, 2002), despite cultural traditions which see wine production as an ‘art, not a science (Jean-Claude Boisset *cited in* Bartlett, 2002), are, in part, driven by a new found appreciation of the potential cost of underlying informal institutional constrains (such as traditions and values). Despite this, “many individual Old World producers continue to rigidly adhere to the customary gods of “terror” and family traditions of production” (Campbell and Guibert, 2006:240). For example, in 2000 there were 144,000 producers in France, of whom 42 per cent produced *Quality Wines Produced in Determined Regions or Areas*, a European classification that combines *Appellation d’Origin Controllee* wines and VDQS “Superior Quality” wines (Campbell and Guibert, 2006).

Historically, comparable examples of formal regulation in the Old World, such as *Appellation d’Origin Controllee (AOC)* in France and *Denominazione di origine controllata* in Italy), have lead to a seemingly reasonable conclusion that common ‘mental programs’ (Hofstede, 2005) may drive such regulation. However, just as underlying differences are considered crudely (Garcia-Parpet, 2008) at a ‘world’ level (i.e. Old Vs New), underlying commonalties may also be simplistically believed to exist within the old or new world. Paradoxically, we propose that an accurate understanding of macro-level differences or commonalties requires a much better understanding of the micro-level constructs on which they are based.

Although cultural, traditions and normative differences at the industry level are influenced by macro-level phenomenon, such as national culture and business norms in the wider economy and the regulations which enforce those norms (Abrahamson and Fombrun, 1994; Chatman and Jehn, 1994; North, 1990), Hofstede (1998) warns that cultural distinctions made at the population level cannot be assumed to hold true at another level of analysis. Consequently, we argue that the use of culture and traditions, as a synonym to explain differences in values and norms in the production of wine, can only be justified as part of a more multi-level analysis.

Culture as a multi-level construct consists of nested levels - national culture, organisational culture, group cultures and individual cultural values (Leung *et al*, 2005) and culture as a multi-layer construct consists of – behaviours and underlying values (Schein, 1992). In this context, the task of explaining how cultural differences reflect and or inform complex and multi-level formal institutional differences such as ‘Old World’ regulatory constraints (Garcia-Parpet, 2008), is a daunting one. How can we unpack such a complex construct (culture) to inform an understanding of underlying difference between old and new world producers? We propose an examination of human values systems (Schwartz, 1992) and the aggregation of these values within regional industry bounds as an appropriate starting point for such a research endeavour.

A MICRO-APPROACH TO UNDERSTANDING MACRO-DIFFERENCES - *Human Values Systems*

Individuals often view situations differently, and values are an essential element in the explanation of attitudes and behaviours (Schwartz and Boehnke, 2000). The differing views of old and new world producers in the global wine industry is well documented (Robinson *et al* 1999), and implicitly, the values around production have been offered as an explanation for underlying differences, although they have not been explicitly measured.

As the human values systems of individuals act as guiding principles in the selection, interpretation and justification of behaviour (Schwartz and Boehnke, 2000), we argue that differences in human values between ‘Old’ and ‘New World’ producers may better explain the sources and consequences of the contrasting ‘rules of the game’ (North, 1990) experienced across the global wine industry. For example, the conservation value domain identified by (Schwartz, 1992) includes the following value types – tradition, security and conformity, which mirror extant explanations for old worlds producers tardiness in their response to the rise of new world producers in the global wine industry (Bartlett, 2002).

If we are to accept that ‘embedded traditions’ (Campbell and Guibert, 2006) constrained old world producers, and such traditions reflect informal institutions (Scott, 2001), which in turn inform the legislators, distinctions based on human values systems are of considerable significance. Many

of the constraints placed on old world producers as a result of complex EU regulations (Garcia-Parpet, 2008), are to varying degrees, industry and value driven, designed to protect traditional strictly controlled winemaking practices and appellations and to increase product differentiation and competitive advantage (Remaud and Lockshin, 2009; Johnson and Bruwer, 2007). Moreover, when threatened by decreases in demand or prices, old world producers have been hesitant to make “structural improvements in the sector” (EU Agriculture Commissioner Franz Fischler quoted in Bartlett, 2002), preferring to conserve embedded traditions and the industry status quo, primarily through the crutch of EU subsidies (Doering, 2002). Such conservation efforts might well reflect some of the underlying values identified by (Schwartz, 1992) in his conservation domain. For example, ‘traditional values’ emphasise an acceptance of customs, ‘conformity values’ emphasise a restraint of action that violate norms and ‘security values’ emphasise stability in society (Schwartz, 1992).

In light of the above, we propose utilising Schwartz’ (1992) theory, which has been tested in more than 200 samples across 60 countries, to analyse key decision makers within the industry to empirically test this assertion in old and new world wine regions. The identification of common values around the production of wine at the regional level can in turn inform a more accurate evaluation of values common within a region and country, and provide the basis for the analysis of contrasts between Old and New World producers. However, rather than ‘simplistically’ (Garcia-Parpet, 2008), aggregate to the world level, we believe that an analysis of common values in wine regions requires an understanding of the interaction between organisationally-specific and industry-wide cultural values and practices. Indeed, one study of Californian wine industry found that the identities of people in the industry tended to be primarily orientated to their geographic region (Philips, 1994: 395). That values may transcend the firm and incorporate the region, suggests to us, a fruitful avenue of research for examining common values between region, in the old and new world.

In the 1990s some researchers began to shift the focus of the study of culture to the industry level. This gave rise to the development of a conceptual link between industry characteristics and environment and organisational culture (Gordon, 1991; Abrahamson & Charles, 1994; Chatman & Jehn, 1994; Phillips, 1994; Bryman *et al*, 1996). Industry culture has been defined as ‘a constellation of values and beliefs among managers in an industry concerning appropriate ways of operating and responding to the environment’ (Bryman *et al*, 1996: 191; see also: Abrahamson & Fombrun, 1994). An appreciation of industry context both informs and provides functional parameters in which to aggregate findings relating to the human value systems of wine producers.

A MICRO-APPROACH TO UNDERSTANDING MACRO-DIFFERENCES- *Industry Culture*

At the heart of the industry-based view of strategy (Peng, 2006) is the identification of a clearly demarcated industry. However, with any global industry (such as the wine industry), geographic industry boundaries can become blurred, as cross-border trade, mergers, alliances and foreign direct investments make it more difficult to achieve clear demarcations (Peng, 2006). In light of this, macro demarcations between 'Old' and 'New' producers at a world level are problematic. By contrast a regional industry demarcation provides a well defined demarcation for research purposes, which has previously been capitalised on by researcher writing in the area of wine research. For example, studies examining culture across a range of service industries, and the Californian wine and the fine arts museum industries, have highlighted the relative importance of cultures within industries (Chatman & Jehn, 1994; Phillips, 1994).

Bryman *et al* (1996: 192) propose that it is necessary to recognise that 'industry level beliefs and assumptions may be an even more powerful influence on cultural forms and strategic orientations in some industries than the kind of factors traditionally examined by organisational researchers.' We see this as an underexplored avenue of research in wine industries, but more importantly, as a complementary research stream to our discussion on human values systems.

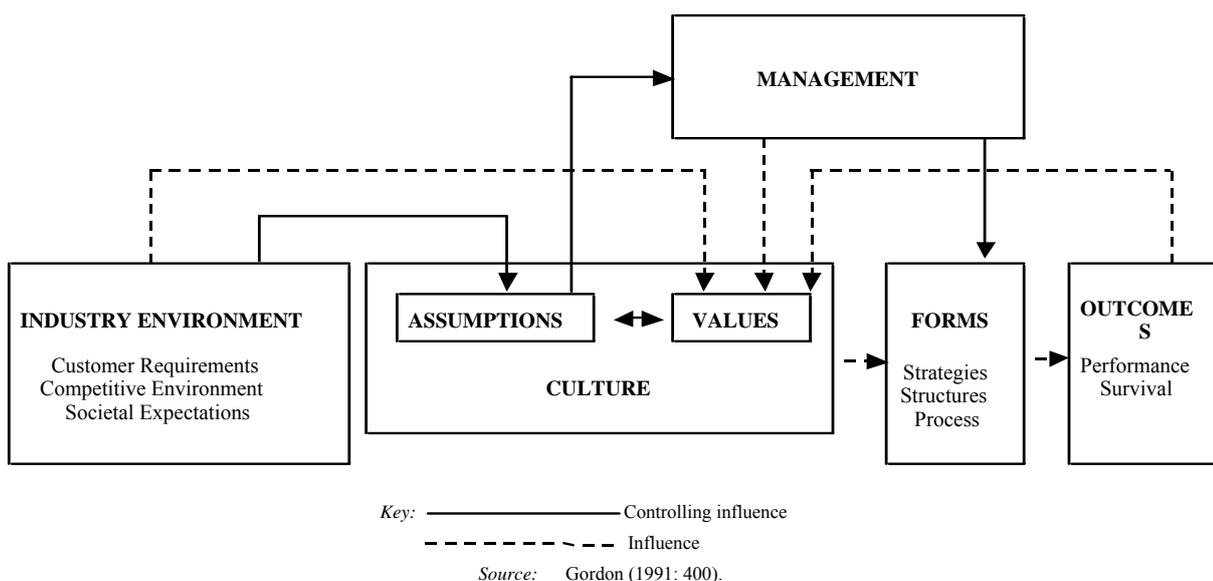
Phillips (1994: 398) argues, drawing on the example of the Californian wine industry and fine arts museums, that industry cultures are evident in industry mindsets that 'transcend suborganisational, transorganisational, and organisational boundaries to be held in common by members of discrete industries'. She explains that industry influences must be taken into consideration before claiming that a particular culture is unique to an organisation (1994: 399). This argument suggests to us that although each wine producer and region may be unique, in other respects, they embody shared values and industry forms of organisation that reflect the wider culture of each region.

Of the existing studies of industry culture, Gordon's is perhaps the most influential. Gordon (1991: 396) argues that 'organisational culture is influenced by the characteristics of the industry in which the company operates.' In charting a relationship between the organisation and its environment, Gordon argues that organisations are founded on industry-based assumptions that constitute an organisation's culture. Drawing on Schein (1986), Gordon (1991: 397) suggests that assumptions and values are reflected in 'behaviour patterns'. Environment and industry assumptions directly influence the managers who shape an organisation's cultural values, which, in turn, influence organisational forms (strategies, structures, production process) and outcomes (performance, survival). Exhibit 1 summarises Gordon's model of industry-driven culture formation. If we see culture, as most writers do, as shared assumptions and values, then it is

plausible to suggest that the wider industry environment may exert a powerful influence on an organisation's culture (Gordon, 1991: 397) and the values and norms of people that make up that culture, thus supporting our argument for a 'bottom up' approach to cultural values within different wine regions.

Industry assumptions assume an important role in Gordon's model. These assumptions, argues Gordon (1991: 406), 'cause companies within an industry to have common elements to their cultures. The influence on the assumption is direct and affects all levels and functions in a company'. This has major implications for culture change, and Gordon (1991: 396) explains that the relationship between an organisation and its wider industry environment means that 'the potential for changing a company's culture is limited to actions that are neutral to, or directionally consistent with industry demands'. Such factors, we argue, may also give rise to the specifics of 'old' and 'new' world wine regions.

Exhibit 1 A Model of Industry-Driven Culture Formation



Industry culture has been adopted by some authors to explain industry malaise and inertia. Abrahamson and Fombrun (1994: 731) present an argument based around the idea of macrocultures (interorganisational macrocultures): beliefs shared among top managers across organisations. Homogeneity between managers means that many managers across organisations (and regions) tend to agree on issues of boundaries (competitors or companies cooperated with), reputation (perceptions of other companies) and strategy, creating common interests and the potential for

strategic agreement within the industry. Ties and links between organisations are reinforced through trade associations, industry magazines, and newsletters etcetera. However, macrocultures and homogeneity may also discourage risk-taking and innovation and lead to ‘the collective failure of industries’, or a failure to react to new entrants, such as what old world regions were accused of in the face of competition from the new world (Campbell and Guibert, 2006; Bartlett, 2002; Anderson *et al* 2001).

Common industry beliefs are also thought to increase inertia amongst organisations and to influence technological diffusion and strategic innovations among firms (Abrahamson and Fombrun, 1994). These contentions relating to the influence of shared belief on technological diffusion and strategic innovations among firms or lack there of, are also considered in the wine research literature. For example, informal norms and beliefs were attributed to a snub by many French producers of innovations such as reverse osmosis techniques (which lead to deeper coloured wine, richer tasting wine). Such innovations were believed to ‘remove the poetry of wine’ (Bartlett, 2002). By contrast new world producers are often defined by their industrial approach and wide spread diffusion of technology to develop new cultivars (USDA, 2004).

There are clear grounds to suggest that the strength of ‘industry values’ may be a reason for the malaise of old world wine producers; and absence of entrenched industry values as part of the reasons behind the rapid growth of production and experimentation with new grape varieties and techniques in new wine regions (Campbell and Guibert, 2006). Inaction in the old world may well be driven by “industry driven assumptions, which exert a powerful influence over the values that make up organisational culture” (Bryman *et al*, 1996: 205), and thereby restrict the range of strategies that a producer might adopt.

CONCLUSION

Drawing on institutional theory as an explanation for the socially-embedded rules that have historically shaped industry norms (Hodgson, 2006; Scott, 1995; North, 1990), this paper argues that commonalities within a ‘regional industry’ can be measured and informed by the most micro of measures; namely human value systems. As the human values systems of individuals act as guiding principles in the selection, interpretation and justification of behaviour (Schwartz, Sagiv and Boehnke, 2000), differences in human values (which are pertinent to production e.g. conformity and tradition (Schwartz, 1992) between Old and New World regions may better explain the sources and consequences of the contrasting ‘rules of the game’ (North, 1990) experienced across the global wine industry. As ‘blurred industry boundaries’ (Peng, 2006) make it difficult to make comparisons at ‘world’ level, we propose a regional bound for industry analysis, mindful that

industry/regional driven assumptions may exert a powerful influence over the values of producers (Bryman *et al*, 1996). The next step in this research agenda is a comparative international research project examining human values and industry culture in an old and new world wine region.

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INSTITUTIONAL THICKNESS AND INTER-ORGANISATIONAL COLLABORATION IN CLUSTERS

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INTRODUCTION

Regional and national innovation policies increasingly seek to promote institutions conducive to clustering based on the relationship between firm clusters and performance, and regional competitive success (OECD 1999; 2001). Much research supports the view that clusters enhance firm performance through collaboration, facilitated by ease of access and ‘interpenetration’ of each others’ organisational boundaries (Harrison 1992). However, recent reviews provide inconsistent support for the link between clusters and organisational success, with many studies generating support for an insignificant or even negative relationship, suggesting that clustering may not necessarily bestow performance-related advantages (Hakanson 2005). Coupled with case studies indicating that different regional clusters have a different mix of collaborative and competitive approaches, with some organisations strongly embedded in inter-organisational networks and others peripheral or isolated (Giuliani 2007), this research suggests that the development of, and mechanisms facilitating, inter-organisational collaboration in clusters, are not well understood and merit continued research focus.

This paper investigates the role of institutional thickness in inter-organisational collaboration in clustered firms. Institutional thickness refers to an integrated and interlocking web of supporting formal and informal institutions including local chambers of commerce and trade associations as examples of the former, and social networks as examples of the latter (Keeble et al 1999). We theoretically explore the extent to which, and mechanisms through which, institutional thickness facilitates collaboration, drawing on concepts of reciprocal altruism, transactive memory and institutional proximity. We argue that institutional thickness fosters a cluster-wide climate of trust and a context conducive to reciprocal altruism (Trivers 1971), which reduces the threat of

opportunism and stimulates collaboration towards shared valued outcomes. We further propose that institutional thickness facilitates the development of a shared understanding of sources of valued resources, as well as the adoption of shared values, approaches and policies, which minimise misunderstanding and normative barriers to collaboration.

This review makes a number of important contributions to the field. First, we respond to the recognition that much of the research interest in collaborative interaction in clusters has been focused on its description and categorisation, and there have been recent calls for a movement away from ontological investigations to an explanation of the underpinning causes and assumptions (Knoben & Oerlemans 2006). In investigating the factors underpinning the mechanisms through which institutional factors support collaboration, we directly respond to criticisms that much extant literature gives no attention to the factors that differentiate between high-performing and unsuccessful clusters, and begin to address the research gap surrounding the complex, but highly important, micro-level interactions that explain cluster effects on firm dynamics and performance (Cooper & Park, 2008). Second, we highlight how institutional thickness can contribute to value adding activity at the level of the individual firm and in the context of the cluster as suggested in the model of an industry cluster as a value adding web (Brown et al, 2007). We then refer to the Hunter Wine cluster to illustrate the outlined analysis.

Literature Review and Proposition Development

This paper assumes that successful collaboration within clusters provides a source of competitive advantage for individual firms and for the cluster as a whole (Cumbers et al 2003). Inter-organisational collaborative interaction acts as a boundary-spanning mechanism between organisations, enabling the sharing of knowledge and other resources (Malmberg & Power 2005), providing access to a broader array of knowledge, opportunity for innovation and resource efficiency (Burt 2004; Cumbers et al 2003; Grant & Baden-Fuller 2000). However, while a review of research indicates that the specific spatial arrangements between organisations influences inter-organisational collaboration (OECD 1999), little research has been conducted to understand the extent to which, and specific mechanisms through which, cluster membership enhances organisations' collaborative capabilities (Todtling et al 2006). There remain significant unanswered questions relating to how clustering of firms exerts an influence on inter-firm collaboration.

In addition, while collaboration potentially provides clustered organisations with access to opportunities for collaboration (Hargadon & Sutton 1997), competition and perceived vulnerability

to knowledge leakiness (Brown & Duguid 2001) also means that relationships between clustered organisations may be characterised by lack of trust, threat of opportunistic behaviour and lack of explicit collaborative routines (Coleman 1988; Gulati & Singh 1998). An inverse relationship is found between such characteristics and successful collaborative alliances, and the processes of collaboration in localised environments has been specifically linked to mechanisms that reduce uncertainty and associated risks (Keeble et al 1999). The core of these mechanisms encompasses institutional components. For example, Campagni's (1991) research highlights the role of institutional links and networks within clusters, reflecting the degree of institutional thickness (Lawson 1997).

The following four sections discuss the mechanisms through which institutional thickness facilitates knowledge flow, a summary of which is provided in Table 1. The first section introduces the mediating role of reciprocal altruism, which contributes to collaboration by motivating interaction and exchange. This is followed by a discussion of institutional thickness' role in developing knowledge of resource distribution and location within the cluster, thus facilitating identification of appropriate collaborative partners. The mediating role of collaborative context, incorporate collaborative routines and cooperative goals, is subsequently introduced, through arguments that institutional thickness enhances access to collaborators by reducing uncertainty regarding their motivation and by reducing coordination barriers. The mediating role of institutional proximity is discussed, based on the link between a dense web of formal and informal institutions and the emergence of shared norms. The contribution of institutional thickness in facilitating value adding activity is then explained. The final section of this paper summarises its contributions and outlines its implications, particularly for future research.

Mechanisms through which Institutional Thickness affects Collaboration

A key mechanism through which institutional thickness affects collaboration is by increasing firm perception of trust and shared value outcomes, and through this, providing a context that engenders reciprocal altruism, and therefore willingness to collaborate. Evidence supports the impact of numerous specific relationship factors on the decision to collaborate including the perception of reciprocity and the development of trust, which have been found to substitute for relationship strength in facilitating collaboration across weak ties (Cross & Borgatti 2000; Gulati 1995; Inkpen & Tsang 2005; Levin 1999; McAllister 1995; Thuy & Quong 2005).

Reciprocal altruism refers to an interaction in which exchange between parties is perceived to produce a net benefit to both sides (Trivers, 1971). This type of behaviour has been recently studied in relation to organisational transactions (Fehr & Gächter 2000). For example firms have been found to share knowledge with the expectation of future benefit (Schrader 1991). Between clustered firms, reciprocal altruism similarly reflects the tendency for organisations to engage in ‘altruistic’ collaborative actions, consequent to the perception that they too will benefit from this action. Recent research has revealed evidence of such behaviour, for example, in Chile, knowledgeable firms provide valuable expertise to other firms on the expectation of return, and develop strong ties based on a norm of reciprocity (Giuliani & Bell 2008).

Institutional thickness is linked to reciprocal altruism through implicit norms and/or explicit rules governing informal exchanges such that opportunism is subject to severe sanctions (Boschma 2005a) limiting the threat of non-reciprocation, and through shared values relating to the role of collaboration in mutual enhancement of competitive position. The existence of formal institutions have been found to foster the perception of shared valued outcomes and the associated belief that collaborative behaviour towards these outcomes will produce benefit to both involved parties (Raco 1999). Formal institutions have also been found to reduce the threat of ‘opportunism’, and ‘cheating’ or non-reciprocation (Jeffrey & Weatherhold 1996). Representative and professional associations have been shown to enhance the likelihood of collaboration by enhancing cognitive trust and monitoring adherence to ethical norms (Claus & Collison 2004; Freidson 1973). Sharma (1997) has argued that formal associations facilitate and often mandate peer scrutiny, which allows comparison against ethical and professional standards and reduces uncertainty, the likelihood of ‘cheating’ and threat of opportunism.

Research into embeddedness indicates that dense informal (social) institutional networks have been linked to the development of perceived trustworthiness or cognition-based trust (Cook & Wall 1980; Parkhe 1993; Uzzi & Gillespie 2002), which incorporates competence, responsibility, reliability and dependability (McAllister 1995), and which enhances willingness to collaborate including the ‘altruistic’ sharing of useful knowledge and resources on the expectation of return (Mayer et al 1995; Tsai & Ghoshal 1998). Similarly, research into personal exchange theory indicates that involvement in inter-organizational exchange relationships leads to a norm of reciprocity, which increases motivation to contribute to another organisation as a gesture of ‘goodwill’ (Blau 1964; Watson & Hewett 2006).

In addition, to an expectation of return, institutional thickness also enhances collaboration is by increasing knowledge of the location of expertise and resources. The decision to collaborate with another is affected by awareness of that source as a valuable fund of relevant knowledge, skills or other valued resources (Borgatti & Cross 2003). Research into transactive memory systems provides some support for this claim. For example, there is substantial evidence that individuals who bring new knowledge into organisations rely on complex networks of relationships to search for, and identify, relevant knowledge (Boschma & Wal 2007; Lorentzen 2007; 2008). As individuals are likely to seek information from others whose areas of expertise are known to them, knowledge sharing is dependent on members knowing 'who knows what' (Moreland et al 1996; Wegner et al 1991). Research into transactive memory systems and knowledge mapping also indicates that a system for encoding, storing and retrieving information that conveys an understanding of who has access to what specialised information is a key factor that enables the sharing and reuse of tacit knowledge (Moreland et al 1996; Wegner et al 1991; Wegner 1986). Based on this research, when individuals need resources outside their current portfolio, and seek to collaborate with known sources rather than having to invest personally in learning new information or purchasing new resources (Yuan et al 2007), knowledge of the location of such resources expedites the identification of, and enhances confidence in, collaborative partners (Moreland & Myaskovsky 2000).

Evidence supports the role of institutional thickness in building knowledge of resource location by enhancing the strength and closeness of individual ties, including the frequency of information exchange and personal interaction (Rempel et al 1985; Uzzi 1996; Uzzi 1999; Zucker 1986), which, in transactive memory research, has been found to significantly impact the development of resource directories (Palazzolo 2005; Yuan et al 2005). Additional support is provided by findings that interpersonal trust, familiarity and degree of prior interaction promote the development of transactive memory systems (Akgun et al 2005). Professional linkages further enhance knowledge of expertise location through professional information repositories with search and retrieval properties (Yuan et al 2007).

A further mechanism through which institutional thickness influences collaboration is through collaborative context encompassing collaborative routines, values supporting collaboration and cooperative goals. The resources of another party are only valuable if they are perceived to be accessible, that is available for application to a given problem or situation (Borgatti & Cross 2003). Collaboration partner choices are never based on pure rationality or full information (March et al

1958 [1993]), and decisions surrounding such choices are influenced by the perceived ease with which resources can be accessed and exchanged (Cohen & March 1972). Collaborative routines and cooperative goals reduce uncertainty regarding partner choices and motivations, and enhance perceived access to valued resources.

Collaborative routines and cooperative goals also enhance capacity to co-ordinate the exchange of complementary resources by creating an environment in which economic partnerships and associated shared goals overshadow independent member goals, and encourage co-operation, reciprocity and sharing (Ahuja 2000; Capello 2002; Capello & Faggian 2005; Cooke & Morgan 1998; Walker et al 1997). Institutional thickness has been linked to the development of formal collaborative routines and facilitates the further development of informal collaborative networks, both of which have a prominent role in the resource sharing and collaboration patterns (Allen et al 2007). The perception of cooperative goals has been linked to shared valued outcomes stemming from the direction of formal institutions and embeddedness in social networks (Keeble, Lawson, Moore and Wilkinson, 1999).

Finally, institutional thickness facilitates knowledge sharing through the development of institutional proximity. Institutional proximity is defined as the extent to which organisations share the same informal and formal cognitive, normative and regulatory frameworks (Zukin & DiMaggio 1990). Institutional proximity and institutional thickness can be differentiated with reference to the level of analysis. Institutional proximity refers to an inter-organisational, dyadic factor which depicts the extent to which firms are more or less similar in their perspectives, approaches and policies. Institutional thickness describes a regional or cluster-level phenomenon and depicts the extent to which firms are embedded in a system of extra-organisational institutions.

These components of institutional thickness together with an explanation of how they contribute to cluster based knowledge transfer are explained in table 1.

Factor	Description	Relationship to Institutional Thickness	Relationship to Collaboration
Reciprocal Altruism	The perception of mutual benefit accruing through acts ostensibly benefiting another	Dense web of formal and informal institutions reinforces the perception of shared valued outcomes and reduces the risk of non-reciprocation through	Reciprocal altruism motivates collaboration under circumstances in which greater immediate net cost is offset by

	party.	monitoring of behaviour and maintenance of behavioural standards.	presumed reciprocation.
Knowledge of Resource Location	The awareness of resource sources, their value and location.	Frequency and intensity of interaction builds knowledge of resource distribution patterns.	Knowledge of the location of valued resources expedites the identification of collaborative partners, and enhances cognition-based trust.
Collaborative Context	The existence of collaborative routines, values supporting collaboration, and cooperative goals.	Embeddness in informal (social) networks builds collaborative routines and the perception of cooperative goals. Cultural preconditions to collaboration enhanced by institutional agents.	Collaborative context reduces uncertainty regarding partner motivations and enhances perceived access to valued resources.
Institutional Proximity	The extent to which organisations share the same institutional arrangements including norms, routines and policies.	Dense institutional environment facilitates the development of shared norms. Formal institutions exert pressure towards shared policies and procedures.	Institutional proximity reduces the likelihood of cultural clashes and conflict, and enhances predictability.

Table 1: Factors Affecting Collaboration in Clusters

Research into institutional proximity suggests that although organisations in a cluster may have various distinct cultures, they tend to converge on an industrial ‘recipe’ (Inkpen & Tsang 2005), and clustered firms in the same type of business experience pressure to adopt similar policies and perspectives (Bhagat et al 2002). A key effect of similar or shared beliefs, values and policies is the enhancement of collaboration and knowledge sharing by minimising the likelihood of cultural conflicts between involved parties (Knoben & Oerlemans 2006). Institutional proximity is linked to collaboration through common norms and routines which allow organisations to interpret actions without explicit instruction (Kirat & Lung 1999). As noted by Helmsing (2001), firms will share resources when an interactional logic is shared across cluster members that stems from the belief that collaboration has valuable outcomes for individual cluster organisations.

Research in institutional economics indicates that a dense network of both formal institutions and informal institutions facilitates the development of shared or similar values and routines across

organisations (Giuliani 2007) and also that formal institutions can reinforce adherence to such values through the threat of sanctions (Boschma 2005b).

Institutional Thickness and the Value Adding Web

Brown et al. (2007) suggest adopting the resource-based view of the firm (e.g., Peteraf 1993, Collis and Montgomery 1997) for the purpose of understanding and rationalising clusters. According to this view the cluster is a series of value adding webs (VAW) that exist at different levels. Within a cluster there are three types of actors:

- a. horizontal actors – these belong to the substantive industry present within the cluster – in the case of wine it is the grape growers and the wine producers
- b. vertical actors – these perform upstream and downstream activities for the horizontal actors – in the case of wine it includes horticulturalists, vigneron, transport companies, bottlers, marketing firms, restaurants, wholesalers etc
- c. lateral actors – these are facilitators – they provide infrastructure and support for the cluster – this could include educational and training facilities, specialist advice, communications, roads

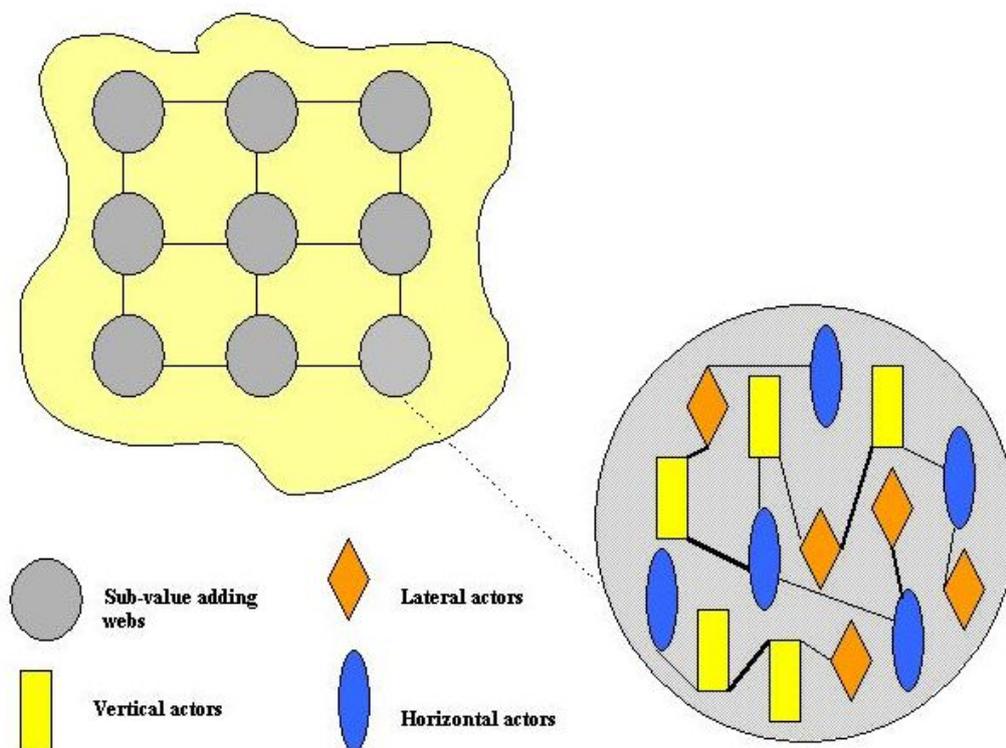
The aim of the value added web approach is to develop a concept that allows for the analysis of resources on selected cluster levels. Three resource categories which are critical to cluster performance and competitiveness are differentiated:

- (1) *Context-specific resources* such as regional resources that characterise the VAW location regarding the type of area (e.g., rural or urban) or the existence of natural resources (e.g., minerals or the climate). In this category of resources industry-related resources can also be identified that reflect sectoral attractiveness and structural conditions to influence value creation opportunities such as innovation-driven competition between cluster members. Further, social and cultural characteristics “can shape economic activity in the same way that factor endowments, such as mineral resources, navigable waterways, and climate do...” (Cortright 2002: 15). Since social, cultural or legal specificities may affect value creation, institutional resources such as legal regulations or cultural specificities are also included in the analysis. Value creation may be understood in terms of created rents. Brown et al. (2007 and 2008) introduce *contextual rents* to include the embeddedness of cluster actors in a certain context into the cluster analysis.
- (2) *Web-specific resources* are rooted in joint activities and the quality and strength of the underlying relationships of cluster members and lead to relational rents (Dyer and Singh, 1998; Lavie, 2006). When investigating the VAW around a certain actor it is therefore necessary to understand the interdependencies between the focal actor and the related actors.

(3) *Firm-specific resources* as the traditional core of the resource-based view of the firm are differentiated into tangible (e.g., machinery), intangible (e.g., brand name) and human resources (e.g., technical experts) and their scarcity leads to Ricardian rents.

Figure 1 illustrates a cluster as a value adding web that can be segmented into sub cluster value-adding webs. There are value adding webs around individual firms and a series of value adding webs that are located within the cluster. The value adding activity can take place within the firm, within the locality (the region) and within the cluster.

Figure 1: The cluster as value adding web



Source: Brown et al, 2007.

When a cluster is seen as a value adding web the single firms do not only generate their own value adding activities, but they also add value to the whole cluster. Because every firm is influencing value creation and the overall competitiveness of the cluster it becomes obvious why it is important to think about the single firm when talking about clusters. Competitive advantage does not only

result from firm specific competencies, but also from the ability to organise the whole value creation process within the cluster. Here institutional thickness of the cluster is important in terms of understanding the dynamics of value adding activity within a cluster; that is, understanding why the value adding activity of a cluster is greater than the value adding activities of the individual firms within the cluster. Where there is reciprocal exchange of information, trust and embedded networks that facilitate knowledge exchange then a cluster has rationality in terms of why individual firms would operate in proximity with one another and why horizontal actors would engage in co-operative activities.

We can examine each of the components of institutional thickness and discuss how each of these factors strengthens value adding activity within the cluster web:

a. reciprocal altruism. Firms are willing to exchange information and to possibly collaborate. This is more so the case where there is not only a shared product where the firms are ostensible competitors but where there is a shared regionality about the product, for example, where the product is perceived to have regional distinctiveness that attracts customers to all firms located within the cluster. In this case firms will strive to share and to co-operate in order to protect the regional brand. This regionality and regional brand may be facilitated through regional trade associations, chambers of commerce or by commercial requirements built into contracts between horizontal and vertical actors.

b. Knowledge of resource location. In the context of a cluster this comes about through daily transactions and through reciprocal altruism. Knowledge can be acquired through commercial means or through formal and informal networks. In a cluster there are more opportunities for accessing such knowledge via normal commercial transactions, through social networks or via specialist lateral actors such as consultants, educational institutions and trade associations.

c. collaborative context. A functioning cluster will have formal and informal networks that facilitate collaboration. This can range from informal discussion through social networking and information exchange between vertical and lateral actors through to formal forms of collaboration such as exist with educational institutions, through trade shows or through regional promotional activity.

d. institutional proximity. Once again in a cluster it is likely that there will be shared value systems and an acceptance of formal or informal governance mechanisms. Actors not only understand

routines they are also likely to understand the routines that surround the production of the core product.

Illustrating Institutional Thickness in a Wine Cluster

Here we take one horizontal actor in the Hunter Valley wine cluster. This hypothetical actor grows a variety of grapes and produces a Shiraz and a Semillon wine under its own label: WWW – Waratah Wonderful Wines. The wine cluster has over 100 producers. There is a supporting growers’ association and there are lateral actors that include educational institutions and agricultural agencies.

Table 2 demonstrates the dimensions of institutional thickness that contribute to value adding activities of WWW and for the wine cluster. It draws on the contextual and descriptive overview of the Hunter Wine cluster outlined in the paper by Henderson et al (2009). Furthermore, the table demonstrates how clustering strengthens and develops institutional thickness.

Table 2 Elements of Institutional Thickness in the Hunter Wine Cluster

Institutional Thickness	Conditions Present in the Hunter Valley Relevant to WWW
Reciprocal Altruism	Extensive network of formal and informal networks strengthen shared values and facilitate sharing and trust. Social networks such as regular Friday evening, informal gatherings at a local restaurant/bar; formal occasions such as wine tastings and regional wine shows; the growers association – the Hunter Valley Vineyard Association; a shared regional identity in terms of a “regional brand”. Important voice role played by key established wine makers (eg Tyrells) in developing reciprocity and sharing information.
Knowledge of Resources	Strengthened by local transactions with vertical and horizontal actors; through formal and informal networks (as above); through support of lateral actors – local TAFE at Kurri Kurri, Department of Agriculture.
Collaborative Context	Seasonal routines are embedded into the production process. In

	turn this forces collaboration and sharing of resources at strategic times of the year such as labour and equipment. In an industry that is based on agriculture seasonal production systems enforce routines, facilitate sharing and assists learning. This is reinforced by vertical actors who are contracted into the production process such as professional viticulturalists and wine makers. They gather, interpret and disseminate information across vineyards.
Institutional Proximity	Many of the above factors contribute to a close institutional proximity. There are similar norms and routines followed, resource sharing is common and knowledge can be accessed from all tiers of actors located within the region. The extent to which organisations share the same institutional arrangements including norms, routines and policies

In the Hunter Valley wine cluster there is considerable institutional thickness. All elements that contribute to institutional thickness are present. These conditions are not recent but have been a pervasive characteristic of the Hunter Valley wine cluster (see Henderson et al, 2009). These conditions in turn can contribute to value adding activities of the individual actor, enhance the context specific resources and contribute to the value adding activity of the cluster web as a whole. However, we are not suggesting that all wine clusters replicate these characteristics or that all actors in the wine cluster experience the same conditions as WWW do in the Hunter Wine Cluster. Indeed, Guiliani and Bell's (2005) work on the Colchuagua Valley wine cluster in Chile highlighted the differences across wine producers in terms of their access to knowledge and to their ability to process and absorb such knowledge.

