

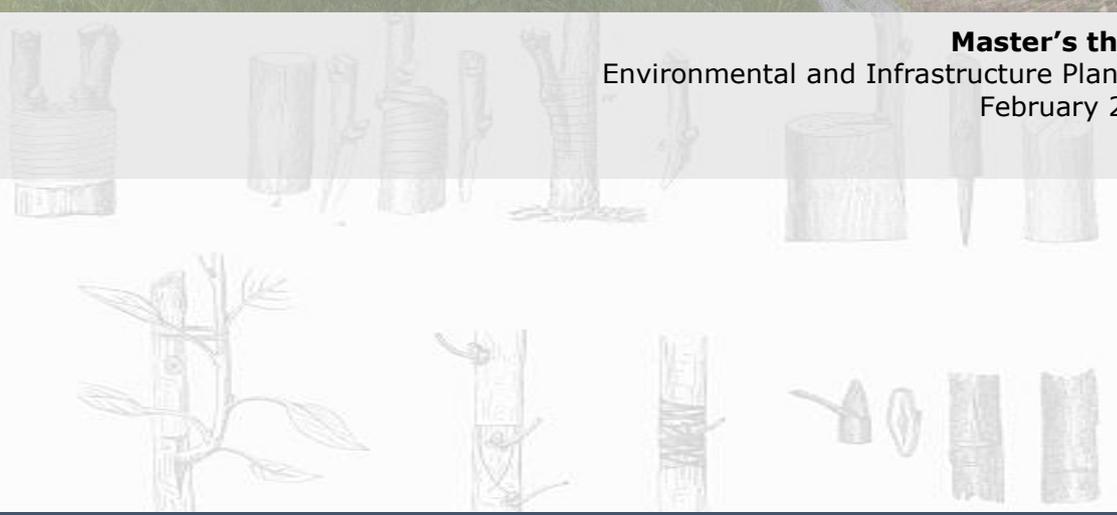
Planning Informed by Culture: Culture for Sustainability Planning and Resilience Building

a Comparative study of Vineyards in the Netherlands, France and South Africa.



Jessica Immelman
S3065642

Master's thesis
Environmental and Infrastructure Planning
February 2019



*Faculty of Spatial Sciences
University of Groningen*

*Supervisor: prof. dr. L. G. Horlings
Secondary Reader: dr. ir. T. Van Dijk*



university of
 groningen

Contents

Abstract	3
Abbreviations.....	4
Tables, Figures and Images	5
Summary	6
1 Introduction.....	8
1.1 Sustainability - a Narrative.....	10
1.2 Why Viniculture?	11
1.3 Problem Definition.....	12
1.4 Research Question	15
2 Theoretical Framework.....	18
2.1 Culture and Values	18
2.2 Sustainable Place-Shaping	20
2.3 Resilience Building	21
2.4 Conceptual Model.....	25
3 Methodology	28
3.1 Key Stakeholders and Units of Analysis.....	29
3.2 Focus and Reason of the Study	30
3.3 Timeframe	30
3.4 Research Approach.....	30
3.5 Data Collection	32
4 Data Collection.....	36
4.1 Wijngoed Wilgenhorst, The Netherlands	36
4.2 Vineyard B, Bordeaux, FR	44
4.3 Spier Wine Farm, Stellenbosch, SA.....	51
5 Case Analyses.....	61
5.1 Assessments and Valuations of 'Culture in Planning'	64
6 Discussion and Conclusion	76
6.1 Future Research.....	80
6.2 Reflection.....	81
Acknowledgments	82
References & Recommended Reading	83
Appendix.....	88
Appendix 1: Interview Tools.....	88
Appendix 2: Supervisor Permission Document.....	91
Appendix 3: Consent Forms	93
Appendix 4: Interview Transcripts	96

Abstract

This thesis deals with the role cultural planning plays in sustainable development and resilience building within complex and globalizing contexts. Cross comparisons of three vineyards in South Africa, France and the Netherlands were conducted to explore to what extent culture, as a central theme to sustainable planning practice, is a relevant and necessary mechanism to enable and direct planning goals to be more adaptable and resilient to social and environmental change. This outlook aims to integrate culture into concepts of sustainable planning and to ensure better resilience through culturally tailored plans. Key theories were applied to interpret values as determinants of cultural outputs in practice, the role of place and sustainable place-shaping in determining preparedness for resilience building. Although culture is not explicitly declared as a tool in sustainable developments within the contexts of the vineyards, the role of culture in the face of globalization, internal narratives and shared expressions of sustainability was clearly observed as being influential. By focusing on incorporating culture into planning practice, the concept of resilience building through place-shaping can better be tailored toward preparedness to the complexities in planning development. This will therefore tap into cultural capital as an intrinsic preparation factor for planners when dealing with change, adversity and unpredictability in global environments.

Keywords: *Cultural Planning; Socio-ecological; Sustainability; Adaptation; Conservation; Resilience; Transformative development; Cultural resources; Sustainable Place-Shaping; Resilience Building, Adaptive Planning; Values*

Abbreviations

CSR	Corporate Social Responsibility
DG	Director General
FTT	Fair Trade in Tourism
IPW	Integrated Production of Wine
ISO	International Organization for Standardization
RRR	Reduce Reuse Recycle
SD	Sustainable Development
SDv	Integral Sustainable Development
WWF	World Wildlife Fund
WIETA	Wine Industry Ethical Trade Association

Tables, Figures and Images

Figure 1	<i>The spread of viticulture and wine from its origins until the end of the Roman Empire (Charters, 2006, p. 17).</i>	11
Figure 2	<i>Conceptual model of Hybrid governance network, Gugerrel based on Steen et al. 2013, as seen in UNU-IAS and IGES (eds.), 2016, p. 40).</i>	13
Figure 3	<i>Global change in Viniculture Suitability (Hannah et al, pg. 6908, 2013).</i>	14
Figure 4	<i>Four Quadrants of the Integral Framework with Respect to Humans and the Physical Environment. (Brown, 2015, p. 11).</i>	19
Figure 5	<i>Place and Place-Shaping (Horlings, 2016, p. 34).</i>	21
Figure 6	<i>The Adaptive Cycle. (Davoudi et al., 2013, p. 309; Adapted from Horlings and Gunderson, 2002).</i>	23
Figure 7	<i>Four-dimensional framework for resilience building (Davoudi et al., 2013, p. 311).</i>	24
Figure 8	<i>Integral Framework Analysis adapted from Brown 2015 (Author's personal illustration)</i>	25
Figure 9	<i>Cultural Planning in Place-Shaping and Resilience Building (Author's personal illustration).</i>	26/68
Figure 10	<i>Research Framework and Data Collection (Author's personal illustration).</i>	31
Figure 11	<i>Date Collection Framework (Author's personal illustration).</i>	31
Figure 12	<i>Integral Framework Analysis applied (Author's personal illustration).</i>	65
Image 1	<i>Horlings and Son (Wijngoed Wilgenhorst, 2019).</i>	1
Image 2	<i>Left: Atwineries.com generated simplified map of registered Vineyards in the Netherlands (2018); Right: Location of Wijngoed Wilgenhorst (2019).</i>	36
Image 3	<i>Screengrab from Wijngoed Wilgenhorst Facebook page.</i>	43
Image 4	<i>Vineyard B Manor.</i>	44
Image 5	<i>Vineyard B Vineyards.</i>	45
Image 6	<i>Slave bell (Spier Wine Farm, 2018).</i>	51
Image 7	<i>Deed of ownership (Spier Wine Farm, 2018).</i>	51
Image 8	<i>Screen capture of the Spier Wine Farm site exemplifying areas of focus (Spier Wine Farm, 2018).</i>	52
Table 1	<i>Respondent Information</i>	32
Table 2	<i>Cultural Planning Comparative Grid</i>	62-64
Table 3	<i>Cultural Planning Comparison Analysis</i>	70

Summary

This thesis is dedicated to determining how culture can inform and inspire more resilience building in sustainable developments through the scope of a comparative study. The study compares three vineyards of different origins: Wijngoed Wilgenhorst, The Netherlands; Vineyard B (which wishes to remain anonymous) France; and Spier Wine Farm, South Africa. Interviews with leading decision-makers on the vineyards were arranged through which an analysis of cultural inputs to their sustainable developments was then measured.

Chapter 1 introduces the aim of the thesis and outlines key understandings of sustainability, the reason for choosing viticulture as a basis of comparison and the problem definition on which the research and aims of the thesis are based. As planning practice has evolved from more traditional and robust foundations through the communicative and integrative turns, we see a desire and necessity for planning to engage more readily in community involvement to ensure better plans that remain adaptable and, most importantly, resident over time and through massive shifts in global environments. By investigating the role of culture plays in sustainable development, this thesis begins by exploring how culture is missing from more traditional planning practice, where it can potentially be better integrated and what concerns we may need to face in the future. Finally, the questions are posed: How does culture/cultural resources play a role in planning practices and sustainable developments, and how does it enable evolutionary resilience in viticulture?

Chapter 2 goes on to outline key theoretical frameworks on which this research is based, and a conceptual model is created. Particular attention is paid to the role of values in determining prevailing cultural inputs in decision-making as a means to wade through and determine culture despite its complexity and difficult-to-define characteristic. Culture in connection to place and sustainable place-shaping (SDv) is considered as a primary measurement theory in determining the role culture can more realistically and firmly play in planning practice. Finally, a brief outline of the 'adaptive cycle' and 'resilience building' management and movements are considered as a preemptive consideration to what can be expected when culture is more readily incorporated into sustainable development planning. The conceptual model developed in light of the research is outlined as a key factor in the data analysis to come.

Chapter 3 introduces the methodology of the research and procedures following in determining the subjects of the study, focus and reasons for the study and data collection frameworks and techniques.

Chapter 4 relays the data collected through the informal interview processes for all three vineyards: Wijngoed Wilgenhorst, NL; Vineyard B, France; and Spier Wine Farm, SA. Key coding of subject matter determined from the data is also considered, namely: place, sustainability, culture and values, cultural resources, ecology, socio-economy, policy, certifications and subsidies, and resilience and innovation.

Chapter 5 determines the data analysis protocol in accordance with the conceptual model and theoretical framework addressed in Chapter 2. Key findings are discussed and explored in relation

to the interview data and consideration in relation to cultural planning in place-shaping and resilience building are made.

Chapter 6 outlines key discussion points and conclusions determined from the analysis, outlining that culture, although not explicitly expressed as a planning tool, is very much integrated and expressed in planning practice when analyzed through this mode. This reveals that by focusing on incorporating culture, the concept of resilience building in place-shaping can better be tailored toward preparedness, therefore tapping into cultural capital as an intrinsic preparation factor for changes, adversities and unpredictability in environmental sphere (Davoudi, 2013).



chapter 1

1 Introduction

This thesis aims to investigate the role culture plays in planning and sustainable development and how it can further assist in the establishment of evolutionary resilience within this complex and globalizing world. In research today, we observe a myriad of investigations into planning practices: systems management, structural approaches and 'creative responses' all responding to the changing climate and environments. Until now, the analysis of sustainable development and planning practice since the creation of 'sustainability' as a concept have been based on the three-pillar approach which perhaps overlooks a key link of 'culture'.

My aim is to explore the role culture plays in the development, adjustment and maintenance of sustainable practices within the context of viticulture by investigating how cultural planning is exhibited in and a necessary component of sustainable development in viticulture. The goal of this thesis, and societal relevance of this research is to prove that culture is relevant and necessary to successful sustainability planning and so establishing evolutionary resilience. In this regard, the contribution to planning practice of this study lies in the ability to integrate culture as a vital theme to integrative and sustainable planning agendas within context, thus looking to protect and maintain cultural heritage in order to rely on its ability to connect, direct and continue planning goals - being inherently adaptable to social and environmental change.

In an ontological sense, the concept of integrating cultural planning as a cornerstone to viticultural relevance, and indeed other areas of agricultural or developmental relevance, could determine an enhanced adaptability to the changing global backdrop within which we find ourselves. Our vulnerability to environmental, political and economic changes harks for a new approach to planning practice. Considering the communicative turn, integrative approaches and place-based planning, we have observed a shift in planning practice, however, consideration of more social and cultural aspects seems to be rather vague, despite its necessity, in planning. To move forward is to identify trends in cultural influence in sustainable development and then seek to gather guidance as to how these can be identified and operationalized within other or varied contexts of planning. In studying three vineyards in three different countries, I set out to learn what sustainability means to the viticultural practitioners; how sustainability has been implemented within their specific contexts; identify what role culture plays in their unique or shared choices in the implementation of sustainable practice; determine what impacts the various culturally dependent sustainable decisions have on their business, community and environment; and finally, determine to what extent viticultural practices are path dependent in this sense. Therefore, I aim to determine how this can contribute to evolutionary resilience in viticulture (and dare I say other arenas), thus further enabling the role of adaptive spatial planning.

In recent years the constant battle between the sanctity of local connectedness and identities against that of increasingly globalized, economically focused, and bipartisan political structures have resulted in what seems to be the mismanagement of the role culture plays in context specific developments – disregarding valuable cultural resources in the constructions of developments, let alone sustainable developments. The investigation and tailoring of sustainable initiatives within a variety of contexts

calls for the acknowledgement of integrated and inclusive operational elements within these varied frameworks. Thus, acknowledgement of the role of cultural resources - in the form of identities, beliefs, shared values and connectedness - in sustainable practice it is essential to reinvigorate what is now becoming a homogenized narrative surrounding general sustainable principles.

In using cultural resources to define and enhance sustainably oriented developments and seek robustness in evolutionary adaptive planning and action, adaptivity in sustainability can be more effectively realized – while simultaneously not ignoring the role integrative adaptation plays in mitigation procedures in the interim.

This research provides insights through investigations into local identities and socio-spatial distinctiveness on multi-scalar spectrums within the narrative of sustainable practice and context-specific developments. In doing so, the goal of the thesis is to prove that culture is relevant and necessary to sustainable planning and eventually resilience building by distinguishing how to identify, enable, strengthen and refine planning through the qualities of the cultural contexts.

1.1 Sustainability - a Narrative

The concept of Sustainable Development originates with that of the Brundtland Commission of 1987:

'Development that meets the need of the present without compromising the ability of the future generations to meet their own needs'.

This definition, although poignant and having inspired enormous changes within environmental and economic spheres, has occupied a rather malleable and vague position in practice.

It is in this equivocal arena that we battle to truly state essential elements that ensure effective, resilient and pervasive sustainable planning practice. It is essential to note, however, that in the ambiguity of the official understanding of sustainable development, market, social and political practices could adjust within the realms of reality and within their various means to meet demand while simultaneously achieving new, more globally accommodating goals. According to Srivastava's (2011) investigation into the concept of Sustainable Development, a 'soft norm' is characterized into three distinct phases:

- (i) "*the phase of inception*", whereby the concept of sustainable development emerged out of concern for the protection and maintenance of the environment [through 'national, economic and legal rather than by ecological considerations'];
- (ii) "*the phase of construction*", sustainable development in the scope of economic growth with an 'anthropogenic bias', ...; and finally
- (iii) "*the phase of prominence*", whereby sustainable development has become the dominant discourse (Srivastava, 2011, p.100-101).

Since the Brundtland Commission and, as mentioned by Srivastava (2011), the Rio Declaration did well to pronounce 'human beings as the center of concern for sustainable development' with human entitlements with due diligence awarded to the environmental sphere spurring the undertone of sustainable developments as we know it today. Srivastava notes that "The Rio Declaration of 1992[...]stipulates that sustainable development determines that advances need to occur with environmental protection being an integral aspect of consideration" (2011, p. 103). Sustainability as a narrative has successfully infiltrated developments in multi scales and arenas – whether it is

due to popular demand by consumer classes or out of dire need in the face of climate, population and food related stressors. Considering this, research concerning the role culture plays in sustainable developments arises as a new and extended area of focus in ensuring the advancement and adaptability of sustainable development.

1.2 Why Viticulture?

Viticulture refers to the production of grapes, whereas viniculture refers to the production of grapes for the making of wine. Historically, the two have a close relationship with wine-making, sometimes even happening within the same area or under the same crest as the vineyard itself. In the maintenance of vineyards, the viniculturalist focuses on the maintenance, protection and health of the vineyards, terrain and the resources necessary. This is followed up by decisions on when to harvest based on the intended knowledge and specifications of the grapes in relation to the wines desired and eventually the winter pruning and maintenance of vines to prepare for the next harvest. Viniculture is an inherently cultural product, taking on expression of localized culture and universalized practices.

The decision to utilize vineyards and the practice of viniculture as the basis for this research stems not only from a personal appreciation of the product itself, but the intense fascination with the role wine and therefore viniculture has played in society over time. In this respect, wine production as a cultural product earmarks the key cultural influences of the area, being the contextual specifications (climate, consumption preferences, terroir, varietal, agricultural decision-making, community engagement, etc.). The production of wine itself, originating around 6000 B.C. using the classic *Vitus Viniferous* grapes (grapes morphed today into our Rieslings and Grenache wines) in current day Georgia or Armenia, then navigating to Iran, Mesopotamia and Greece whereby it traversed the ancient world via trade routes and through expansions of empires.

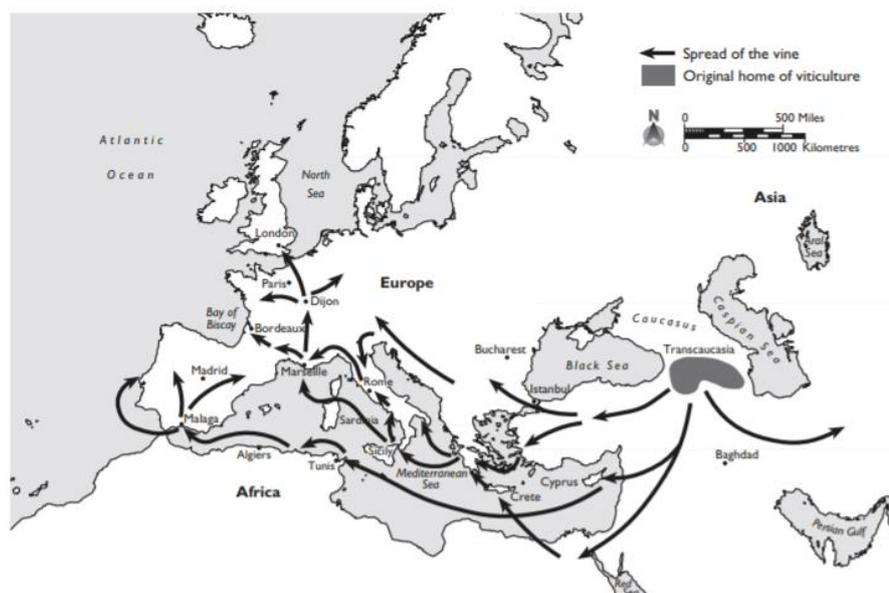


Figure 1 - The spread of viticulture and wine from its origins until the end of the Roman Empire (Charters, 2006, p. 17).

The evolution of grape production mirrors and strongly aligns with that of agricultural developments – occurring at similar times in the Neolithic periods, the cultivation of grapes and eventual discovery of wine allowed for a wonderful crop that truly mapped the societal and therefore cultural progressions of nations. Today we see the spawn of these ancient varieties, including those of Asian or American descent, such as *Vitus labrusca* or *Vitus Riparia* into a myriad of different varieties and hybrids (Charters, 2006).

With wine vines only capable of growing between the lines of latitude of 30 and 50 degrees (depending on altitude and other climatic variables) (Charters, 2006), it became a well sought out product for export and reserved for imbibement by only the elite of certain nations. With this in mind, we need to understand here that in the progression of viniculture across nations and continents, that the export of practice, knowledge and tradition accompanied it – making it not only an ambassador of a culture, but also the vessel through which its particularities can be shared and appropriated within new contexts. Therefore, this inherently cultural product bears the mark of centuries, in cultures and societal progression, making it an ideal platform on which to further test the weight of cultural representation in the 21st century and beyond.

1.3 Problem Definition

1.3.1 Complexity of Culture

In understanding the motivations for choosing culture as a defining mechanism for sustainable development, it is important to note that culture, according to UNESCO, "is that complex whole which includes knowledge, beliefs, arts, morals, laws, customs, and any other capabilities and habits acquired by [a human] as a member of society" (UNESCO, 2017). Thus, in this study, cultural planning focuses primarily on enabling resourceful communities by distinguishing cultural resources and practices as mechanisms for sustainable development and, more importantly, evolutionary resilience planning and adaptability to challenges ahead within contexts.

Through this research, the concept of 'cultural planning' as a key consideration in sustainable development is determined. The goal is to operationalize cultural resources of 'local rituals, beliefs, and everyday activities and priorities, etc.' to develop flexible approaches that are tailored to 'cultural aspects' (social, economic, urban, environmental, and creative) as well as governmental concerns (Stevenson, 2005). In opening the black box that is *culture* and determining a process by which the role of culture in sustainable development can be distinguished, planners can more readily rely on the longevity and success of plans within various contexts.