Implications and Discussion

Our review supports the existence of at least four mechanisms through which institutional thickness may influence collaboration in clustered firms. Institutional thickness may operate to facilitate the development of inter-organisational trust, provide a context supporting reciprocal altruism, build knowledge of resource location, and facilitate access to knowledge. We have synthesised this research into a tabular framework which depicts the impact of institutional thickness through four factors (see Table 1). We then discussed the important function of institutional thickness in

contributing to the value adding activities within an industry cluster. We then illustrated this by referring to conditions that are present within the Hunter Valley wine cluster that contribute to institutional thickness.

This review is a first step in the development of our understanding of the causal mechanisms through which institutional thickness enhances collaboration in clustered firms. As such, this research responds to calls to investigate how clustered firms derive value from proximity. Investigating the mechanisms also provides a powerful explanation for the situations in which clusters do not enhance collaboration, and therefore responds to recent calls to account for the failure of organisations to reap value from proximity and provides explanation for the inconsistent results in previous research into institutional thickness. By specifying the mediating pathways through which the institutional environment potentially affects collaboration, our research stimulates questions relating to the role of moderating circumstances that impede the development or utility of such pathways. Moderating variables have long been acknowledged as powerful explanations accounting for inconsistent relationships. In turn we discuss how institutional thickness is an important rationale and outcome of clustering and in turn contributes to value adding activities within the cluster.

Future research should be targeted to generating empirical support for this framework, through, for example more systematic case study analysis aimed at generating evidence of the role of the different mechanisms through which institutional thickness influence collaboration. Such research should also seek to explore both the extent to which institutional environments influence cluster dynamics including knowledge of resource location, collaborative and shared values, and the perception of reciprocity, as well as the effect of these factors on collaboration. The objective of such case analysis would be to transfer the theoretical concepts outlined in the previous sections to concrete examples and to explore the extent to which collaboration is linked to the influence of different institutional arrangements. This empirical research is required to gauge the extent to which the mechanisms investigated in this review provide robust explanations for the influence of institutions on collaborative interaction in clusters. We presented an exploratory discussion of the mechanisms of institutional thickness that are present within the Hunter Valley wine cluster.

This paper was written in an effort to integrate research on institutions, collaboration and clusters as discussed in the existing literature. It is expected that empirical investigation will confirm and/or modify the present model, and thus, it is intended as a catalyst and beginning for future research.

The utilisation of this model will ensure that such future research includes consideration of institutional thickness and the mechanisms through which it potentially affects collaboration in clusters.

In conclusion, the current review provides a new perspective on collaboration between clustered firms, which can usefully inform future policy and research endeavours. In developing this model, we have integrated a range of theoretical accounts of collaboration and its antecedents, and highlighted a new direction for future research. By proposing and arguing a series of intermediary actions between institutional thickness and collaboration, this paper explicates the complex organisational and inter-organisational dynamics on which collaboration is dependent.

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EXAMINING BUSINESS-DRIVEN ENVIRONMENTAL SUSTAINABILITY INITIATIVES IN AGRICULTURE BASED TOURISM CLUSTERS IN NORWAY AND AUSTRALIA

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ABSTRACT

Studying business driven sustainability initiatives can teach us how businesses and their managers/owners decide and justify why and what environmental actions they undertake. While sustainability can be defined as including both social, economic, ecological and cultural aspects, this study will focus on the balancing act that small businesses perform between economic and ecological sustainability. Through examining environmental actions that are beyond compliance and voluntary it is hoped that a better understanding of how the social, political and cultural contexts influence behaviour in agriculture based tourism businesses. While empirical data on environmental behaviour in different industries shows that the motivation to undertake environmental improvements are either to fulfill environmental regulations, cost reductions or to obtain competitive advantage, other lines of research points to the business owner/managers own values and conviction as a strong influence on environmental behaviour. Within institutional theory there is debate as to whether behaviour is only guided by self-interest and maximisation of personal or business benefits (neo-institutionalist stance), or whether there are other more normative and cultural cognitive institutional pressures that would lead business owners to undertake non-mandatory environmental investments (classical institutionalists). A mixed methods research design will be undertaken in two different institutional frameworks, the liberal market economy of Australia and the coordinated market economy of Norway in order to develop theory around how institutional frameworks influence implementation of environmental sustainability measures. Two cases of business-initiated sustainability processes have been selected; In Australia, Lovedale Chamber of Commerce which is part of the Hunter Valley wine region, a major tourist destination in NSW, has initiated a “Greening of Lovedale” Process. The area has a mix of smaller wineries, accommodation, food and adventure businesses. In Norway, Vikebygd Landskapsark, located in one of Norway’s major tourist attractions, the applegrowing Hardanger fjord, has been selected.

Vikebygd Landskapsark has been established as a private shareholding company with the purpose of establishing sustainable business opportunities within agriculture based tourism, accommodation, adventure and local foods. This paper will review and discuss different aspects of institutional and resource based-theory in relation to how these might explain environmental decision-making.

EXAMINING BUSINESS-DRIVEN ENVIRONMENTAL SUSTAINABILITY INITIATIVES IN AGRICULTURE BASED TOURISM CLUSTERS IN NORWAY AND AUSTRALIA

1. INTRODUCTION

Studying business driven sustainability initiatives can teach us how businesses and their managers/owners decide and justify why and what environmental actions they undertake. Through examining environmental actions that are beyond compliance and voluntary it is hoped that a better understanding of how the social, political and cultural contexts influence behaviour in agriculture based tourism businesses. This paper will review and discuss different aspects of institutional and resource based-theory in relation to how these might explain environmental decision-making and lead to new theoretical insights.

In the following a brief review of the concept of sustainability for the business community will be reviewed, a summary of empirical data for why businesses undertake environmental/ sustainability activities, followed by a review and discussion of how institutional and resource based theories may explain how business-activities towards sustainability might be promoted or hindered by the institutional context. The review will identify current research gaps and outline a research proposal for a comparative case study, where two agriculture based tourism clusters will be examined using a mixed methods design.

2. EMPIRICAL RESEARCH ON BUSINESS AND ENVIRONMENTAL SUSTAINABILITY

2.1 Sustainability - the concept as seen from a business perspective

The World Commission on Environment and Development (Brundtland, 1987) defined sustainable development as "development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (1987: 8).

The ideas behind sustainability are according to Visser (2008) derived from the preservation and conservation movements of the 18th and 19th centuries. Yet he states that sustainability remains a contested concept, but is based on the concept of sustainable development and includes such

elements as, corporate citizenship, social justice, environmental management, ethics and stakeholder management. Visser states that “it is important to acknowledge that the concept of sustainability is not a neutral, scientific or objective concept, but rather a normative or subjective concept. It will therefore always comprise implicit or explicit values, and deals with how the interface between environment and society (institutions and individuals) is managed to ensure that human needs are met without destroying the ecosystems for the future generations needs”.

The World Business Council for Sustainable Development uses the term eco-efficiency to define how environmental sustainability is achieved; “Eco-efficiency is achieved by the delivery of competitively-priced goods and services that satisfy human needs and bring quality of life, while progressively reducing ecological impacts and resource intensity throughout the life-cycle to a level at least in line with the earth’s estimated carrying capacity. In short, it is concerned with creating more value with less impact” (World Business Council for Sustainable Development, 2000, p. 4)

While mostly sustainability has been equal to being green or environmentally friendly, the term has developed towards a more holistic definition as suggested by Adam Werbach (2009, p. 9) in “Strategy for Sustainability”, sustainable business means “thriving in perpetuity”, and it therefore needs to comprise all the four components of :

- Social (Acting as if people matter)
- Economic (Operating profitably)
- Environmental (Protecting and restoring eco-systems)
- Cultural (protecting and valuing cultural diversity).

Andersson and Wolff (1996) summarised the evolution of ecological control from the 1970s to the 1990s in different stages:

The 1970s introduced mostly government legislation to control business and through the establishment of a system of sanctions. Implementation of these control functions was made impossible due to the difficulty in sanctioning at the municipal or regional level, making it easier for businesses to not comply due to local sensitivities.

The 1980s followed with a firm belief in the market forces and as a result a market view of ecological control was adopted. The focus was on the polluter pays principle, leading to systems of environmental taxation aimed at setting a cost on the ecological damage that companies cause. Environmental taxation, however, could lead to uneven social consequences and thereby a

perception of unfairness as only some actor would actually pay for using “free resources” such as air and water.

Both the 1970s and 1980s views were based on the assumption that companies are reluctant and unwilling to respond to ecological demands.

However in the late 1990s, a third phase of "business driven ecological decision-making" was introduced - businesses as such take the lead or are the drivers of obtaining a more ecologically balanced economy. However, while businesses often have the technological expertise and innovation drive for pro-active and beyond compliance environmental action, will their actions be based on what is best for nature or what is based for the business? The difficulty of assessing if businesses are going beyond compliance and not only green-washing is becoming a vital question.

While the obvious questions around measurement are still important, there is also a lack of theory development in attempting to answer why business driven sustainability initiatives evolve, how business organisations cooperate and how they perceive their surrounding community and natural environment. “The devolution of decision-making creates a notion of ecological spaces where everybody (Community, business, regulators) has to collaborate to create a better environment. These refer to regions of ecological interdependence; they transcend administrative boundaries and calls for new frames of reference” (Andersson & Wolff, 1996).

According to Ostrom (2009), there has until recently been an acceptance that resource-users will never self-organise to sustainably maintain their resources (Ref. “The Tragedy of the Commons” (Hardin, 1968) and that governments must use regulatory measures to force change, yet more examples are surfacing that indicate that individuals and businesses invest both time and energy in order to achieve sustainability. She points however to the problem that research on sustainability has developed in two parallel scientific communities, the social and the ecological, and that these do not easily combine in research. This has often led to a one size fits all recommendations and has neglected local social systems that could more efficiently self-organise and solve ecological problems themselves.

Through using an institutional theory perspective to examine the evolution of ecological control depicted above, there seems to have been major changes in how institutions have influences businesses environmental behaviour, from an emphasis on regulatory institutions, through more

market based policies where companies would pursue profit maximization and self-interest within a new economic reality of environmental tax. The latest stage of the ecological control which emphasizes business-driven environmental action, to some degree assumes that businesses are part of the same community as other societal actors and that they share the same concerns for the environment. They should thus be governed by the same regulatory, normative and cultural cognitive institutions as every organization, business and individual within that community. But what are these new frames of reference and what impact do they have for the surrounding natural environment?

2.2 Incentives and motivations for business driven environmental action

In the area of environmental policies, Prakash and Kollmann (2004) found that there are 5 different instruments that create incentives for firms to comply; 1) command and control, 2) market based, 3) mandatory information disclosures, 4) business-government partnerships and 5) private voluntary codes. A big debate within the area of effectiveness of measures to reduce environmental degradation is whether this can be best promoted through enforced environmental regulation or through voluntary or market-driven incentives. While some see stringent environmental regulation as enhancing competitive advantage and creating an incentive for innovation and new technical solutions (Porter & Van der Linde, 2000), others see regulation as hindering innovation and competitiveness through high and non-selective compliance costs (Walley & Whitehead, 2000). According to Prakash and Kollmann (2004) the business sector has as a norm preferred environmental self-regulation and market-based instruments.

When examining motivations for businesses to undertake environmental actions, Anton, Deltas and Khanna (2004) found that total quality environmental management and environmental reporting are principally motivated by perceived competitive advantage in the marketplace, while internal environmental policy, corporate environmental standards and environmental auditing were predominantly influenced by the degree of regulatory standards in place. This literature further suggests that businesses participate in voluntary environmental initiatives to:

- reduce costs or increase efficiency,
- to avoid or delay regulatory action,
- to gain competitive advantage,
- to enhance or reinforce a positive image in the marketplace as a good corporate citizen,

- to comply to pressures imposed by banks, insurers, clients and suppliers who do not wish to inherit environmental liabilities,
- to conform to pressures from community groups, environmental organisations and industry members and
- to increase employee productivity through improved corporate culture and employee pride.

In a case study of Scandinavian Airlines, around the motivations for environmental commitment in the airline industry, it was shown that there were three main motivators for going green; firstly achieving eco-efficiencies (whether they be eco-efficient technologies, improving brand image or shareholder value), secondly, conforming to Scandinavian/national culture on the environment, and thirdly, internal environmental leadership by management (Lynes & Dredge, 2006).

While there has been substantial research undertaken in the area of external drivers of corporate environmentalism, there has been little research on the internal factors that might impact on the company's decisions to go green or greener. Prakash (2000; 2001), studied why firms go beyond legal requirements in their environmental policies and found that these could not solely be explained by external efficiency based theories but were in large due to internal processes and cognitive differences in decision-making, influenced by manager's values, mental models and sense-making. He suggests a space of discursive struggle between policy-supporters, policy-sceptics and policy-neutrals. If a "beyond compliance" policy is adopted it would either be power-based (policy supporters capture top management and induce adoption), or leadership based (inducing consensus and convincing on the long term benefits of these policies). It would be in these internal processes where normative institutions might have a stronger influence on the business leader's choice of environmental strategies and actions.

Scott Marshall, Cordano and Silverman (2005) studied how individual and institutional level drivers influence the early stages of transformation in terms of environmentalism in the US wine industry. They found that drivers of proactive environmental behaviour vary in relevance and relative importance depending on which stage the industry/firm is in. Further they found that managerial attitudes and norms, existing regulations, employee welfare and competitive pressures were all strong drivers of proactive environmental behaviour.

2.3 Environmental Phases

Several researchers have developed frameworks where firms are classified according to an environmental or social responsibility profile or phase which includes being reactive, defensive, accommodative or proactive (Hunt & Auster, 1990; Wartick & Cochran, 1985). Roome (1992) suggested a staged model involving definitions of when firms adhered to non-compliance, compliance, compliance-plus, commercial and environmental excellence and leading edge in environmental actions. Henriques and Sadosky (1999) used these frameworks to assess firm differences in stakeholder importance, and found that while reactive and defensive firms would rank regulatory and community stakeholders at a low level, the accommodative and proactive firms would rank external stakeholders as important in their environmental processes. Interestingly the proactive firms were the only firms that ranked the media as less important than other stakeholders. All but the reactive firms thought that the regulatory stakeholders were important. While the opposite was the case for the reactive firms which would rank the media as the only important stakeholder when it came to environmental processes in the firm.

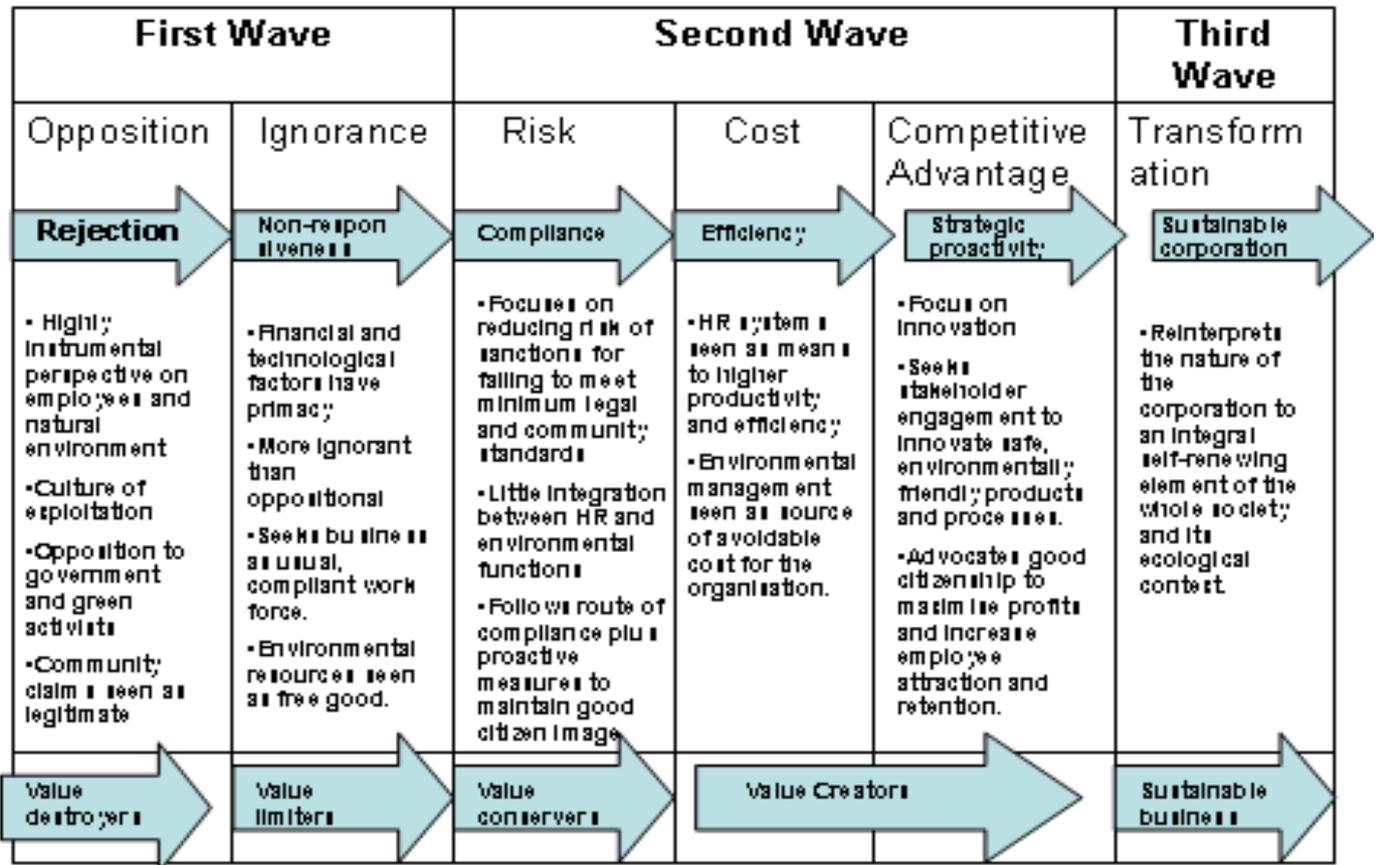


Figure 2 Waves of sustainability (Dunphy, Griffiths, & Benn, 2007, p. 17)

Dunphy, Griffiths and Benn (2007) suggests that firms go through different waves of sustainability according to their environmental awareness and actions taken. The assumption of many of these frameworks is that the firms have a choice of environmental strategy/action and that every company is interested in moving towards a higher state of environmental performance.

Schaefer and Harvey (1998) suggested that as firms are both strongly influenced by external and internal pressures, the staged model may not offer the best theoretical basis for classifying environmental awareness/action, as these stages may be more associated with institutional pressures, bounded rationality when taking decisions (the organisation develops environmental strategy as an incremental process emerging from past practice and with limited information), and systemic pressures which would be determined by cultural constructs and the strategic behaviour which is culturally expected of managers. Last they suggest that an organisational learning approach (focus on tacit knowledge and whole-organisation learning of environmental knowledge)

might be beneficial to understand environmental decision-making by firms (Schaefer & Harvey, 1998).

3. *Institutional theory and the natural environment*

3.1 Types of institutions

Veblen (1919), one of the founding fathers of classical institutional theory, defined institutions as “settled habits of thought common to the generality of man” (p.239). Classical institutional theory defines institutions as being established through an interactive process, where institutions define what is collectively accepted and rational, while in a reciprocal way, humans define through their actions what are the institutions for their group, organisation or society. Therefore human preferences of behaviour will be influenced strongly by what is expected from them in the roles they perform, whether they be professional (lawyer, plumber etc) or societal (mother, child, grandfather etc). A such this perspective is a social constructivist perspective (Vatn, 2005a).

According to new institutional theory, institutions are defined as "humanly devised constraints that structure political, economic and social interaction"(North, 1991). However, while the classical institutionalists state that the institutional context shape what is considered rational and accepted action for humans in a given group, the neo-institutional perspective claims that society comprises individuals whose main concern is benefit maximisation or self-interest, and institutions therefore are a constraint to individual benefit maximisation. In this framework, institutions can be stated as “rules of the game”, benefit maximisation is the rational way to act in relation to societies institutions, and institutions are mainly external to humans, they do not shape human ways of acting, but will contribute to reduce transaction costs through establishing the rules of the game (Vatn, 2005a).

North (1991) stated that institutions consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct) and formal rules (constitutions, laws, property right). Individuals are guided by these institutions through rational choice (benefit maximisation), duty (through

cultural or other social pressure/expectations) or out of habits/lack of conceiving an alternative to the chosen action.

Vatn (2005b) discusses the problem of reducing environmental decisions to economic and technical maximisation and proposes that with a more social constructivist perspective on institutions, environmental action may be more determined by socially determined behaviour and thereby questions of collective and individual values.

Scott (W. R. Scott, 2008), a classical institutional theorists, suggests that institutions comprise three types:

- 1) regulative (formal rules and incentives constructed by the state and other empowered agents of the collective good),
- 2) normative (informal rules associated with values and explicit moral commitments), and
- 3) cognitive (abstract rules associated with the structure of cognitive distinctions and taken for granted understandings).

Scott further states that institutions provide stability and meaning to social behaviour, and are developed through cultures, structures and routines. The three institutional pillars tend to be interrelated and internally consistent. For example, the introduction of an environmental legislature (regulatory) is likely to create an understanding and a shared body of knowledge among people about environmental issues (cognitive), as well as a set of beliefs and values related to environmental protection (normative).

	Regulative	Normative	Cultural Cognitive
Basis of compliance	Expedience	Social Obligation	Taken for Granted
Basis of order	Regulative rules	Binding expectations	Constitutive schema
Mechanisms	Coercive	Normative	Mimetic
Logic	Instrumentality	Appropriateness	Orthodoxy
Indicators	Rules, Laws Sanctions	Certification Accreditation	Common beliefs Shared logic of action
Affect	Fear guilt/ Innocence	Shame/ Honour	Certainty Confusion
Basis of legitimacy	Legally sanctioned	Morally Governed	Culturally supported

Figure 3. How do institutions guide behaviour ? (W. R. Scott, 2008, p. 51)

Different research traditions give different emphasis or priority on the influence the various institutional pillars have on behaviour. Scott (2008) suggests that the reason why economists and rational choice political scientists, are drawn to the conclusion that regulatory pillars are the most important, is that they study behaviour of individuals or firms in markets or other competitive situations such as politics. This is a situation where contending interests are common and hence explicit rules and referees are more necessary to preserve order. It is necessary therefore to examine the State as rule maker and referee within a regulatory framework. However, in self-organising processes, where the state has little active input, who or what will influence behaviour?

3.2 Institutions and organisational fields

In relation to organisations, Scott (1995) in (Scott Marshall, Cordano, & Silverman, 2005) considered that firm's organisational field (or social arena) defined as " the community of organisations that partakes in a common meaning system and whose participants interact more frequently and fatefully with one another than with actors outside the field" (p.56). The

organisational field is thought to be a better foundation to analyse institutional processes that shape organisations (W. R. Scott, 2008). In more practical terms, DiMaggio and Powell (1983) define organisational fields as those organisations that in aggregate constitute a recognised part of institutional life, key suppliers, resource and product consumers, regulatory agencies and other organisations that may influence the way organisations do things. Institutional theory can therefore be used to examine “how organisational and societal players build consensus around the meaning of emerging issues, such as what can be considered “environmentally sound”, and what practices associated with “environmentally sound” are accepted (Scott Marshall et al., 2005)(p95).

Jennings and Zandbergen (1995) further state that when it comes to environmental issues, organizational fields will often be grounded in a particular geographical area or locale, centering on those communities and organizations that are most involved in the environmental issue or share the same values. Therefore, when examining organizational fields, the local community, trade associations and environmentalist organizations will also have a role in consensus making around environmental awareness.

Brown et al (2007) (see below) have developed a multi-level theoretical framework for analysing resources in clusters, which comprises using institutional theory to analyse how the context (or regional and societal context) influences the individual firms and the business clusters competitive advantage. The framework further suggests distinguishing the cluster into different actors depending on whether they are competing within the same business (horizontal actors), supplying businesses (vertical actors) or providing, regulation, services or knowledge into the cluster (lateral actors). At web-level, network theory is suggested to analyse the impact different actors have on each other, and the resource based theory is used when examining the impact of resources on firm’s individual competitive advantage. Through using this framework to analyse the changes or influences of environmental policies on cluster and individual firm competitive advantage a clearer understanding of how these issues are dealt with within what one can call the business organisational field will be possible.

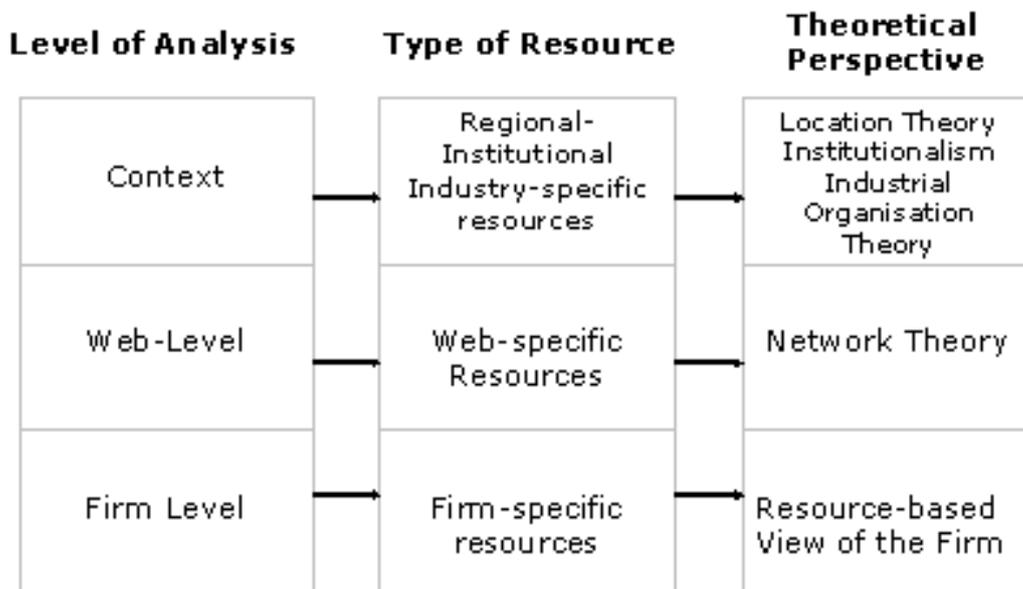


Figure 4. Using a multi-level theoretical framework to analyse what influences environmental behaviour in agriculture based tourism clusters. (Brown et al., 2007)

3.3 What makes institutions change?

The organizational fields are the basis for diffusion of innovation or new practices across different actors. These innovations, for instance new environmental practices, can be adopted due to coercive pressure/isomorphism (formal and informal pressures by other organisations of which the organisation is dependent), mimetic isomorphism (wanting to do what others are doing due to uncertainty –risk avoidance) and normative isomorphism based on what the accepted norms are (DiMaggio & Powell, 1983).

But within organisations or organisational fields, what leads to changes in institutional frameworks? According to DiMaggio and Powell (1991) there are two strands of thought around what changes institutions;

- 1) Through internal revisions of institutional contradictions and “refitting” at a micro-level old institutions to better fit the new reality. Institutional change will only happen if it is perceived as a legitimate change and therefore an appropriate or acceptable new way of doing or perceiving things. (Zucker, 1987) Political leadership is often seen as assisting in rationalization of the new logics of institutional framework.
- 2) Through external pressures, that block reproduction of institutional patterns and thereby induce change. This can be regulatory measures introduced by the state or the collective mobilizing efforts of professions. Coercive processes may impose standard procedures and conformity.

DiMaggio and Powell (1991, p. 31) reviewing three cases of institutionalization, states that there is convergence in the way power and interests influence the way organizations change.

The need for change is often identified by a goal oriented elite intervention at critical points in an organizational field’s development, in order to create legitimacy, a field wide organization is then constructed. Professionals (often from the outside) play leading roles and provides an outsiders (neutral/autonomous) view, which has an impact on ideology and behaviour. Last the change comes as a result of internal contradictions as to what strategic direction needs to be made. When organisational fields are unstable and established practices not practical or acceptable, successful change of institutions will depend upon collective action and a redefining new “rules of the game”. (1991, p. 30)

According to Jennings and Zandbergen (1995) environmental crises may lead to deinstitutionalisation; an environmental crisis can undermine the faith in the current system/institutions such as the paradigm of limitless resources, technological solutions and human intentions. The impact individual actors can make to innovation and thereby to institutional change in the area of environmental improvement may also be important, as showed in Scott Marshall et al’s research on the US wine sector. (2005).

3.4 Differences in institutions between Norway and Australia

According to institutional typology the institutions that are present in Anglo-Saxon cultures are very different to those present in Northern European and Nordic cultures, reflecting in part informal

institutions (trust-regimes, collaboration, degree of consensus, traditions) and in part formal institutions (constitutions, educational system, IR system, property rights). When faced with serious environmental issues, it could be expected that the way/mode and means a business, a business cluster or society will respond to the environmental challenge will differ according to the country's formal and informal institutions. Koen (2005) and Ferner and Quintanilla (1998) have suggested an institutional typology of the difference between a typical liberal market such as the Anglo-Saxon cluster of countries as compared to more coordinated market economies of Northern Europe and Germany (Table 1).

Table 1. Using an institutional typology to show differences between Anglo-Saxon liberal market economies and Northern Europe coordinated market economy (2003)

National Institutions	Liberal Market Economy	Coordinated Market Economy
	Anglo Saxon	Northern Europe/Nordic + Germany
Business and organization coordination	Weak	Strong and well organised at the industry level
Relations between institutions and actors	Arm's length: Short term; low trust	Long term; high trust
Financial Institutions	Market	Banks and market
Education and training system for lower-level workers	Ineffective	Effective
Unions	Weak	Important role

Career patterns for managers	Between firms	Within firms
Labour market	Flexible; deregulated	Regulated

4. Resource based theory and the natural environment

The resource based view can be seen as a model to explain and describe how and why a firm can obtain and sustain competitive advantage. The model has been developed by several researchers (J. Barney, 1991; J. B. Barney, 1986; Dierickx & Cool, 1989; Wernerfelt, 1984, 1989), however Peteraf (1993) offers a summary description of the relationship between the firms external environment and its internal resources and capabilities.

The model proposes that the firm needs four conditions in order to obtain and sustain competitive advantage; resource heterogeneity, ex-post limits to competition, imperfect limits to mobility and ex ante limits to competition.

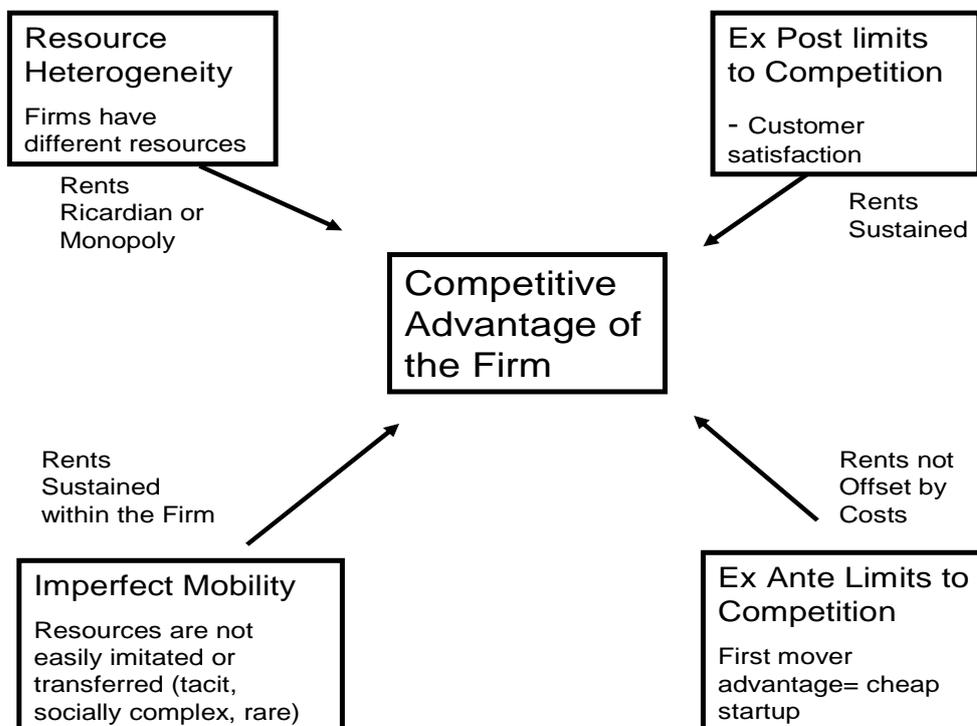


Figure 5: The Cornerstones of Competitive Advantage for the Firm (Peteraf, 1993, p. 186)

The basic proposition is that for a firm to obtain sustained competitiveness it needs to have resources that can not be easily replicated or transferred to other firms (immobile or imperfectly mobile resources), these resources need to be different to other firms resources (heterogenous), there needs to be limits to competition after the product/service is produced in that customers will prefer your product over others whether this is due to service, product quality, special agreements or loyalty , there also needs to be limits to competition before production of a product/service, so that the firm obtains a first mover advantage when investing in infrastructure or property. When the competition is fiercer, the price of these assets will increase, leading to less profitable/sustainable business operations.

In order for resources to lead to competitive advantage, they need to be valuable (rent-producing) and non-substitutable (Dierickx & Cool, 1989) If resources are mobile, they can be easily traded and therefore acquired by other firms. If resources are immobile they can not be easily traded, for instance when there is no defined property rights. If resources are imperfectly mobile, they can be traded, however they are more worth to the firm that currently employs them than to other firms. Key characteristics of such resources are that they are tacit (causally ambiguous) meaning that they have been developed over time and with complex social involvement within an organization and can not easily be transferred to another firm or to other people, they are socially complex and they are rare (firm specific) (Hart, 1995). Resources for the firm are the bundles of physical and financial assets as well as employees skills and organizational processes that comprise the firms competitive advantage. While physical and financial assets can be easily replicated or acquired by new competitors, tacit resources are not easily substitutable, they are skills based and people intensive. These resources are often a result of a particular path through history which is not easily recreated, dependent on preceding levels of learning, investments, asset stocks and development activity. (Dierickx & Cool, 1989). It is through the firm having valuable and non-substitutable resources that rent (profit) can be achieved.

Hart (1995) points to an obvious weakness in the resource based theory; through the omission of constraints imposed by the biophysical (natural) environment it is lacking in emphasis on competing for future sustainable business. Future businesses will be constrained by and dependent upon ecosystems, creating unprecedented challenges in how a business is run. He contends that the basis for gaining competitive advantage will be based increasingly on such socially complex and

tacit capabilities of waste minimization, green product design and technology cooperation (p. 991). He introduces a conceptual framework for integrating the natural environment into the resource based theory of competitive advantage: The Natural Resource Based View.

Strategic Capability	Environmental Driving Force	Key Resource	Competitive Advantage
Pollution Prevention	Minimize emissions, effluents & waste	Continuous improvement	Lower costs
Product stewardship	Minimize life-cycle costs of products	Stakeholder integration	Preempt competitors - excl. access - env. barriers
Sustainable Development	Minimize environmental burden of firm growth and development	Shared vision	Future position

Figure 6. A Natural Resource Based View of a Firm's Competitive Advantage. (Hart, 1995, p. 992)

Hart (1995) proposes that through using this framework it is possible to analyse competitive advantage of the firm, based on the three interconnected and path dependent strategies of pollution

prevention, product stewardship and sustainable development. For these strategies to be competitive, the resources and capabilities they comprise must be valuable, non substitutable, developed as tacit socially complex and rare resources.

Barbier (1994) and the World Business Council for Sustainable Development (2009) suggested a matrix for classifying ecosystems in use and non use values of more or less marketable resources. While the directly valued ecosystems/natural resources are tangible and easily substitutable, with clear property rights, others may be classified as indirect values and options values which has less defined property rights around them and can be classified as tacit or resources which are causally ambiguous, ie they are more worth to some firms than others. Last other types of natural resources can be classified as non-use values which are deemed not marketable for a business, yet these offer maybe the least tangible, yet the most inimitable resource seen from a competitiveness point of view.