1.3.2 Culture in Sustainable Development

Determining culture as a key principle for sustainable developments - above and beyond the three contemporary, generic and widely referenced environmental, economic, and societal principles of sustainability to date – poses a challenge insofar as defining the elements of specific cultural mechanisms of interest and implementing these into structured approaches, plans and strategies within contexts. Until now, the relativity and variance in cultural expression and interpretations alone

have challenged the chance for developing standard, universally applicable formulae for reference and implantation purposes.

Presently, culturally fueled sustainable development has been acknowledged through the works of Reid and Schwab (2006), whereby the three pillars of reference are based on social/economic, ecological and cultural policies, "where all are supposedly holistically integrated within the active operational groups to ensure high-quality and robust growth within the context in which it is applied" (2006, p. 439). Although this assertion was based on the role of tourism in landscape governance in Jordan, similar acknowledgments can be made for more permanent contributors to landscapes, such as agriculture.

Conversely, in the case of figure 1, derived from an investigation of riverine landscape development in Wachau, Austria (UNU-IAS and IGES (eds.), 2016), landscape governance structures recognize the hybridity of 'market', 'civil society' and 'government and state authorities' and goes onto investigate the interconnectedness of the areas, as well as the streams of relational influence.

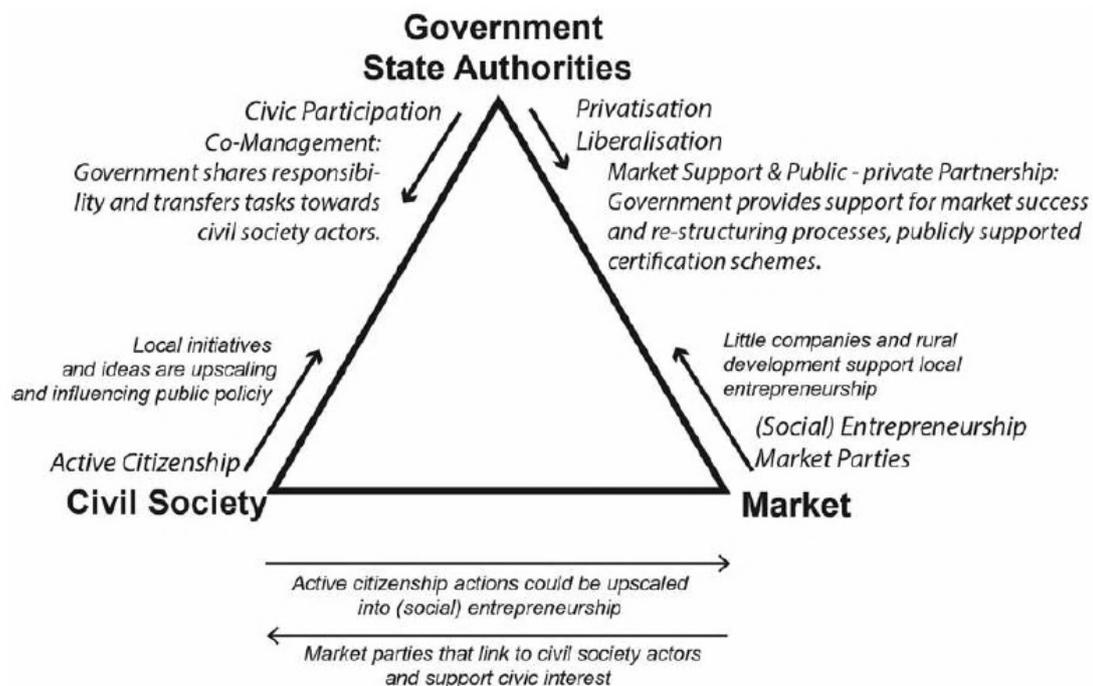


Figure 2 -Conceptual model of Hybrid governance network, Gugerrel based on Steen et al. 2013, as seen in UNU-IAS and IGES (eds.), 2016, p. 40).

The noted decentralization away from top-down approaches towards bottom-up influences from that of citizens and markets allow for more intrinsic influences - such as local cultural impacts - however, it is essential to note that 'culture' is not specifically a primary area of consideration in this case. As noted by Reid and Schwab, culture provides a sense of 'continuity, connection, and direction', which is further reified through 'national identity', and 'a sense of belonging to a place or a tradition' (2006, p. 441). Therefore, the question is, how can culture be operationalized when it itself occupies such a varied, innate and transient role in society, while also comprising of the market, social and

governmental sectors already acknowledged in the three pillars of sustainability? Secondly, does 'culture' stand alone? Or can it be better utilized as a connector and overarching consideration?

Over time and through agendas, the concept of sustainable development itself tends to be understood as a contextually based concept, open to interpretation, somewhat vague in its makeup and especially ambiguous insofar as best practice is concerned – and certainly ambiguous when the true benefit to human beings within contexts is considered. Various agendas around economics and politics have stretched the notion of 'benefit' for ecological and human systems, placing profit over people in many instances. But it is within this understanding that we can recognize the role culture can potentially play as a marker for true contextually beneficial sustainable developments and planning practice. By using cultural resources first and foremost, users of the sustainable agendas must consider the inherent benefit within contexts before that of company or political agenda.

1.3.3 Climate Change

An area of major consideration to this research and the context in which much of sustainable development is occurring is around the threats associated with climate change and all that comes with it. Accordingly, viticultural shifts are beginning to arise as a key consideration for the industry.

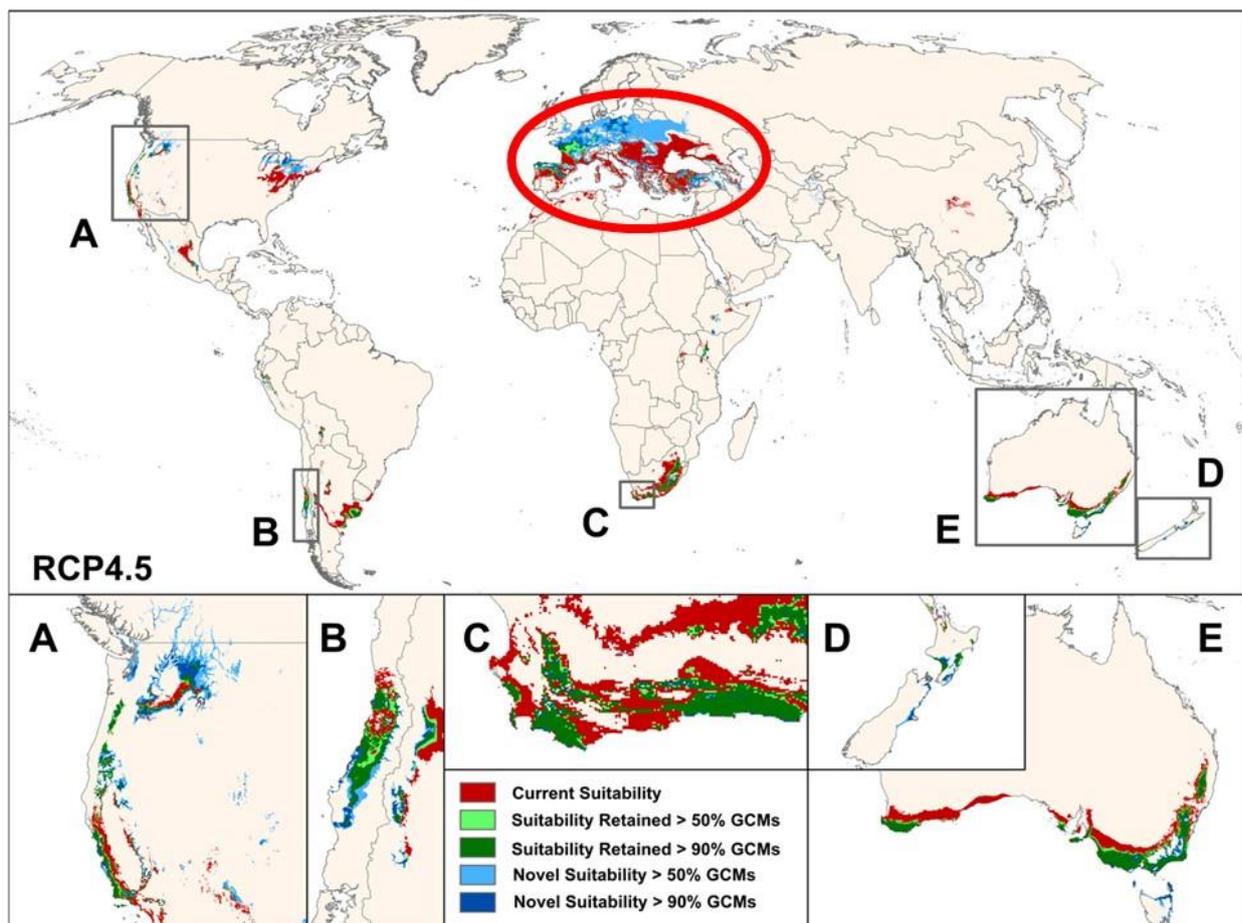


Figure 3 - Global change in Viniculture Suitability (Hannah et al, 2013, p. 6908).

Figure 3 above, taken from an American study, as referenced by Horlings (2018), of 'Climate Change, Wine, and Conservation', outlines current areas of viticultural suitability and juxtaposes it

with that of the future suitability ratings predicted according with climate change projections. This study outlines regions involved in this research which depicts: Dutch suitability to increase by a novel 50%, as 'Northern European and Western North American regions offer large newly suitable areas'; French region to shift dramatically north in suitability with a 'decline in traditional wine-producing regions, namely Bordeaux and Rhône valley'; and South African regions to shift dramatically, retaining only a fraction of the suitable region, with 'elevation shifts in suitability increasing environmental footprints of the vineyards' and therefore risking ecological impacts due to vineyard practices (Hannah et al., 2013, p. 6908).

According to the study, however, it is also essential to note the increases in potential footprint and therefore ecological influence on emerging regions as the climate and therefore industry begin to shift. The question of resilience within sustainable changes begins to emerge as a primary marker for resilience and adaptability of the industry over time and through stressors.

This shift in viticulture can serve as a corner stone and educational platform on which other major agricultural industries can base their specific adaptational approach. The opportunity and essentiality to involve culture within this shift and plans that emerge from it is brought to the fore. Through this study, the apparent involvement of culture will hopefully become more apparent.

1.4 Research Question

The central focus of this thesis is to investigate the role of culture in viticultural developments – namely, sustainable development and to explore how cultural resources are exhibited therefore mapping the effects, potential and limitations of a cultural influences in planning approaches. This is aimed at contributing to many arenas of planning and plan development with the hope to further utilize culture as a primary consideration and driving force for sustainable decisions. It is my hope that by incorporating culture more readily, the resilience of sustainable developments will also improve, resulting in culture-informed planning.

It is essential to note that in investigating the cultural link to resilient sustainable development, this thesis outlines planning practice to achieve sustainable developments on the vineyards formally and/or informally. Based on culture as an informer of planning; sustainable place-shaping practices; and the outcome of resilience planning, the following question is asked:

How does culture/cultural resources play a role in planning practices and sustainable developments, and how does it enable evolutionary resilience in viticulture?

This primary question focuses on the examination from an institutional and formal planning perspective, as well as informal planning practices. To answer this overarching question, an open and conversational approach whereby deductions regarding cultural expression, or the lack thereof, are made. By seeking to identify culture as an influencer and how it is expressed and used on the vineyards, this research seeks to lay out a platform on which future planning practice can be based.

Cultural planning could suggest a form of transformative development that aims to mediate sustainable practices and cultural notions of space and place through and in sectoral/institutional planning. Inevitably, through this thesis, a transition to cultural planning' to determine a, "responsive, highly effective framework that is relevant to local communities and that provides the tools needed for them to develop truly vibrant and creative places," (Stevenson, 2005, p. 46) and plans going forward can be achieved.

A decorative graphic featuring several pink ink splatters of varying sizes and a large, bold, black number '2'. The splatters are arranged around the number, with one large splatter forming a partial circle behind the '2'.

chapter 2

2 Theoretical Framework

In traditional and current methods of planning, there is a strong narrative on which planners and change-agents alike depend to design or determine various approaches to respond to changes; adapt to these changes; or ensure maintenance and dependability of such changes. Only recently have concepts such as flexibility and resilience planning entered the discussion of effective and essential practice. Even more recently, however, - and certainly not thoroughly enough - the concept of culture is considered an important element in plan development. Whether considering culture in plan development is indeed effective and influential to sustainable or adaptive design stands to be proven. Current theories of planning practice are investigated alongside emerging research as to the role culture plays in community development and subsequently planning practice.

The concept of culture as a mechanism for sustainable development can be considered as essential in the development and implementation of effective, enduring plans. Dessein et al. (2015) mention culture as not only being an 'everyday concept' that is used in a variety of ways and contexts and provide a sense of shared/ 'public' meaning and understanding, but also as fundamental to sustainable development. However, despite the influence of culture on context, the effects of neo-liberal developments and globalization has led to a degree of "cultural uniformity, a disconnection between places of production and consumption, sustainability problems, and the commodification of land and landscapes" (Horlings, 2016, p. 31). Consequently, there seems to be a knowledge gap of the role of culture and its elements in the planning process and how this can affect the success of sustainable development aimed at meeting the needs of today, while conserving the ability for future generations to meet their own needs (Dessein et al., 2015). In this regard, the role of culture - both tangible and intangible - as a 'mediator between people and society and the environment' as a guide for "people's intentions, way of life, sense of place, practices, norms and rules" (Horlings, 2015, p. 259).

2.1 Culture and Values

Primarily, here we investigate the cornerstone of differentiations between culture being that of the value system, considered to be complex, context dependent and specifically 'culturally varied' (Horlings, 2015). With values determining preference, principles and motivational goals set and achieved through society and in contexts, investigating the inspiration and drivers behind these values is essential in understanding, in part, the effects and potential for the mechanization of culture in plan development (Horlings, 2015). However, in acknowledging the complexity of this arena, it is important to note that values themselves are not independent concepts to be clearly defined and analyzed, rather it is in their complexity, cultural variance and through discourse that the wonder of personal and societal values take shape.

For the purpose of this research, we view values in degrees of approach based on the works of Horlings (2015):

- *economic'*- economic evaluation that values all benefits against all costs through a Cost-benefit Analysis whereby economic frameworks allow for the interpretation of value through a determined price;

- *intentional* – the moral convictions, motivations and intentions of people, determining the conditions for engagement. Intentional convictions and motivations allow for the interpretation of 'leadership, not as a solo activity, but one that is multi-agency and multi-level' within both institutional and cultural contexts', and
- *symbolic* – 'sense of place'/place-based and community attachment ('we-feeling'). Symbolic approaches outline the role place and place-based developments occur, solidifying an essential link to the particularity of various geographic and purpose driven contexts.

Values of 'preferences, principles and motivational goals' are "relevant because they influence people's perception of, their attachment to and appreciation of places as well as their motivations" (Horlings, 2015, p. 262). This intrinsic attachment makes this concept of values an integral area to explore when it comes to its potential application in resilience planning and sustainable development.

It is essential to note that these values are rather place-less in their make-up and that in seeking utilization in place-based plan and sustainable developments, the question emerges as to how these can indeed be connected to place? And even if sustainable developments can assist in culture itself?

2.1.1 Culture in Place

In attempting to investigate a connection between values and a sense of place, an investigation into values and their dependence on context, cultural variances and individuals versus the 'we', 'place' emerges as a key component to value development and maintenance of culture. The following model, developed by Wilber (2000) as mentioned by Brown (2015), allows for a starting point of the analysis of motivational values within the context of places for Integral Sustainable Development (SDv).

	INTERIOR	EXTERIOR
INDIVIDUAL	<p>CONSCIOUSNESS "What I experience"</p> <p><i>Areas studied:</i></p> <p>"I", subjective realities, e.g. self and consciousness, states of mind, psychological development, mental models, emotions, will.</p> <p style="text-align: right;">UL</p>	<p>BEHAVIOR "What I do"</p> <p><i>Areas studied:</i></p> <p>"It", objective realities, e.g. brain and organism, visible biological features, degrees of activation of the various bodily systems.</p> <p style="text-align: right;">UR</p>
COLLECTIVE	<p>CULTURE "What we experience"</p> <p><i>Areas studied:</i></p> <p>"We", intersubjective realities, e.g. shared values, culture and worldview, webs of culture, communication, relationships, norms, boundaries, customs.</p> <p style="text-align: right;">LL</p>	<p>SYSTEMS "What we do"</p> <p><i>Areas studied:</i></p> <p>"Its", interobjective realities, e.g. social systems and environment, visible societal structures, economic systems, political orders, natural resource management.</p> <p style="text-align: right;">LR</p>

Figure 4 – Four Quadrants of the Integral Framework with Respect to Humans and the Physical Environment. (Brown, 2015, p. 11).

The 'four quadrants' are a way to identify individual and collective axes and subjective and objective dimensions of "being-in-the-world" (Brown, 2015, p. 11) – each playing a vital role in the SDv movement, each affecting each other and emerging concurrently as these distinct dimensions. The quadrants map represents perspectives or domains relevant to 'What I experience?' (I), 'What we experience?' (WE), 'What I do' (IT) and 'What we do' (THEY) (Brown, 2005, p. 11). In this sense, Horlings (2015) denotes that the quadrants, when working in unison, represent place-shaping processes, whereby the 'I' quadrant represents values and the 'WE' quadrant the collective and intentional dimensions. As emphasized by Brown, "each is an indispensable domain, interconnected with and affecting the others. Each plays a crucial role in the success or failure of any SDv initiative" (2015, p. 15). It is essential to note that the culture to which this study refers is not only of the collective-interior or 'WE' quadrant of this graph, but rather the collective and interrelated functions of all quadrants together. However, the focus on using references to this quadrant as a means by which 'culture' can be operationalized and affect the outcomes in the other quadrants is important. For example, the ability to translate shared values into a foundational element of sustainable plans in spatial planning is a vital element in ensuring that the consciousness of stakeholders is stratified, reification of behavior is ensured for all and that systems are maintained with an essential foundation.

In analyzing the framework of values within the connections to individuals and platforms through which discourse and therefore creation and reification of culture occurs, we can investigate key inspirations behind culture as a tool for change and change maintenance through the lens of planning. The above framework functions as an intermediary device through which the abstract realm of values can now be more readily understood in relation to the setting.

2.2 Sustainable Place-Shaping

In this regard, Horlings (2016) does well to define sense of place as an arena through which 'differentiated outcomes occur through time and space' connecting the arenas of unbound and complex values of subjective and objective natures into processes of 'ecological, political-economic and socio-cultural' productions.

A pertinent place to start is with that of the French concept of 'Terroir', as mentioned by Horlings (2015) referring to physical characteristics of cultural landscape and varieties, and which can be 'sensed' by the smell and taste of the wine. It has both immaterial aspects of people's agency, such as cultural traditions (e.g. varied ways of pruning the vines), craftsmanship, events, festivals and geographically varied styles of winemaking and artifactual aspects, such as barrels, corks and labels representative of cultural creativity, innovations and traditions. Thus, a true representative of 'geographically varied expressions of behavior which impact sustainability and are thus expressed in place' – in this sense, Horlings' point that: " Values are constructed through the interaction of individuals and structures in a socio-institutional context in places and that they have a geography" (2015, p. 59). This speaks to the link otherwise overlooked between cultural influence in place and planning practice.

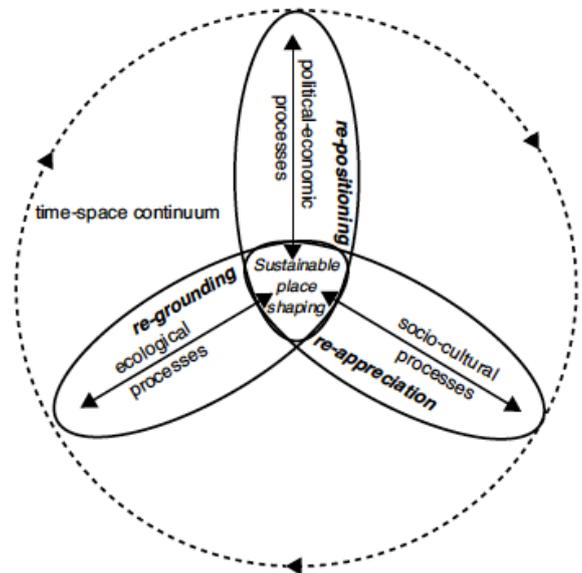
PLACE AND PLACE-SHAPING

In a relational approach places are seen as in time and space differentiated outcomes of intersecting, unbound, ecological, political-economic and socio-cultural processes.

Seeds of change are rooted and unfolding in places - actually in innovative place-shaping practices - situated at the intersection of these processes.