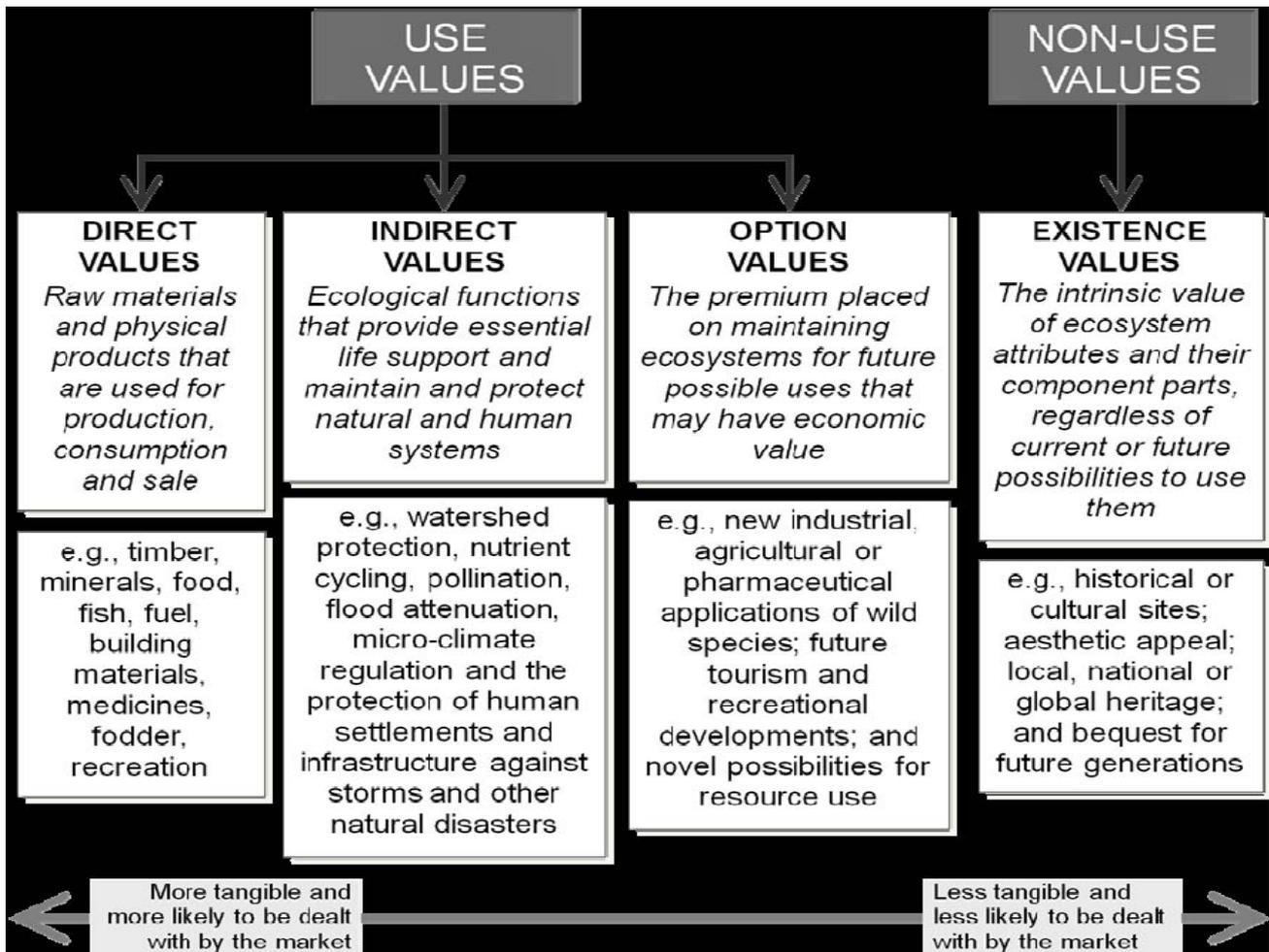


Figure 7. Economic value of eco-systems (World Business Council for Sustainable Development, 2009)

Hart (1995) points to that external legitimacy and reputation may influence the competitive advantage of natural resources, and therefore be dependent on more cooperative action and transparency than competition.

In accordance with this statement it makes sense to combine an analysis of sustainability actions within countries both with the institutional theory and natural resource based theory. It also makes sense to analyse the cluster level in order to understand how the social dynamics between the actors within the cluster may influence sustainability.

5. *Research gaps*

Shrivastava and Hart (1994) suggested that since environmentalism will be one of the most potent forces of economic, social, and political change, organizations and organizational theory will need to transform themselves dramatically in order to accommodate environmental concerns. More than ten years later, Kallio and Nordberg (2006) found that there are still big questions unanswered concerning organisations and their relationship with the natural environment. These include: what is the organisation's relationship with the natural environment? Why does integration of concerns for the natural environment happen within organisations? Where does it happen? Who does it happen to? How does it happen? What are the consequences of an integration of the organisation and the natural environment? They also found that while substantial empirical research (mostly case-study based) had taken place, there was less development of theory merging organisational and management theories with the natural environment. There has also been few studies assessing how sustainability action affects firm's or clusters competitiveness and how the natural environment is linked with the involved firms or organisations' (businesses, government, non-profit or others) actions as a part of their everyday activities (Gladwin, Kennelly, & Krause, 1995; Kallio & Nordberg, 2006). There has also been little done to compare contexts, local formal and informal institutions when examining business-driven environmental action (Gjølberg, 2009; Halme, Roome, & Dobers, 2009; Hart, 1995).

From the above review the following knowledge gaps emerge:

- More research is required that looks at how the business sector acts and implements environmental action. What are their perception of environmental action, why are they doing it, what do they see as important factors for the environment and business to co-evolve and mutually benefit each other, how do they pursue environmental action, how do they get organised and what are the (short and long-term) consequences for the environment and society?
- More theory is required on the development of the links between the natural environment and business
- More comparative research is required that looks at how businesses deal with environmental issues within different contexts and different national institutional frameworks.

6. Location and purpose of study

When faced with serious environmental issues, it would be expected that the way/mode and means a business, a business cluster or society will respond to the environmental challenge will differ according to the country's formal and informal institutions. In rural areas the issues of environmental degradation and preservation would be expected to be more prominent for agricultural-based businesses. And even more prominent in areas where the natural environment and landscape comprise the basis for tourism as an added income-earning strategy for rural businesses. While this leads to added challenges it will also to some degree demand that businesses go beyond compliance with environmental regulatory systems, as the landscape is not under environmental jurisdiction, yet a common good that businesses can profit from, but need to develop/maintain in collaboration. Therefore in these areas a wider perspective on the value of the natural environment could be expected, not only on marketing the tourism businesses as being environmentally sound, but also preserving or enhancing the natural landscape as value-adding for the tourism businesses.

The two countries selected, Norway and Australia, have distinctly different contexts and institutional frameworks when it comes to environmental management in rural areas. For this

research two business driven environmental initiatives have been identified and are currently being approached for approval of access. They are self-defined clusters, they do not follow administrative or geographical borders, but rather are based on a common business focus – agricultural based tourism - in the area. They fit the definition of clusters according to Porter's (1998) describing these as; geographic concentrations of interconnected companies and institutions in a particular field. They include both suppliers of inputs, services and knowledge (universities, training), and downstream businesses focussed on customers that both compete and collaborate. In Australia their networking organisation is a Chamber of Commerce in a wine-tourism area, in Norway in an applefarming and tourism area, a shareholding company has been established with the purpose of promoting sustainable development in the area.

In Norway the agricultural sector has since the early 70-ies received a high level of subsidies to promote national self-sufficiency of basic foods and livelihood for the rural population. While the subsidy levels for agricultural production have been substantially reduced in the last decade, they have been shifted towards subsidies for farm-based environmental protection and preservation. As subsidy levels are reduced and farms have to survive through value-adding strategies, tourism ventures have become a growing feature of rural Norway. There is a distinct shift away from traditional farming towards a mix of farming and agri-tourism, eco-tourism and lately the concept of geotourism. Geotourism is defined as tourism that sustains or enhances the geographical character of a place—its environment, culture, aesthetics, heritage, and the well-being of its residents.(National Geographic Society, 2009). With geotourism in mind, several agricultural based tourism clusters have joined forces in a movement towards creating what they call landscape parks to strengthen their business. Landscape Parks are unique natural and cultural places defined by the local landscape and by the people's own sense of identity. They have a distinct goal to develop agro and tourism businesses in a sustainable way to make it attractive to both locals and visitors.

In Australia, the agricultural sector has been one of the strongholds of the national economy and is largely focussed towards producing for the World market with few subsidies. The Local Agenda 21 introduced by the Federal government in 1992, stressed that local authorities should together with its citizen's community organisations and private enterprises develop a consensus on a plan of action – a local Agenda 21 (Black, 2005). One of the main drivers in rural environmental management in Australia could be said to be the community and volunteer based action as demonstrated by the Landcare movement which was initiated in the early 90-ies. By 1998 it was estimated that 66% of all farmers were involved in Landcare groups (Aplin et al., 1999). While

these achievements are formidable, in the later years there has been issues of volunteer fatigue, difficulties in dealing with common property issues and diminished funding (McKenzie & Pini, 2007). McKenzie and Pini found from their extensive case studies (2007) that the local councils that were most environmentally conscientious were located in areas that had many divergent and active business interests, particularly in areas where use of the natural environment was considered an added value to the local tourism industries.

This study will examine two business-driven environmental initiatives in small geographically defined agriculture-based tourism clusters in Norway and Australia. As such it will study two similar clusters with the purpose of examining what and how differences in context, such as formal and informal institutions, impact on how these businesses choose to organise and implement environmental action. It will explore their perceptions of environmental action, why they want to undertake environmental activities, what they see as important factors in strengthening or impeding their environmental goals. It will analyse how they pursue their goals and what the businesses consider to be the short and long term consequences for the environment, their business and the community.

The aim of the study is to identify to what extent and why agriculture-based tourism businesses undertake sustainability measures. It will also examine how businesses perceive the impact of the natural environment on their operations. Research questions are:

- How do formal and informal institutions influence business-driven environmental actions beyond policy compliance in the two clusters?
- Are there different perceptions on what comprises sustainable environmental action among business actors and stakeholders in the two clusters?
- How is business-driven environmental action perceived and supported by local and other stakeholders?
- What are the drivers and barriers to environmental action in the two clusters?
- How is the status of the natural environment perceived as value-adding or value-subtracting to the business?
- How can cluster analysis inform business driven environmental programs?

7. Conceptual Framework and research design

According to institutional theory, institutions are defined as "humanly devised constraints that structure political, economic and social interaction". As such they consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct) and formal rules (constitutions, laws, property right) (North, 1991). According to institutional typology the institutions that are present in Anglo-Saxon cultures are very different to those present in Northern European and Nordic cultures, reflecting in part informal institutions (trust-regimes, collaboration, degree of consensus) and in part formal institutions (Constitutions, educational system, industrial relations systems, property rights). When faced with serious environmental issues, it could be expected that the way/mode and means a business, a business cluster or society will respond to the environmental challenge will differ according to the country's formal and informal institutions.

At firm level it is suggested to use the natural resource based view (Hart, 1995) to indicate how institutions influence the firms view of competitiveness in relation to the natural environment.

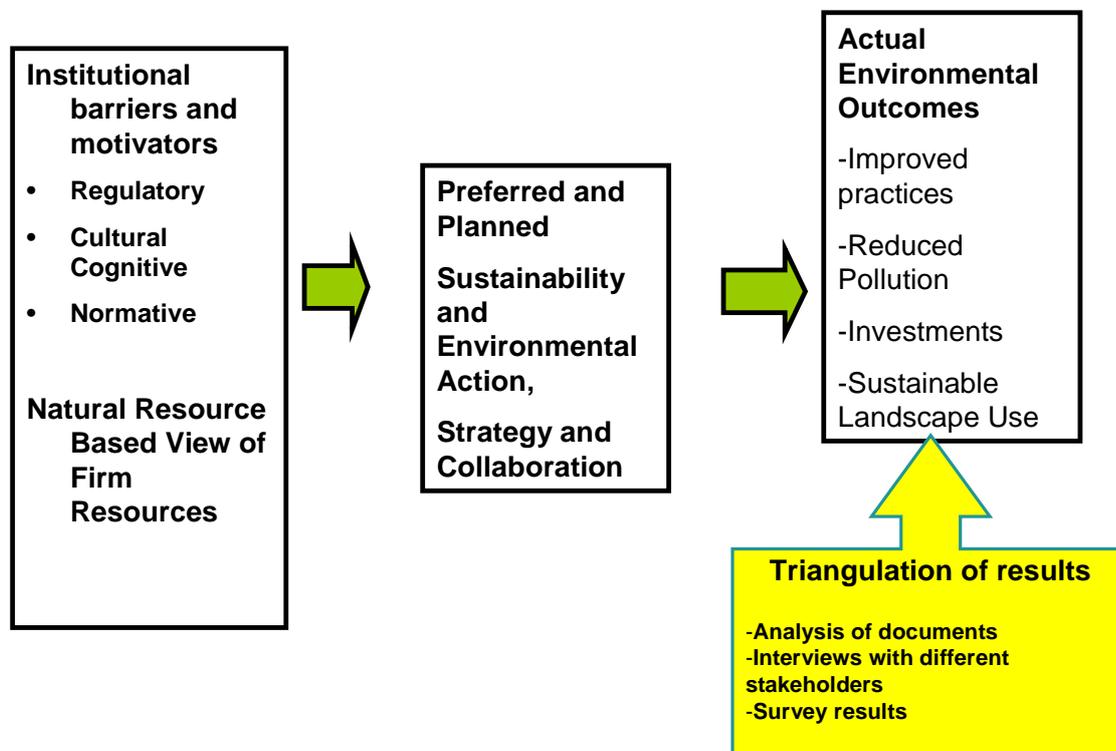


Figure 8. Conceptual framework for the study .

The research design will be based on an explanatory mixed methods approach used on two cases, where the triangulation between 3 sequential studies, both quantitative and qualitative will be used (Creswell & Plano Clark, 2007) (Jick, 1979). It follows Yin’s (2003) description of a comparative case study as “an empirical inquiry that investigates a contemporary phenomenon within real-life context, especially when the boundaries between phenomenon and context are not clear” (p13).

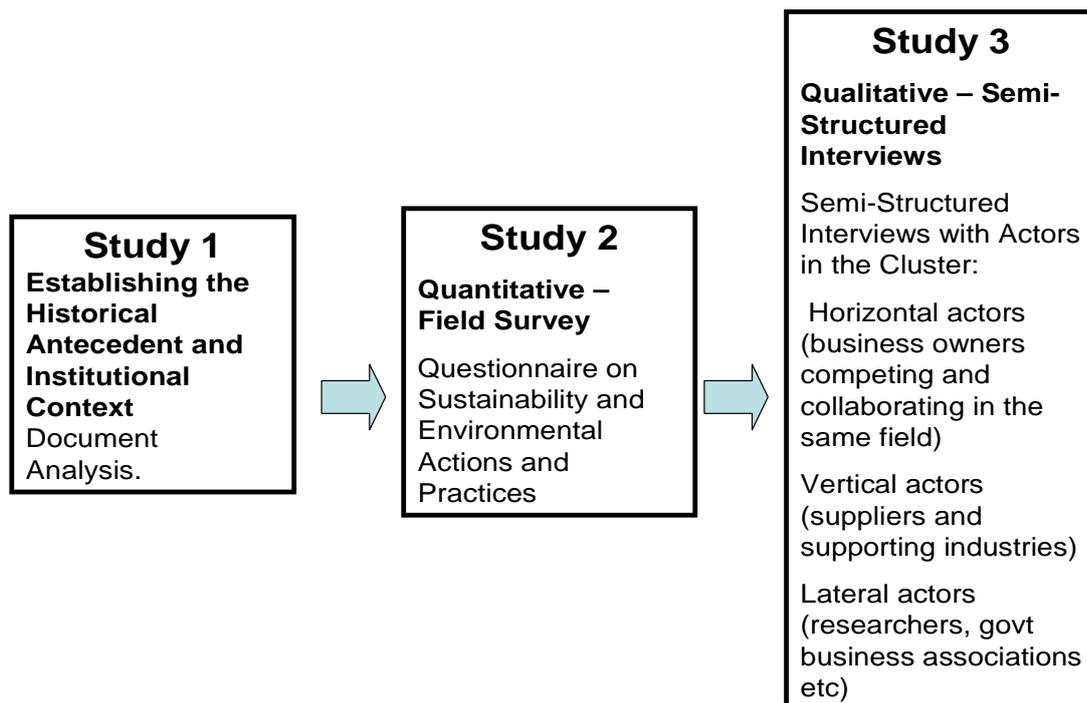


Figure 9. Three consecutive studies in two clusters, countries and languages.

8. *Theoretical and Practical Significance of Study*

The theoretical significance of this study is the attempt to undertake an intra-industry and inter-country study of how and what institutions impact on business-driven environmental initiatives.

Through the study of cases from two countries with distinctly different institutional frameworks it is hoped that new relationships can be discovered and theorised.

Through using a mixed methods approach, it is envisaged that a clearer picture of how and why clusters instigate on business-driven environmental action, and what the consequences are for the local society and the natural environment. This will lead to theory development which in turn may improve prediction of firm behaviour and what formal or informal institutions lead to actual changes in businesses environmental behaviour. It will also improve the understanding of how and why some businesses perform proactive environmental behaviour, whether proactive environmental behaviour is conceived differently under different institutional regimes and to what extent business-driven environmental initiatives can lead to lasting change of institutions influencing environmental improvement.

As both businesses and environmental threats “go global” increased knowledge about what influences firm decision-making with relation to climate change and other environmental issues will be important both for business leaders and policy makers. More knowledge about the firm’s perspective on the issue of environmental orientation and strategy, and how best to ensure lasting change will be vital for the development of relevant environmental policies.

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NEW ENGLAND AUSTRALIA: WHAT FOLLOWS FROM REGIONAL STATUS? A COMPARATIVE, POLITICAL ECONOMY APPROACH⁵⁵

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ABSTRACT:

The New England Australia wine region was formally defined on the basis of geographical indicators (GIs) in January 2008. To date, the region has pursued a marketing approach built principally on its GI-defined regional status, emphasising cool climate diurnal variation, as well as some markers of cultural and political identity, such as ‘family’ and ‘artisan’ production. This general marketing profile fits hand in glove with that of a region ‘presenting an image of quality and tradition’ (Chang et al, 2006: 6). Yet, as Garcia-Parpet (2007) has reminded us, marketing is not merely about product promotion. It is also about the strategies that businesses adopt to achieve market entry, both legal and cultural, and the mechanisms for circumventing possible barriers. With this in mind, we contrast the marketing strategies of the New England wine-producing region in Australia with that of the Languedoc-Roussillon region in France. While the two occupy similar market positions, they nonetheless reveal diametrically opposed marketing strategies. Against the background of this comparative discussion, we seek to propose methods to enhance the development of the New England wine region so that it becomes a more complete example of successful rural restructuring.

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NEW ENGLAND AUSTRALIA: WHAT FOLLOWS FROM REGIONAL STATUS? A COMPARATIVE, POLITICAL ECONOMY APPROACH

1. INTRODUCTION

Writing in the *Oxford Companion to Wine*, John Robinson (1999) used the concept of nature to describe the diametrically opposed approaches to wine making of the Old World and the New World. According to Robinson, for the Old World, nature is ‘the determinative driving force’ of wine, exemplified in the phrase *vin de terrior*. By contrast, for the New World, ‘nature is the enemy that must be controlled and dominated by science’, as exemplified by the term *vins technologiques*. Moreover, while complex webs of regulation preside over the production and supply of wine in the Old World, in the New World ‘there are no limitations imposed on supply other than concern for consumer’s health’ (Robinson, J., in Garcia-Parpet, 2008: 238).

Beyond the inaccuracies that these stylized accounts of ‘wine worlds’ provide, and beyond the heady domain of sensory critique that is wine consumption, wine is big business. Australia is no exception to this, as illustrated by Table 1:

Table 1: The Australian wine industry, 1990-2004

	1990-91	1995-96	2000-01	2004-05
Total vine area (ha)	61 362	80 574	148 269	166 666
Wineries	617	812	1318	1899
Total production (million litres)	346	606	1035	1442
Export volume (million litres)	57	130	339	661
Export value (A\$ million)	180	472	1614	2748
Domestic consumption (litres/capita)	17.8	18.3	20.5	21.8

Source: Adapted from Banks, *et al.* (2007: 17).

The most striking statistic in Table 1 is that the value of wine exports in 1990-91 represented a mere 6.5 per cent of what they had reached in 2004-05. Also significant is that the number of wineries increased by a factor of over 3 (from 617 to 1899) in the same time period, representing significant capital investment. While there are some signs of a dampening of both demand and production in the Australian Bureau of Agricultural and Resource Economics’ (ABARE) projections for the Australian wine industry for 2010-11 (ABARE, 2009), the tonnage of grapes crushed in 2007-08 nevertheless rose by 31.1 per cent from 2006-07 (ABS, 2009a). Domestically, total sales of wine in 2007-8 reached \$2 096.2 billion, with exports valued at \$2 608.4 billion. However, alarmingly for

local producers, the value of wine imported to Australia increased by 40.8 per cent from 2006/07 or to \$431.4 million (Australian Bureau of Statistics (ABS), 2009a).

Both grape cultivation and wine production are now widespread economic activities throughout Australia, with ABARE (2009) currently listing approximately seventy wine producing regions and as many subregions. Thus, wine production has significantly disrupted long term-trends indicative of the marginality of rural and regional Australia, in particular smaller farm holdings. For example, between 1970 and 1996, the number of farms in Australia decreased from 250,389 to approximately 150,000. Further, the mean size of the remaining farms has increased from approximately 1,858 hectares in 1960 to 2,834 hectares in 1996 (Davidson and Grant, 2001: 296). Moreover, over 2007-2008 alone, the number of agricultural businesses operating in Australia fell 6 per cent to 141,000 (ABS, 2009b).

In many ways, the New England North-West region of New South Wales (NSW) is indicative of these national trends. For example, net tonnage of grapes crushed for wine has increased from 14,893 tonnes in 2000-1 to 17,953 tonnes in 2006-7, with a concurrent increase in businesses from 91 to 104 across the same time period (ABS, 2008). These kinds of increases in production stand in contrast to other statistics for the same region, such as stagnant or dwindling population bases (see, for example, Conway, Dollery and Grant, 2009). In addition, as the recent work of some geographers has served to remind us, issues of regional economic regeneration are as much about notions of identity and rescaling as they are about avoiding rural malaise (see, for example, Banks, *et al.*, 2007; O'Riordan, 2001).

Indeed, much rides on the success of the wine industry for Australia generally and in particular for its regions. With this in mind, this paper undertakes an analysis of the development of a marketing strategy by the New England region, as pursued by the two growers associations; the New England Wine Growers Association (NEWGA) and the Southern New England Vignerons Association (SNEVA). This approach has been assisted by the New South Wales Government's Department of State and Regional Development through its Northern Inland Regional Development Board, located in Armidale, NSW, as well as the Armidale-Dumaresq Council. By way of these producer groups, and in conjunction with the Department of State and Regional Development, the region has pursued what Banks and Sharpe (2006) refer to as 'the geographic imperative'; namely the awarding of regional status on the basis of GIs by the Australian Wine and Brandy Corporation, to conform with many of Australia's famous wine producing regions and sub-regions such as the Coonawarra in South Australia, Margaret River in Western Australia and the Hunter Valley, to the south of New England Australia region.

The achievement of the status of a certified region – ‘New England Australia’ – in January 2008 was hailed as a significant milestone by both producers and the community alike (Food and Wine News, 2008). This geographic approach to product branding has been augmented by the efforts of individual producers, notably by developing ‘certified organic’ products (Blickling Estate 2009; Wright Robertson, 2009), and ‘certified biodynamic’ products in another (Walden Woods, 2009), as well as particular marketing efforts like food and wine events (such as the annual Guyra ‘Lamb and Potato Festival’; ‘Gourmet on the Glenn’; Nundle’s ‘Picnic at Hanging Rock’ – see ‘Events’, nd).

Nevertheless, a series of pertinent questions may at be asked at this juncture concerning the marketing of New England Australia. For example, is the focus on the achievement of regional status (the ‘geographical imperative’ identified by Banks and Sharpe, 2006)) enough to ensure the vibrancy and growth of the region’s wine industry? Further, alongside the efforts of individual producers, how may this approach to marketing the region’s wines – and the region more generally – be augmented and improved, given the region’s market position? Moreover, what can be learned from other regions – not just in Australia, but globally?

By way of an initial response to the questions posed above, this paper seeks to demonstrate that useful lessons can be learnt through comparing of the New England Australia wine region with that of Languedoc-Roussillon in France. Despite obvious dissimilarities, the two regions share a number of characteristics, particularly with respect to their market position, and more specifically in relation to older, more firmly entrenched competitors. We argue that the novel ways that Languedoc-Roussillon structured its response to its market position can be instructive for New England Australia.

The paper itself is divided into five main parts. Section 2 provides an account of the emergence of the New England wine region derived principally from the work of Chang, et al. (2006). Section 3 of the paper notes that despite the achievement of Regional Status, when viewed through Porter’s (1998) ‘Diamond Model’ of market advantage, New England Australia can be assessed as occupying a precarious position in terms of its prospects for sustainability and growth in the face of a nationally and internationally competitive industry. Section 4 considers both the market position and strategies of the Languedoc-Roussillon region in France through reference to the work of Garcia-Parpet (2008), focussing on the fact that that this region has adopted decidedly ‘new world’ strategies in the face of a rigorous and systemic mechanism of ‘old world’ market closure. Section 5 of the paper engages in some comparative observations, notably that many of the marketing strategies, in particular the development of new wine varieties, the targeting of a price point which is neither exclusive, nor budget-based and the valorisation of ‘place’ and in particular

'region' are also applicable to the emerging, and important, New England Australia wine region. The paper ends with some brief concluding remarks in section 6.

2. New England Australia

The New England Australia wine region is located approximately 650 kilometres north-north west of Sydney. Encompassing some 27,000 square kilometres, it is one of the largest wine regions in Australia (Food and Wine, 2008). In their discussion of the region immediately prior to its official recognition as a wine region based on geographic indicators, Chang et al. (2006: 6) provide a useful array of general information about the New England as a wine-producing region. Firstly, in common with some other areas in Australia, commercial wine production commenced in the 1850s alongside the establishment of broad-acre farming and grazing. However, this production generally waned until the last of the vines were left to die out just prior to WWII. Again, as with many other areas in the country, it was only in the 1970s that interest in the industry was renewed. However, in the case of the New England, the vast majority of its currently productive vineyards were planted between ten and fifteen years ago.

Secondly, the New England Australia region was hewn out of the pre-existing 'Northern Slopes' region and is classified by the AWBC as a sub-region of the larger Northern Slopes area. This is represented in Figure 1. Yet, the New England Australia region is still geologically and climatically diverse: The plateau from Tenterfield in the north to Armidale and Walcha in the south is characterized by a height of approximately 1000 meters, with rainfall of 800-900 millilitres per annum and constituted by yellow Podzolic soils. On the other hand, the west and south of the region, around respectively the towns of Delungra and Kootingal, are approximately 600 metres above sea level, have significantly lower rainfall, and are constituted by black-earth Euchrozem soils (Chang et al., 2006: 7).

Figure 1: The Northern Slopes and New England Australia wine regions



Source: ABARE (2009).

Thirdly, Chang et al. (2006: 8-9) provide a synoptic ‘snapshot’ of the industry based largely on an audit of the region conducted by the NSW Department of State and Regional Development in 2002-03. Table 2 provides a comparative portrait of the New England Australia wine producing region as an element of the former Northern Slopes region:

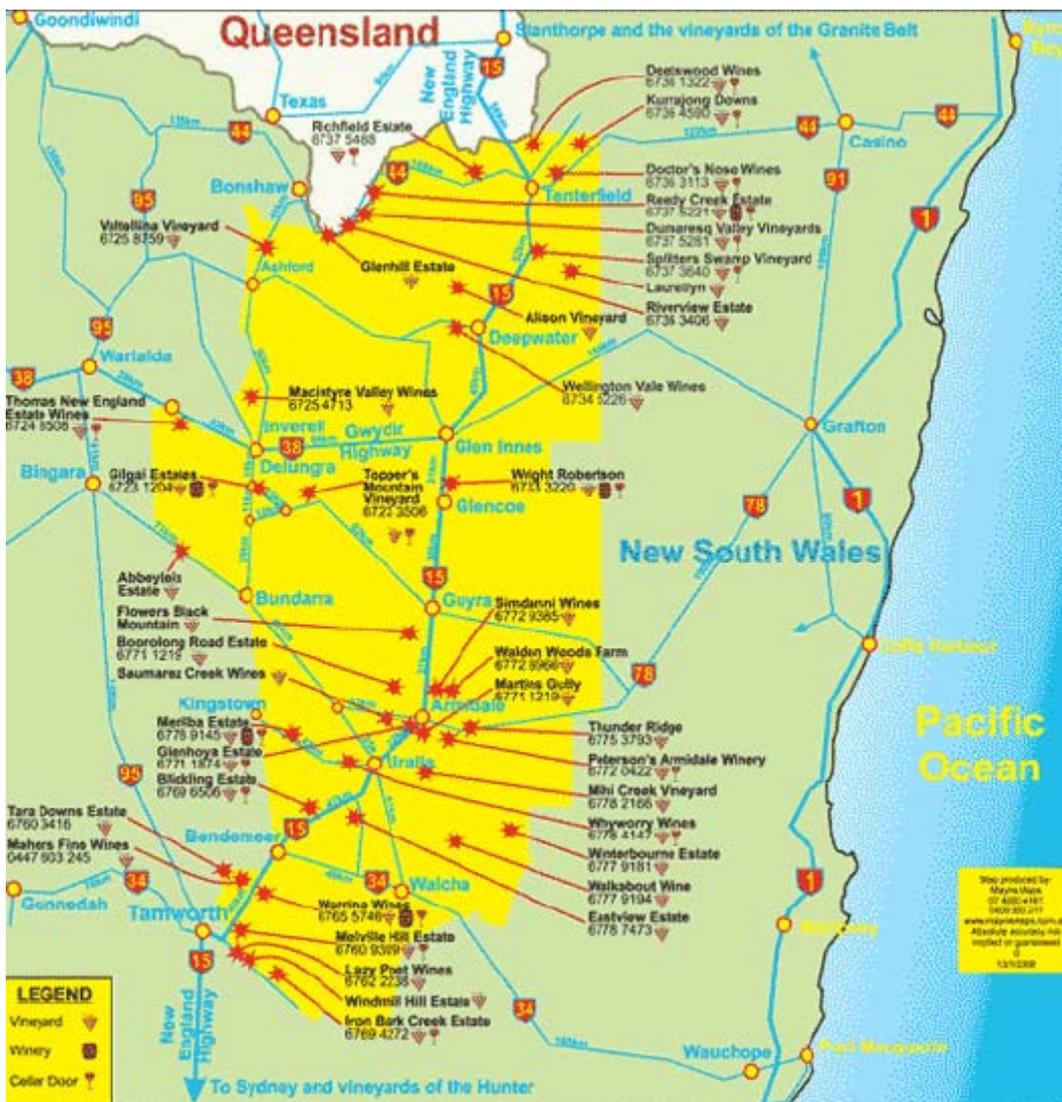
Table 2: Grape Cultivation in Northern Slopes and New England, September 2005

	Northern Slopes	New England	New England as a % of Northern Slopes
Vineyards	52	41	79
Area (hectares)	409	291	71
Grape production (tonnes/year)	2,529	1,852	73
Litres/bottles	1,580,734/2,107,645	1,157,750/1,543,666	73/73
On-farm oenology as %	9.6	12.1	n/a
Value	\$29.5 million	\$21.6 million	73

Source: Adapted from Chang, et al., (2006: 8).

From Table 2 we can see that the New England Australia wine region constituted approximately 75 percent of the ‘embryonic’ wine industry of the Northern Slopes at the time. Chang et al. (2006: 9) also note that there were five wineries in the (former) Northern Slopes region. All of these are now to be found in the New England Australia GI designated region (see Figure 2).

Figure 2: New England Australia wine region



Source: Food and Wine (2008b).

Important questions are raised by the data presented in Table 2 and associated evidence presented in Figure 2. First, trends since this time, such as business failure rates and capital concentration, as well as the opening of new wineries and vineyards, are not represented. Second, the extent to which the five wineries in the region have been contracted by local grape growers to produce wine from the grapes of the region is particularly significant for the prospects of

developing a regional style based on the expertise and artisanship of these local wine makers. Whereas the regional wine makers and those responsible for marketing the region overall may reach for the slogan of ‘cool climate’ (see, for example Northern Inland Regional Development Board, 2009), this is a far cry from developing a regional style of wine that can make claims to both distinctiveness and quality that coincide with the awarding of regional status. Third, given that there are only five wineries in the region, what is the value of the crush and winemaking that takes place *outside* the region? Finally, what is the marketing trajectory of those producers that now lie outside the GI-defined New England Australia, yet are still part of what ABARE (2009) now refers to as ‘other Northern Slopes’? In short, Table 2, combined with Figure 2, raises doubts about the cogency, and overall financial sustainability of New-England Australia as a viable wine region.

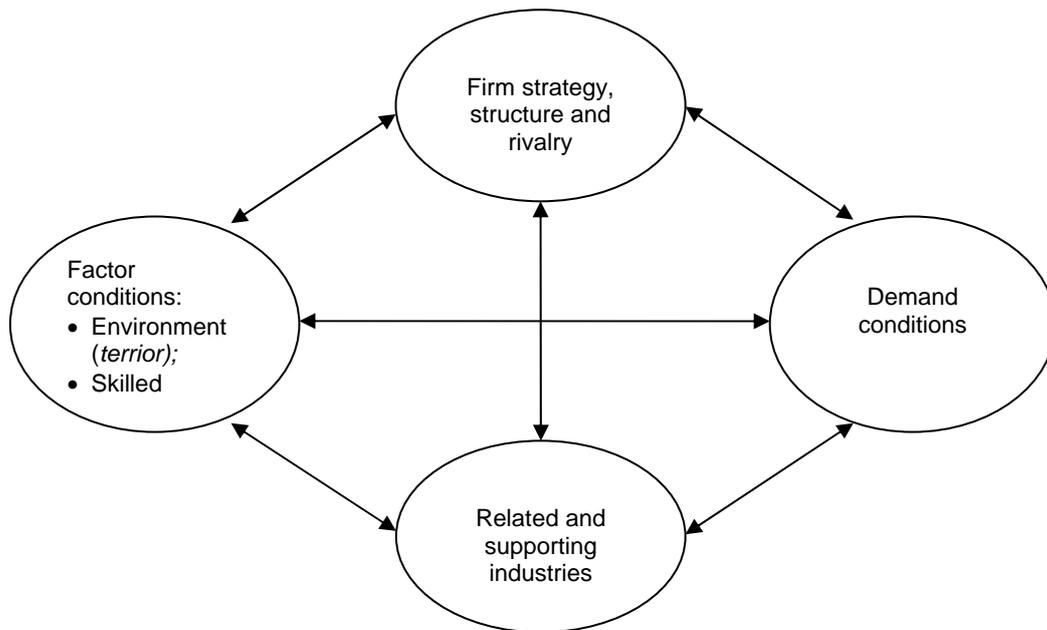
3. Prospects for New England Australia: Porter’s (1998) ‘Diamond Model’

In their diagnosis of prospects for the wine region, Chang et al. (2006: 10-11) applied Porter’s ‘Diamond Model’ to the data uncovered by Vanzella (2003) in his auditing of the region for the NSW Department of State and Regional Development. The Diamond Model considers four determinants of national marketing advantage, namely:

- *Factor Conditions* – the factors of production (levels of skilled labour, infrastructure, physical and knowledge resources) necessary to compete in what is a highly competitive market;
- *Demand conditions* – the nature of domestic/local demand; the model identifying, in particular, ‘sophisticated consumers [who] can pressure firms to innovate faster and to produce superior products than otherwise’;
- *Related and supporting industries* – namely, whether or not there are nationally and internationally competitive related industries with which a particular industry can enjoy reciprocal relationships;
- *Firm strategy, structure and rivalry* – namely, ‘the presence of fierce rivalry’ in the domestic market and the governance of this market such that this fierce firm rivalry is encouraged.

Chang et al. (2006), following Porter (1998), represented the model diagrammatically as presented in Figure 3.

Figure 3: The Diamond Model of Industry Strength



Source: Chang, et al., (2006: 11).