We assume that place-shaping takes place via processes of:

- re-appreciation, which includes perceptions, meanings and values attached to place, processes of sense-making and how actors take the lead in appreciating places;
- re-grounding, rooted in (agro-)ecological and cultural place-based assets and resources, influenced by wider communities, cultural notions, values, assets, technology and historical patterns;
- re-positioning, alternative, diverse or 'hidden' economies [23] and ways of value-adding, altering political-economic relations shaped by globalization



Current Opinion in Environmental Sustainability

Figure 5 - Place and Place-Shaping (Horlings, 2016, p. 34).

To determine connection to place and place-shaping, three key areas of focus are implemented, as noted in Figure 4. The three processes align with concepts of socio-cultural and perception of meanings and values; ecological and cultural place-based assets; and political-economic and impacts of globalization on value-adding and interpretation in both a narrow and broad sense. All focus areas are essential in activating and determining cultural influence with the added consideration of their adaptations over time and space. This amalgamation of 'individual and shared beliefs, values, worldviews and paradigms' expressed through these processes refer to changes that occur in what Horlings refers to as the "inner dimension of sustainability" where personal motivations and collective cultural values merge into sustainable development and thus place-shaping (2016, pg. 35) – a hat tip to the potentialities of cultural planning.

The thorough investigation and dedication to understanding co-design in place-shaping and the essential outcomes that emerge as a result is tantamount to determining a more definable role culture can play in plan development and implementation in spatial planning, being it formal or informal. If culture can translate into sustainable developments, as suggested by Horlings (2015), so too does it have the potential to further bolster and increase resilience of sustainable developments within place-specific contexts.

2.3 Resilience Building

Resilience building is essentially the ability to adapt to future changes in a multi-scalar and multi-denominational sense. However, being able to predict these potential shifts is what allows planners

and those needing to adapt to accommodate for the necessary adjustments. With complexities emerging on all fronts and climate change as a primary concern, there is a need to adapt to multiple processes at one time - "it involves not only adapting to future temperature and precipitation scenarios, but also adapting to other changes, such as the economic consequences of globalization, demographic changes or urbanization" (O'Brien, 2012, p. 669).

2.3.1 What are we adapting to?

It is vital to acknowledge that in the need to adapt to future scenarios, it is also necessary to consider the impacts and influence of our plans on the environments around us. This "fundamental", "adaptive challenge" calls for a more active role of culture – values, beliefs, loyalties and common human-environmental relationships" (O'Brien, 2012, p. 670). This give and take strongly requires sociological insight necessary to recognize potential shifts before or as a result of various spatial initiatives. As mentioned by Miller, "The challenge is to find practical ways to use the future as part of the process of discovering and creating the present" (2007, p. 26). In this regard, there is very little we can do to 'outsmart the complexity of reality' and of futures. The question is then, can developing a framework of 'capacity' for how to deal with the unpredictability of futures within an adaptable and resilient framework that considers the inherent flexibility and robustness of culture be an answer? It is most likely the 'combination of technologies, innovation, institutional reforms and behavioral shifts within the cultures that be', however, this usually involves the 'investigation into values, assumptions, beliefs and identities' (O'Brien, 2012). It is a dance between the deliberate and the unintended changes in society and the ability to tap into the 'human potential to commit, care and effect change' over time in response to or preparation for futures.

2.3.2 Beyond Adaptation toward a Transformation into Resilience Planning with Culture

Adaptations in planning seek to reduce vulnerabilities through time by reducing impacts on projects and plans requiring expertise and resources in a carefully understood framework to implement and in turn adapt through time (O'Brien, 2012). Through adaptations, transformations can be achieved by which "physical and/or qualitative changes in form, structure or meaning-making (Folke et al., 2010; Nelson et al., 2007; Pelling, 2011). It is here that a focus on resilience building to aid current and future shifts in developments can take place.

2.3.3 Evolutionary Resilience and Resilience Building

The concept of evolutionary resilience is interesting as it transcends the traditional resilience arenas, comprising of engineering resilience, whereby equilibrium states are re-established after brief disturbances (efficiency of function) and ecological resilience, which suggests the existence of multiple equilibria (existence of function) (Davoudi et al., 2013). Evolutionary resilience, as coined by Davoudi (2012), bases its foundations on socio-ecological resilience, where human beings and nature are interdependent and that of the evolutionary perspective – thus, the "ability of complex social-ecological systems to change, adapt or transform in response to stresses and strains" (Davoudi et al., 2013, p. 309). This 'institutionalization of adaptability dynamics is considered to enhance preparedness and capacity to influence the direction of future changes', highlighting the pervasiveness of change and uncertainty through space and time (Davoudi et al., 2013, p. 219). This need to rely more so on the factors that embrace and are defined by change, social and

institutional makeups, is emphasized along with the necessity for learning and transformation. Thus, the following framework (Figure 6) developed by Davoudi et al. (2013), reveals a four-dimensional framework that works to embrace a long-term, multiscalar reference and assessment for adaptive planning strategy development.

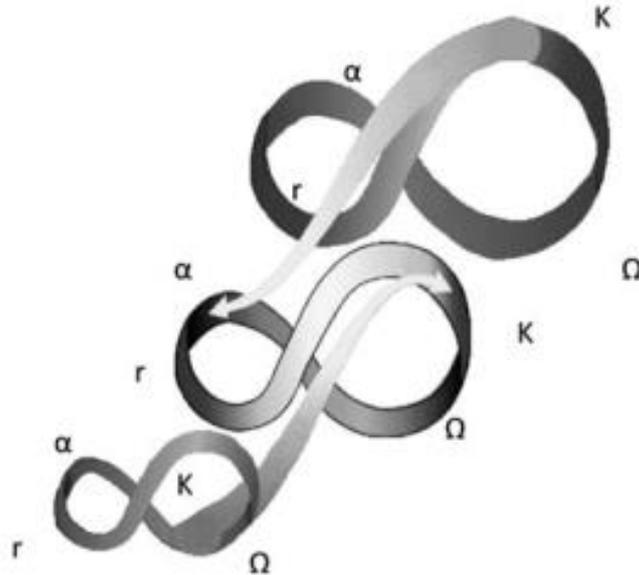


Figure 6 - The Adaptive Cycle. (Davoudi et al., 2013, p. 309; Adapted from Horlings and Gunderson, 2002).

The figure represents four "panarchical" (Davoudi et al., 2013, p. 309) or universal stages/scales of change over time and space that are defined by continual interactions between smaller and larger, faster and slower scales respectively:

- "the *growth phase (r)*' is characterized by rapid accumulation of resources (capitals), competition, seizing of opportunities, rising level of diversity and connections as well as high but decreasing resilience;
- The '*conservation phase (K)*', is where growth slows down as resources are stored and used largely for system maintenance. This phase is characterized by stability, certainty, reduced flexibility and low resilience;
- The '*creative destruction phase (Ω)*' is characterized by the chaotic collapse and release of accumulated capital. This is the time of uncertainty when resilience is low but increasing;
- The '*reorganization phase (α)*' is a time of innovation, restructuring and greatest uncertainty but with high resilience" (Davoudi et al., 2013, p. 309).

As Davoudi et al. mention, however, "the adaptive cycle does not in itself offer a framework for 'measuring' resilience, but rather it offers an evolutionary understanding of resilience as continually altering, as the system adapts and changes" (2013, p. 309).

Davoudi et al. go on to indicate that the 'dynamic interplay between persistence, adaptability and transformability across multiple scales and time frames in ecological (natural) systems' may not be the quintessence of developmental approaches in that it leaves little room for a distinct role of human interventions, despite the cycles implication that changes in resilience can be anticipatory and

therefore stimulated or prevented by human interventions themselves (2013, p. 309). Davoudi et al. (2013) therefore suggest a framework that introduces the concept of preparedness and the cultivation of it (Figure 7). This emphasis on learning and anticipation of change is also something to be considered when embracing the concepts of resilience building.

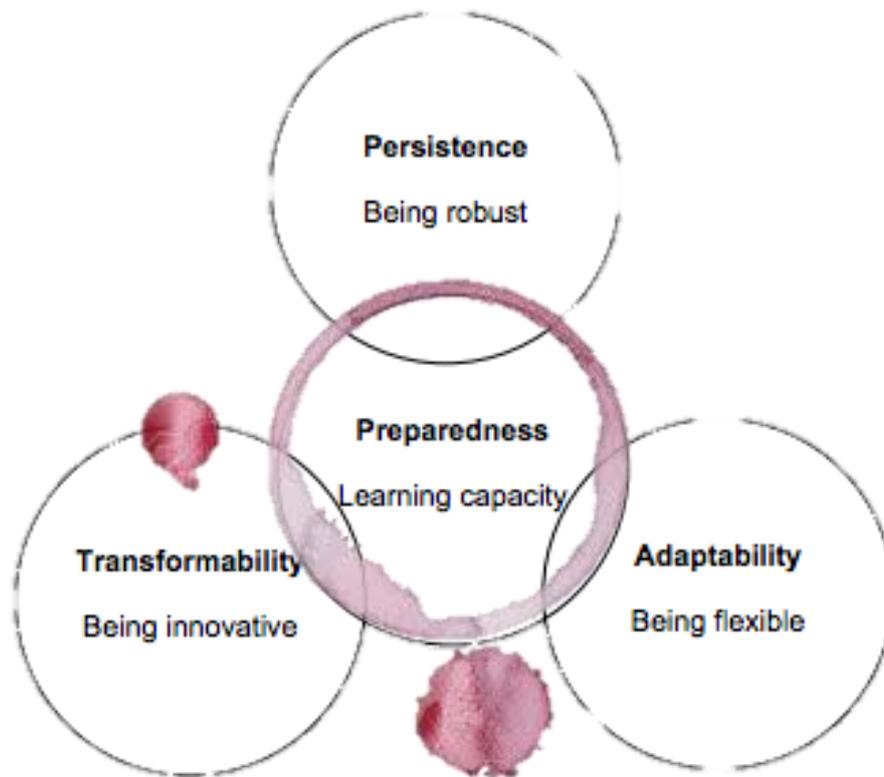


Figure 7 - Four-dimensional framework for resilience building (Davoudi et al., 2013, p. 311).