In their analysis, Chang et al. (2006: 10) identified the infant nature of the wine industry in the New England as the principle reason for claiming that the region's prospects were 'not encouraging'. The *factor conditions* of the region were assessed using data from Vanzella (2003). Chang, et al (2006: 10) noted that land for viticulture had been chosen on the basis of pre-existing ownership rather than technical site selection. Significant doubts were also expressed about the continuing availability of skilled labour, and variable product quality was mooted as a potential problem. Moreover, two of the factors that Chang et al. (2006) found encouraging at the time have been significantly mitigated by recent events. Firstly, the continued support of government has changed, with the abolition of Regional Development Boards generally and their amalgamation with the Federal government's Area Consultative Committees to form the new Regional Development Australia Committees. While the newly formed Regional Development Australia Northern Inland (RDANI) still has a funded Food and Wine Industry Development Project for the region, the long term relationship between producer groups and this new government structure is yet to be determined. Secondly, while the potential support of the University of New England as a 'knowledge resource' under the general category of factor conditions was identified by the authors, this has yet to eventuate.

Moving away from the analysis of Chang, et al. (2006), yet still deploying Porter's Diamond Model, we can observe that the *demand conditions* for New England Australia wines will be heavily influenced by the situation in the highly competitive Australian wine market. Moreover, we can

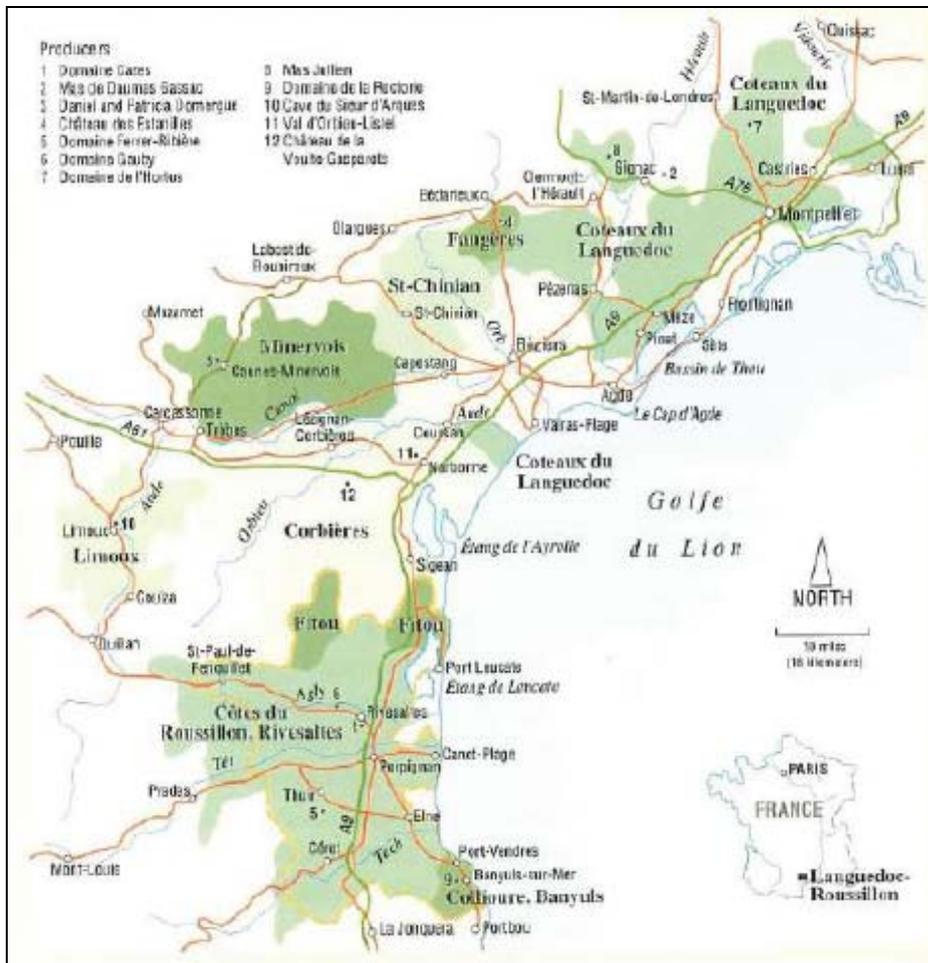
speculate that, while it is possible to conceive of a situation where quality consumer demand shapes product innovation, this would rely upon both clear market signals and the capacity of the region's producers to adapt to these demands – something which is brought into question by the nascent nature of the industry. Further, while there may be anecdotal evidence that other industries in the region, such as quality produce and tourism, can assist wine consumption analogous to the way suggested in the model under the category *related and supporting industries* in Porter's model, overall market conditions, wherein New England Australia produces a very small proportion of the national crush, again tend to mitigate against these positive elements.

Of course, individual producers – and their loyal consumers – may have every reason to feel positive about the immediate and long term prospects for their relationships. Moreover, viewed structurally, we have seen that the wine industry of New England has the potential to play an important role in revitalising the sustainability of the New England region. It is thus imperative that, alongside mainstream approaches to market analysis and prescription, alternative forms of analysis are pursued. It is with this in mind that the paper now moves to an account of Languedoc Roussillon region in France.

4. Languedoc-Roussillon: From ‘*le gros rouge*’ to ‘pioneer’

At first glance, Languedoc-Roussillon in the south of France (see Figure 3) would appear to be the diametric opposite of New England Australia for a number of reasons. Writing in the *Global Encyclopaedia of Wine* (2000: 138-140), Jim Budd stated that at 620,000 ha in area with 250,000 ha under vine cultivation, it was then the world’s largest wine region, and constituted over double the total area of Australian vineyards. Moreover, along with Provence, it has the oldest vineyards in France. While in the 18th and early 19th century the region had a reputation for high quality wine, with the industrialisation of the French economy, inclusive of a rail link to Paris opening in 1850, Languedoc came to specialise in what became known as *le gros rouge* for the industrial proletariat. However, the slow decline of this wine-swilling class led to a decline in demand for cheap red wine that Budd (2000: 139) describes as ‘terminal’ for the region leading into the 1980s.

Figure 3: Languedoc-Roussillon, France



Source: *Global Encyclopaedia of Wine* (2000: 139).

At this point we leave Budd's account of Languedoc-Roussillon to turn to one that is of more interest in this more recent economic context. Published in the *International Review of Sociology*, Garcia-Parpet's (2008) investigation 'Markets, prices and symbolic value: grands crus and the challenges of global markets' is grounded in political economy in at least two respects. First, it adopted a critical stance in relation to the construction of markets by recognising that as well as competing for consumers on the basis of indices such as price and quality, 'competition between businesses has taken the form of competition for power over regulation and the imposition of a particular style of production' (2008: 237). This critical political economy approach to markets and their legal definitions immediately renders contestable what, in our discussion of GIs above, is

uncritically valorised, namely the epistemic reality of a defined geo-temporal place. While this critical perspective may be levelled against any marketed wine region, Garcia-Parpet (2008: 237) nonetheless asserts that the wine market in France is thoroughly embedded in what Banks and Sharpe (2006) have labelled ‘the geographic imperative’. However, Garcia-Parpet also points out that what underscores this regional marketability are the ‘valorisation of “traditional methods” and the delimitation of certain privileged zones of production’ through attributing ‘the principle of non-reproducibility to history and nature’. In France, then, these forms of production control not only serve to limit supply but further enhance the unique appeal of a particular region; and this in turn shapes the marketing strategies of the region and becomes a principle determinant of price.

In her account of the development of the institutional framework of the *Appellations d’Origine Contrôlée* (AOC), Garcia-Parpet (2008: 238) noted that the system developed in the 1930s as a mechanism to deliver the producers from the sophistry of the dealers, and that it was developed on the basis of the smallest French administrative area, the *commune*. What transpired was that after 1935, a small fraction of wine producers in France were given legal sanction to name and privilege their own wine, thereby excluding the vast majority of their countryman’s produce from the label of excellence and thus creating the qualitative distinction between AOC wine on the one hand and *vins de table* on the other – a distinction that was to last up until 1968. This is by no means to suggest that there has not been any change to the system of AOC classification. On the contrary, Garcia-Parpet pointed out that the number of appellations has risen from approximately 40 in 1935 to some 400 at the present time. However, there can be no doubt that the official process of classification itself instituted a new form of closure and so too new modes of marketing and distribution. Garcia-Parpet (2008: 239) observed that:

Independently from the actual quality of the wine, wine professionals, experts and consumers traditionally tend to attribute greater value to AOC wines. This distinction is maintained in France by a literature which has been reinforced by the importance of large-scale distribution, which has acquired a dominant role in wine retail. These large-scale operators make extensive use of this literature in the promotion of their business.

We are thus alerted to the fact that while the achievement of GI status, whether it be for the New England Australia region, or for one of many that have struggled on the fringe of the AOC matrix for decades, classification is at once both political and social, as well as being temporal and viscerally economic. Further, while the institutional barriers to market entry are by no means as intricate, nor as rigorous in the Australian context as they have been in France from the mid-1930s,

the discussion above indicates that while the barrier to regional classification on the basis of GI may have been dismantled for New England Australia, other barriers to market share, of both political and social types, may well be in place and have to be negotiated. It is these barriers, in the context of Languedoc-Roussillon (and with an eye to New England Australia), to which we now turn.

While the AOC system has evolved, it has not undergone reform to any significant extent. However, it has been threatened by the actions of Languedoc-Roussillon. To take up the historical narrative derived from Budd, above, Languedoc-Roussillon was facing dire economic consequences due to the radical fall in demand for its *gros rouge*. The way forward lay in taking a number of bold steps. The first was in terms of product. Languedoc-Roussillon adopted New World techniques, to the extent that it was labelled the ‘New California’ of winemaking in France. Specifically, the AOC versus *vin de table* dichotomy was circumvented with the production of ‘international’, single variety wines — winemaking impermissible under the AOC. Moreover, the wines were labelled according to variety more prominently than place. This culturally, but not legally heretical circumvention saw eighty percent of this product exported to the United States, with an increase in price ‘by a factor of 2 to 3 depending on the grape’ (Garcia-Parpet, 2008: 242).

The second product innovation was to re-valorise the wine produced using grapes traditionally associated with the region – initially carignan – which was snubbed as being of average quality due to high yields (Budd, 2000: 138). Garcia-Parpet (2008: 247-248) pointed out that the process of elevating these local wines (based also on cinsault and picpoul de pinet) took place later in the re-valorisation of the region generally (from approximately 2000 onwards) wherein ‘the heretical could be transformed into the *avant-garde*’.

These changes in the marketing and production of Languedoc-Roussillon wines were due, as Garcia-Parpet points out, to the strong leadership displayed by Aimé Guibert and Robert Skalli. Fleeing bankruptcy from his leather business in Paris, Guibert was blessed with site selection when purchasing a vineyard in the region and serendipitously employed Bordeaux’s leading oenologist to assist him in his endeavours. While his wines quickly achieved international success (principally through the use of his upper-class contacts in London), initially they garnered praise in France only when presented *en chaussette* (i.e. blind tasted), with wine professionals simply refusing to taste any labelled product. Nonetheless, while cultivating a band of loyal local consumers, ‘the wines consumed in official ceremonies or in the meals of the local elite on special occasions were not the local wines’. (Garcia-Parpet, 2008: 241). Guibert was then joined by another maverick, Robert Skalli, who from 1981 instituted both the single variety wines and their export to the United States, along with strict specifications on these products. Furthermore, Skalli (cited by Garcia-Parpet,

2008: 242-243) made a very deliberate decision not to engage in the sophistry of the AOC system, stating of his single variety wines that the premise of his marketing strategy was to achieve:

[A] simplicity of understanding the wine product by requiring only a dozen words to be understood and remembered (Chardonnay, Merlot, etc.), a level of standards in production which must ensure, on an international level, quality, productivity, food industry demands and allow for the specific character of the vine (Skalli, cited by Garcia-Parpet, 2008: 242-243).

Moreover, Skalli also insisted that his wine be positioned at a middle price point, thus achieving distance from the stigma of *le gros rouge* and at the same time not competing with AOC wines (Garcia-Parpet, 2008: 243).

This leadership was political as well as commercial. Skalli relied on 120 other producers with 7,000 ha of grapes to service the markets he had created overseas. Moreover, the quasi-feudal cooperatives of the region transformed themselves into rat-cunning marketers. For instance, the *Union des Caves Cooperatives de l'Ouest Audois et du Razes* (UCCOAR), took control of the business that imported wines to the region, then moved to capture the low end of the Bordeaux market as well as forming a joint-venture with a Texan company to import direct to that state. Over time, AOC producers came to acquire vineyards in Languedoc-Roussillon, citing their need for expansion, where in fact the limitations on their own produce due to the AOC had cramped their capacity for profitability. Moreover, companies from the New World began to acquire vineyards in the region. For example BRL Hardy's La Baume vineyards are now based here (Garcia-Parpet, 2008: 243).

According to Garcia-Parpet (2008: 243), this professionalization of producer groups coincided with the reorientation of production toward 'pre-established commercial objectives'. While this may appear a somewhat trite point, it is nonetheless diametrically opposed to method of restricted production as dictated by the in AOC. Moreover, the limited capital base of individual producers meant that partnerships were formed as mechanisms to facilitate the marketing and eventual pre-selling of now valued *vin du pays* wines. In addition, different kinds of partnerships prospered, such as the separation of winegrowing on the one hand and wine production on the other, similar to such arrangements in Australia (Peter Lehman in the Barossa is perhaps the most notable example). This form of partnership also accommodated the need for extra capital required to store wine for more than 5 years so that it can acquire value based on its status as *vin de garde* (Garcia-Parpet, 2008: 244). According to Garcia-Parpet (2008: 245-6), these kinds of relationships have resulted in a

significant increase in marketing capacity that was simply not available to individual producers or indeed communes. These kinds of relationships resulted in significant increases in prices for the region overall. Indeed, according to Garcia-Parpet (2008: 246) the dominance of the AOC system has been significantly undermined.

In her analysis of these changes, Garcia-Parpet (2008: 248-9) argued that any falling back on the dichotomy of New World versus Old would be far too simple: The artisan model has not been attacked. Rather, the AOC importance as a system of classification has been eroded. Further, this breaking of market closures has led to significant capital, some of it international, being attracted to the region and a general diversification of the wine business. However, most importantly, the author insists that her account emphasises that all markets, as ‘social constructions’ – namely institutionalised practices that necessarily entail cultural and aesthetic, moral and ethical content – are malleable, while not relying on claims concerning the epistemic reality of GI classification.

5. Comparative Observations

In providing an account of the development of the Languedoc-Roussillon wine region, we have travelled some way from our original question; namely, what follows from the attainment of regional status for the New England Australia wine region in terms of its overall marketing strategy. The dissimilarities between the two wine-producing regions are such that some may argue any attempt at fruitful comparison would have to be contrived. However, we argue that there are useful threads of comparison based on the constructivist account of markets provided above. The essential similarity of the two regions is that they face a market situation that is a veritable edifice of competition. As we have seen, in the case of Languedoc-Roussillon, this edifice was the result of AOC classification and the regional restrictions that accompanied this. However, in the case of New England Australia, it is simply the competitive nature of the market, in which its products could be potentially swamped by other regional and national producers. If under-branded and under-sold, wines from the New England Australia region could make a less than positive contribution to the economic and cultural sustainability of the New England North-West community.

That this dire situation has not eventuated thus far is due to two principle reasons, and it is here that the direct similarities with the trajectory of Languedoc-Roussillon begin. The first is in terms of product differentiation. We have seen that, in the Old World, the producers of Languedoc-Roussillon took the nigh-heretical step of both *specifying* the production and labelling of their wines on the basis of single grape varieties, as well as keeping the wines at a mid-range price point. In the ‘New World’, the producers of New England took the not heretical, but atypical step of *generalising* away from the (dominant marker) of grape variety to emphasise the ‘cool climate’

characteristics of their wines. This was undertaken well before the achievement of regional status on the basis of GIs, and remains a significant feature of the dominant discourse of the region's producers in differentiating their product, as well as some interesting marketing material (see, for example, Appendix 1). Moreover, all producers in New England market their wines at a mid-price point (\$12-\$25). By staying at a mid-range price point, not only does the wine remain accessible while not devaluing the region, it also is not competing with premium, established wines, thereby avoiding exposure to the sophistry of critical evaluation that surrounds these wines. Nevertheless, the possibility of the wines 'punching above their weight', particularly in blind tastings (relatively devoid of the cultural markers that affect consumers) remains open.

Despite these similarities, Languedoc-Roussillon is much further along its trajectory of marketing success than New England Australia, with impetus for reform coming some 30 years ago. It is here that we may discover some future possible directions for New England, particularly in nationalising its sales and expanding its production. Two points have to be made with respect to the organisation of the industry and its representation.

The first is the extent to which leadership was both a catalyst for change and a driver of continued success in the case of Languedoc-Roussillon. Indeed, it is difficult to underestimate the overall impact of both Aimé Guibert and Robert Skalli to the prosperity of the region. The extent to which the impact of these individuals can be emulated is initially doubtful. The New England Australia region can hardly hope for a down-on-their-luck merchant, with the very best of connections to the elite in Southeast and North Asia, to land in the New England with the best viticulture skills from Bordeaux and begin making wine. However, moving away from the extreme serendipity that Languedoc-Roussillon experienced, the role of flamboyant leadership in the wine industry is by no means unprecedented in Australian wine production. Individuals such as Bob Roberts of Mudgee's Huntington Estate, d'Arry Osborne of McLaren Vale, Murray Tyrrell of the Hunter, as well as their progeny, who have become second generation, flagship wine makers in their regions, have played an important role in adding value, not just to their own enterprises, but to their regions by pressing their personalities on the terrain of Australian wine consumption. This leadership role, underscored by strong faith in the quality of their product, has been explicitly recognised by the Australian wine industry, with the aforementioned producers, along with others, joining forces to promote the quality and tradition of Australian wines internationally; and as such mitigating the otherwise predominant 'sunshine in a bottle' reputation of the country's producers (ABC 7.30 Report, 2009). As such, the role of charismatic leadership, backed by quality products, is a marketing tool that ought to be considered by producers of New England Australia.

Robert Skalli's leadership in Languedoc-Roussillon was of a distinctly different genre. As we have seen, according to Garcia-Parpet, his single-mindedness with respect to the introduction of New World techniques and labelling, while heretical, was ultimately rewarded. There are signs of product differentiation based upon technique, as opposed to the ambit claim of 'cool climate' in New England Australia. Three of the vineyards, under the leadership of Wright Robertson of Glencoe, have now achieved Certified Australian Organic status (see Blickling, 2009; Walden Woods, 2009; Wright Robertson, 2009). This is an important marker of product differentiation as these wines are not only lower in alcohol content, but also do not use the standard preservative sulphur dioxide (220); rather, minimal quantities of potassium sulphate are used – and occasionally not at all. The health benefits – perceived or real – in the context of an ageing domestic market are appealing indeed.

Nevertheless, Skalli's most significant contribution was at the level of political economy: the strict modernity he imposed on the winegrowers to produce according to pre-ordained benchmarks for the region's export market. The reverse of this tactic in the context of the New World would amount to the development of a New England white blend (Riesling-Sauvignon-Blanc?) or perhaps a New England Pinot Noir sourced from multiple vineyards across the region and marketed as such. Yet is it possible? While an experiment in this direction would be daring (as would the region's championing of a particular, 'left-field' blend), it is important to recognise that the ground for such an approach in Languedoc-Roussillon lay fundamentally in the dire situation the region's producers found themselves in, and the structure of the French commune system. This is manifestly not the case for New-England Australia, where viticulture is a matter of horizontal agricultural diversification (the basis for site selection identified by Vanzella, 2003) and where the tradition of agricultural yeomanry is more akin to that of the United States than of Europe (see Byrnes, 2007: 13). Moreover, the region's grape growers are currently very careful about being 'pigeon-holed' into a single variety (Sniekers, pers. com., 2009). Nevertheless, the concept of regional varieties forms an interesting benchmark by which to assess current regional activities.

Other similarities exist. For example, the fact that Petersons Family Winery, originally of the Hunter, then with extensive vineyards in Mudgee, and now on the tablelands in the form of Peterson's Armidale Winery, first harvested grapes in the Armidale region in 2002 (Petersons Wines, 2007), demonstrates that the region is liable to colonisation in the same way that Languedoc Roussillon has been. However, we would note here that the move by Petersons took place at the height of viticultural expansion and overseas sales in Australia. As such, any similar move in the future is likely to be driven by the elevated notoriety of the region.

Concluding remarks

As such, many suggestions for the future marketing of New England Australia spring from our comparative analysis. Yet the overarching point is that the achievement of regional status for New England Australia, rather than being seen as the pinnacle of branding, ought in fact be conceived as just the beginning. Regional status merely entails that New England is positioned within the seventy or so other wine regions in Australia. Moreover, Banks and Sharpe's 'geographic imperative', while being grounded in epistemically realist claims, is nevertheless a mere single marker of product identity. In the case of Languedoc Roussillon, these (negative) markers were overridden by those associated with the broader, cultural milieu. In the context of the New World, it may be that New England Australia would do well to consider projecting its putatively Old World motifs of artisanship. Whatever the direction taken, the comparative example of Languedoc-Roussillon suggests that product innovation, leadership and solidarity offer the key to continued industry, and regional prosperity.

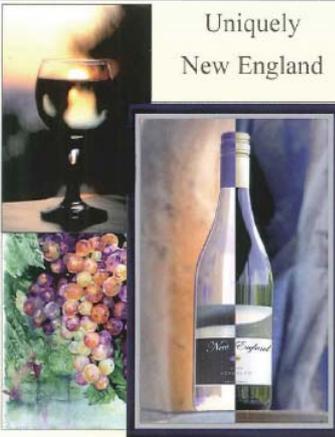
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Appendix 1: An example of New England Australia marketing material emphasising history and regional characteristics

Uniquely
New England

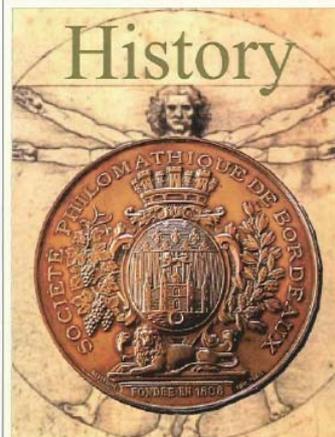


**COME FOR THE WINE, BUT BEWARE,
YOU WILL FALL IN LOVE WITH THE
PLACE**

Brilliant wines in picturesque vineyards is just a part of the New England experience. Soaring escarpments and pristine gorges dot the many national parks. Waterfalls cascade to form chablis clear streams which abound with elusive trout. Restaurants serve local produce in inspiring combinations. Peace and tranquility are your companion, as you explore the back roads which lead you to your own special place, be it by a brook or lying on a picnic rug under our massive blue sky. You will fall in love with the New England. The sights, sounds, tastes and smells provide balm to the weary and refreshment for the soul. Experience the four seasons as they were meant to be, in all their glory and majesty. Come to the New England, visit our vineyards and relax. We promise you a warm welcome.

Layout & Design by Stephen Dobson A.C.S

History



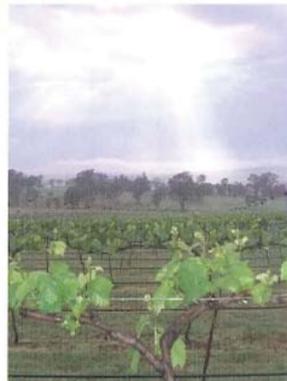
NEW ATTITUDE, OLD VINES

Few people know that the New England is one of Australia's oldest wine regions.

For example Roslyn Vineyard at Inverell, was well established by the end of the 1880's . Having garnered more than 100 first prizes at show in Australia as well as winning many international medals and citations from the Bordeaux, Calcutta, Amsterdam, Columbian and London wine shows. The varied terroir of the New England region has been creating distinctive wines for over 140 years. The combination of cool climate, granite and ironstone loam and variance in altitude ranging from 400 metres rising to 1100 metres above sea level, lend a range of complexity to the wines that few regions can match.

Southern New England Vignerons Association &
New England Wine Growers Association
Home of the New England Regional Wine Show
<http://newenglandwines.org.au/>

VINEYARDS
Of
New England
Australia



"There is no other region which has come on stream with so much to offer as New England..." It is a beautiful region; it is no coincidence that the name New England was chosen when it was first settled. Variations in altitude, aspect, degree of slope, and soil type give vignerons a wide choice of variety and wine style."

James Halliday, Chair of Judges New England Wine Show 2007

Source: SNEVA and New England Wine Growers Association.

VALUE CHAIN FACTORS INFLUENCING CHOICE OF BOTTLING LOCATION IN THE WINE INDUSTRY

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ABSTRACT

Purpose – The purpose of this research is to understand the value chain factors that influence strategic decisions pertaining to bottling location within the wine industry.

Design/methodology/approach – The following is an analysis of the considerations to determine optimal bottling location(s) for a medium or large size wine manufacturer looking to expand its operations. It allows for quantitative factors such as volume forecasts, taxes and duties, financial objectives and carbon emissions through transportation, as well as qualitative factors such as the ease of managing bottling operations, proximity to major infrastructure, and brand perception to be factored. While the analysis is not based on any one particular winery, the authors have drawn on academic and industry studies from a number of major wine producing and consuming countries, and their experience within the wine industry in New Zealand, Australia, and various export markets to arrive at this paper.

Findings – Spies (2000) defined the six primary activities of a wine value chain as: soil and plant material; viticultural practices; cellar practises; winemaking; packaging and distribution; and, market development. While packaging and distribution is only one of the six activities, it nevertheless remains a significant portion of cost and improvement opportunity for many wine companies' value chains. This paper presents a framework by which the impact of choice of bottling location for a wine estate might be valued. As part of this process, what is highlighted is that there are a range of potential options when considering where bottling might be commissioned and wine producers should not automatically assume by default that the winery is necessarily the correct choice of location for bottling. A number of key supply chain drivers, grouped into the segments of customer, environmental, financial, and organisational, are considered to evaluate an optimal location for any bottling plant.

Research limitations/implications – This analysis is not based on a single case of a particular winery but rather on a range of different cases, each with its individual circumstances. While not all factors were relevant in each case, at least some were. These however varied substantially in scope and importance between cases. The analysis nevertheless highlights the importance of considering a variety of supply chain aspects when making strategic business decisions such as the location of bottling facilities.

Practical implications – It assumes that a wine estate to which this analysis is relevant is at a stage in growth and development where a need exists to revisit strategic decisions such as the location of bottling and whether to bottle in-house or outsource.

Originality/value – This paper offers insights into the pre-requisite conditions under which a company might strategically evaluate location of its bottling operations relative to its vineyards and winery operations, then looks to explain how value may be impacted as a result of such decisions.

Keywords – wine bottling location, wine supply chain, wine value chain

VALUE CHAIN FACTORS INFLUENCING CHOICE OF BOTTLING LOCATION IN THE WINE INDUSTRY

INTRODUCTION

Interpretation of value will vary depending upon whose perspective it is assessed from. For instance, a manager within a business is looking to increase value to benefit the company's shareholders, while a customer of the business is looking for value from the organisation in perhaps terms of price, quality, brand perception or social/environmental contribution.

Walters & Rainbird (2007) discuss at length research into the definition of value and go onto explain that 'value is a term frequently used but infrequently understood and of which numerous interpretations exist.' Their text aptly explores the 'New Economy' – New Business Models – New Approaches. Value is discussed from both the perspective of the consumer as the principal driver of value, and value in the context of the firm.

To understand value, it is useful to consider Porter's (1996) suggestion that a company can outperform rivals only if it can establish a difference that it can preserve. It must deliver greater value to customers or create comparable value at lower cost or do both. The arithmetic of superior profitability then follows. For a wine estate this may equate to greater efficiency in operations resulting in lower average costs, where the savings of which can then be transferred to customers.

Hartley (2008) investigated transportation of wine in bulk to understand the impact on product quality. He observes that bulk transport does not impair quality and indeed has some logistical and environmental advantages. These are detailed more fully under respective sub-sections below, which explain drivers that contribute to determining optimal bottling location(s).

The wine supply chain is pictorially displayed per the following diagram 1.

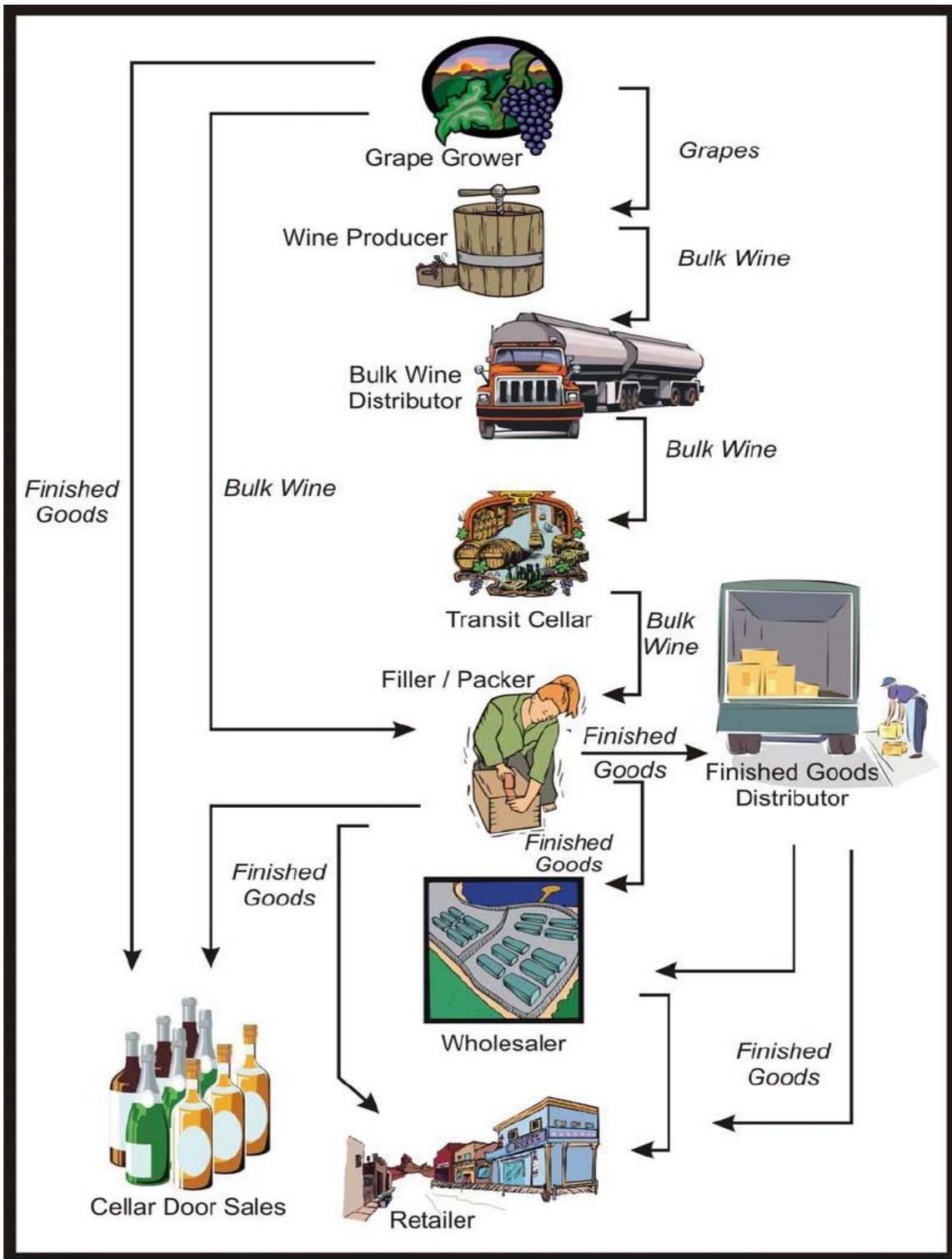


Diagram 1

Source: GSI Application Guideline

Spies (2000) defined the wine value chain to include the 6 primary activities of: soil and plant material; viticultural practices; cellar practises; winemaking; packaging and distribution; and, market development. While Spies writes from a South African

context, these factors are universal to wine value chains around the world. These activities are depicted in the following diagram 2.

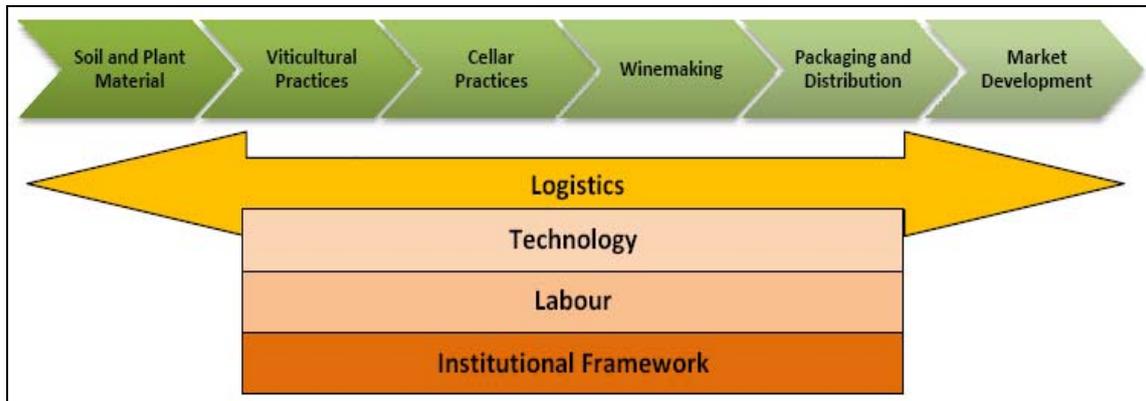


Diagram 2

Source: Adapted from Spies (2000)

While packaging and distribution is only one of the six primary activities, it nevertheless remains a significant portion of cost and provides an improvement opportunity for many wine companies' value chains.

Study objectives

- Identification of logistics and supply chain factors integral to any decision pertaining to bottling location
- Determine the extent to which the choice of bottling location may impact the wine value chain

DRIVERS THAT CONTRIBUTE TO DETERMINING OPTIMAL BOTTLING LOCATION

A number of key value chain drivers need to be considered when evaluating optimal location for any bottling plant. These can be grouped under four primary segments: customer, environmental, financial, and organisational. The customer segment groups value chain drivers that directly affect customer value include: changing market demands; material specifications; and, quality. The environmental segment includes the public aspects of, environment and infrastructure. The financial segment includes all value chain drivers relating to financial and risk aspects of the wine value chain, namely: business risk; capital; foreign exchange risk; operating costs; and, tax. Lastly, the organisational or operational/internal segment consists of any factors relating to controllable processes within the organisation, including: distribution network; forecasting; in-house or outsource; inventory; management and human resources; markets; scale; strategy; supply; technology and specialisation; and, transport. These four factors effectively capture all aspects of a winery's value chain. Each of the drivers is discussed more fully in the sections below.

Customer

The customer segment of value chains includes the factors which relate to, and are influenced by, customers of the winery, the consumer of the wine, and how each perceives value. This section discusses the value chain drivers of changing market demands, material specifications and quality.

Market demands - Packing product close to the final market maximises opportunities as a result of the flexibility created within the supply chain to blend or pack in different formats that more closely reflect actual demand. This in turn can contribute positively to reducing inventory within the total supply chain, creating enhanced value. The converse happens when product is bottled remote to the final market or markets. Another consideration may be whether there will be a change in the fixed cost component depending on the bottling location and how easily capacity can be adjusted according to market changes.

Material specification - Eventual selection of bottling location may enable an organisation to review packaging elements such as bottle glass weight and the weight and/or nature of shipper or case. By way of example, if wine is bottled close to its eventual consumption market, less sturdy and therefore lighter weight packaging may be able to be used, which can include features such as perforation for easy conversion into cut-case display – a feature that is normally avoided with product that requires transport over long distances. By bottling closer to market, shipment density also becomes less important, allowing for packaging with fewer bottles per unit of shipment volume to remain a viable option, as in the case of more bulky presentation packaging or gift with purchase items for example.

Quality - Hartley's (2008) research concludes that:

- Bulk wine is less likely to experience large temperature variations during transit, as a larger single volume of liquid has greater thermal inertia than a smaller one. Transporting wine in bulk will therefore lessen temperature variation. High temperatures accelerate wine development, which in bottles can cause pressures that can compromise closures.
- Apart from top end wine specially made with bottle ageing and longevity in mind, wine effectively begins to deteriorate from the time it is bottled and it is the filling point that the shelf life is deemed to start. Bulk shipping defers the moment of bottling and thus the start of shelf life.
- Damage to packaging, such as bottle and label scuffing, may be reduced if the product is filled locally to the point of sale and problems that do occur can be more readily resolved with a local supplier.