This research elaborates on the importance of cultural values of people and society, their occupations/practices, traditions, beliefs, political structures and worldviews on the conservation of landscapes and resources and the relevance of identity and sense of place to make transformation to sustainable development and planning successful (Dessein et al., 2015; O'Brien, 2012; and Horlings, 2015). Dessein et al. state that if there are "conflicts between actors or a decrease in well-being, and the aims of nature conservation will not be reached", and that if planner's take cultural mechanism into account when creating policies and legislation as a primary instrument, while still making room for voluntary activities or participation of the public within their contexts, chances of success can be increased (2015, p. 44). According to Gugerell et al., 'establishing a link between conservation and spatial planning requires the consideration of cultural regions and landscapes in regional development plans and sectoral policies' (2016, p. 6). The aim of the study is to investigate the relevance of cultural considerations in planning and how they are exhibited; while mapping the effects, potential and limitations of a cultural planning approach. This paper investigates the effects of cultural components on sustainable development and planning through the lens of three vineyards in Flevoland, Netherlands; Bordeaux, France and Western Cape, South Africa.

In doing so, this research examines how local cultures, traditions, history and sense of place are exhibited in the production processes and products; and how these characteristics are also exhibited and contribute or inhibit sustainable/adaptive planning within the vinicultural framework. According to Massey, it is essential to note that “a global sense of place” means that any nation, region, city ... as well as being internally multiple, is also a product of relations which spread out way beyond it,” (2004, p. 4) making this research theoretically important in seeking a balance between the rapid depersonalizing effects of globalization and the increasing need for adaptation in light of climate change.

The study will investigate the following areas and actors: local governance and legislation; conservation policies and biodiversity; vineyard business practices and adaptive approaches to global and climate variations; community relations and actions; products and global standing.

2.4 Conceptual Model

The following model emerges out of the above theories resulting in an analytic framework through which data accumulated through this research can be analyzed. As noted below, two primary data gears will be applied. Figure 8, outlining the application and progression of the vineyards decision-making in relation to Brown's (2015) *Four Quadrants of the Integral Framework with Respect to Humans and the Physical Environment* (Figure 4).

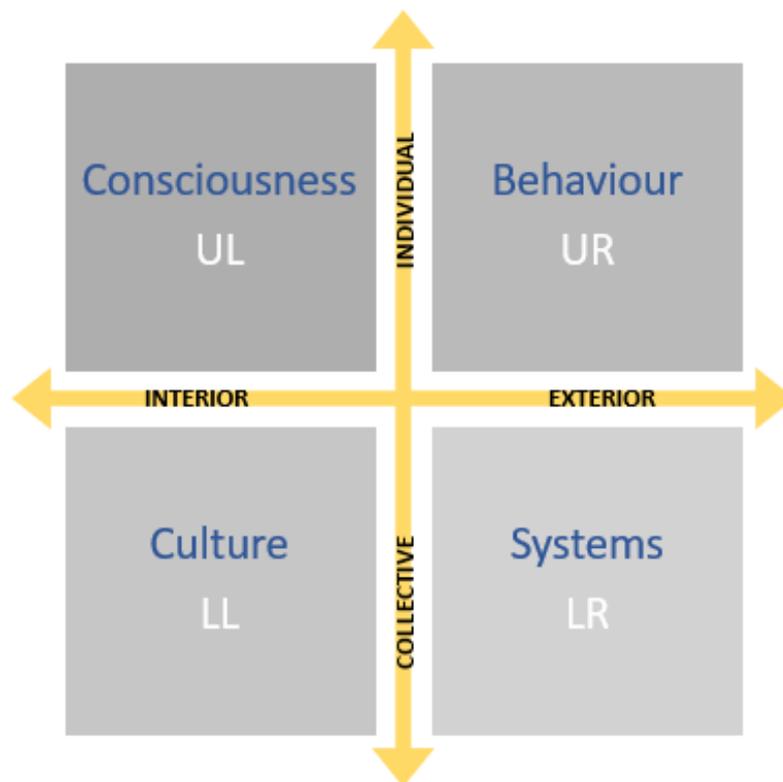


Figure 8 – Integral Framework Analysis adapted from Brown (2015) (Author's personal illustration).

Figure 9, below, is an adapted and amalgamated tool that will be applied to integratively analyse data. It represents Horlings' (2016) *Place and Place-Shaping* figure (Figure 5); in conjunction with an overarching application of Davoudi et al.'s (2013) *The Adaptive Cycle* (Figure 6) insofar as its

focus on transition and eventually paradigm shift development through place-shaping and Resilience planning; as well as an adapted Davoudi et al.'s (2013) *Four-dimensional framework for resilience building* (figure 7) as a parallel analysis in relation to Horlings' Place and Place-Shaping categories of development and cultural application.

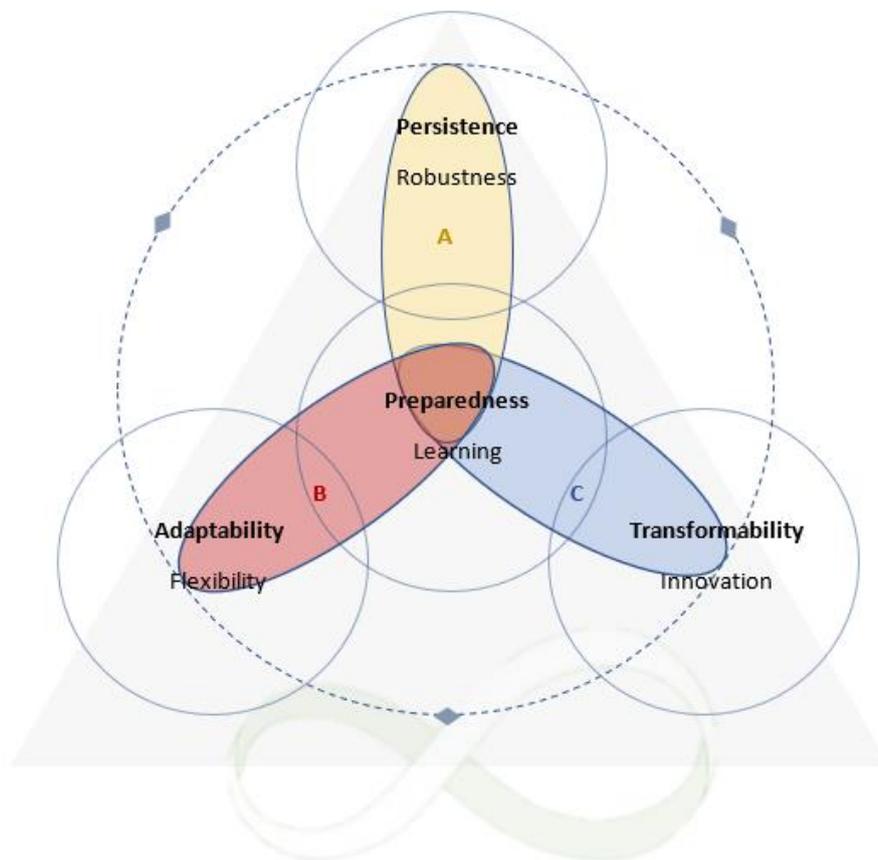


Figure 9 – Cultural Planning in Place-Shaping and Resilience Building (Author's personal illustration).

Figure 9 represents an adapted and integrated model representing those of Horlings (2016) (Figure 5) and Davoudie et al. (2013) (Figure 7). Four main concepts represented in both models remain essential to understanding the areas of focus. They have been aligned and integrated showing the scope of consideration in this thesis. The space-time continuum represented in Horlings (2016) is now traveling both directions so as to represent the relational influence both past and future have on culture and therefore plan development. It is also essential to note that an overarching concept of the adaptive cycle by Davoudi et al. (2013) (Figure 6) links and assists in navigation of the 4 concept wings through time and space, condoning the panarchical or universal ability to traverse scales and or stages of change.

- 'A' representing 'Re-positioning' and the political-economic arm whereby value-adding and globalized interpretations of development can be interpreted. This aligns with the concepts of Persistence or robustness in resilience building. A key and universal consideration in both a globalized and capitalist-based framework in which all the vineyards function.
- 'B' represents 'Re-grounding' or ecological and cultural aspects whereby the values and shared-notions of expression in place-shaping arise. This has a strong overlap with the previous adapted integral framework analysis from Brown (2015). This aligns with the

concepts of Adaptability and Flexibility, the primary focus of this research in that culture can be operationalized here.

- 'C' represents 'Re-appreciation' and the socio-cultural procedure perceptions, meanings and leadership in place-making. Another overlap with the previous analysis, speaking primarily to the systems developments of all the vineyards. This aligns with the Transformability and innovations in resilience building in that historical and current perceptions and appreciations of place can also be altered and recreated in a renewed way – allowing for the chance for transformation and innovative input and whereby many of the universally necessary strides in systems transitions towards sustainability can be made.

These analysis gears will drive a more in depth understanding of culture and its impact, (as an abstract and seemingly difficult-to-grasp concept), which can then be applied in planning practice.



chapter 3

3 Methodology

The research will be completed in collaboration with vineyard owners and staff, experts in the field and the Department of Spatial Sciences at University of Groningen.

3.1 Key Stakeholders and Units of Analysis

This thesis will take on the framework of a case study, with an influence of comparative methods in order to determine trends and variances in cultural influence for sustainable development of the three chosen vineyards in the France, Netherlands and South Africa:

3.1.2 Vineyards

The following three vineyards constitute the three case studies that have been studied:

- Vineyard B, Bordeaux, France (est. 1838)
 - Values, History, Sustainability Vineyard
 - Contact: Director General
- Spear Wine Farm, Stellenbosch, South Africa (est. 1692)
 - Natural Heritage Initiative, Ancient Farm. New Life, Conservation
 - Contact: Orlando Filander, info@spier.co.za
- Wijngoed Wilgenhorst, Flevoland, the Netherlands (est. 2012)
 - Dutch planning, sustainable farming practices, start-up
 - Contact: Geert Horlings, wijngoedwilgenhorst@gmail.com

** the name of the French vineyard has been changed to assure anonymity*

The vineyards allow for the cross-comparison of both the contexts of the vineyards and planning practices chosen in order to determine the methods by which cultural resources are mechanized in their decisions towards sustainable developments. The winemaker acts as a crop dependent bystander and connector to different vinicultural cultures and practices, offering a different perspective on the process and influencing factors. These will then be consolidated to determine the goals of the investigation. The spatial boundaries of this paper investigate both the internal cultures and sustainable developments/planning through cross-border studies on the three chosen vineyards. The theoretical scope is based on literature pertaining to cultural planning and sustainable developments, vinicultural/agricultural planning, planning and adaptation, governance, community, and heritage – all potential key concepts embedded in this study.

Vineyard B was selected based on its strong focus on sustainable viticulture the researcher's connection to the Director General and its overarching position as representative of classical vinicultural practice and position. Spier Wine Farm was selected based on the researcher's prior interactions and knowledge of the vineyard and location in addition to its notoriety, sustainable focus and culturally specific background. Wijngoed Wilgenhorst was selected based on location and researcher's connection with the owner and family. The location and organic farming practices of the farm were considered culturally significant and newer origin an essential area of consideration in the comparative study.