Also of concern from a quality perspective is the allowance for manufacturers in some European countries for instance to blend up to 20% foreign product without having to declare the source or as part of contents, which could potentially damage brand image and equity.

Environmental

The environmental segment of value chains includes the factors which relate to, and are influenced by, the environment in which the winery intends to operate and are largely outside its scope of influence. Costs or value creation are to a large degree dependent

on public investment and perceptions. This section discusses the value chain drivers of environment and infrastructure.

Environment - The consideration for the environmental driver of bottling close to market is primarily a reduction in the total carbon equivalent emissions that can be attributed to the wine. Without regarding the emissions attributable to activities on the vineyard, savings can be gained in transport, bottling materials, and packaging.

While carbon emissions due to transport are relatively minor compared to the total emissions from wine production (Fearne et al, 2009), by transporting wine in bulk shipments some emission reductions are still able to be achieved. Effectively it is possible to transport approximately twice the physical volume of product in equivalent transport units (refer to the transport section). In doing so environmental emissions associated with transport are halved; a factor which becomes increasingly important with an increase in distance between the growing region and the final market.

Shrewsbury of WRAP (2008) observes that importation of wine in bulk for packing in the United Kingdom reduces the amount of green glass entering the U.K.'s recycling systems, increases the domestic market for recycled glass and also increases the use of lighter weight bottles which in turn use fewer raw materials and have a lower environmental impact. As well as cutting glass waste this approach also improves the industry's carbon emissions profile, and saves money by reducing transport and energy costs.

An estimated 20% of Australian wine is currently bulk imported into the U.K., saving around 11,000 tonnes of carbon dioxide (CO₂) per year. However by increasing these volumes and using lighter weight bottles a further 122,500 tonnes of CO₂ could be saved from Australian imports alone. Below Table 1 shows the significant factors for reducing emissions for wine imported into the U.K. from Australia on a per bottle basis.

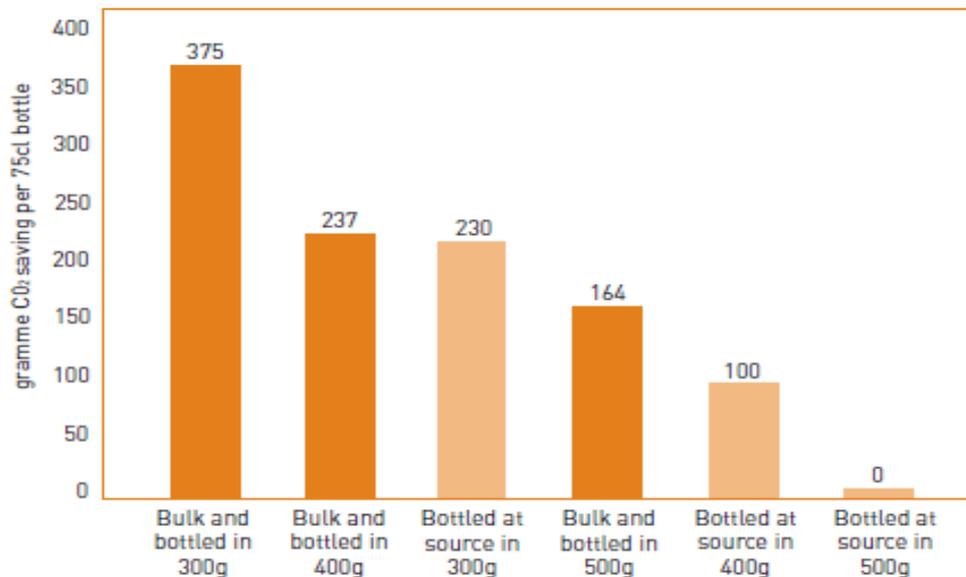


Table 1

Source: WRAP (2008)

WRAP (2008) have developed a web based tool to calculate savings for transport costs, material costs, packaging savings, and CO₂ emissions reductions for wine transported from various countries. This is available at: www.wrap.org.uk/winebottles

A further potential environmental benefit of exporting bulk wine to foreign markets and packaging locally is the use of the local recycling system. In the European Union in particular the recycling system is focused on minimising total environmental impact and has large support from consumers (Rasmussen et al, 2005). Many of the packaging materials remain in Europe throughout a number of product life cycles, reducing repeated long distance transport of waste.

While little legislation currently exist that truly regulates or punishes greenhouse gas emissions, many developed countries are introducing, or are planning to introduce, such legislation (Osborne, 2007; Colman and Păster, 2007). Political pressures in a developed market being considered for bottling and packaging could eventually lead to industry needing to adopt a mandatory and international emission offset scheme there (Boemare & Quirion, 2002). A winery that has considered initiatives to minimise environmental impact of its products through supply chain planning may find itself with a distinct advantage at a later stage (Cholette & Venkat, 2009). One of the key

steps in achieving such planning is an assessment of where in the supply chain emissions are produced and in what volumes (Lambert et al, 2004).

Infrastructure - Infrastructure has a distinct impact on the efficiency of any manufacturing operation requiring physical inputs (Moreno, López-Bazo, & Artís, 2002). Infrastructure requirements may also influence final choice of bottling location. Such factors include local government requirements, zoning, effluent disposal, and proximity and developments in transport infrastructure. Local government requirements, and the differences in these between municipalities, may strongly affect a decision on where to locate a bottling operation. Zoning, and potential future changes in this, may be another influence. Effluent disposal may attract costs in some areas, particularly for industry, which can differ considerably between locations. As wine making and bottling involves some activities that inherently produce a large amount of liquid waste, effluent disposal facilities and costs should be a consideration. The proximity of a bottling operation to transport infrastructure, such as sea ports, airports, rail lines, or motorways, will affect total transport costs and could be particularly important if exports play a role (Bougheas, Demetirades & Morgenroth, 1997). Development plans in infrastructure by government should also be considered as the bottling operation likely represents a long term investment.

Financial

The financial segment of value chains includes the factors which relate to, and are influenced by, an organisation's investments and financial risks. This section discusses the value chain drivers of business risk, capital, foreign exchange risk, operating costs and tax.

Business risk - Business risk is an overall assessment of factors that may compromise one or more primary operating objectives: profitability, supply, or product integrity. Assessment of business risk is largely subjective as it is generally not possible to define quantitatively. As suggested by Wheelen & Hunger (2006), initial assessment of the business risk associated with various options often commences with a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis of each possibility. Individual strengths, weaknesses, opportunities and threats may then be weighed for

significance and probability from which it is then possible to create a weighted business risk estimate.

Capital - Bottling plant capital requirements may vary depending upon location. If bottling is conducted close to market it is more likely that there may be a requirement for multiple smaller operations rather than perhaps a single large, high speed bottling line if located as part of the winery, or close by. Each option will have varying capital requirements (and potentially operating requirements and cost – refer below). Equally, varying locations will have differing local government compliance requirements which may in turn require differing levels of treatment of such things as water and waste disposal thus potentially leading to varying capital and/or operating cost requirements. Land availability and building costs will also influence capital costs. Due to the long term nature of the capital investment in a bottling plant, long term growth plans for the winery need to be factored in. If exports represent a significant part of such plans, or much of the raw materials are imported by sea freight, the proximity of the operation to port facilities would be a consideration (as discussed earlier in infrastructure).

Foreign exchange risk - By exporting lower value bulk raw materials for bottling in a foreign market, a winery is able to hedge inherently easier against a decline in the importing country's currency value (Heckerman, 1972). If higher value finished goods such as bottled and packaged wine are imported, a reduction in the importing country's currency will have a far greater effect on profitability for the importer. While an increase in the importing country's currency would have the opposite effect, most wineries would generally prefer to minimise risk in their operations over speculating on exchange rates.

Operating costs - Operating costs are a function of fixed and variable costs Schey (1987), which are in part determined in a bottling environment by the bottling line capacity, throughput rates, utilisation, efficiency resource and component costs. These will vary from market to market and with changes in volume. The mix of fixed and variable costs will in a large part be determined by whether a winery decides to outsource bottling in a particular market or to keep this in-house. In a decision on bottling location these costs need to be considered along with all other factors including inventory value in the supply chain (as discussed below).

Tax - Depending upon final market, tax rates may vary between raw materials and finished goods (Feng & Wu, 2009), such as wine imported in bulk versus imported in bottles. This is the case with the European Tax CCT (Common Customs Tariff) for example. Further, excise and duty in many countries is calculated based on the CIF (cost, insurance and freight) value of goods. Where this is the situation and where product is shipped in bulk to a particular market and further packaging is completed in-market, the total tax charged per bottle will potentially be lower. Customs regulations and duties are also subject to change over time, which can affect the value placed on a location by a producer. If for example a free trade agreement is established, or is likely to be established, between the home market and a foreign market, the favourability of bottling locations may change very suddenly. Potential changes in tax and duty legislation in a foreign market should therefore be one of the considerations if the primary financial reason for the choice of a bottling location is to take advantage of a perceived reduction in import duties and taxes.

Organisational

The operational/internal segment of value chains includes the factors which relate to, and are influenced by, the structure and processes that make up a winery's supply chain. The drivers in this section are those most directly influenced by a winery. The value chain drivers discussed include distribution network, forecasting, whether to bottle in-house or outsource, inventory, management and human resources, markets, scale, strategy, supply, technology and specialisation, and transport.

Distribution network - While the customer base and order profile remain unchanged between potentially different distribution network scenarios, network efficiency and effectiveness can be affected through choice of bottling location as each location will potentially necessitate a different distribution network structure. As a consequence distribution network cost and efficiency needs to be factored as part of the evaluation of value creation when finally selecting bottling location. For example, different distribution network structures may alter inventory, transport, and intermediary requirements throughout the supply chain, affecting costs and efficiency.

Forecasting - According to Butler et al (1993) investments in operations that represent major strategic changes, need to take into account a large range of quantitative and qualitative factors, which are based firstly on a realistic forecast for a number of years into the future. An investment into bottling facilities, and to a lesser degree entering into an outsourcing agreement, is likely to represent such a major strategic investment., Multi-year forecasts in this case need to take into consideration numerous factors for the winery as well as its national and international competitors, which could influence supply and demand. These include market developments, macroeconomic trends, agricultural influences, and tax and trade developments. While a realistic forecast is an important step to supporting such strategic decisions, it nevertheless needs to be remembered that any forecast, and the decisions made using it, are based on speculation with information from a single point in time.

In-house or outsource - Many wineries choose to bottle in-house. This is readily possible where bottling is in proximity to the winery or within the same geographic region. It becomes more difficult to achieve however where bottling is to be completed in some remote market, potentially half a world away. As a consequence, in these situations it is likely that most wine estates would choose to bottle using an outsource service provider. However, as inferred by Skuras & Vakrou (2002), if the location is a major factor in a brand's strategy a winery may take into consideration the implications for their brand of not bottling near their growing region. Also if choosing to outsource, particularly in developing wine markets, the local skill sets in wine operations may not be as readily available as in home markets. In some markets outsourcing may be the only viable option for bottling close to consumption, due to regulations restricting foreign ownership of land, buildings or companies. These regulations may in many instances be circumvented by entering into a partnership with a local company, however foreign ownership may potentially be limited to a minority stake, making outsourcing an overall more attractive option in many cases.

Inventory - While inventory is required in some form in the supply chain to fulfil demand, an efficient supply chain will attempt to minimise the value of this as far as possible without compromising supply and profitability (Chopra & Meindl, 2009). The nature of wine somewhat dictates periods in which raw materials, grapes amongst other inputs, can be processed into finished goods. With every step in the production process

value is added, including economic value, requiring increasingly greater investments of capital. Not only does the value of the product increase, the cost of write-offs and obsolescent stock also increases. The point at which the greatest economic value is added to most wines is arguably at the point of bottling. Therefore by postponing bottling until as close to the point of consumption as possible, the total inventory value in the supply chain can be reduced, while not necessarily reducing output or sales capacity. Inventory also has an effect on the variable component of operating costs (see above) including through storage requirements, insurance costs, and taxes if these need to be paid in advance of sale to customers in a particular market.

Management and human resources - Managing staff and operations remotely can create issues that are not present in local operations (Dowling, Festing & Engle, 2008). Depending upon the ultimate choice of bottling location(s) there may be cultural, performance, expectation, language, and standards issues that require oversight. Production capacity may be affected in some locations during holiday periods that do not coincide with similar periods in the home market or those of the market(s) being supplied from a potential production location. Examples are the northern hemisphere summer in Western Europe, where many industries traditionally cease production for periods of up to six weeks, or during Chinese New Year in China and parts of Southeast Asia. These periods will result in a need for a greater inventory investment in the supply chain to allow for extended production downtime. Furthermore, local skill sets may not necessarily be at the same level as those common in the home market. Remuneration and labour costs may also differ between locations. For these and other reasons, outsourcing is often evaluated as a preferred mechanism to realise bottling in a remote market.

Markets – According to a client study conducted by Middlebank Consulting (2006), bottling close to market is likely to be viable only where volume in a particular market, or markets in proximity, is in excess of 10,000 nine litre equivalent (9LE) cases per annum and this volume is derived from a small number of stock keeping units (SKU's). Depending upon choice of bottling partner in a specific market, in instances where a supportive aligned industry provider, such as another winery, is the 3PL (third party logistics provider) it may be possible to negotiate reduced annual volumes that are cost effective. Clearly the larger the SKU base the larger the total annual volume required

to justify bottling close to market. Depending upon the export activity of a given wine estate and the extent to which markets have been developed for specific brands, it is conceivable that for a New Zealand or Australian winery markets may be grouped into the likes of United Kingdom, Western Europe, Eastern Europe, USA/Canada, South America, Asia, and Australasia. One consideration when bottling large volumes in different markets where different pricing strategies are applied, is avoiding large volume customers from conducting arbitrage by buying in the lower margin markets and importing into another market with higher margins, affecting profitability and strategy there. This risk is particularly evident if free trade agreements exist between two markets or they are part of a free trade zone such as the European Union.

Scale - As mentioned earlier, sufficient scale needs to exist to make bottling close to a foreign market a financially viable option. The exact amount is dependent on the total costs of setting up and running a foreign operation and the savings that can be attained, as well as how much growth in volume a winery can sustain without major investment or alteration of the other aspects of its operations. Depending on choice of bottling partner in a foreign market, economies in bottling may be able to be achieved by combining the exporting estate's volume with those of a local estate acting as a third party bottler to achieve scale of volume economies.

Strategy - Strategic direction of a wine estate plays an important part in determining whether a company even considers bottling close to market as a possible alternative to local bottling. For those organisations that have a strategy of building infrastructure and assets within their own country of origin, bottling remotely is unlikely to even be a consideration and yet in many instances it can be shown to create improved return and value. Some of these organisations may fear that by not bottling in their home market their brand image will suffer as a consequence.

Supply - Any decision to bottle close to a foreign market versus at or near the winery requires consideration of business risk associated with potential supply interruption to materials, bulk wine, and services. These interruptions can be due to numerous causes, which commonly include logistical factors, such as unreliable transport services, port strikes, or bottlenecks in freight gateways. Some locations may however have greater flexibility and frequency for possible production, which can in turn positively affect

inventory investments. When modelling to optimise cost and operational efficiency and effectiveness, it is important to consider not only outbound (distribution network) factors but also inputs or inbound supply. This will naturally include bulk wine, bottles, labels, cases and other packaging materials. Each of these components or inputs will have an effect on the total logistics cost, which will at least in part be dependent on the bottling location that is chosen. The mode of supply and the associated costs may also change as a result of bottling location. Flexibility in inbound supply should also be a consideration here.

Technology and specialisation - Fortunately transport technology has progressed such that the risks of 10 years ago of contamination and taint are now minimal. Tanks and liners are now less permeable, thereby negating the possibility of oxygen ingress resulting in oxidization or degradation of the wine. For instance, oxygen transmission rates for flexi-tanks produced in 2000 when compared with those produced in the 1990's have reduced from 100-200 cc/m² of tank skin/24hr to 1-2 cc/m²/24hr (Hartley, 2008). Other considerations for this driver are the levels of technology and specialisation at the location being considered. These may not necessarily be the same as in the home market and there may be difficulties in transferring these between locations without significant capital investment.

Transport - It was identified by Hartley (2008) that bulk wine shipments are more cost effective than bottle shipments in terms of transport cost per volume of liquid. A standard 20 foot container typically holds 12-13,000 bottles, whilst a standard flexi-tank holds an equivalent of 32,000 bottles and ISO tanks hold the equivalent of nearly 35,000 bottles. This increase in shipment density translates into cost savings in transportation. Total transport costs for a specific location also need to take into account the transportation from the port of debarkation, assuming sea freight is used, to the bottling destination for products or raw materials if this is a considerable distance. In Europe for example, much of the cross country transport is necessarily done by road or rail freight, which can add significant costs that are commonly in excess of the sea freight costs from the home market. Furthermore, by adding complexity to a supply chain through additional production facilities in a foreign market, and longer lead times for raw materials, there is an increased probability of at times requiring faster and more

expensive modes of transport to avoid delays in production. This has the potential to reduce or even negate previously perceived savings in transport costs.

Conclusions and future research

Bottling location, unless outsourced and contracted year by year, is a strategic decision, the consequences of which a business lives with for a period of many years. A number of factors promote the shipping of bulk wine and bottling it close to its final market, including amongst others transport savings, product quality and shelf life, potential tax and duty advantages and a reduction in the environmental impact of operations. These factors have a particular importance to New Zealand and Australian wineries, where much of the export volumes are shipped over long distances to Europe and North America. A number of factors have the potential of increasing risk however, and may cause such a venture to become impractical. While as a rough guideline approximately 10,000 9LE cases split between a small number of SKU's are required to make bottling operations additional to those in the home market viable, each of the drivers discussed in this analysis needs to be considered and evaluated for each individual winery operation.

As each winery is likely to place a different importance on the above mentioned drivers, the research applications of this analysis are to consider the implications of how to apply the factors to individual markets taking into account the environments of the origin market and of the foreign markets. Additionally, future research would investigate the change over time in the centre of gravity of the importance of each of the four primary segments. The underlying assumptions would be that not all of the segments hold equal importance, that there has been a change in these over time, and that future changes could affect current decisions. An example of such a change would be the relatively recent widespread impact of environmental factors on commercial operations when compared to the 1970's say. Another aspect that gives a possibility for future research includes attaining a more accurate estimate of how each of the different drivers affects volume and capital requirements to make bottling close to a foreign market a viable option.

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ANNUAL FINANCIAL BENCHMARKING SURVEY FOR AUSTRALIAN WINE

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ABSTRACT

The Annual Financial Benchmarking Survey for the Australian Wine Industry is co-authored by Deloitte and the Winemaker's Federation of Australia. The survey has been plagued by low participation rates, making the value of the data to SME stakeholders questionable. Nonetheless, anecdotal evidence suggests the report is widely read by this industry segment. An exploratory study informed by grounded theory concepts was undertaken to examine how SME stakeholders make use of the report. A two phase interview approach was employed and the study involved 10 SME stakeholders from the McLaren Vale wine region in South Australia, a representative from Deloitte, a representative from WFA and a supplier of services to SME wineries. Findings include: The term "benchmarking" means different things to different SME stakeholders, but this was not linked to their employment of the report. SME specific variables such as motivations for being in the industry and different approaches to reporting were found to reduce the comparability of SME businesses, but most participants were not found to have specifically considered the consequences of such variations with respect to usefulness of the report. In accordance with existing literature, informal information sharing was found to be strong with regards to operational knowledge, but not in relation to financial performance, implying the industry is not already supplied with the intended service of the survey through other sources. Contrary to existing knowledge, a high dependence and focus on external information was not found to be common to the SME stakeholders. A potential application of the survey as a template for improving the reporting practices of SMEs was not found to be being employed by the sample included in this study.

ANNUAL FINANCIAL BENCHMARKING SURVEY FOR AUSTRALIAN WINE INDUSTRY

BACKGROUND

The *Annual Financial Benchmarking Survey for the Australian Wine Industry* (commonly referred to as the Deloitte benchmarking survey), is the only financially focused benchmarking resource available to wine industry participants. Given the industry's well documented evolution from cottage industry to significant international competitor (Marsh & Shaw, 2000; Aylward, 2006), one might expect resources like the Deloitte's benchmarking survey to be highly valued by industry participants. However, in the nine years that Deloitte and the Winemakers Federation of Australia have worked together to co-author the survey, it has been plagued by low participation rates. Out of the 2,200 wineries invited to participate in the 2007 survey, only 54 did so. The survey argues its importance on the basis that over 60% of industry revenues are captured, but with a survey response rate of 2.5%, this must be achieved through the participation of industry giants. This begs the question: how relevant is this freely available resource to the SME wineries that, in terms of number of participants, dominate the Australian wine industry?

The questionability of the value of the data to SMEs is addressed in the benchmarking reports themselves: page 5 of the 2007 report warns 'Due to the low response rate of entities in the \$0-1m segment the survey results from this segment may not be representative of the entire segment' (Deloitte 2008). Yet, anecdotal evidence, such as in-passing references in conversations, indicate the report is widely read by SME stakeholders, implying some benefit is derived. An exploratory research study was conducted to examine the use of the report by SMEs from the McLaren Vale region of the South Australian wine industry.

SMEs and the Wine Industry

SME winery stakeholders are readily established as being worthy of research attention. The vast majority of Australian wine industry participants conduct small operations. Out of the 2,320 wineries operating in Australia in 2008, 2,022 crushed less than 500 tonnes of grapes. 197 industry participants crushed between 500 and 10,000 tonnes, with only 28 players processing more than

10,000 tonnes (the remaining 73 wineries are classified as ‘unknown or unspecified’) (Winetitles, 2009).

The wine industry is an important sector of South Australia’s economy. South Australia has over 620 wine producers (Winetitles, 2009) employing over 10,000 people (Workforce Info Service, consulted March 2009). The South Australian wine industry generated \$2.1 billion in 2007 (SA Food Centre, consulted March 2009) and in the year to January 2009, exports totalled \$1.6 billion – 16% of the state’s total (ABS, consulted March 2009).

Benchmarking

The beginning of the evolution of benchmarking as a management tool is generally attributed to work conducted by Xerox Corporation in 1979 (Camp, 1989, Yasin, 2002). It is a topic that is relatively new; a literature review conducted by Delbridge, Lowe and Oliver (1995) found less than 20 business process benchmarking articles published before 1990. However, thousands of articles have since been published, with the large majority of those being in practitioner focused journals (Yasin, 2002, Voss, Chiesa and Coughlan 1994). Indeed, academia has complained about the how-to nature of the literature (Elnathan and Kim 1995; Rogers, Daugherty and Stank 1995) and called for greater theoretical depth (Monkhouse 1995; Garengo, Biazzo and Bitici 2005).

Academic definition of benchmarking

Defining benchmarking is not a simple task. One source identified over 42 different definitions (Heib and Daneva 1995, quoted in Moffet, Anderson-Gillespie and McAdam 2008, p369). Camp’s (1989) definition of benchmarking as ‘the search for industry best practices that will lead to superior performance’ is, according to Moffet et al (2008, p369), the most popular. The concept of pursuit of best practice is a common theme in definitions (Vaziri 1992; Yasin 2002; Ansell, Moles et al. 2003; Francis and Holloway 2007) but it is absent in the Deloitte’s benchmarking survey. The survey discloses the averaged results of participants, divided in to revenue based segments. The concept of pursuing best performance is addressed through the ‘best performers’ section, where the results of the top quartile of respondents (based on profitability as a proportion of sales) are disclosed. However, this focus on results, as opposed to the processes employed to achieve those results, is contrary to the popular academic definitions of benchmarking.

A much broader definition of what constitutes ‘benchmarking’ activities has been found to be applied in practice. Monkhouse (1995) asserts that the public relations benefits perceived to be obtained through being seen to adopt dynamic new business practices have led to companies adopting benchmarking practices without proper understanding of the methods or the benefits to be obtained. These ill informed attempts to reap the well publicised rewards of benchmarking tend to manifest as a company comparing some metrics, such as customer satisfaction or pricing, to its competitors.

Benchmarking and SMEs

While benchmarking was developed by large entities (Cassell, Nadin and Gray 2001) evaluating performance is a necessity for entities of all sizes (St Pierre and Delisle, 2006). As noted by Walsh and White (1981), ‘a small business is not a little big business.’ This fact is well noted in literature that discusses the customization of benchmarking methods to suit SME needs such as finite labour and financial resources, different organisation structures and variable motivations for being in business (Garengo, Biazzo and Bititci 2005, Monkhouse 1995, Coulter, Baschung and Bititci 2000, Dattakumar and Jagadeesh 2003).

Existing SME benchmarking literature is primarily focused on espousing the benefits to be obtained from particular approaches to benchmarking (Maire, Bronet, Pillet 2008, St-Pierre and Delisle 2006, Carpinetti and Oiko 2008, Deros, Yusof and Salleh 2006, Rickards 2007). Articles addressing the extent of benchmarking are also well represented (Perera and Baker, 2007, Cassell, Nadine and Gray 2001, Kotey 2003, Hwang and Lockwood 2006). The dearth of theoretical depth noted in the benchmarking literature generally extends to SME specific benchmarking literature (Garengo, Biazzo and Bititci 2005).

Benchmarking and the Wine Industry

Whilst financial benchmarking in the wine industry has not been focused on in the academic literature, the importance of benchmarking has been acknowledged by the industry. In 2007, WineAustralia (then named The Australian Wine and Brandy Corporation) and the Winemaker’s Federation released the strategy document ‘Directions 2025’ which contains 10 directions intended

to direct wine industry the wine industry towards sustainable growth targets. Direction 8 is ‘Continuous improvement in business skills and practices for the Australian wine sector through the creation of a dynamic culture of self-reliance.’ This direction contains a list of recommended strategic responses including item A.4: ‘Wine business benchmarking guides and gross margin “ready reckoner”.’ (WineAustralia 2007, p19).

METHODOLOGY

An interpretive case study informed by grounded theory concepts was deemed most appropriate for meeting the objectives of this research project. Case studies are recognised as an ideal strategy for answering ‘how’ questions posed in relation to a contemporary phenomenon over which the researcher has little control (Yin 1984). An extensive review of the literature failed to identify existing research on the topic, and found that the Deloitte’s report fits the definition of benchmarking poorly, making direct application of the benchmarking literature inappropriate. As such, it was determined that the research would not seek to test an existing theory, and would instead be informed by the grounded theory concept of induction of new theoretical understanding through the analysis of findings (Glaser and Strauss 1967; Eisenhardt 1989).

A two phase data collection and analysis approach was employed. Nine unstructured first interviews were conducted with six SME winery stakeholders, a representative from WFA, a representative from Deloitte and a supplier of services to SME wineries. The analysis of these first interviews resulted in the development of the following propositions which were further explored during semi-structured second phase interviews:

Proposition 1: The term ‘benchmarking’ means different things to different SME stakeholders

It was apparent during the first interviews that SME stakeholders were using the word benchmarking to mean different things, so it was decided that the second interview would ask participants to explicitly explain what they understood the term ‘benchmarking’ to mean.

Proposition 2: The usefulness of the Deloitte benchmarking report to SMEs is reduced due to variables such as motivations for being in the industry, product costing methods and target markets.

Comments made by phase one interviewees made it clear that SMEs reports may not be comparable. For example, one SME's comments indicated tax minimisation strategies and transfer pricing of grapes (from vineyards held in a different family owned entity) affect the legitimacy of resultant reporting, and therefore it can be implied that useful comparability would be affected too:

'Our business was a classic of many others where poor accounting, or deliberate, you know, not capturing the real potential value of the fruit from the beginning, or the focus was to keep tax to a minimum, it's very easy to lose the real state of your business... And most SMEs I think are in that situation, they don't capture, it's not a real commercial operation.'

It was proposed that such variation between SMEs would reduce the comparability of their resultant reports, and therefore reduce the usefulness of the Deloitte survey.

Proposition 3: SMEs do not highly value the Deloitte benchmarking report because they are able to satisfy their information needs through informal information sharing

Explicit examples from other businesses provided during the first interviews implied that access to information was high. Three of the first interviewees made reference to a particular wine business having been put in to liquidation, so this was used as an example to explore informal information sharing in the second interviews: interviewees were asked to recall when and how they first became aware of the wine business being put on the market. Additionally, interviewees were asked to discuss their perceived access to operational and business performance information relating to other winery businesses.

Two further propositions were developed with reference to the literature. The phase one interview data did not indicate these items to be of relevance to the participating stakeholders, so they were not explicitly explored during the phase two interviews. However, the propositions were re-included after several of the second phase interviewees yielded relevant comments:

Proposition 4: The Deloitte report is important to SME stakeholders, despite its questionable relevance, due to their dependence on external information.

This proposition was developed with reference to existing information seeking literature. Small business managers spend more time seeking external information than large business managers (Johnson & Kuehn, 1987) and SMEs are more dependent on external information than larger entities (Lang, Calantone & Gudmundson, 1997). As such, it was proposed that despite the low participation rates, SMEs high dependence on external information may make them value the report.

Proposition 5: The report is useful to SMEs because it facilitates industry specific business management skills education

The use of a benchmarking resource as a template for improvement is well documented in the literature. The Baldrige Award is a US based quality process focused benchmarking award, and while relatively few companies actually apply for the award each year, the award criteria is commonly used as a framework for process improvement (Knotts, Parish and Evans 1993, Yasin 2002, Bemowski and Stratton, 1995). Heaphy & Gruska (1995) reported that this use was the original intention for the introduction of the award:

‘When the first set of Criteria was released in 1988, the intention was to get this material in the hands of industry leaders, university professors, government organizations, and others looking for guidance on defining the elements of total quality leadership...the government never intended to have thousands of companies applying for the Award, but rather to have them use the Criteria for self-improvement’ (Heaphy and Gruska, 1995, p20)

The realisation of this intention has been documented in the literature. A survey conducted by Bemowski and Stratton (1995, p43) found that only 23.9% of businesses that were making use of the award criteria were doing so in order to apply for the award, the rest were using it for self assessment. A survey conducted by Knotts, Parrish and Evans (1993, p50) found that overall, 44% of firms access the award criteria for internal use, although when the data set is reduced to small firms only, the percentage of firms utilising the report falls to 17% of manufacturing firms and 8% of service firms surveyed.

Similar to the Baldrige Award application criteria providing US companies with a framework for pursuing quality improvements, the Deloitte's benchmarking report provides SMEs with a list of metrics that are specifically useful to the wine industry. SME owner-managers may use the report as a template for reporting practices to aspire to.

PARTICIPANTS

The WFA and Deloitte representatives were not reinterviewed in phase two, but the pool of participants was expanded to include a further four SME stakeholders.

Profiles of all interviewees are displayed in Table 1. Of the total 13 participants, one was from the Winemakers Federation, one from Deloitte, and one is the commercial manager from a business that provides services to SMEs. Ten participants are stakeholders from SME wineries. Five of those participants are owners, while five are employee accountants carrying various job titles like CFO or Commercial Manager. Of the five owners, participant 1(a) has a strong financial background, while participants 2(a) and 10 had general management experience in other industries before joining the wine industry. Participants 2(a), 3 and 4 are second or third generation participants in family owned businesses. The other stakeholders with ownership interests entered the wine industry as first generation participants.

The stakeholder from winery 8 was the only SME participant not based in McLaren Vale; while the winery he is employed by is located in McLaren Vale, he operates from an office in Adelaide.

Table 1: Interviewee Profiles

Stakeholder	Ownership interest in entity?	Accountant (or strong financial background)	Based in McLaren Vale?	Phase 1 Interview	Phase 2 Interview
Winemaker's Federation	NA	✓		✓	
Deloitte	NA	✓		✓	
Provider of winery services to SMEs		✓	✓	✓	✓
SME winery 1(a)	✓	✓	✓	✓	✓
SME winery 1(b)		✓	✓	✓	✓
SME winery 2(a)	✓		✓	✓	✓
SME winery 2(b)		✓	✓	✓	✓
SME winery 3	✓		✓	✓	✓
SME winery 4	✓		✓	✓	✓
SME winery 5	✓		✓		✓
SME winery 6		✓	✓		✓
SME winery 7		✓	✓		✓
SME winery 8		✓			✓

The SME wineries' participation in the survey and usage of the report are displayed in Table 2.

Table 2: Participation in and use of the Deloitte Benchmarking Report

SME Winery	Provided data in 2008?	Provided data in prior years?	Intend to provide data in future?	Read 2007 report?	Read previous reports?
1	✓	✓	✓	✓*	✓
2		✓	✓	✓**	✓
3		✓	Maybe		✓
4					✓
5					✓
6	✓	✓	✓	✓	✓
7		✓		‘Briefly’	✓
8			✓	‘Looked through it’	✓

*The accountant read in detail, the owner described his reading of the report as “I take a look at it.”

**The accountant read in detail, the owner did not read the report itself but was presented with relevant sections in other reports.

RESEARCH FINDINGS AND IMPLICATIONS

Proposition 1: The term ‘benchmarking’ means different things to different SME stakeholders

Clear support for this assertion, which is in line with existing knowledge establishing variable definitions of benchmarking (Moffet, Anderson-Gillespie and McAdam, 2008), was found in the data collected during this research study. However, only partial support was found for Monkhouse’s (1995) assertions that companies tend to adopt benchmarking practices without proper understanding of the methods or the benefits to be obtained, manifesting as a comparison of metrics against competitors. Half of the SME stakeholders interviewed provided descriptions of benchmarking that went beyond comparison of metrics, to make reference to improvements. Having a background in accountancy was found to increase the likelihood of possessing a sophisticated understanding of the term benchmarking. Four of the five non-owner accountant stakeholders included references to improvements or pursuits of best practice in their descriptions of benchmarking, while only one of the non-accountant stakeholders did so. All of the other stakeholders’ explanations of the term benchmarking were limited to concepts like comparison and industry averages. To illustrate the distinction, one CFO explained:

‘The important part of benchmarking is the actual process improvement. That’s the one thing that hasn’t translated from the academic to the practical. Most accountants ... use benchmarking purely as a number next to another number ... whereas the fundamental thing is the process improvement.’

This can be contrasted to a typical description offered by a non-accountant stakeholder:

‘Comparing my business to either industry peers or, you know, comparable businesses.’

It was anticipated that findings in relation to this proposition would be linked to implications for the future of the survey eg the survey should ensure it is meeting users needs in relation to their understanding of the activity of benchmarking. Such a link was not found in this small sample. Of the accountants that actively used the 2007 report, two provided academic definitions, while one did not. Additionally, the other accountant who expressed an intention to provide data for future surveys also provided an academic definition. Those with an academic understanding of the term

benchmarking were not concerned that the Deloitte survey reports industry averages, as opposed to aiming to assist with process improvements; they still consider it a useful resource.

Proposition 2: The usefulness of the Deloitte benchmarking report to SMEs is reduced due to variables such as motivations for being in the industry, product costing methods and target markets.

This proposition was developed because examples given during phase one interviews illustrated that variable factors would create differences in SMEs' reported results, reducing the comparability of one SME against the next. Further examples were gathered from phase two interviews, yet when interviewees were explicitly asked if such items affected the comparability of SMEs, several of the interviewees claimed they would not. It appeared that this was not an issue that many participants had previously given much thought to and some interviewees changed their opinion while they discussed the issues.

Amongst those who did appear to have actively considered the effect of SME variations, one of the active users of the report confidently asserted variables do affect the comparability of SMEs, but the reports are still useful when considered in the contexts of one's own business model and the potential causes of variances from the benchmarked figures. For example, when discussing product costing variances, the interviewee who participated in the survey explained:

'You need to be aware that that could be an explanation for your business being different. So what we tend to look at is not necessarily our result directly comparable to the Deloitte's survey, but over a period of time, whether our results are moving in line with the industry generally. So we use it as more of a trend, rather than an absolute.'

Another participant who was conscious of variations tries to second guess the sample:

' I look at the survey results and one of the key things I am looking at is, what was the sample and what was the sample made of and just try to reality check it to see whether there are skewed results because of one or two business that are in there. Now the difficulty there is you don't necessarily know who's participated. So, you get some qualifying information

about the size of the businesses within the sample, but to protect the confidentiality of the business that have supplied or provided the samples, you don't know who they are.'

A different user of the report confidently asserted that the possibility of variations relating to motivations or product costing did not concern him. He asserted:

'What ends up happening is that you end up getting to about the same number, no matter how you work it out. For instance it costs \$3,000 an acre to run a vineyard no matter how you work it out – that's across the whole country pretty much ... Across the board all run and operated wine businesses that have got plenty of thought put into them come out pretty much the same.'

When asked how concerned he was that other respondents to the survey were not running businesses that had 'plenty of thought put in to them', his opinion was:

'Probably not that concerned about that. My thoughts on those types of things is that other people who are actually canny enough in business to actually read those things are generally going to respond to them. Joe Blow up the road who's got his head in the sand isn't generally going to even read or contribute to one of those things so I think it sort of balances itself out in the end.'

He went on to explain that, following the first interview, he had taken a more critical look at the survey report and discussed it with accountant contacts from other wineries, and was now more confident in the report data than he had been previously. Nonetheless, this same participant was concerned about variations relating to target markets, and identified that as a possible improvement for the report:

'That's probably the biggest area. There are business around that only do cellar door. Their profit margins per product are through the roof compared to someone who just does export for instance. If they could distinguish between the fundamental business models and actually put some sort of form of product mix in there: you have got your different tangents of business sides but also your core business strategy, and what your export and domestic mix is would probably be useful.'

Other users also made suggestions for improving the usefulness of the report by including qualitative questions in the survey:

'A good question is: what is your motivation for being in this industry?'

As an example of participants contradicting themselves as they thought through the issues, one participant first asserted variations did not concern him:

'I don't think it matters... OK if it shows up some variation, so be it. That's the reality of the world we are living in.'

But, he later went on to say:

'I certainly would prefer to compare our product costing to wineries that have got the right product costing because I don't want to compare us to people who don't know what they are doing.'

Another respondent, when asked about the effect of target markets, first asserted the effect of such variables would not affect the usefulness of data, but then went on to explain:

'And we cross compare, so we would have a look at benchmarking, OK lets take an example, <name withheld>. He and I were looking at a partnership to do a project, and he was talking about massive margins, and we're saying ... those guys ... they're all absolutely creaming it! Well, they were until about 12 months ago and sales slowed down and things turned to (rubbish). So now you think OK they're sitting on high value stock in an economy when people are slowing down their spend, maybe our model's not so bad where we've got less time in oak, less products that rely on oak, but the turnaround, we've got a whole suite of BOB opportunities to clear stock. So, it would be interesting to have a graph of profitability of a business versus retention of stock. So it might be a hundred percent unwooded Chenin off the vine in March, in the bottle in June, sold by Christmas, great business. Even if it's stuff all percent. As opposed to a two year, in expensive oak.'

This example clearly demonstrated that higher margins would be expected of stock that requires a longer production and sales timeframe, whereas lower margins would be accepted for product lines that can be turned over quickly. Comparisons would need to be considered with reference to the product lines involved; therefore knowledge of the target markets being pursued would be a useful reference point from which to consider benchmarking data.

One of the employee accountants who is not a regular user of the report was in a position of needing to think of his feet. His immediate reaction was,

'That's a really good question actually. My guts would say, my immediate reaction is we're all in the game together. And the reason I say that is OK you can be third generation or you can be in it for a tax write off but at the end of the day you're still competing with me for a label space on a shelf in Dan Murphys.'

However, he then went on to discuss his opinion that many third and fourth generation businesses are currently in a lot of trouble, but are not realising it yet because they do not have high debt levels, so can afford to ride out bad years more comfortably than younger, more heavily geared businesses. He then identified debt levels as a significant discriminator affecting the comparability of businesses, and decided that benchmarking data delineated with reference with capital structure would be a useful reference.

Similarly, one participant mentioned variation caused by grapes:

'They might transfer their grapes out of the vineyard at \$750 per tonne where we might have to pay \$2000 per tonne for the grapes'

This example implied transfer pricing of grapes could have a material effect on the resultant COGS, but he went on to assert most wineries end up with similar product costings.

The contradictions appeared to be because this was not an issue that some interviewees had thought about previously, which implies that they are not critically assessing the benchmarking information supplied to them.

This finding has relevant implications to the future of the report. The representatives from Deloitte and WFA were conscious that one of the barriers to SME participation is that the survey is considered time consuming and difficult to fill out, so they were interested to know whether a simplified version for SMEs might encourage greater participation. Whilst difficulty in completing the survey was the most consistent reason cited for not supplying data to the survey, the findings in relation to this propositions would suggest simplification of the survey would be counter productive

because it would make it less useful to all readers. Those already highly familiar with the report use the details disclosed to compare their winery's results with reference to factors like debt levels, target markets, bulk wine use etc. Those who are not making use of the survey question the impact of such factors, so presumably providing less information in the report would increase their scepticism in relation to the data.

Proposition 3: SMEs do not highly value the Deloitte benchmarking report because they are able to satisfy their information needs through informal information sharing

Conclusive support for this proposition was not found in the data collected. While information sharing was found to be strong in operational areas, it was not considered as strong with regards to financial performance, which is the information supplied by the Deloitte benchmarking report. Further, participants generally felt their understanding of other businesses was stronger locally; they were not as confident in their understandings of other wine regions. The Deloitte benchmarking survey provides national data.

Exploration of an example of informal information sharing demonstrated informal information sharing to be high amongst the SME stakeholders, especially amongst those who are highly embedded in the industry. During the first interviews, several interviewees mentioned that a particular McLaren Vale wine business had gone in to receivership and the vineyard was now for sale. This information was used to explore the concept of informal information sharing in the second phase interviews, with all participants being asked when and how they came to know the business was being put on the market. Only two of the interviewees, both employee accountants, were previously unaware of the information. One of these interviewees was the only SME stakeholder participant who, while the winery he is employed by is in McLaren Vale, works from an office not located in McLaren Vale, giving him geographical segregation from other industry participants. The other interviewee, whilst working out of a McLaren Vale office, made it clear that he does not value or enjoy participating in wine industry 'gossip' and draws a clear distinction between his employment and his personal life, which is not centred around the McLaren Vale region. However, both of these participants felt they still had access to such information, were it relevant to them. Both commented that winemakers from within their organisations would have been aware of the information. The interviewee who is not based in McLaren Vale explained that

his organisation had recently acquired a vineyard and would not be in the market for a similar acquisition in the near future, so described the availability of such properties as ‘not on my radar’. Similarly, the other interviewee explained he has access to information, but only seeks information in relation to specific issues that are relevant to him, not generally. The other eight participants were all able to confirm they knew about the business being in receivership and the property being for sale before the for-sale signs were displayed. Interestingly, all cited a different source for the information.

However, while this example provided evidence to suggest information sharing is strong, participants generally felt that information sharing in relation to business performance was not as strong as in relation to business operations. For example, when asked about the sharing of financial information, one respondent explained:

‘That info is kept a little bit closer to the chest. Everybody tells you what they want to say. You always get a bit of a sniff if there’s a problem but we don’t generally discuss real business performance.’

These findings were in line with Haughton and Browett’s 1995 case study which addressed collaboration and competition between 17 wineries in the McLaren Vale wine region and found strong evidence of information sharing between winemakers on production issues, but claimed this collegiate nature did not extend to financial matters. Profit margins and production costs were described as closely guarded secrets. The introduction of the Deloitte’s benchmarking survey does not appear to have affected the region’s attitudes towards the sharing of financial information.

Three respondents did feel that their understanding of other firms’ financial performances was strong, but access to this information was attributed to other business relationships as opposed to informal sharing. Investments in other businesses, the timing of payments from clients, knowing how much was paid to suppliers and involvement in industry bodies were all cited as sources of information.

The WFA representative interviewed explained they consider the benchmarking report highly important because it is the only source of financial benchmarking data available to the industry. The data collected in this study supports this assertion: the McLaren Vale SMEs interviewed do not have an alternative source for the information supplied by the Deloitte benchmarking survey.

Proposition 4: The Deloitte report is important to SME stakeholders, despite its questionable relevance, due to their dependence on external information.

Support for this proposition was not found in the interview data. To the contrary, four of the five active users of the report made unprompted reference to the high importance placed on internal information, as did two of the accountants who are not active users.

‘There is no doubt that the focus is more on our own operations and I think you can get preoccupied with looking over your shoulder and trying to pry too much into what other people are doing, then you can lose focus.’

This finding is at odds with existing literature which establishes that SMEs focus on external information (Lang, Calantone & Gudmundson, 1997). However, the difference could be attributable to the high concentration of accountancy skills within this study’s participants. Lang, Calantone & Gudmundson (1997) attributed their findings to SME businesses’ lack of depth of internal information. Four out of the six participants that emphasised the importance of internal information in this study are either employed as accountants or have a background in accountancy, so can be expected to be equipped with the skills to produce and interpret comprehensive internally focused financial information.

The implication for this finding is that further research to determine whether existing knowledge in relation to the information seeking activities of SME managers holds true across the wine industry generally would be well justified.

Proposition 5: The report is useful to SMEs because it facilitates industry specific business management skills education

As opposed to US industry’s use of the Baldrige award criteria as a template for improvements, none of the interviewees reported using the Deloitte’s report as a template for reporting improvements. Conversely, some participants cited the reporting practices required to facilitate participation as a reason for not supplying data to the survey:

‘I’ve spent some time over the last few years reading the intentions of the report and thought it was fairly involved for an unknown, not necessarily useful, outcome.’

Similarly, another SME owner reported having attempted to complete the online survey previously, but was put off because he was not sure if he would be causing tonnage that he had bought or sold from other wine businesses to be double counted:

‘So I have got that far several times and said stick-it, I am not wasting any more time because some surveys that are internet surveys can take a lot of time to fill in and then you suddenly thin, “I am not sure whether the information I am going to give them is double counting”. In the end I said well the industry is in enough trouble, I don’t want to be double counting the grapes and them thinking that, imagine if there was another 2000 small SME businesses that had done the same thing and so many grapes get double counted! And you think, “Oh I didn’t realise we had a vintage in 2009 of 2.1 million grapes” when it might only be 1.6. So I think you have got to wonder whether the data is corrupt if it’s not very clear exactly how to record it.’

However, comments from those who supply data to the survey were more positive. The owner of one SME explained:

‘... the contact most people have with the Deloitte’s survey is not so much reading the finished product but doing the input. Doing the input itself is quite interesting from an internal point of view, it’s kind of a little bit of a discipline. There’s a question – we’re filling it in – let’s ask ourselves a question while we’re filling it in.’

Whilst a Baldrige Award style application of the survey was not identified in this research study, further research to examine whether such an application could add value to SME businesses would be well aligned to the industry’s intentions expressed in the Directions 2025 document (WineAustralia 2007).

CONCLUDING REMARKS

This study was small both geographically, being limited to the McLaren Vale region, and in terms of the number of participants. However, it yielded some interesting findings that indicate a need for more expansive research.

Further exploration is especially well justified in relation to proposition 2: it was apparent that SMEs had not actively considered what factors might make the data available to them less useful. Research to explore the levels of critical assessment that SME winery stakeholders employ when

assessing information that is available to them could help information providers better service intended users.

Given the industry's importance to our economy and its expression of an intention to foster the growth of the financial skills of its participants, further research to explore the application of the survey as a template for financial reporting would be well justified.

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ASSESSMENT OF SERVICE QUALITY AT WINERIES AND CELLAR DOORS THROUGH SERVICE MAPPING

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ABSTRACT

Purpose – The importance of cellar door sales in wineries is investigated and a method of assessing service quality using services mapping approach is tested for the purposes of enhancing research in this important area.

Research approach – Service mapping involved a group of students in using participant observation techniques to map service quality at three stages of the winery visit: approach and entry; the cellar door; departure and other observations. Observers were instructed to use all five senses in making their observations, i.e. the look, smell, sound, taste and feel of the experience. Physical evidence and staff interactions were also recorded and invisible management processes were implied.

Findings – Each of the three wineries studied provided a distinct theme and presentation, sensorial experience and level of service quality based on the observations. The technique of service mapping could provide winery and cellar door managers with unique insights into the totality of the cellar door visitor experience.

Research implications – Research on cellar door service quality has implications for the presentation of the wine brand and corresponding brand awareness, loyalty and sales. This research method has utility in assessing the cellar door experience and associated cellar door and winery management processes.

Originality/value – This is the first time that service mapping has been used to assess the cellar door experience. It has provided some new and useful insights for researchers and managers in the wine industry.

Keywords: Service quality, wineries and cellar door, service mapping.

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ASSESSING SERVICE QUALITY AT WINERIES AND CELLAR DOORS THROUGH SERVICE MAPPING

INTRODUCTION

Wine tourism has become the focus of wine and tourism enterprises in Australia and internationally and there has been a concomitant increase in research, planning, marketing and management to facilitate its development (Carlsen and Charters 2006). With this growth and recognition, comes an understanding that improvement in the service quality at the cellar door can facilitate competitive advantage and product differentiation (O'Neill and Charters 2000). The main service setting for wine tourism is the cellar door and O'Neill and Charters (2000) suggest that the cellar door may be the foundation of any wine purchase made. Cellar doors enable distribution at a low marginal cost, establishment or reinforcement of brand equity (Thach and Olsen 2006) and an opportunity to add value to the wine consumption experience. Quality service at the cellar door may help develop the relationship between customer and brand, and allow implementation of relationship marketing strategies (O'Neill, Palmer and Charters 2002).

Although a range of tools exist for measuring and evaluating service quality, few have been applied in the wine tourism field. In this paper the use of one such evaluative tool is discussed and illustrated. Service mapping has been applied in wine festivals in order to investigate the festival experience (Taylor 2004), but has not been applied to the winery and cellar, where the opportunity for managing wine product awareness, sales and loyalty is most prominent. In order to investigate service quality at wineries and cellar doors, students from Curtin University visited three wineries (small, medium, large) within the Margaret River Region to assess the 'cellar door experience' at each. The technique of 'service mapping' (Bitner 1993, O'Neill et al 1999, Getz *et al* 2001, Taylor 2006) was used as a means of recording tangible and intangible experiences that influence satisfaction rating of the cellar door experience, thus allowing for analysis of service quality and consideration of the management processes that shape these experiences.

Literature review

In developing the Western Australian Wine Tourism Strategy, Carlsen and Dowling (2001) defined wine tourism as "travel for the purpose of experiencing wineries and wine regions and their links to Australian] lifestyle. Wine tourism encompasses both service provision and destination marketing".

There has been phenomenal growth in Australian wine tourism in the last decade, well ahead of the trends in domestic and international tourism. In 2000, 9.5% of international visitors included a visit to at least one winery and by 2004, this proportion has increase to 12% (Tourism Research Australia 2005). In 2008, 13.2 % of international visitors included a visit to a winery during their trip to Australia with annual growth in international wine tourists of 6% per year between 2000 and 2008 compared to only 2% for all other tourist types (TRA 2008). About half of international wine tourists buy wine, with total spend of \$39mn in 2006 (TRA 2006). Domestically, in 2000 there were 1854 million domestic tourists and 1756 mn day trippers to wineries (Tourism Research Australia 2005). By 2008 there were 2289 million n domestic tourists and 2093 million day trippers to wineries (TRA 2008) . Domestic wine tourism has increased by an average of 3% annually between 2000 and 2008, and day trips by 2% annually, well ahead of domestic trends that showed an overall decline of 1% over the same period. Cellar door sales to domestic visitors in 2000 were \$295 million but by 2004, increased to about \$400 million – a 35% increase (Tourism Research Australia 2005). In 2006, about 69% of domestic wine tourists purchased wine at the cellar door and total cellar door expenditure is estimated at \$666 million (TRA 2008). In 2008, there were 1614 wineries with cellar door facilities (TRA 2008) and increase of 8% since 2005. Based on the projected growth rates in wine tourism and proliferation of cellar door facilities at wineries (see below) it is possible that wine tourism in Australia would be generating cellar door expenditure approaching one billion dollars by 2010.

As a result, wine tourism has emerged as a growing area of special interest tourism within Australia, and the growing significance and competitiveness of this sector has led to heightened concerns by both producers and consumers of the quality of services being offered (O'Neill and Charters 2000). Alant and Bruwer (2004) suggest that the most important aspect to wine tourists relates to cellar door visits. This importance may be attributable to the presence of both goods and services elements, which subsequently allow wineries to establish a link between brand association and cellar door (Lockshin and Spawton 2001). Furthermore, the cellar door can help to establish or reinforce the image and quality level of the brand (Mitchell and Hall 2004). The emerging strength of wine tourism, at both macro and micro levels, is vital to the ongoing viability of wine regions as whole (Beames 2003) and the profitability of individual wineries cellar door operations (O'Neill and Charters 2000). Research has revealed a great deal about wine tourist needs and expectations (Charters and Ali-Knight 2002, Carlsen and Ali-Knight 2003, Carlsen and Charters 2006), none of which are more important than the cellar door experience (O'Neill *et al.* 1999). A positive cellar door experience is shown to positively affect relationship marketing strategies (Getz 2000), current

and future purchase intentions and the development of brand loyalty (O'Neill and Charters 2000). The cellar door experience is vital to sales and profitability of many small winery enterprises (Morris and King 1997). Achieving success relies not only upon the delivery of outstanding service (O'Neill and Charters 2000), but also on the experiences provided (Macionis 1998).

Thach and Olsen (2006) cite the growth in wine tourism in the California and concomitant value of wine sales through tasting rooms and cellar doors, which currently accounts for 64 percent of Californian wine sales, or USD1.3 billion. Direct sales of wine also occur through wine clubs and also over the Internet and represent a growing source of sales, especially for smaller (<5000 cases) wineries. Cellar door sales also proffer larger profit margins than selling through the trade, and provide an opportunity to engender brand awareness and loyalty. In a highly controlled and competitive trading environment, where the marketing budgets of smaller wineries are dwarfed by the larger wine companies, direct sales through the cellar door will only increase in importance.

Quality service at the cellar door, arguably, creates a level of brand loyalty that leads to post-visit purchase when visitors return to their place of residence. Early studies found that only 13% of all Margaret River winery visitors making a post-visit purchase, but more reliable and recent studies finding the proportion of post visit purchases at 46% for New Zealand wineries (Mitchell and Hall 2004). The higher price of Margaret River wines and the limited availability through the trade obviously limits post-visit purchase of West Australian wines. However, there is room for attention to the nexus between cellar door service quality and post-visit wine purchase and consumption behaviour. In a survey of over 200 winery visitors, O'Mahony *et al* (2006) found that 20.5% of winery visitors surveyed changed their wine consumption, with 73.3 percent consuming higher quality wine, 66.7 percent increasing wine purchased.

Positive cellar door experiences can also generate post-visit sales. Mitchell (in Carlsen and Charters 2006) provides some analysis of reasons for purchase (and non-purchase) by wine tourists after visiting wineries. He interprets winery visitation as 'consumer experience tourism' and finds that it is indeed the experience elements of the visit, such as service and social aspects that are most influential in post-visit purchase behaviour. He also points out the importance of 'hygiene factors' that, if absent, can compromise the experience but in themselves do little to enhance the experience. In contrast to previous studies, Mitchell finds a high likelihood of brand loyalty amongst New Zealand winery visitors, especially if they visit more frequently, which results in increased post-visit purchases.

Involvement is the level of perceived personal importance and/or interest evoked by a stimulus within a particular situation. In the context of wine tourism and cellar door visits,

O'Mahony et al (in Carlsen and Charters 2006) find that high involvement correlates with higher post-visit purchases of wine, but the relationship is a complex one. Without over-reliance on market segmentation (which can be misleading when based on a single factor such as demographics) it is evident from this research that there is a continuum of wine involvement from low to high and may or may not change subsequent to a winery visit. Perhaps more than any other topic area in wine tourism marketing, it is the questions of wine involvement, winery visitation and subsequent wine purchase behaviour that deserves further research. An opportunity presented through wine tourism and cellar door visits is to convert low involvement wine consumers to high involvement (Charters and Ali-Knight 2002) and ultimately enduring involvement or EI (Galloway *et al* 2008). Wine is an information intense product, one that requires a considerable amount of information to describe it completely (Watson et al, 1999). Cellar doors provide an opportunity to convey information and simultaneously increase involvement and affiliation.

METHODOLOGY

There is a considerable body of anecdotal and research evidence that identifies the nexus between customer-perceived service quality, visitor satisfaction and sales in the service sector. The competition or performance might be excellent, but if visitors experience low-quality services or incompetent service delivery from staff, then the expected brand awareness, loyalty and future sales that flow from wine tourism may not be realised.

However, perceptions of quality service and the consumer experience are complex concepts. Getz *et al* (2001) found that in addition to all of the interrelated functions that contribute to perceptions of quality, a relationship exists between perceptions of previous service encounters, and expectations of future service quality. It is apparent that service quality expectations are partly formed as a result of previous service encounters, hence service encounters directly inform future expectations (Getz *et al* 2001). This may not only influence personal perception, but may influence personal perception at that point in time. As such, these results may not be indicative of the service experience as perceived by others, however the amalgamation of a group of results would certainly be a useful tool in measuring both the tangible and intangible elements of cellar door service.

Experiential factors are important such as the desire to share the wine and the winery experience with others. Furthermore, wine tasting influences immediate and long-term purchase decisions so both the utilitarian (wine purchase and consumption) and hedonistic (having fun tasting wine) dimension are both important. According to Griffin and Loersch (2006) winery service quality is a blend of winery exterior, cellar door interior, service, staff, wine and convenience attributes. Of these, staff and cellar door interior are most important, and the winery exterior of least

importance. Overall prompt service by welcoming, friendly and knowledgeable staff in a clean and well presented tasting area is most important to wine to the success of the emergent Canberra Region wine tourism offering.

On a precautionary note, O'Neill and Charters (2006) found that there is often 'disconfirmation' between perceived and actual service quality. Perceptions of quality service are influenced by levels of visitor education, experience and other factors, Furthermore, service quality recollections decline over time and influence future purchasing and repeat visitation, so wineries need to work on long-term strategies to maintain brand loyalty. For example, repeat visitation indicates good service quality, generates favourable word-of-mouth advertising and post-visit purchasing so wineries should maintain a program of wine events (concerts, exclusive tastings, dinners, meet- the-winemaker, seminars and exhibitions) and wine clubs (newsletters, mail-out and social networking sites) to encourage repeat visitation and brand loyalty (Fountain, Fish and Charters 2008).

Methodological Approach

One technique with considerable potential is the creation of a service map, which, according to Bitner (1993: 362), "visually displays the service by simultaneously depicting the process of service delivery, the roles of customers and employees, and the visible elements of the service". It is based partly on the premise that customers often rely on tangible evidence of service, or surrogate indicators, when they are unable to judge the actual quality of the service. Physical evidence of service, according to Bitner, can include communications such as advertising and signs, the price, guarantees, logos, and the physical environment. Bitner (1993, p. 361) called the setting a "servicescape", saying that it acts in the way a package does for tangible products, that it conveys an image, and evokes a sensory or emotional response. Furthermore, the setting can differentiate the service from others, convey the values of the organization, and indicate targeted market segments.

Service mapping could be done by conducting customer interviews, or using customer-completed log books or diaries, or by using trained participant observers. The main elements in the "mapping" of a cellar door service encounter consist of recording:

- the process and actions required by visitors to enter, experience and depart the cellar door
- the nature and effectiveness of encounters with winery staff
- all tangible and intangible evidence of services provided

- observations of other visitors and factors that influence the cellar door service encounter

It is important to recognize that this particular technique does not directly evaluate customer expectations or satisfaction levels, it is confined to the the actual service encounter at the cellar door. It might be best to use it as part of a more comprehensive evaluation strategy, preferably employing the principle of “triangulation” to study quality from different perspectives as perceived by the customer (through customer feedback and surveys including SERVQUAL and SERVPERF (Griffin and Loersch 2006)), management and staff evaluation sessions and external auditing against predetermined criteria and standards (e.g. ISO 14000).

In this research it was decided to employ participant observation, of service quality, as a form of research in which the researchers take part in the experience being studied as if they were regular customers. Olsen and Thach (2006) employed participant observation in the form of “secret shoppers” to monitor and evaluate their customer-oriented processes of Californian tasting rooms and cellar doors.

The main advantages of this method are:

- closely simulating the actual customer experience
- multiple observers can be used to ensure that the a variety of service experiences are covered
- observers can be trained in service quality and how to evaluate its important dimensions and indicators
- participant observers can search out various indicators of service quality that other cellar door visitors may overlook.

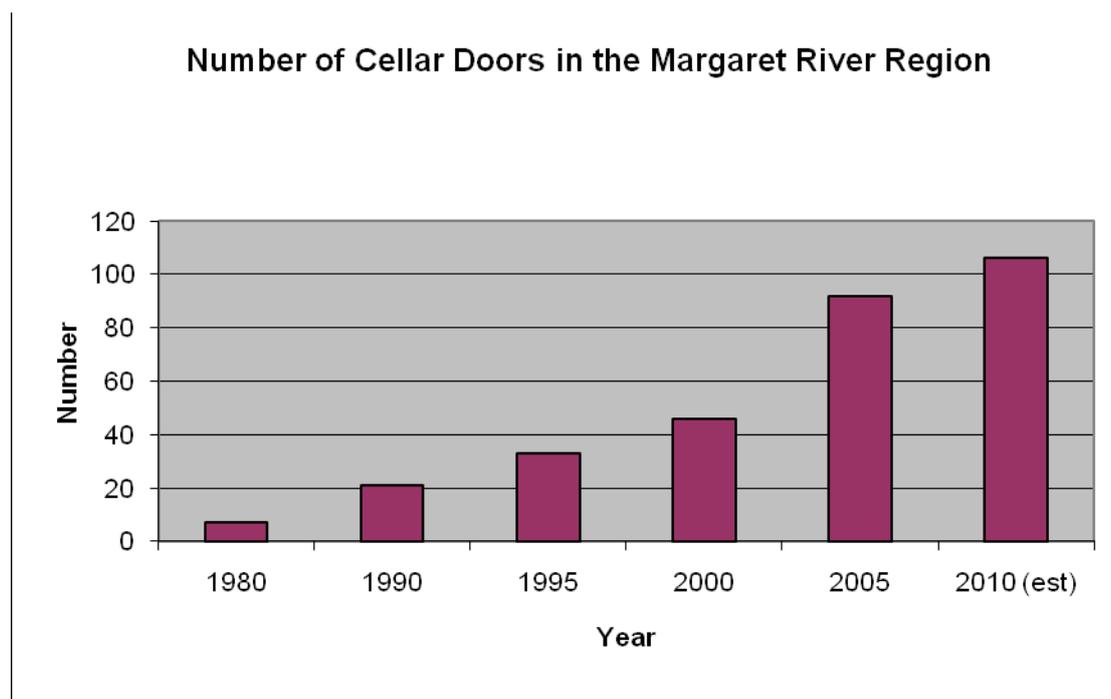
Overwhelmingly, wine tasting is a sensory experience, so the service setting and quality must be optimal and pleasing to all five human senses. In other words, wine tasting at the cellar is not just about serving samples of quality wine. Wine tourism is essentially a service in that consists of both tangible and intangible experiences (O’Neill *et al* 2004, Thach and Olsen 2006) of finite duration within a temporary, managed atmosphere. As with all services, this experiential “product” is produced and consumed simultaneously, is highly heterogeneous and very difficult to store and/or control. Wine tourism can be described as non-standardized services in which the knowledge, behaviour and commitment of the service providers is crucial (Bejou, Edvardsson and Rakowski 1996). The cellar door experience is shaped by complex interactions of visitors and the service staff, the wine product, the cellar door setting, winery management systems and other winery attributes, making evaluation of service quality a complex task

Location and Sample

The Margaret River region of Western Australia, located 3 hours south of Perth is a relatively intensively developed tourism region, that enjoys a reputation for good climate, attractive landscapes and a lifestyle associated with fine dining and wine, which has become popular with tourists (Getz and Carlsen 2000). One of the principle attractions to the region is the associated wine industry, which produces premium wines, and captures a significant number of wine tourists. Within the Margaret River region, it has been estimated that cellar door sales account for approximately 34 percent of sales revenue for wineries, and in some instances rising in excess of 80 percent of sales revenue (King and Morris 1997). However, the cellar door, which is often the first contact consumers have with a winery and its wines, is critical to the potential to maximize immediate sales, and provide quality associations potentially leading to post-visit sales. Therefore every aspect of the cellar door, including layout, appearance and staff, is of extreme importance, as it is here that perceptions of the winery are established (O'Neill *et al.* 2002).

The cellar door experience is of the utmost importance in terms of securing sales, ensuring repeat visitation and providing an overall positive tourism experience. Margaret River winery cellar doors tend to be rate highly (Charters and Ali-Knight 2002, O'Neill and Charters 2000) in terms of service quality. Supporting this growth in wine tourism is the increase in the number of wineries with cellar doors between 1980 and 2010. The number of cellar doors operations doubled in the decades of the 1980s and 1990s, but after 2000 took only five years to double in number again (Figure 1).

Figure 1 – Cellar Door Operations in the Margaret River Wine Region 1980-2010



A group of 19 undergraduate, postgraduate and mature-age students from the viticulture and wine science course of Curtin University in Margaret River provided observations of the three wineries. These observations were recorded at various stages, beginning from their initial approach to the winery, parking, the cellar door experience and finally upon departure. A 21-seat tour bus was used to transport the group, which ranged in age from younger (early 20s) to middle age and senior (aged over 60). This group, though not typical in size of an average cellar door visitor group as the majority (47%) of wine tourist groups are couples (Tourism Research Australia 2005) is representative of all age groups that visit cellar doors. Winery one is a small, family owned and operated winery, winery two a medium sized (but family owned) winery and winery three is a large winery (but also family owned).

Students were required to visit the three wineries and make observations and notes on the following aspects of the visitor experience, noting physical evidence and any staff interactions at each stage of the visit:

1. Approach to the winery – was the signage (safety, directional, information, welcome) clear?
2. Entering the winery – physical evidence of any entry statements/sense of arrival?
3. Parking – convenient? secure?
4. Cellar Door – (see below)
5. Departure – departure statement? Welcome back?
6. Other observations – overall quality, atmosphere and “feel” of the experience?

Cellar Door experiences should be pleasing to all five senses – sight, smell, sound, taste and touch. Student observers were instructed to use all five senses in recording their impressions of the cellar door experience, as follows:

Sight – the design, themes, presentation of wine labels and merchandise and the “fit” of the winery with the region

Smell – any pleasing or offensive odours (cooking, industrial smells can interfere with wine tasting)

Sound – could you hear the staff behind the bar? Any other sounds pleasant or otherwise?

Taste – good quality wine? Right temperature (cold wine is more difficult to taste)

Touch – surfaces (floor, wall, bar), merchandise and furnishings good quality?

Approximately 4 to 6 observations at each of the 4 stages of the winery visits were recorded as well as other observations at the three wineries by the 19 students. This produced a total of

approximately 350 to 400 observations per winery for analysis. Only the most frequently occurring observations which have direct management implications are analysed and presented in this paper, with irrelevant, inaccurate or incomplete observations discarded. Invisible management processes have been deduced from the visitor actions, visible staff contact and physical evidence observations.

FINDINGS

The findings are presented below in summary form for three stages of the winery visit: approach and entry; cellar door; and departure and other observations. Physical evidence and staff contacts are discussed and management processes for each winery are identified.

Winery One: Approach and entry

Winery one displayed clear directional signage from the road, a welcome sign on arrival and directions to the cellar door through the vineyard. The welcome sign displayed the story of the winery. A sign also invited visitors to walk through the vines, immediately creating an open and friendly ambience. Pet farm animals were clearly visible from the driveway, also creating a familial ambience. Although the driveway was gravel it was well maintained and led to a car park conveniently located adjacent to the cellar door entry, despite some recent rain which made it muddy in parts. The car park was visible from inside the cellar door building, providing a sense of security. The entrance way was through an arched walkway to a cellar door with glass walls and an attractive outdoor area providing an open, welcoming approach and entry. The cellar door staff member was friendly and greeted the group upon entry.

Winery One: The Cellar Door

Visually, the cellar door was brightly lit and observers noted photos and awards on display, a small but adequate merchandise area and tasting bar, tasting notes, comfortable furnishings and clean restrooms. The only detraction was an untidy administration area visible from the tasting area. Audibly, the staff member was able to be heard above the background music, which was light and appropriate. There were no odours to interfere with the wine, which were presented at the right temperature (apart from one wine) and were of high quality. Despite the small area, the floor-to-ceiling windows on three sides of the room enabled the room to feel comfortable and not overcrowded. The staff member was observed to be warm, genuine, intimate (she moved around the group, pouring wines), friendly and knowledgeable. Family members also came into the room and greeted the group during the tasting, adding further to the family feel of the winery.

Winery One: Departure and other observations

Importantly, the group was asked if they wanted to make any wine purchases and those that did found the purchase process easy. The group received a farewell from the staff and a thanks for visiting the winery (in the form of a sign). The story of the winery was reflected both on the

signage and wine label as well as through the cellar door, where a prominently displayed, unique vintage aircraft can be viewed.

Winery One: Management Processes

In terms of management processes it was clear that a sound signage strategy was in place and a program of road and car park maintenance was also implemented. The winery owners had also paid particular attention to the design of the cellar door building, materials, location and orientation. Staff training and attention to personal service, information provision and sales techniques were also evident. The strong branding and positioning of the winery was noted and the story of the winery was well portrayed in all material and displays. Overall the cellar door experience was considered to have a positive effect on the wine brand.

VISITOR ACTIONS	APPROACH TO THE WINERY	PARKING	ENTERING THE WINERY	CELLAR DOOR	DEPARTURE	OTHER
PHYSICAL EVIDENCE	<p>Clear signage to winery on road.</p> <p>Clear signage to cellar door from car park</p> <p>Welcome sign on arrival</p> <p>Invite to walk through the vines</p>	<p>Small parking area but adequate</p> <p>Convenient access to cellar door from car park</p> <p>Driveway and car park maintained</p> <p>Secure and car park visible from cellar door</p>	<p>Bright, open, friendly atmosphere.</p> <p>Inviting walkway/archway entrance</p> <p>Pet animals, photos, toy box, magazines creates relaxed family feel</p> <p>Small attractive outdoor area</p>	<p>Sight: Vineyard photos and awards displayed Tasting notes available Good layout, design Comfortable furnishings Clean restrooms Promotional material displayed</p> <p>Merchandise local and limited Untidy administration area</p> <p>Sound: Music appropriate and audible Staff audible</p> <p>Smell: No odours</p> <p>Taste: Wine temperature good One wine sample too cold Good quality wines.</p> <p>Touch: Not over-crowded even with group</p>	<p>Was invited to purchase wine.</p> <p>Wine purchasing process easy.</p> <p>Farewell/thank you statement</p>	<p>Spittoons small but available</p> <p>Last-minute booking accommodated for well</p> <p>Label reflects story behind brand</p> <p>Overall experience had a positive effect on the wine brand</p>
VISIBLE STAFF CONTACTS	No staff present	No staff present	Warmly greeted by staff at the cellar door	<p>Warm, genuine, intimate, friendly staff.</p> <p>Informative/educational Relaxed and personal service. Family/owners greeted the group Enjoyable experience</p>	'Thank you' for visiting from staff	
INVISIBLE MANAGEMENT PROCESSES	Signage design and maintenance	Design and maintenance of access roads	Cellar door design and facilities	<p>Staff recruitment and training</p> <p>Technical information provision</p>	Sales techniques	<p>Provision of facilities</p> <p>Branding and Labelling</p>

Explanatory Notes

- Clear directional signage to the winery and cellar door.
- Welcoming informational signage inviting visitors to walk through the vines
- Driveway and car park well maintained but gravel and muddy in parts
- Parking convenient but only just adequate for a 21 seat coach
- Car park visible from cellar door and therefore secure.
- Open, warm friendly atmosphere

Inviting archway/walkway to cellar door
Pet animals create relaxed, family feeling

Winery Two: Approach and Entry

Winery two displayed clear directional signage from the road but despite having an impressive stone entry and sealed driveway there was no welcome sign. A large sign displayed the two wine labels of the winery and opening times for the cellar door. The long winding, tree-lined driveway gave the impression that the Estate was well planned and designed. The large sealed car park was close the cellar door entrance and was shaded with tall native trees, that also softened the large winery exterior appearance. Heavy wooden double doors with quality handles provide a sense of arrival upon entry to the architect-designed building that makes good use of natural light and colours.

Winery Two: Cellar Door

Visually, polished concrete floors and high wooden ceilings provided a contemporary, chic look to a very large space. Quality fittings and furnishings complemented contemporary art work (paintings and sculptures). The merchandise area was extensive, well lit and presented, but with limited local products. There was a prominent wine list over the extensive tasting bar, displaying wines for tasting, vintages and pricing information. Full glass wall opposite the tasting bar ensured the space was well lit, even in winter. Windows at one end provide an opportunity to view the barrel room, providing evidence that this is a production winery. Audibly, a group having pre-wedding celebrations at one end of the cellar door meant that it was not always possible to hear the staff speaking when wines were being presented. The capacious interior space made it difficult to hear as well. There was a strong smell of oak and wood polish from the furniture and food odours emanating from the staff kitchen behind the tasting bar (note: food was not available to the public). Other inoffensive odours (essential oils) were detected. The wines were served at the right temperature for tasting but not all wines were tasted and some required a tasting fee, refundable upon making a purchase. A large polished wooden table in front of the tasting bar necessitated some crowding and physical contact between visitors. A grand piano, lounges, children's and outdoor areas provided a comfortable feel. The staff was very well presented in black corporate clothing and were very knowledgeable about the wines and obviously well trained and efficient. Wines were presented in a logical sequence with each wine of higher quality and at a higher price point, culminating in the reserve wines for some varieties.