3.2 Focus and Reason of the Study

This study will focus on the following key sectors and stakeholders:

- Vineyard owners
- Vineyard practices
- Community and ecological impact
- Policy (economic, ecological and social)
- Planners and Sustainable Coordinators

The reason behind choosing these three countries as the foci for the cross-border study is rooted in the evolution of both the vinicultural industries within the specific cultural contexts, as well as the incorporation of sustainable/adaptive planning. France can be viewed as having historical relevance, with traditions and French winemaking identities being at odds with modernization, need for adaptations. The Netherlands, being both a hyper planned and modern player in the realm of viticulture, can invest immediately in adaptive approaches that coincide with policies and preferences of the vinicultural contemporary domain. South Africa seems to fall in-between this spectrum, having the traditional Huguenot/French vinicultural foundations, while also being a country in transition post-Apartheid - reshaping itself within the new global vinicultural arena and being subject to both influence and necessity to survive amidst a globalized, modern production forum. In this regard, France has a historically established vinicultural identity and practice; the Netherlands exhibits potential in developing its vinicultural practices and identity; whereas South Africa is fighting to redefine itself after political and cultural conflicts nearing the end of Apartheid, now working to maintain and change the lay of the cultural-scape in South Africa.

By observing the vinicultural practices and sustainable decisions made on three vineyards in the corresponding countries, it is the home of this research paper to define key shared or difference cultural mechanisms used to both maintain and change practices and plans in an evolutionary adaptive way.

3.3 Timeframe

The timeframe is essential to consider as harvests and seasons of active versus latent involvement will influence research. Research was run off-season whereby interviewees have time to reflect and engage more freely in the interview process. Qualitative data collection was therefore run during this bracket of time.

3.4 Research Approach

3.4.1 Research Frameworks

The research design takes into consideration the embedded qualitative data methods required to formulate conclusions about culture and decision-making; and action structures that result from it. Qualitative data collection in the form of semi-structured interviews and observations were the primary approaches; literature and supplementary data sought from previous studies are also considered. The goal was to generate empirical and representational conclusions sought through the

data collection process to determine a chain of evidence that can provide insights into the relevance and impacts of cultural influence of the sustainable planning process.

The research strategy follows the logic of theoretical research and qualitative data collection.

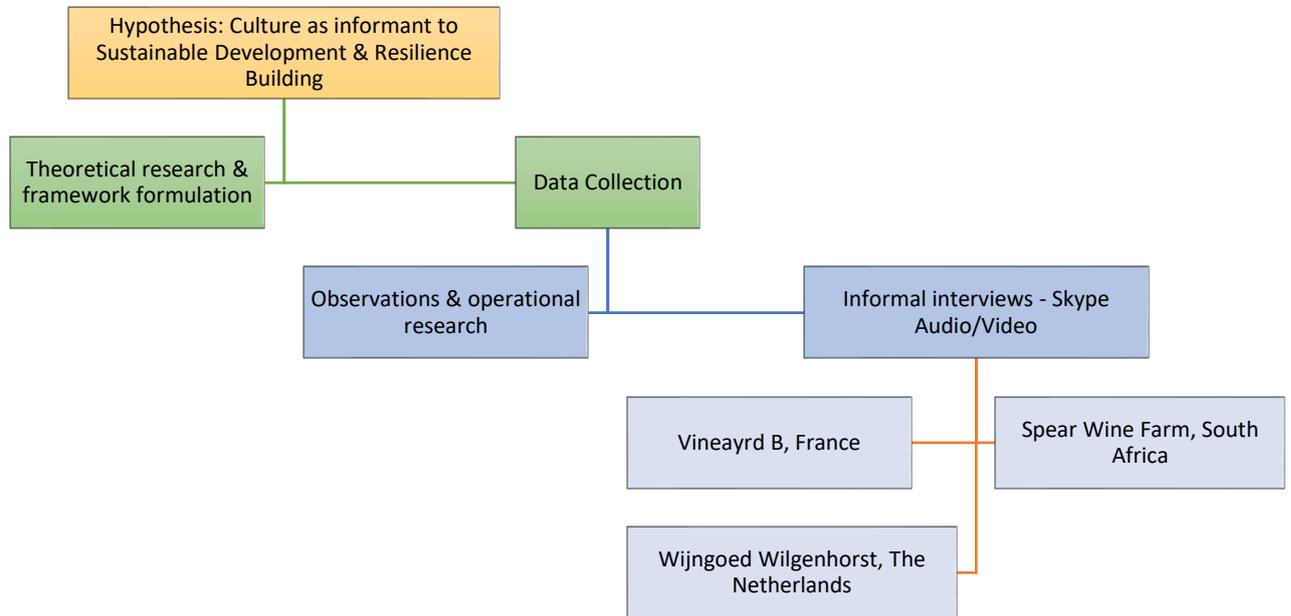


Figure 10 – Research Framework (Author's personal Illustration).

The data collection process is further delineated as follows, highlighting some potential outlets and tactics for data collection.

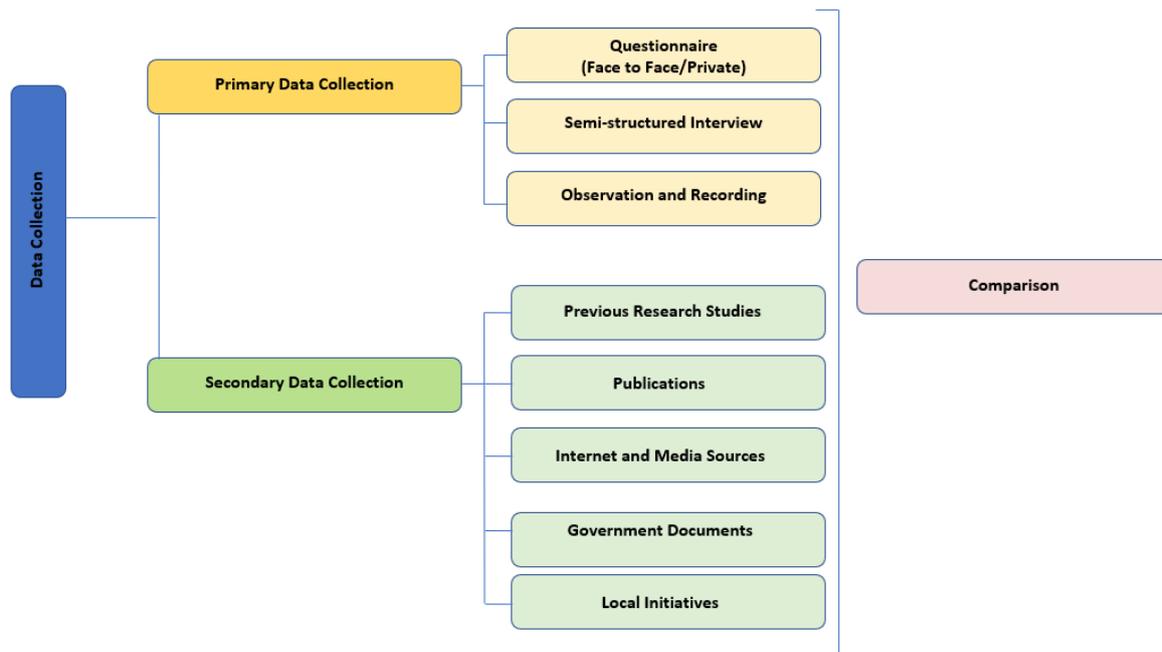


Figure 11 – Date Collection Framework (Author's personal Illustration).

3.5 Data Collection

Data collection through semi-structured interviews was collected. Interviews were loosely based on the question sheet attached in the appendix. These questions were adapted or added for clarification as the interviews commenced. Respondent details are as follows:

Table 1: Respondent Information

	Wijngoed Wilgenhorst	Vineyard B	Spier Wine Farm
Characteristics	Geert Horlings, Owner (2011 – present) Male, Middle-aged - Primary decision-maker & businessman	Anonymous – Referred to as the 'Director General' (DG)	Orlando Filander, Farm Manger (2001- present) Male, mid to late 30s - Environmental management on the farm and of vines
Location	Flevoland, the Netherlands Organic Vineyard	Bordeaux, France Sustainable Vineyard	Stellenbosch, South Africa Biodynamic Vineyard
Duration and Time	+/- 2 hrs., 2018	+/- 1.5 hrs., 2018	+/- 1 hr., 2018
Interview Technique	Semi-structured interview over Skype video chat in personal office	Semi-structured interview over Skype video chat in work office	Semi-structured interview over Skype call in work office

Table 1 - Respondent Information

All interviews were held over Skype. In addition to interviews, further research about the vineyards was conducted via internet sources and through observation. Thorough analysis of the websites of each vineyard, along with any media coverage. This allowed for an understanding of both controlled and uncontrolled identities to be expressed. All interviewees are noted as professionals in sustainable development and/or viticulture between the ages of 30 and 60 and are all determined to mark sustainable developments as primary foci of the respective vineyards.

Geert Horlings of Wijngoed Wilgenhorst was elected as the interviewee based on his primary relationship the vineyard project, the decision-maker concerning sustainable developments on the farm. His prior professional experience with, HLBbv, focuses deeply on logistics around efficiencies of sustainable agriculture – making his role within the emerging wine industry in the Netherlands particularly interesting. In addition, his role in 'Skylark Foundation' – a joint venture between Flevoland, the Dutch Agriculture Union and Heineken, pursuing favorable output of crops with less impact on the environment. – Horlings is exposed to, "sustainability aimed at any one particular crop, but that of an integral approach in the entire business operations" (Veldleeuwrik, 2019). His agricultural background from childhood and familial connection to academia and sustainable developments is also a primary decision-maker in determining Wijngoed Wilgenhorst and Geert Horlings as participant in this research.

Vineyard B's DG is chosen as the primary interviewee for this vineyard based on his director general position, placing them as a primary decision-maker and connection between intentions for the

vineyard determined by the board and the reality that is Vineyard B. Additionally, the respondent's personal and professional engagement with the viticultural and sustainable development within the bordelaise and global viticultural relations earmarked them as a good candidate. The vineyard is also selected based in its size and focus on sustainable viticulture.

Orlando Filander, Farm Manager of Spier Wine Farm was recommended as the primary spokesperson by the vineyard relations team insofar as being able to accurately and adequately relay sustainable developments on the farm. His position lends itself to overall environmental management of the vineyards and surrounding areas (agricultural and indigenous) on the farm. His focus on viticultural practice and devotion to integrative solutions and systems independence in light of climate change marks Filander as a good contributor to the research discussions. This in addition to the notoriety and sustainable initiatives laid out by Spier Wine Farm itself.