Winery Two: Departure and other observations

The group was not invited to purchase wine before departure, however some did make purchases and the purchase process was very efficient. The group was encouraged to visit again but not thanked for visiting. There were no departure signs. Other observations involved the strong contemporary theme of the winery and the extensive wine for tastings with various price points. The tasting notes were not clearly presented however, and took some finding in large white folder, of which there was only one copy available to the group. The winery displayed tourism information about the region and forthcoming events.

Winery Two: Management Processes

The winery estate is clearly well designed and the physical facilities are impressive. The signage and entry statement could do with some modification to present a more welcoming tone to complement the obvious ease of entry that the driveway, car park and cellar door provides. Corporate branding is evident in both wine labels and extends to staff uniforms and merchandise for sale. Some fine tuning of the timing of maintenance (of furniture), use of staff kitchen and management of multiple group visits could assist in ensuring that the cellar door experience is never compromised by odours or excessive noise. Staff training in sales techniques, not only for wine but also for the extensive range of merchandise may also enhance cellar door sales. Improvement in the provision of tasting notes may assist the visitor in making purchase decisions when choosing between the 15 wines and multiple price points.

Overall, the cellar door provided a positive wine tasting experience and left an impression of a modern, contemporary and well managed winery and cellar door operation.

TABLE 2: WINERY 2

VISITOR ACTIONS	APPROACH TO WINERY	PARKING	ENTERING THE WINERY	CELLAR DOOR	DEPARTURE	OTHER
PHYSICAL EVIDENCE	<p>Good directional signage from main road</p> <p>Impressive stone entrance and sealed driveway.</p> <p>Prominent signage with cellar door opening times</p> <p>Well planned approach to winery</p> <p>No welcome signage</p>	<p>Large sealed car park</p> <p>Parking close to cellar door entrance.</p> <p>Cellar door entrance well signed</p> <p>Tall native trees and garden integrate and soften built environment</p>	<p>Large heavy wooden door marks entrance to experience</p> <p>Contemporary and impressive architecture.</p> <p>Interesting, modern architectural design-good use of natural colour and light.</p>	<p>Sight: Polished floor, high wooden ceilings and bar but feels comfortable/casual chic. Quality artwork, fittings and furnishings Wine list clearly displayed behind large tasting bar. Large good quality merchandise area brightly lit and well presented. Limited offering of local produce Modern artwork displayed supports brand image. Piano, lounge, coffee table, children's play area and wooden picnic tables provide welcoming sight</p> <p>Sound: Difficult to hear staff over other noises</p> <p>Smell: Smell of wood and polish from furniture display overpowering. Other light scents (essential oils)detected. Food odours from staff kitchen</p> <p>Taste: Wine at good temperature. Large range of quality wines and good selection</p> <p>Touch: Large table made the area for standing feel congested. Access to bar involved physical contact with other visitors</p>	<p>Not invited to purchase wine</p> <p>Process of wine purchase easy.</p> <p>Staff encouraged a repeat visit</p> <p>No visible thank you or departure signs</p> <p>No visible safe journey signage</p>	<p>Theme carried through all labels with variations for different price point/ quality levels.</p> <p>Extensive wine list – cellar staff selected a range and guided tasting</p> <p>Loud group at tasting bar incongruous with relaxed ambience</p> <p>Tasting notes not clearly presented</p> <p>Information on events in Margaret River available</p> <p>Overall experience was positive</p>
VISIBLE STAFF CONTACTS	No staff present	No staff present	Greeted by friendly cellar door staff	Engaging, knowledgeable and well trained staff.	Staff sales service	
INVISIBLE MANAGEMENT PROCESSES	Signage and site planning	Carpark design and access	Cellar door design, architecture and construction	<p>Maintenance schedules (wood polishing)</p> <p>Timing, use and location of staff kitchen</p> <p>Presentation of technical tasting notes.</p>	<p>Sales techniques</p> <p>Signage</p>	<p>Information provision</p> <p>Management of multiple group tastings</p>

Winery Three: Approach and Entry

Winery three was located on the main road and very well signed, even though the grand imposing entry statement and sculpture made it almost impossible to miss this winery. A long, winding paved driveway through vines and past a large dam included safety signage but no welcome sign. The car park was also well signed and located amongst the vines, depositing the



visitors directly into the vineyard rows, which were clearly labelled with varietal information. Visitors are required to descend stairs and traverse a wooden deck (which was slippery from the rain) across a water feature to enter the cellar door. Sculptures of the company emblem and feature walls of oak barrels add to the prestigious first impression of the winery. Staff greeted the group on arrival and escorted them to a reserved tasting area within the cellar.

Winery Three: Cellar Door

Access to the long, curved tasting bar was through the merchandise (mostly imported) area, beyond which were views of the dam and trees, only partially blocked by furniture located in front of the glass walls. Low ceilings and a large open fireplace at one end, combined with quality furniture and fittings completed the comfortable look and feel of the tasting bar. An adjoining restaurant was the source of imposing noise as well as cooking and beverage odours. Appropriate music was playing but difficult to hear due to background noise. Finishings of timber, copper and slate gave a natural interior feel to complement the water and bush views. Wines were of high quality, presented at the right temperature in very high quality glassware. An attractive, formally dressed staff member presented the wines with great enthusiasm for the winery and the winemaker and seemed to follow a well-rehearsed script which portrayed the story of the winery very well. Although a lot of information was conveyed, there was no invitation to ask questions about the winery. An additional feature of the cellar door was an educational area where displays conveyed viticultural and winemaking information.

Winery Three: Departure and other observations

The group was informed of a wine at special prices but were not prompted to purchase wine or merchandise prior to departure. The group was thanked for visiting and personally welcomed back by staff, but there were no departure signs. Other observations included the availability of large spittoons, the strong and obvious branding of the wine reinforced by signage, sculptures and stories. Overall, the experience was overwhelming in terms of the grand scale of the cellar door, restaurant and winery and the quantum of information about the winery conveyed by the staff.

Winery Three: Management Processes

There has been a clear emphasis on portraying the winery brand through expensive signage, sculptures and staff presentations. The site was clearly well planned to provide a transition from the entrance to the vineyard and down to the cellar door (i.e. 'from grape to glass'). The design and architecture was grandiose indicating that the owners had spared no expense in developing the winery. Some attention to entrance and exit signage would improve first and last impressions. Staff training could include sales techniques, although recruitment and selection policies are clearly successful in recruiting staff with the right personal attributes. Further training in customer

engagement (although difficult with a large group) and sales techniques may enhance the visitor experience and generate cellar door wine and merchandise sales. Finally management needs to consider means of separating the restaurant and associated noise and odours from the cellar door tasting area as well as the internal layout of the tasting area furniture and merchandise.

Figure 3: Winery 3 Service Map

VISITOR ACTIONS	APPROACH TO WINERY	PARKING	ENTERING THE WINERY	CELLAR DOOR	DEPARTURE	OTHER
PHYSICAL EVIDENCE	Winery well signed from road. Prominent, imposing entry statement. No welcome signage Cellar door well signed along elaborate driveway. Safety signs	Large, well signed car park Parking within vineyard and varieties signposted. Secure car park	Grandiose stairway to timber walkway over water feature Wooden deck slippery when wet. Doors not marked well. Entrance intended to impress but also considered ostentatious	Sight: Long curved tasting bar with views of winery Prominent large merchandise area Furniture partly blocks view Large fireplace and comfortable furniture Designated space for group tasting Low ceilings give contemporary modern look. Quality finish, furniture and fittings Educational area and display. Wine and food books on table. Sound: Difficult to hear staff member due to acoustics and background restaurant noise. Music appropriate Smell: Some restaurant smells Taste: Temperature of wines appropriate. Quality of wines Touch: Natural materials Large good quality tasting glasses	No prompt to purchase wine	Large fixed spittoons Wine labels carried the theme of the winery Overall experience was overwhelming Cellar door staff did not invite questions
VISIBLE STAFF CONTACTS	No staff present	No staff present	Greeted by cellar door staff	Cellar door staff enthusiastic and knowledgeable about the wine and winery	Cellar door staff	
INVISIBLE MANAGEMENT PROCESSES	Signage strategy	Site planning	Design and architecture	Staff training in customer engagement Merchandising presentation Food production and separation of restaurant and cellar door	Sales techniques	

DISCUSSION AND CONCLUSIONS

In this section the observations of physical evidence and staff contacts along with the underlying management processes are related back to the extant literature on service quality, brand equity and sales at the cellar door.

One important stage (some would say the *most* important) in the winery visit is the approach and entry, where first impression are formed and customer expectations are developed. The physical evidence can take many forms but is mainly the directional, informational and welcome signage to the winery, entry statements, landscaping, driveways and car parking. There is a safety dimension in approaching wineries, particularly along main roads, and guidelines are in place as to the colours, size, shape and symbols for use in tourism and winery signage. It is therefore imperative that wineries have a signage strategy in places, not only to ensure that visitors receive a

positive first impression, but also to provide safe entry and adhere to government standards. Driveways, car parks and gardens need to be well maintained and this could be best achieved through a programmed maintenance schedule throughout the year, with major works scheduled for the low season and regular maintenance during the high season and during vintage, when machinery and trucks are also using winery access roads. Of course, a good appearance begins with design, so site planning and tourism development principles of tourist flow, structural stability and aesthetics (Gunn 2004) should always be employed initially. Design themes should ideally extend through the whole winery presentation to the wines and merchandise, so that a cogent, positive and consistent brand image is projected to the visitor. In this study, these themes appeared as friendly, familial and authentic (winery one), contemporary and modern (winery two) and grandiose and impressive (winery three).

The cellar door offers the perfect setting to communicate the wine brand values, engender customer loyalty and generate sales. From the visitor's perspectives, it should be a pleasing sensory experience in order to be stimulating, educational and memorable. Any element of the cellar door environment that compromises this sensory experience should immediately be addressed by winery management. In many cases these may require only minor changes to physical layout or operation of the cellar door, but in other cases structural changes may be required. It is also important to schedule maintenance and cleaning within the cellar door environment, as untidiness and odours will be quickly noted by visitors (Olsen and Thach 2006). Based on the observations in this study, only minor changes are required to the cellar door in winery one, attention to the timing of maintenance is needed in winery two and some structural separation between the restaurant and cellar door would enhance the sensory experience at winery three.

The most significant component of the cellar door experience relates to the interactions with staff. The personality, appearance, presentation skills, winery knowledge, rapport with customers and sales skills of staff members are critical to cellar door service quality. It is therefore essential that wineries have a recruitment process that includes clear criteria for the selection of staff with the personal attributes and technical ability, as well as interviewing and screening procedures to ensure these criteria are met. Staff training is also essential, particularly with respect to methods of engaging with customers, provision of customer services and sales techniques. There is also a requirement to tailor the customer service to different demographic and age groups at the cellar door, with younger wine tourists requiring more personal attention than older wine tourists (Charters and Fountain 2006, Getz and Carlsen 2008). Good signage, displays and provision of technical information (tasting notes) can also assist the staff to deliver the levels of wine information and education required by visitors (Charters and Ali-Knight 2002). Cellar door staff can

embody the wine brand and personality so their physical appearance and attitude should reflect the brand. In terms of the three wineries studied, all staff displayed the ability to engage with the group, although were at times hampered by the setting (wineries two three). They all provided good customer service and displayed good technical knowledge of the wines and the winery.

However, only winery one demonstrated ability to invite sales and it appears that training in professional selling skills designed to meet visitors needs (Root 2004) is needed. Olsen and Thach (2008) have proposed and tested a five-stage professional sales model for winery visitor centres involving (1) Introduction; (2) Needs Assessment; (3) Building Trust; (4) Purchase Assistance; and (5) Ongoing Relationships. Their testing indicates that Californian wineries have "...a lot of work that needs to be done to improve the visitor experience" (p.35). Areas that need attention include the telling the story of the winery by way of introduction, engaging visitors in conversation in order to identify their needs, make sales suggestions and establish a meaningful relationship based on trust. Wineries also need to train staff to promote wine clubs, invite visitors to make a return visit and engage in other ongoing relationship activities rather than just "...pouring wine and telling a canned refrain about each" (p.35).

Finally it is interesting to note the emphasis on wine export sales (ACIL 2002, Trebeck 2004) within the wine corporations and associations that lead the industry, when there is a large potential to increase wine sales through the cellar door beyond \$1 billion dollars annually if cellar door service quality and overall experience is optimised. Service mapping is one useful tool for evaluating the service encounter at the cellar door as perceived by trained observers. This then enables the refinement of the physical setting, staff training and management processes that are inherent in the cellar door experience.

A limitation of service quality mapping using observation is that although , the cellar door experience may be positive it may be as much due to the individual expectation and experience of the observer as the actual cellar door service setting and quality. However, with detailed briefing and instructions to observers it is possible to filter these extant variables and focus on specific dimensions of the phenomenon. This was achieved using the service mapping approach in a structured way and instructing observers to use all five senses, not just taste.

Research can lead to a better understanding of the wine tourist and opportunities to increase wine experiential value and consumer involvement (Charters and Ali-Knight 2002). The importance of quality cellar door experiences has been highlighted as one of the key areas of which

to evaluate a wineries ongoing success (O'Neill and Charters 2000). However, quality service at the cellar door is remain only one factor in the purchase decision for wine consumers, with taste and price of wine also important (Ali-Knight and Charters 2001, Getz and Brown 2005). Future research should integrate both the tangible (price/quality of wine) and intangible (service/experience) dimensions of the cellar door experience and related purchase and post-visit wine purchase and consumption behaviours.

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MANAGING A SUSTAINABLE WINE TOURISM INDUSTRY

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ABSTRACT

This study is part of an on-going qualitative research project into sustainable wine tourism, looking at developments in the wine tourism industry in the Hunter Valley, NSW, Australia, and particular its sustainable development (SD). For this paper, the official Internet presence of selected wine tour operators offering vineyard-tours as well as tastings was assessed by checking home pages and related sub pages for comments relating to SD issues. The study shows that the majority of tour operators do not make any mention of SD issues on their web pages though there were some exceptions. Furthermore, the emphasis in developing SD practices within the wine tourism industry is clearly on environmental aspects though a sustainable development of tourism will require a three pronged approach of economic as well as environmental and social sustainability.

Keywords: wine tourism; sustainability; Hunter Valley

1. WINE TOURISM AND SUSTAINABILITY

This study looks at developments in the wine tourism industry in the Hunter Valley, NSW, Australia, and particular its sustainability. In the following sections the article will provide a short introduction to the term ‘Sustainable Development’ (SD) and outline contemporary wine tourism in the Hunter Valley before discussing experiences with sustainability in the wine tourism industry. Finally, it will discuss the case studies of several tour operators with differing commitment towards SD as indicated by their official web presence.

Wine tourism is being developed in many regions around the world (see Getz, 2000; Hall et al., 2000) including the Hunter Valley. The Hunter Valley is a significant contributor to the NSW economy (Department of State and Regional Development, 2009) and its sustainability is a concern (Hunter Valley Vineyard Association, 2009). Contemporary wine tourism can include such diverse activities and locations as Wineries, Attractions and Galleries, Events, Tours, Accommodation, and Restaurants. Overall, there are around 120 wineries and cellar door that offer tastings, sell wine and local produce, and offer catering and/or tours (Hunter Valley Wine Country, 2009a). The issues in developing and maintaining a sustainable rural tourism relate both to a more sustainable wine production as well as destination sustainability (social, moral, economic, agricultural and infrastructural impacts).

The Australian wine industry and grape growers seem well aware of the environmental and political issues surrounding wine and wine tourism, and the Winemakers’ Federation of Australia Incorporated (WFA), the national peak body with voluntary membership representing more than 90% of the wine produced in Australia, states its commitment “to the continual improvement of its environmental performance. Accelerating the adoption of ecologically sustainable practices throughout all aspects of its operation is critical to its future success and will ensure the needs and expectations of the wider community and customers are met” (WFA, 2009). The organisation developed a Wine Tourism Strategic Business Plan 2000-2005, building on the previous work done on the National Wine Tourism Strategy (1998) and National Wine Tourism Implementation Plan (1999) as well as maintains a central database of wine tourism publications and research, and publishes a series of fact sheets providing practical information for winery operators, and participates in a wine tourism workshop programme.

The need for radical changes to address some of the extreme economic, social and environmental imbalances in modern development has been postulated for years. The increasingly popular idea of

SD suggests a holistic approach to (at its most extreme radically) modify the current socio-economic situation to allow an enduring and just living standard for humanity and its co-inhabitants on Earth. The term was first used in forestry where its principle postulated to take only as many trees as could be grown in a certain time unit (Eblinghaus and Stickler, 1996). In the 1970s the United Nations started discussing the concept in a more general way (Tosun, 1998) and eventually defined it as a development that “meets the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations, 1987). It seems it is no coincidence that the opposing terms of (‘positive’ as ecological) sustainability and (‘negative’ as industrial) development were merged (Wichterich, Zillmann, Sibum and Quistorp, 1997) to signal that economic growth and environmental preservation were not to be seen as mutual exclusive (compare Gwynne and Silva, 1999b). Either way, the term was popularised during the Earth Summit in 1992 and since then has increasingly gained popularity among experts (Wichterich et al., 1997) as well as the general public. SD has developed into a guiding principle for global as well as regional developments (Brand, 1997) and consequently has relevance for the tourism industry. Yet elaborations on what exactly SD encompasses are diverse (compare Schröter, 2002; Wichterich et al., 1997), which is at least partially due to the political nature of the international debate (see Brand, 1997).

Either way, the term has found its way into mainstream debate as well as into tourism debates (e.g., Cohen 2002; Collins 1998; Holden 2003; Teo 2002). A statement by the World Tourism Organisation (WTO) proposes that “sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments. Sustainability principles refer to the environmental, economic and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee long-term sustainability” (World Tourism Organisation, 2004). The emphasis on balancing all three dimensions is notable as the SD discussion is often shortened to economic or environmental aspects.

The Australian wine industry and grape growers seem well aware of the environmental and political issues surrounding wine and wine tourism (see Winemakers’ Federation of Australia Incorporated, 2009). Furthermore, a shift in consumer behaviour to more environmental conscious behaviour could advantage those wineries that adopt and successfully communicate sustainable practises to their respective customers. In order to establish the extent of sustainable practises and their possible

role in marketing, a sample of promotional materials of selected wineries of the Hunter Valley was conducted and qualitatively analysed.

2. METHODOLOGY

This study is part of an on-going qualitative research project into sustainable wine tourism, looking at developments in the wine tourism industry in the Hunter Valley, NSW, Australia, and particular its sustainable development (SD). For this paper, the official Internet presence of selected wine tour operators offering vineyard-tours as well as tastings was assessed by checking home pages and related sub pages for comments relating to SD issues. The Hunter Valley Wine Country organisation (2009d) lists more than 20 categories of activities, of which the two categories 'Wineries Offering Wine Tours' (8 operators) and 'Cellar Door Tasting' (19 operators) have been surveyed in greater detail. The web presence of all listed operators was investigated, with a special focus on homepages and 'about us'-pages. The major limitation is that only publicly accessible information could be evaluated, which might not always give the 'full picture' of an organisation's involvement and commitment towards SD. Thus a follow-up study has been initiated.

This follow-up study will examine how knowledge in regards to sustainable practices circulates within the tourism industry of the Hunter region. This will involve an examination of (1) the role values play in adapting more sustainable practices and (2) the role of knowledge 'gatekeepers', particularly in relation to successful initiations and implementing of more sustainable practises.

The main expected outcome is the development of a critical understanding of the current developments and issues regarding sustainable tourism in the Hunter region including an identification of the key players (through literature research, trade publications, family tours, and interviews).

For now, the findings of the explorative study will be discussed in the following section.

3. FINDINGS

25 wine tour operators and their stance towards SD are assessed by analysing their publicly accessible marketing of their official Internet presence. This, of course, 'only' indicates the individual tour operator's decision to publicise issues of SD in which they see themselves involved,

while there might be reasons for not mentioning certain management plans and/or actions towards SD. However, as such incidences cannot be investigated properly in the scope of this study, only the publicly accessible information as disclosed through the official web presence of the tour operators has been investigated.

The online assessment indicates an importance that most business seem place on the natural environment as they include (often picturesque) images of their vineyards as well as describing the natural resources they utilize. However, hardly any of the operators talk specifically about issues of SD (see Table 1: Individual Operators in the category ‘Wineries Offering Wine Tours’ and Indicators of Their Involvement in SD and Table 2: Individual Operators in the category ‘Cellar Door Tasting’ and Indicators of Their Involvement in SD).

Table 1: Individual Operators in the category ‘Wineries Offering Wine Tours’ and Indicators of Their Involvement in SD

Name of Operator	Mentioning of SD issues, including environmental issues
Cruickshank Callatoota Estate http://www.cruickshank.com.au/home.htm	no
First Creek Wines www.firstcreekwines.com.au/site/index.cfm?PageMode=indiv&module=NEWS&page_id=90080&leca=293	yes
Hermitage Road Cellars http://www.huntervalley.com.au/wine/winetours.htm	no
McGuigan Cellars http://www.mcguiganwines.com.au/AboutUs.aspx	no
Margan Family Winegrowers http://www.margan.com.au/about_margan.php	no
McWilliam's Mount Pleasant	no

http://www.mountpleasantwines.com.au/fe.htm	
Tyrrell's Vineyards	no
http://www.tyrrells.com.au/about/our-philosophy.aspx	
Wyndham Estate	no
http://www.wyndhamestate.com/Wyndham.html#/Facts/	

Table 2: Individual Operators in the category 'Cellar Door Tasting' and Indicators of Their Involvement in SD

Name of Operator	Mentioning of SD issues, including environmental issues
Gartelmann Wines	no
http://www.gartelmann.com.au/epages/gartelmann.sf/en_AU/?ObjectPath=/Shops/gartelmann	
Ghost Riders Vineyard	no
http://www.ghostriderswines.com.au/about.htm	
Glandore Estate	no
http://www.glandorewines.com/main.php	
Hermitage Road Cellars	no
http://www.huntervalley.com.au/wine/winetours.htm	
Hope Estate	no
http://www.hopeestate.com.au/index.php?page=1	
Hungerford Hill Wines	no
http://www.hungerfordhill.com.au/hungerfordHills/HhHistory/	
Hunter Valley Winegrowers Tasting & Sales Centre	no
http://www.huntervalleywinegrowers.com.au/About_Us	

html	
IronBark Hill Vineyard	no
http://www.ironbarkhill.com.au/news.php#	
Ivanhoe Estate Vineyard	no
http://www.ivanhoewines.com.au/site/index.cfm?display=64470	
Keith Tulloch Wines	no
http://www.keithtullochwine.com.au/templates/content.aspx?edit=false&pageID=12	
Kelman Vineyard	no
http://www.kelmanvineyard.com.au/default.aspx?tabid=2333	
Krinklewood Vineyard	yes (biodynamic)
http://www.krinklewood.com/	
Lindemans Wines	no
http://www.lindemans.com/au/	
Littles Wines	no
http://www.littleswinery.com.au/about.htm	
Macquariedale Estate	yes (biodynamic)
http://www.macquariedale.com.au/	
Majors Lane Wines	no
http://www.winecountry.com.au/InformationSheets/WC_ShowInfoSheet.asp?sheetNo=597	
McGuigan Cellars	no
http://www.mcguiganwines.com.au/AboutUs.aspx	
McLeish Estate	no
http://www.mcleishhunterwines.com.au/index.html	

http://www.margan.com.au/about_margan.php

The very low number of operators addressing issues of SD and/or environmental managing programs is surprising, especially seeing that the Hunter Valley Wine Country, the official Tourist Information Website for the Hunter Valley, actually mentions organic and biodynamic production on its homepage (Hunter Valley Wine Country, 2009b).

However, some relevant information regarding a pro-active stance towards SD is deeply hidden in sub pages and thus nearly inaccessible to the browsing tourist. For example, some operators participate in the ‘Hunter Cleaner Production Program’ that offers businesses a method to achieve environmental best practice and economic efficiency, and involves reducing the use of energy, water, and material resources to minimise waste and increase operational efficiency (Department of Environment and Conservation and the NSW Department of State and Regional Development, 2009). First Creek Wines, for example, is participating in this program to “improve the efficiency of its operations and achieve substantial cost savings; reduce its demands and impact on the environment; strengthen the commitment of its workforce to cleaner production practices; gain a competitive edge in the local market; and enhance its ‘clean, green’ credentials as an Australian wine producer” (First Creek Wines, 2009). It is not clear how many other operators might be participants in this program though a information request to the Department of Environment and Conservation and/or the NSW Department of State and Regional Development would bring more details up.

Furthermore, there are several Organic Wineries, including Hermitage Road Cellars, Hunter Valley Cellars, Macquaridale Estate, Savannah Estate, Tamburlaine Wines and Windarra Winery. And while these wineries only present a small percentage of the overall numbers of wineries in the Hunter Valley (see Figure 1: Percentage of Organic Wineries in the Hunter Valley), it can be surely assumed that SD issues play a crucial part in the decision to convert to Organic and/or Biodynamic operations.

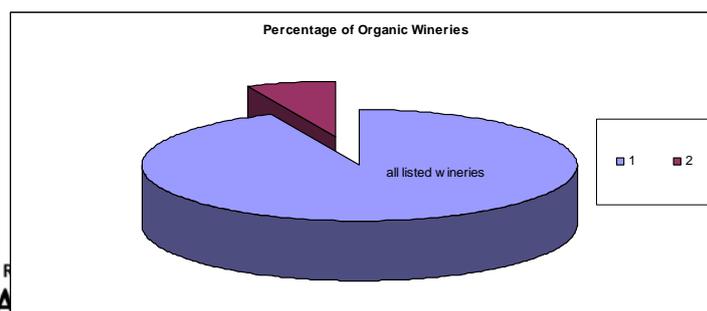


Figure 1: Percentage of Organic Wineries in the Hunter Valley)

A further complication is that wineries might have developed personalised and often hard to measure attitudes and practises that might well align with sustainable practises. Kurrajong Vineyard, for example, talks about its own approach to Sustainable Agriculture (SA): “It is important to note that sustainable and organic farming are not necessarily the same thing. Some practices can be sustainable but not organic, and vice versa. One area where this is particularly true is weed management. In areas of higher weed pressure organic practices require a lot of energy and therefore produce a lot of greenhouse gases, either because many passes of mechanical treatment are used, or steam or flame methods must be used. In comparison, the use of a synthetic herbicide may result in much less energy use, and thus be a more sustainable practice when the bigger picture is looked at” (Kurrajong Vineyard, 2009).

Still, the low numbers of tour operators specifically addressing SD issues is somewhat surprisingly low seeing that the media and increasingly also the tourism literature suggest the rise of the ‘green consumer’. This new type of mass consumer is supposed to actively seek more environmentally friendly businesses and/or services. Consequently, organisations communicating such environmental friendliness might gain a competitive advantage. And yet not many wine tourism operators chose to disclose their environmental attitude and/or action. For the time being, the emphasis in developing SD practices within the wine tourism industry is clearly on environmental aspects with no operators mentioning, for example, the ethical (compare Macbeth, J. 2005) and socio-cultural aspects of SD. But it is clear that a sustainable development of tourism requires the three pronged approach of economic as well as environmental and social sustainability. The WTO guidelines seem to acknowledge this by emphasising the scope of issues including viable, long-term economic operations that relate to host communities, community participation and consensus building in tourism planning and development, as well as raising tourists’ awareness about sustainability issues and promoting sustainable tourism practices (World Tourism Organisation, 2004).

In Australia further theoretical and applied research is conducted by the Australian Government through Tourism Research Australia and its International Visitor Survey (IVS) and National Visitor Survey (NVS), Australian Bureau of Statistics, the Sustainable Tourism Cooperative Research Centre (STCRC) with up-to-date summaries of what research is available and others, as well as State and Regional Tourism Organisations, universities, the wine industry and private companies and consultants. Such research shows a trend towards thematic groupings and networks among wine tourism stakeholder (Burton, 2000), urging investigations into ‘how organisations initially establish and extend their networks, along with the underlying communication mechanisms, in order to sustain learning processes, the generation of new knowledge generation and the transfer of acquired knowledge’. It has been argued that “a cohesive, regional approach that incorporates the needs of all stakeholders is required, based on a thorough understanding of visitor needs and expectations. Wineries of all sizes stand to benefit from a strategy that allows them to partner effectively with other tourism attractions and facilities that meets the needs of their target market” (Winemakers’ Federation of Australia Incorporated 2009).

4. CONCLUSION

It has been established before that the contemporary wine tourism industry in the Hunter Valley is a diverse industry, and that there are no binding guidelines across the wine tourism industry nor are there attempts to coordinate SD management plans and actions yet. Instead there are individual attempts towards more sustainable business practises. Many of these are, however, focussed on ‘End-of-Pipe technologies’ of increased fuel efficiency and recycling. In fact, recycling typically the first management action to be adopted in environmental business practice (Michalos, Creech, McDonald and Hatch Kahlke, 2009; see also Arbuthnott, 2009). Critics believe that such End-of-Pipe technologies are not truly sustainable as they represent ‘just’ a technological adaptation without any indication of a change in consciousness (see, for example, Dangschat, 1997). In doing so the current socio-economic system is not changed significantly and truly green technologies and initiatives are ignored. In other words, the challenges to adopt truly sustainable practices that combine the environmental, economic and socio-cultural aspects of tourism development are enormous.

Firstly, the wine tourism industry is located within the wider tourism industry, which in turn is set in a specific socio-economic system that currently thrives on non-sustainable business practises.

Furthermore, it is not clear how the demand side responds to the challenges of SD. Previous “efforts to understand and predict why individuals acting an environmentally appropriate manner have generated a considerable body of literature” (Vaske and Kobrin, 2001:16) and so far studies show “no direct relationship between environmental awareness and pro-environmental behaviour” (Hildebrandt, 1997: 237). In other words, while there is much talk about the ‘new green consumer’ there are also indications that nothing much has changed since the Earth Summit and the release of its blueprint *Agenda for the 21st Century*. There are indications that a ‘green paradigm’ is challenging the dominant western environmental paradigm but the shift in beliefs and attitudes could take decades to complete. In the meantime it is down to individual tour operators to act, and this explorative study showed the great variety in their action and non-action. In the long-term “achieving sustainable development involves a different way of thinking and working. It requires looking after people, taking the long-term view, taking account of the social, economic, environmental and cultural effects of our decisions and encouraging participation and partnerships” (Department of Prime Minister and Cabinet, 2003). Or in the words of prominent members of the Australian Wine Industry: “we can’t afford to have business as usual, it’s not a viable option... We need to really think about profitability and sustainability ... for survival” (Smedley cited in ABC News 2009) and “for us it’s about long-term sustainability and ensuring the industry is still viable into the future” (Krieger cited in Page 2009).

However, people can only operate within the given structure and as Arbuthnott (2009) notes, the “barriers to intended actions and social norms have a strong influence on whether or not intended behaviors are accomplished. Thus, changing the physical and social environment to make sustainable behaviors less difficult and more socially valued will enable those with weaker attitude changes to behave more sustainable. In this way, changing contextual factors is likely to have the largest impact on sustainable behavior and development” (Arbuthnott, 2009: 159). Such structural change achieved in a combination of ‘top down’ as well as ‘bottom up’-approaches might be around the corner or not come for years; consequently only the future will show how sustainable the wine tourism industry can and will develop.

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KEY FEATURES OF THE HUNTER VALLEY WINE CLUSTER

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ABSTRACT

We outline the key features of the Hunter Valley Wine cluster through reviewing its history and development; outlining its organisational features and reflecting on the abiding and unique characteristics of the cluster are. We then turn to prior review and analyses of the Hunter Valley Wine cluster in order to highlight the key features from these studies. Following we then include an analysis of prior studies of wine clusters in order to highlight information flows in the Hunter Valley Wine Cluster. The article serves as a background to the understanding and evaluation of the Hunter Valley Wine Cluster.

INTRODUCTION

Wine grapes were among the first crops planted by Europeans when they came to Australia in the eighteenth century, and wine has been produced ever since. Wineries were established in the Hunter Valley in the 1840s, and early wine pioneers were Wyndham and Lindeman, both well known names in the Australian wine industry. Until the 1960s, domestic demand was small and was mostly for fortified wines, while exports were inconsequential. A re-orientation of public tastes, to some extent as a response to skilled promotion and advertising, but also reflecting the influx of European immigrants in the years after 1945, boosted the wine growing industry in the Hunter Valley as it did elsewhere in Australia (Halliday 1979; Beeston 2002). Beginning in the 1970s, a few individuals who were industry leaders (Len Evans, Max Lake, Ian Croser) and ambitious for the industry as a whole collaborated to raise awareness of the potential of the Australian wine industry, to promote it and lobby government for support, especially in regard to exports.

Growth and change have been rapid in all Australian wine growing regions in the last twenty years to the extent that 73% wineries in Australia have been established since 1980. At the same time rationalisation and mergers have resulted in the concentration of ownership in the top four companies (60% of national crush), Foster's Group and Hardy Wine Company accounting for 42% of all branded wine sales. The big 4 also dominate export sales (approx. 70%) (AWBC 2007). Most wineries in Australia (71 per cent) are small in scale, crushing less than 100 tonnes annually. In

contrast to the large-scale production in Victoria and South Australia, the Hunter produces only .05% of the wine grapes grown in Australia. (www.winebiz.com.au/statistics accessed 2/10/07; Marsh and Shaw 2000;)

Part of this rapid growth has resulted from government assistance, directed at research and development as well as in international marketing. Industry associations were formed progressively under the stimulus of government initiative but were and remain largely funded by statutory levies, and member subscriptions. The Australian Wine and Brandy Corp (est 1980) provides market development, promotion etc., information and regulatory administration funded by statutory levy and fee for service. The Grape and Wine Research and Development Corporation (GWRDC) (est.1991) which is a statutory authority financed by producers' levies matched by government funds and based in South Australia, serves as a central clearing house for funding research and development. Exports have been actively supported by government and by collaborative efforts between government agencies and industry associations. Industry leaders were later to recognise the importance of collaboration culminating in Strategy 2025 (Marsh and Shaw 2000).

As the map (fig1) shows, the parts of the Hunter Valley where the wine industry dominates is situated about 160 kilometres north of Sydney and close to the major population centres of Sydney, Newcastle and the Gosford. The service centre is the town of Cessnock, with a population of 18,000, and the wine growing district which is close to it enjoys a moderate climate, with a mean temperature range of 11 to 24 degrees C, and an annual rainfall of about 750mm, most of which falls in the growing season. Undulating vineyards and farms with the backdrop of wooded hills makes for pleasant scenery and attractive to tourists. About 4,000 hectares are under vine (McDonald 2005).

Figure 1 Location of the Hunter valley



Source: <http://www.winecountry.com.au/viewmap.aspx>

Key Features of the Hunter Valley Wine Cluster

Its location has meant that the wine industry has of necessity developed a close relationship with recreation and tourism. A variety of accommodation and recreational facilities such as golf courses, formal gardens, specialty retail shops, restaurants, conference venues, health spas, tour operators and so on attract visitors for the day or the weekend. It is estimated that there were around 2.3 million visitors to the Hunter Valley wine district in 2005 (Cessnock City Council, 2007). Many of these were wine tourists who patronised the wineries' cellar doors to taste and purchase wine. This close association is of interest because the particular market allows and encourages small wineries to exist where they would not be able to compete in another context. One vigneron explained "when I first came here [in 1985] my comment to my shareholders was that I think we are almost first in the tourism business and then in the business of growing good grapes and making great wine" and another explained that his family realised early that "the only way we could survive was to get people to come to our wineries and buy our wine" (ABC, 1997). Marketing is directed in several directions – through major retail outlets, direct sales via the cellar door, multi-channel sales via the web and/or cellar door, and restaurant sales or independent retail outlets (usually dependent on direct contact with the winery).

Max Lake was one of the pioneers of this development in the Hunter. As he described the district in the early 1960s “I saw an area that was languishing, was a cattle driven economy that five families had made wines [and] weren’t surviving on them [sic]” (ABC 1997). This part of the Hunter basin had long been dominated by underground coal mining, with dairy farming and agriculture playing a minor role in the local economy. A number of small towns, of which Cessnock is the largest, provided support for these industries. As coal mining operations slowed from the late 1950s, vineyards and wineries, and those who visited them, began to play an important part in the economy of the lower Hunter. Now, open cut mining for coal in the upper Hunter Valley and associated electricity generation co-exist somewhat uneasily with a small number of wine growers, along with beef cattle producers and the thoroughbred horse industry.

The Hunter Valley wine cluster is thus characterised by a large number of relatively new and typically very small vineyards and wineries and a smaller number of much older but not necessarily large wineries. The word ‘boutique’ describes many small and micro-businesses that grow grapes, produce wine or provide tourist facilities. The Hunter is a small wine growing area in terms of the grapes and wine it produces, (35,000 tonnes of grapes crushed each year of the 415,000 tonnes in NSW and 1.5 million tonnes for the whole of Australia (www.winetitles.com.au 2005, 2006) but these come from about 150 wineries, (there are 432 in NSW and 2,146 Australia-wide at recent estimates), with 97 of them established in the ten years 1991-2002 and a hundred more between 2002 and 2007 (www.winebiz.com.au/statistics/wineries.asp accessed 12.10.07). The Hunter concentrates on medium, small and micro-businesses which produce wines of all qualities, but it promotes an image of boutique and/or high quality wine and thus seeks to enhance the reputation of the district as well as that of the individual winery. It has been suggested that regional reputations have become increasingly important in securing high prices for wine (Schamel and Anderson 2003). The economic value of this grape and wine industry exceeds \$350 million and it employs 1240 people full time directly, another 480 in associated activities on grape and wine producing properties (McDonald 2005).

Less than half of the wineries in the Hunter crush grapes on site (Brooks et al. 2004) but almost half export at least some wine overseas (www.winetitles.com.au accessed 30.8.07). A minority of producers have well-known brands and have ready access to the mainstream liquor markets in Australia and overseas via well-established distribution channels. Frequently in the Hunter as elsewhere, ultimate ownership and control of vineyards, wineries in the district and of related firms such as suppliers and distributors within the cluster resides with national and multinational

companies or with non-resident investors. In this way the Hunter wine cluster has links with other wine clusters, especially in the so-called New World, but in fact all over the wine-consuming world while also operating within a relatively small geographical area with particular natural and industry characteristics. A recent trend is for the larger multinational companies to withdraw from the Hunter (Foster's Group media releases, 30/8/05 and 29/6/06).

The wine industry in the Hunter Valley of NSW has can be regarded as a spontaneous or resource-based cluster because it depends on site-specific characteristics, namely the 'terroir' for wine production, its proximity to its market and its attractiveness as tourist destination (Mytelka and Farinelli 2000). Its physical boundaries and its place within the larger cluster of the Australian wine industry are made fluid by the relationships between actors in the Hunter and in the wine industry as a whole. At the same time, its development has been to some extent dependent on industry-wide trends, some of which have received assistance or encouragement from government or government-sponsored bodies which have responsibilities to the industry as a whole. Their relationships with other parts of the local economy and with the tourist trade are also significant.

The interdependence between wineries and with local businesses is easily seen. There are close relationships between viticulturists and wine makers working in different vineyards and wineries across the region, and these are supported by formal and informal networks for information exchange and learning. The Hunter Valley Vineyard Association is a trade association with a wide membership among grape growers and wine producers and it provides an informal network for co-operating in promoting the cluster as well as being a conduit for knowledge sharing among members, between members and other firms in the sector (such as equipment suppliers); and between members and the research and education arms of the sector, most of which are not located nor exclusively interested in the Hunter. Thus there are (mostly indirect) links with parts of the Australian wine cluster that are geographically remote. The main educational and research institutions and the national trade and industry organisations are located in South Australia: some links are mediated through the larger wine firms and some through the HVVA. Kurri Kurri TAFE offers a two year full time course in vineyard management and winemaking. The state (NSW) Government regulates cellar door and other licenses and offers some support for regional industries, but the Export Council, and Austrade are federal government entities with responsibility to the wine industry as a whole (AWBC 2007b). One function of the Hunter cluster is to position itself to take advantage of these inputs from lateral actors.

Vertical integration occurs in some wineries but elsewhere, grapes are crushed, wine is made, bottled, carted and distributed by contractors or agents who have links throughout the district and often beyond. This necessitates a high level of co-operation between the various contractors and growers. Frequently the owner or chief officer is also the wine maker, but a group of about eight professionals are employed as contract winemakers to a number of wineries and in several cases this is in addition to owning their own vineyard and winery (www.winebiz.au/wineries/regions). These individuals have wide industry experience, and might be expected to be sources of expertise, knowledge and innovation along with wine makers and grape growers who can readily tap into the resources of larger inter-regional producers (Guiliani and Bell, 2005).

Generally, bottles, seals, cartons, printed labels and so on are sourced from manufacturers or agents who operate in more than one region. Logistics are handled by experts who have links throughout the industry and of course with other industries. Exports typically are arranged through distributors or shipping agents in Sydney. This means that even the smallest vineyard has links with other operators both inside and outside this district. Expertise may also be pooled: there is a contract wine making facility which is used by more than 90 vigneron to make some or all of their wine, especially sparkling wine, and to bottle, label and pack it (www.petersonhouse.com.au/winery accessed 4.9.07). In other ways, producers have a close relationship with local businesses on whom they rely for goods and services.

The Hunter is close to suppliers and distributors in Sydney and Newcastle. Logistics, as in storing, packing and transportation, can be supplied from these major urban centres, often as easily and cheaply as if they were closer to the wineries. While specialist suppliers and support services do exist in the local area, the small volume produced and the Hunter's convenient location also blurs its boundaries. The wine industry shares products and services with other rural industries in a much broader geographical area. An example of this might be a machinery franchise which supplies equipment to vineyards and wineries but also to other kinds of farmers, local government, operators of tourist and recreation facilities and the construction industry

The rural setting and its ambience also attract retirees and 'weekend vigneron.' They may be seeking a 'tree-change' or looking for an opportunity to invest or participate in the wine industry, seeing this as an attractive way of life (lifestyle choice) or source of additional income. These range from the 'hobby' operation involving family members and friends on a shoe-string budget to

significant investments employing skilled staff, well-developed business plans, a capital outlay amounting to many millions of dollars and an expectation of a reasonable return on investment.

Further, the cost of land is relatively high: this is related to the geographical location and the demographics of the area, and its implications are twofold (at least). The land itself, and the ‘terroir’ that defines it, is of course finite. Apart from vineyards, land in this locality is desirable for housing, tourist accommodation and in related uses such as golf courses. The vineyard area is in demand from city-based individuals and families who are seeking a particular lifestyle.

High land values together with small volume and a multiplicity of SMEs are reflected in the relatively high cost of production in the Hunter and its small output compared to other areas. The implications of this high cost basis for wine production is the perceived need to produce premium wines that attract a high price in the market, and the need to market these ‘boutique’ small volume wines in the face of increasing concentration of liquor retailing in the hands of a small number of large corporations: chiefly the dominant supermarket chains. It also presents some unique and interesting marketing challenges and poses some questions about competitiveness.

A survey based on information provided on an industry website (www.winebiz.au/wineries/regions) listed 149 identified wineries, but may not be a complete list. Of these 149, only 26 did not offer the facility of a cellar door. According to NSW Liquor Act, wineries can establish a ‘cellar door’ for the purpose of making direct sales of wine. Usually, but not always, the cellar door offers wine for tasting and sales and is typically open at weekends to accommodate the tourist and recreational visitor to the district. Complementing the cellar door, most of the wineries (all but 38) had a website or email address which enabled wine to be ordered directly from the vineyard. In two or three cases the website was ‘under construction’ or the link provided did not operate. In addition, most of the wineries listed at least one extra activity or facility which gave it a point of difference or competitive edge. This ranged from simple picnic areas to function rooms for weddings or conferences, to cafes and restaurants, from corporate gift hampers to olive oil and jars of pickles or an art gallery and from a self-catering cottage for weekend rental to land developments and holiday villas for sale. Some advertise organic wine, biodynamic growing regimes or other specialist product.

The association between wine and tourism has been exploited in many districts throughout the world (Getz 2000; Beames 2003) but the Hunter’s proximity to Sydney has given wine tourism in

the Hunter a particular flavour. Recreation, food, wine and accommodation have developed together but not always in harmony as the wine/tourism cluster has evolved over the last 25 years. For the Hunter tourism is a related industry cluster which overlaps and co-exists within the district. The Hunter Wine Country Visitors Guide (2006), a commercial directory aimed at tourists, lists over 180 places to stay, be they self-contained cottages, motels, guesthouses, bed and breakfasts or large resort complexes. Cessnock City Council estimates 3,000 rooms to the end of 2005, an increase from 1472 rooms in 1999 (Cessnock City Council 2007). Tourism-related businesses offer horse riding, horse-drawn coaches, aeroplane and hot air balloon flights, golf, beauty spas, and day tours. There are a number of high-end restaurants as well as cafes (more than 65 food outlets in 2007) and retail outlets selling craft items, souvenirs, gourmet foods, wine accessories and so on. Ancillary businesses cater to weddings, conferences and other functions. Some of these attractions are within or closely associated with wineries or vineyards; some are not.

In recent years this close relationship has extended as wineries have become the site for concerts from opera to jazz to pop and including internationally renowned artists, festivals of food and wine, sporting events and the like. In all these cases, accommodation for visitors, the opportunity to enjoy a short break from city life and to taste or buy wine, have been packaged and marketed. In most cases, the Tourist Association provides the ticketing and much of the marketing, but individual wineries and the Vineyard Association are also involved (HVTA 2007).

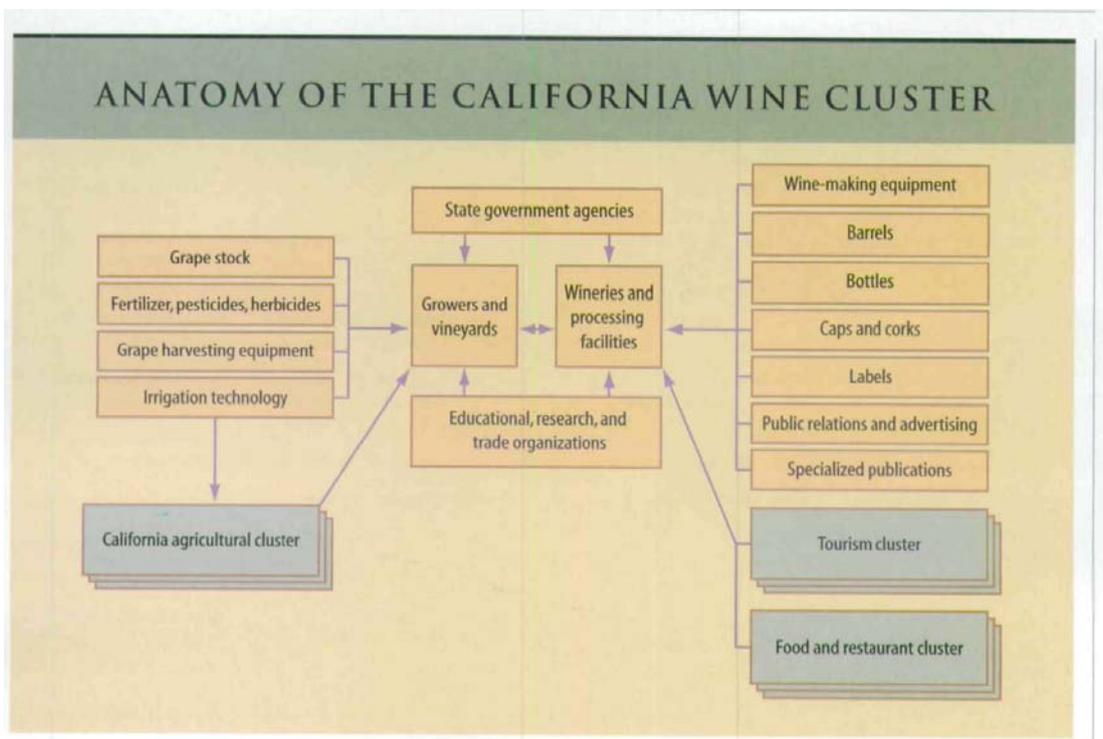
Analysing Wine Clusters

Through cluster frameworks a cluster can be represented in terms of a few key dimensions that summarise the structure and the relationships that are present within a cluster. The cluster map also attempts to capture the underlying dynamics of a cluster and what is unique about the cluster being examined. The wine industry has been mapped by several researchers who have sort to highlight key features pertinent to the wine industry and present within the studied wine cluster. Wine is readily suited to cluster analysis and mapping: there is regionality and close association between producers and there is often long history of clustering activity taking place.

The pioneer research on clusters was conducted by Porter (1990) who developed a framework to highlight the factors that contributed to the contribution of clusters in regional development. Subsequently Porter (1998) mapped the Californian wine cluster (see figure 2), and later applied his map to the Australian wine industry (Porter and Bond 2004). In doing so he included the whole of

the south east Australian wine industry as his subject, making it a particularly large cluster geographically. There is much to be said for this schema, which shows the cluster inputs. Porter has recognised that the wine cluster is embedded in a larger community that includes other forms of agricultural production as well as tourism and what he calls the ‘food and restaurant cluster’. Also significant is the recognition given to institutional and infrastructure support to the cluster – grower organisations and government agencies. Missing from his framework are some key inputs such as logistics (transport, storage) and the distribution channels which are relevant to the Hunter wine region, together with the important role that consultant agronomists and winemakers play. In other respects, though, the main elements of the local wine cluster fit comfortably into a cluster model which looks much like Porter’s.

Figure 2 Porter’s Mapping of the Californian Wine Cluster



Source: Porter, 1998.

Porter considers the cluster to be contained within some sort of geographical boundary, although we might say he takes a broad view of this in relation to the Australian cluster, but emphasises that access to shared resources add to the efficiency, productivity and flexibility of all the players via economies of scale, that complementarities develop with the cluster and that competition within the cluster for prestige, pride and market share spur each one to greater efforts. Resources are shared and the value of the whole becomes greater than the sum of its parts would otherwise be: hence that all-important ‘competitive advantage’ of a cluster.

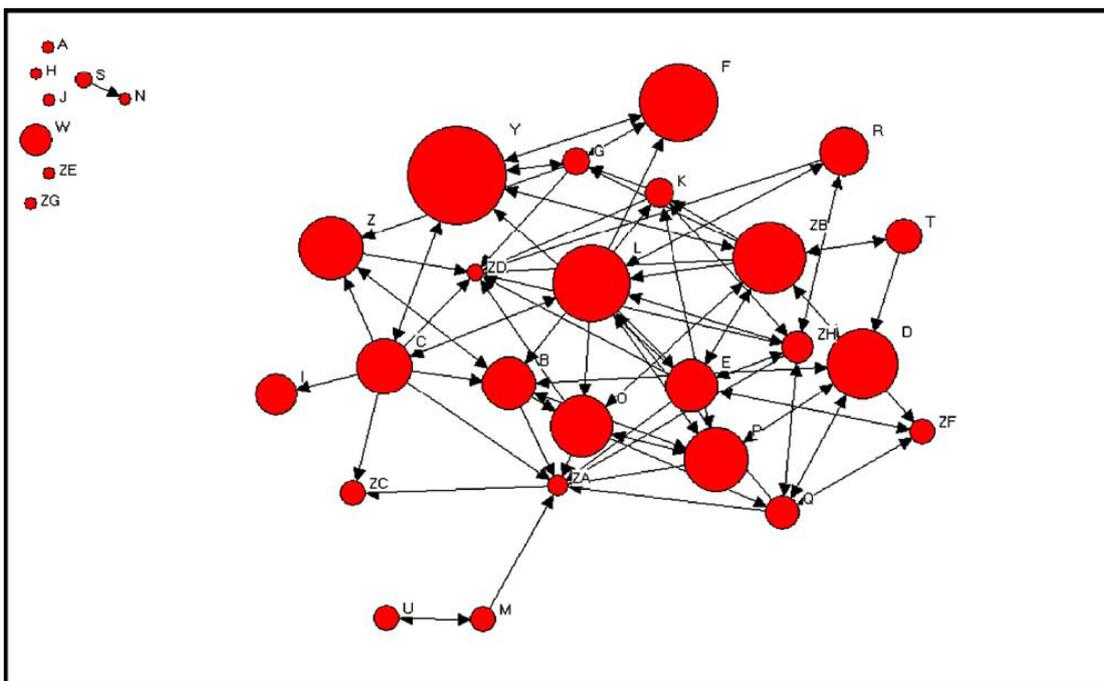
More recently, there has been considerable interest in the way resources, especially the resource of knowledge is acquired and distributed within clusters. (Giuliani and Bell 2005) studied the way in which knowledge is gained and shared in a wine growing district in Chile. This is an area characterised by the recent rapid increase in grape and wine production and in new equipment and techniques, with a critical role being played by international expert consultants (‘flying winemakers’) who have brought new levels of experimentation and innovation. In contrast are micro and small grape growers who have traditionally produced wine for their own consumption or to sell as bulk wine. The research interest was at the level of the organisation but was directed at mapping pathways of learning and innovation within the cluster as a whole.

Using social network analysis, Guliani and Bell (2005) examined the different roles played by firms within the cluster and the overall structure of knowledge exchange. They discovered a core group of firms with what they called ‘advanced absorptive capacities’ but others would probably consider openness to innovation or connectedness, that were ‘technological gatekeepers’ occupying a central position in acquiring and transferring knowledge from outside the cluster and innovation within it. These firms are more likely to make linkages outside the cluster and also with other local firms, especially other firms with the capacity to absorb knowledge and, like them, act as nodes for the exchange of knowledge within the cluster. Other firms exchange knowledge within the cluster to greater or lesser degrees, and may be primarily the source or the recipient of learning and have different linkages both within the cluster and in relation to extra-cluster sources of knowledge. Still others remain isolated from knowledge exchange within the cluster may and may not have links to extra-cluster sources of knowledge. Among this last group are those ‘external stars’ that have limited intra-cluster linkages but are open to extra-cluster learning.

This study highlighted the importance of the individual firm in the cluster, by focussing on ‘the capacities of the individual firms to absorb, diffuse and creatively exploit knowledge that shaped

the learning dynamics of the cluster as a whole' (p 64). Their map is of the linkages between firms within the cluster, and does not concern itself with extra-cluster relationships (see figure 3). This representation highlights the different capabilities and resources available to firms across the cluster and it highlights the importance of networks in facilitating information exchange within the wine cluster.

Figure 3 Local knowledge system in the Colchagua Valley (Guiliani and Bell, 2005, 57).



(Arrows show direction of knowledge transfer; diameter of the nodes is proportional to firms' absorptive capacity.)

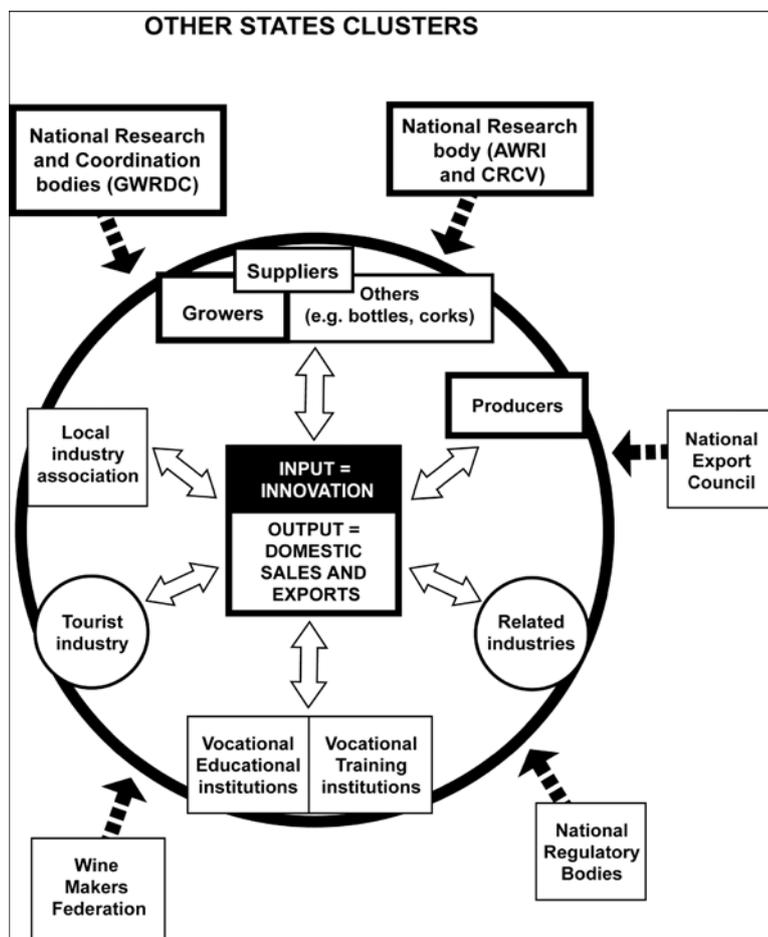
This study is interesting in the context of the Hunter wine cluster because it isolates learning and knowledge exchange from other cluster activities. The wine firms with the biggest influence in terms of skill and knowledge transfer are not necessarily the largest in terms of production. Innovation results both from activities within the cluster and expertise imported from outside it. In this case it is most often from ‘flying winemakers’ but in the Hunter we would find some of those, but also input from research and development institutions such as GWRDC and the universities and colleges as well as a spillover of knowledge from in-house R&D or from collaboration between wine firms and research institutions such as Commonwealth Scientific and Industry Research Organisation (CSIRO) (Dunstall and Johnston 2005).

Aylward and Glynn (2006) have created a cluster framework to differentiate between the South Australian wine cluster, which they see as the most developed and most innovative of the wine regions in Australia, and others which are less developed or innovative (see figure 4). Following Mytelka and Farinelli’s (2000) distinction between informal, organised and innovative clusters, they differentiate between clusters in terms of levels of integration using the terms ‘embryonic,’ ‘organised’ or ‘less developed’ and ‘highly developed’ or ‘innovative’, particularly in regard to success in international sales (exports) of wine (Aylward 2004a; Aylward 2004b). In this approach the relationship between wine production and institutional actors such as universities and national research bodies is considered important. The main criteria for assessing innovation is that of exports.

The faster increase in exports by volume, number of markets and value of the South Australian segment of the industry together with hugely increased product differentiation, technical innovation and marketing innovation in South Australia compared to wine producers in Victoria or NSW make this an innovative cluster, while those in NSW are considered to be less organised and less innovative. This is reflected in slower growth, less use of research services, collaboration between firms and production process improvements. Without question, South Australia is host to the biggest wine producing companies with the highest volume of wine sales and especially of export sales, the peak bodies of industry associations, and the best-funded and most prestigious education and research facilities in Australia (Aylward and Glynn 2006). Comparing the SA and ‘other states’ cluster maps, Aylward and Glynn locate these organisations within the cluster in SA but outside it elsewhere. This view is somewhat supported by the earlier conduct of surveys of innovative awareness that excluded the minor (in terms of quantity) wine producing areas such as the Hunter

(GWRDC 1998). Individual companies, such as Orlando Wyndham Group (OWG) have been able to harness the resources, for instance, of the CSIRO to help them develop better ways of managing the intake of grapes into the winery; the authors note that ‘raw materials supply network for fresh grapes is characterised by complexity. The inter-dependencies between wineries, carriers, harvesters and growers are extremely strong.’ (Dunstall 2005). In this case, detailed planning using advanced technology and data base management resulted in better co-ordination between contract growers, harvesters, carriers and the winery. With contract winemakers, a chronic undersupply of labourers and limited winery capacity, similar problems pose themselves in the Hunter and although the solutions may not be the same they have not been investigated in such a sophisticated manner.

Figure 4 Less Innovative Australian Wine Clusters



Source: Aylward and Glyn, 2006

What seems to be missing from this model is recognition of the likelihood of knowledge spillover and access to technical support for SMEs that might derive from the scale of operations within the cluster as a whole. There is also evidence that those companies that are more closely associated with exporting wine have an advantage in making gains from promotion activities compared to those that concentrate on a local market, as is often the case with the SME (Zhao et al 2003). Large volumes and economies of scale make a wide product range and vertical integration possible while the very small (micro), small and medium enterprises that are typical of the Hunter call for a different model altogether.

Marsh and Shaw (2000) have examined the impact of collaboration on firm-level competitiveness within the Australian wine industry. They refer to the place of cluster theory among others that acknowledge the importance of collaboration in competition particularly where innovation is needed and transaction costs are high: “Their common ground lies in an emphasis on market-enhancing collaboration as a complement to robust competition in product markets. In these perspectives, market conditions are the ultimate arbiters of performance. But within this framework, collaboration and competition, mixed according to relevant contingencies, constitute a performance-enhancing strategy” (Marsh and Shaw 2000, p.27). To them, clustering is as associative process where processes have been established to manage critical linkages. They distinguish among collaborative activities within the Australian wine industry: innovation (by which they mean primarily technological and agronomic research), strategic, visionary and medium-term priorities and marketing. All these activities take place within the cluster. For these writers, the strategic advantage of the cluster has come from deliberately cultivated collaborative relationships between producers and between producers and industry associations including those officially supported by government programs. Efficiencies derive from reduced transaction costs in terms of increased information, common goals and collaborative or coordinated activities, much as Porter suggested. The role of industry associations is crucial: the research and development arms of educational institutions but especially of R&D connected to the industry, such as GWRDC (which is a statutory body) are paramount. Their view is essentially one of cluster development where value is added via collaboration but essentially flows from the centre to the periphery.

DISCUSSION AND ANALYSIS

As a wine cluster we would suggest that the Hunter Valley Wine Cluster has a number of unique features that distinguish it from other wine clusters. Here we take it given that there will always be differences in terms of natural conditions – soil, climate and grape varieties. From the above review

of the Hunter Valley Wine Cluster together with the analytical frameworks applied to wine cluster analysis we would suggest that the following features are relevant:

- a. a long history of wine production (by Australian standards) – the embedded knowledge present in long established firms within the cluster is an important cluster resource
- b. small and family owned production – this is likely to generate demands for shared resources, including knowledge sharing, and greater experimentation and variation in grape varieties and wine production
- c. proximity to Sydney – wine production takes on tourist elements with wine tasting tours and short term tourists being an important component of the cluster – in turn, wine production often takes place in conjunction with other value adding activities linked to tourism – cellar door sales, accommodation
- e. an established framework of supporting institutions and infrastructure – this ranges from grower associations, to educational institutions, wine shows and social networks across growers and upstream and downstream actors in the industry
- f. an established cluster brand and image – the wine cluster has an established and marketable reputation in terms of particular wine varieties

In terms of the analytical frameworks that have been used to evaluate and classify wine clusters we can draw upon the various frameworks to highlight what is important in the Hunter Valley Wine Cluster.

- a. Porter's framework – the key features as outlined by Porter for the Californian wine cluster are present within the Hunter. The key role of complementary activities such as food and accommodation are very important in the Hunter.
- b. Guilini and Bell's network analysis – knowledge generation, development, transmission and absorption are all important aspects of a wine cluster. Gulini and Bell (2005) not only highlight the importance of knowledge flows, they also focus on individual firms within the cluster and the differences in terms of proximity and absorptive capacity that is present across grape growers in the cluster. Whereas Porter (1998) assesses the resources of the cluster as a whole, Guilini and Bell (2005) focus on the resources and capabilities of the individual firms in the cluster. Their analysis brings into focus the cluster boundaries – those firms outside of the knowledge flows – and the different capabilities of firms within the cluster. In the case of the Hunter this is also the case. There are a few well established producers with a long history and who have extensive formal and informal networks for knowledge access and sharing within and beyond the cluster. There are also

many small producers with limited resources and expertise who knowledge absorptive capacity and access to knowledge networks is, by contrast, very limited.

c. collaboration, the integration of infrastructural support, exports and innovation - Aylward and Glyn (2006) highlight several key factors that are present in the Hunter – strong elements of collaboration. They also highlight features that are lacking in the Hunter – innovation, exports and integration with key infrastructure and support. In comparisons with the Barossa Valley of South Australia these elements would appear to be missing, however, we would qualify the apparent exclusion. First, exports are important to the region, as already outlined, and indirectly exports are generated through wine tourism which is important in the Hunter. Second, even though there are small scale producers in the Hunter, there are many wine varieties and blending with grapes from other regions – especially those from the adjacent Mudgee and Orange regions. Thirdly, while key educational institutions and research facilities are more embedded in the Barossa region, the Hunter Valley is able to benefit from the expertise, experience and knowledge transfer of key wine makers and growers who have had prior experience in the Barossa and other regions.

d. collaboration – Marsh and Shaw (2000) highlight the key role played by the collaboration between competitors in product development, innovation and resourcing sharing in wine clusters. Collaboration is present and embedded within the Hunter Valley wine cluster through both formal (market based) and informal (social networks) arrangements between producers.

CONCLUSIONS

The Hunter Valley wine cluster contains many of those features attributed to wine clusters that have been developed in the wine cluster literature. However, we have also suggested that there are other features that make the Hunter Valley wine cluster fairly unique, at least in the Australian context. Many of the analyses of the wine cluster are aggregative and general – they provide a broad overview of the cluster – the exception is Guilini and Bell (2005) who examine the relationships between individual firms in the cluster. The next steps is to specifically identify and classify the key resources and the different types of actors that are present within the Hunter Valley wine cluster and to provide a schematic representation of the cluster that systematises the underlying relationships and activities of the cluster from the view point of the individual firm. This will involve the framework developed by Brown et al (2007) that conceptualises clusters as a series of interlocking value adding webs surrounding individual firms within the cluster. Such an examination should go beyond knowledge flows and identify the key resources and transactions that are present within the cluster.

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ⁱⁱ The intricacy and complexity of winemaking in the contexts of people, place, geography and region with industry and survival well in view has been caught in its many-sided individuality in Max Lake, *Hunter Winemakers: Their Canvas and Art* (Sydney: Jacaranda Press, 1970). The lesson here, if you will allow, is no wine industry without people who are creatively committed to the land and viticulture, and to the vine in the region. Small scale winemaking is often a qualitatively different phenomenon to industries (production facilities) of considerably more scale and size. However, ideally quality itself should not be a prisoner of scale. See further, for perspectives, then and now, on the ever-changing wine industry scene, James Halliday, *A History of the Australian Wine Industry, 1949-1994* (Adelaide: Winetitles/Australian Wine and Brandy Corporation, 1994), and note current (2007/8) “overview” in *The Australian & New Zealand Wine Industry Directory* (South Australia/Adelaide: Winetitles, 2009), pp.1-16ff.

ⁱⁱⁱ See the still prescient work, A.C. Kelly, *The Vine in Australia*, in Dennis Hall & Valmai Hankel, eds. (Sydney/Hunters Hill: The David Ell Press, 1980), p.19. Kelly’s study of vines generally, and climate and soils, remain compelling and useful historical records. Viticulture is no exception: economic success is built upon informal understanding(s) of the past and the present.

^{iv} Consider a few remarkable, detailed and general as well as particular examples from Greco-Roman and Punic-Carthaginian Mediterranean antiquity: note, Pliny *Natural History*, Book 14.2ff (Cambridge, Massachusetts: Harvard U.P., Loeb Classical Library, 1945, first reprinted, 1952); Columella, *On Agriculture [De Re Rustica]*, Book 1.1ff (and its preface). See further, the lifelong work and thoughtful exploration of H.P. Olmo, “The Origin & Domestication of the Vinifera Grape”, in Patrick E. McGovern, Stuart J. Fleming & Solomon H. Katz (editors), *The Origins and Ancient History of Wine* (Philadelphia: The University of Pennsylvania Museum of Archaeology and Anthropology, Gordon & Breach Publishers, 1995), pp.31-43. Volume 11, in *Food and Nutrition in History and Anthropology*, University of Pennsylvania.

^v For inspiration in the craft of history and its general utility or capacity for “perspectivism”, see Marcus Greil, *The Dustbin of History* (Cambridge, Massachusetts: Harvard U.P., 1995).

^{vi} To take one broad example, namely, Australia’s speculative confusion in the drive to produce “commodity wine” and the long and short term potential for high quality fine wine rather than “premium” branded wines which merge into a morass of brands and bottles almost indistinguishable from beer markets and marketing. See Brian Croser, “The Australian fine wine industry, irrelevant or neglected?”, *The Australian and New Zealand Wine Industry Journal*, Vol.21.6 (November/December, 2006), pp.16-20. See further, Brian Croser, “Decanter wineman of the year” in *Decanter Magazine*.

^{vii} See generally the numerous articles in the *Australian Financial Review* re these companies and struggles corporate, familial...and always in this marketplace...of people and ideas, and values.

^{viii} Informative work is usefully summarized in the preface of Robert E. White, *Soils for Fine Wines* (New York: Oxford U.P., 2003), and see generally for thoroughness and detailed research re soil, *terroir* and much more.

^{ix} One way of presenting such arguments is contained in the fine work of Emile Peynaud, *The Taste of Wine [Le Goût du Vin]: The Art and Science of Wine Appreciation*, trans. by Michael Schuster (New York: John Wiley & Sons, 1996; first published in French, 1983). Jacques Blouin worked closely with Peynaud in the making of this second edition. See further, a broader but complementary work, Harold McGee, *On Food and Cookery: The Science and Lore of the Kitchen* (London: George Allen & Unwin, 1986; first pub., 1984).

^x Again, see the exploratory work in Gloria Vivenza, *Adam Smith and the Classics: The Classical Heritage in Adam Smith’s Thought* (Oxford: Oxford U.P., 2001); see also, the equally challenging and exploratory, Scott Meikle, *Aristotle’s Economic Thought* (Oxford: Clarendon Press, 1995; 1997).

^{xi} For one view of the complexity of wine and its markets/‘marketability’, see Larry Lockshin, “The schizophrenic nature of wine”, Vol. 20.1 (Jan./February, 2005), pp.32-33. Far more than a “duality” of wine consumers/drinkers is at stake, and again terms such as ‘premium’ and ‘super premium’ can only confuse. Wine is a commodity but it is a commodity with ‘attitude’: history, philosophy, beverage/food, culture, indeed anthropology, and shelf spaces or cellar door/vineyard locations, and combinations thereof, are the stuff of the wine trade.

^{xii} See especially for a detailed study of traditions of vine and wine, of education and culture in social context and external/internal crises in the wine trade from vigneron to table and café and well beyond, Harry W. Paul, *Science of Vine and Wine in France, 1750-1990* (Cambridge: Cambridge U.P., 2004); see also, the enduring thoughtfulness in Max Lake, *Classic Wines of Australia* (Brisbane: Jacaranda Press, 1966) and *Cabernet: notes of an Australian wineman* (Adelaide: Rigby, 1977).

^{xiii} See the insightful essay by Peter L. Bernstein, “Facing The Consequences” [bernsteinsp.pdf](#) (Jan., 2000) or *National Association for Business Economics – Abramson Awards*, Washington D.C. It is no surprise that Bernstein’s close friend was Robert Heilbroner of *The Wordly Philosophers* fame.

^{xiv} If there is a “political economy” of wine and the wine industry it should, indeed must, include questions of philosophy and science and, of course, these questions must necessarily include the productive worlds of viticulture and the land. Theory and practice, experiment and questioning are elemental: see for engaging examples, Matt Kramer,



“The Notion of Terroir”, Harold Tarrant, “Wine in Ancient Greece: Some Platonist Ponderings” and “Warren Winiarski, “The Old World and the New: Worlds Apart?” in Fritz Allhoff (ed.), *Wine & Philosophy: A Symposium on Thinking and Drinking* (Oxford: Blackwell Publishing, 2008).

^{xv} Besides the intense current interest, fashionable and useful interest in behavioural economics (Schiller, et al.), note also, the long rise of the French, and now world-wide, influence of the Annales school of social and economic history: Peter Burke, *The French Historical Revolution: The ‘Annales’ School 1929-89* (Cambridge, Polity Press, 1990). See also, the sage essay by Ralf Dahrendorf, *Homo Sociologicus* (London: Routledge & Kegan Paul, 1968; 1973).

See further, two recent articles by Robert J. Schiller: “Challenging the Crowd in Whispers, Not Shouts”, *The New York Times, Economic View* – nytimes.com (November 2, 2008), and “Can talk of a Depression Lead to One?”, *Economic View* – nytimes.com (February 22, 2009).

^{xvi} One very useful way to view Aristotle and matters Aristotelian: G.E.R. Lloyd, *Aristotelian Explorations* (Cambridge: Cambridge U.P., 1996).

^{xvii} See, Peter L. Bernstein, *Against The Gods: The Remarkable Story of Risk*, p.307, and generally chapter 18. See further, G.E.R. Lloyd, *Aristotelian Explorations*, “The idea of nature in the Politics”, pp. 184-204.

^{xviii} For enduring perspectives on adverse vintage conditions, climate and social history, note Pliny the Younger’s following letters, his wit and the descriptive power of his writing: Book VIII.15; VIII.17; Book X.8.

^{xix} Inspiration should be acknowledged: see the insightful, Nicholas Purcell & Peregrine Horden, *The Corrupting Sea: A Study of Mediterranean History* (Oxford: Blackwell, 2000).