3.5.1 Research Questions and Guidelines for Informal Interviews:

The questions outlines were organized into main areas of value identification in planning and decision-making of the interviewees. This allows for the coding of key value-based and cultural influences. Additionally, a strong focus on sustainability and sustainable expressions of the vineyards were investigated. The informal interviews had over Skype were recorded with the permission of the interviewees. These recordings were then transcribed into scripts which were then thoroughly analysed for valid quotes and codes for value and culture analysis were identified from this. The transcripts are noted in the appendix and available on request and codes of analysis are noted in tables developed later in this document.

Primary Research Question

In investigating the primary question, investigation from an institutional or formal planning perspective to that of more informal planning practice is to be observed.

How does culture/cultural resources play a role in planning practices and sustainable developments? And how does it enable evolutionary resilience in viticulture?

To answer this overarching question, a variety of identifying codes or categories were determined whereby further, secondary questions were determined:

- Cultural planning in place and practice
- Values in cultural planning
- Socio-cultural representation
- Political-economic agendas
- Ecological influences
- Policy structures
- Resilience building

This therefore led to determining the secondary questions necessary in understanding how the above categorizations within planning can be identified and analyzed through the research process.

Secondary research questions

Next, how the role of culture or 'cultural influence' in different planning practices exhibited within the contexts of the vineyards is examined.

- What is the role of culture in sustainable place-shaping on the vineyards?
- What are they doing – sustainable practices?
- Why do the vineyards choose to do this? (Motivations)
- Who is planning towards this on the vineyard?
- How can this enrich evolutionary resilience planning?
- What is the role of globalization in the contexts on the farm?

Questions are semi-structured and act as a guide throughout the interview process. Most interviewees and locations are documented accurately. One interviewee and location are replaced with pseudonyms for interest of anonymity.

A microscopic cross-section of a blood vessel, likely an artery, showing a thick, pink-stained wall and a central lumen. The lumen contains several small, dark, circular structures, possibly red blood cells or platelets. The word "chapter" is overlaid in a black serif font on the left side of the vessel.

chapter

4

4 Data Collection

4.1 Wijngoed Wilgenhorst, The Netherlands

Wijngoed Wilgenhorst is a family owned vineyard in Zeewolde, the Netherlands, producing on a small scale and in a biological fashion. The development of the vineyard originated from family initiative whereby the owners, Geert and Alice Horlings, decided to start propagating grapes. Having come from a farming background, with current connections to land and resources both within and out of the vinicultural world, the small-scale vineyard was born alongside small orchards of pears and apples. Wine, being of a personal interest to Horlings, intensified the fascination with learning about propagation and wine production. In many senses, Horlings and his family (his son having studied fruit production and will soon be investing time to learn viticulture in Germany) have invested in a pioneering project around the concept of exploration into a new and specialized field, developing artisanal and place-specific products, and generating a heritage business to be handed down through generations.



Image 2 – Left: Atwineries.com generated simplified map of registered Vineyards in the Netherlands (2018); Right: Location of Wijngoed Wilgenhorst (2019).

It is essential to note that perhaps due to climate change in recent years have allowed grape production to be possible within the region. Varietals, both old and new world and of primarily northern or Germanic descent, are grown here. Although the Dutch vinicultural industry is concentrated primarily around Limburg, in Southern Netherlands by the Belgian border, Wijngoed Wilgenhorst is truly an interesting and indeed pioneering project. Set in the polder of Flevoland, Zeewolde the town is one of the youngest municipalities in the Netherlands. It was officially

established in 1984, after pioneering farmers and families moved there in 1979 after the creation of the polder. Planning and the polder developments, like that of Zeewolde, are synonymous with key developments occurring before and in response to demand and land use. With this recent history in mind, Horlings stands strong in his role as a community developer, municipal stakeholder, and a harbinger of evolving polder-culture.

Sustainability

Sustainable developments in general on the vineyard are developed through self-determined practice and research, as well as meeting various guidelines determined by local and national legislature. Horlings highlights a massive influence and dependence on new technological developments as a key characteristic of sustainability, highlighting that the relatively new Dutch wine sector is more adaptable in this sense, as opposed to the more traditional and age-old practices of France and other old-world wine industries: *“if you want to be sustainable you should also add new techniques, because those new techniques in technology can help you to become more sustainable”*. Personal ethics of transparency, organic growth and local investment drive key decisions around sustainability for Horlings, with a focus on developing a good product within the guidelines determined by himself and the Dutch agricultural industry. Horlings exemplifies his dependence on his personal expression of sustainability with a foundation reliant on Dutch sustainable practices which were acquired through his work as an agricultural development consultant. This sense of personal approach or culture, however, remains a strong theme, bringing to the conversation a great sense of pioneership within Dutch, and especially Northern Dutch, agricultural development.

Culture

The Flevoland culture resembles that of innovation which takes the historically Dutch pioneering attitude into a new era. Being relatively new (around 30-year-old) homesteads in the Flevoland region represent some of the most modern and innovative interpretations of agricultural and residential life. It is important to note, however, that Horlings himself considers Flevoland rather 'cultureless' in comparison to other Dutch regions. Horlings go on to state that this is due to its newness, *“it does not [have] much cultural background, because there’s not so much cultural inheritance in Flevoland. All those farms are 30 years old, so they are very modern. We choose for a modern building with wooden walls... It has a more natural look to it”*. Culture for Horlings takes on a more of a micro-cosmic style in nature.

Horlings identifies culture as having to do with “you as a person”, noting his distinct interpretation of 'human capital': “human capital is not only the capital of the people who work with you and the volunteers, but it also has to do with your own capital. How you develop as a person”. Horlings himself has a personal attachment to sustainable place-based developments having worked professionally within research and consulting around sustainable and agricultural developments. It is also through Horlings' career experiences mentioned in Chapter 3 that interactions with other farms and increased knowledge- and practice-sharing takes place. Horlings notes, that practicing viticulture does differ from traditional farming in that, “There is more to do about also selling your

products; doing your own marketing; and so on. It's a much broader situation as opposed to a normal agricultural farm". In this sense, Horlings is learning through trial and error – with significant dependence on his personal knowledge surrounding integrative approaches, chemical compositions and impacts as well as general sustainable applications within agriculture to be successful.

Horlings, in relation to the traditional Dutch approaches to agriculture, mentions that, "*the Dutch are good at logistics and agriculture. And what I am doing [does] not [have] much to do [with] those values from the Dutch. So, I think it's really something different*". When considering the culture in place, however, the Netherlands, as noted by Horlings, have been highly progressive insofar as investing in research around grape varieties, experimenting within this and innovating in wine-making along with other more Northern European countries (i.e. Germany and Belgium). Horlings suggests that the 'newness' of this emerging viticultural sector in the Netherlands and indeed Northern Europe has led to innovation and exploration – dare I say, true to the Dutch explorative heritage. Horlings notes that close to 70% of grapes grown for wine in the Netherlands are new varieties – also remarking that this is indeed a 'very Dutch' thing and the best approach for the industry. Triumphantly, and very casually, Horlings goes to exemplify this trend with a closing statement on the topic of innovation within viticulture, stating "so I think you shouldn't stick too much to the old, but to try the new methods of winemaking".

Personal cultural expression by Horlings is also directly influenced by his personal pursuit of a work/life balance. This is noted as being an ideal case, Horlings mentions his goal of being 'three days for the boss, one day for your own, and one day for your hobby'. Seeing his life within sustainable consultancy as rewarding, Horlings also notes that the vineyard is his personal contribution to time well spent. An additional encouragement for the vineyard "development" is the characteristic of 'heritage'.

In addition to his personal culture, Horlings' father in law's farm harbors the bulk of working vineyard at present, with old materials and knowledge of the area being a massive assistance to Horlings establishing his first vineyards in the Flevoland area. Additionally, Horlings' son has pursued studies in fruit production and a specialization in viticulture to which he plans to dedicate time in Germany studying. Their mutual investment in building infrastructure for the farm, such as the shed to receive visitors and volunteers seen to be an essential working element of the farm and definer of its harvesting success. In making a connection between village communities and other stakeholder groups through the vineyard, Horlings' integrated investments from person, to family group, to community and then province. This speaks to the long-term agenda of his vineyard.

Cultural Resources

During the interview, Horlings makes it clear to define cultural resources in relation to the vineyard as the contributing community – resulting in an annual volunteering team for the harvest– as well as local artisans and service providers in the area. It is important to note that these members are all situated, according to Horlings, in the hyper-local surroundings of the vineyard. This is where most volunteers are sourced, most decision-makers are also positioned and most the of the 'cultural' influences come from. Horlings states: "*I think there's place for a vineyard in every village...*

everybody can connect to their own place and vineyard and own Village". This is in connection with the hyper-local markets and market value products, such as wine which tend to hold in communities. Horlings extends this statement by saying that if he were to take his wines to Southern Holland to sell, they would unlikely be bought - 'there is just something about local foods'.

One such example of Horlings' interpretation is his integration of the local artists. The labels on the bottles of his wines are designed with the theme of the polder lifestyle. At the time of the interview, the 100-year celebration of the Leyly Southern Sea Laws, to which Horlings planned to name a prosecco the Zuiderzee Wit, marks the commemoration of the development of the Southern Sea laws and the polder of Flevoland. This was especially culturally significant as Horlings planned to also integrate the local artworks on the label depicting the 100 years of progress regarding 'living below sea level' from then till now. In this, Horlings speaks of how the business can work to integrate and contribute to culture of the area and vice versa, saying, "*you are what you came from, so you are made by your own history. You always take it with you*". Horlings' wines have been served by formal governance meetings and are now celebrated at large as being a hyper-local Flevoland product.

Horlings integrates the community (immediate and outreached) as a harvesting resource, while concurrently providing the vineyard as a cultural educational and engagement platform: "*What you do is make a community of people around your business, which will all connect from your business they all want to be part of it*". Horlings mentions these volunteers as being 'ambassadors of the wines, the product and the business' and being a part of the 'network' – to make the story real about the wines he produces. In this sense the volunteers, although provide free labor, are more an investment for the development, coloration and marketing of 'the story'. In doing so, Horlings identifies the community as a primary supporter of the project. Firstly, by "*buying the wine... Also, there's a lot of discussion in agriculture with chemicals and so on, and what I see is that nobody in my [farming] community asks difficult questions... That's also why it is good [to] build a community around your farm. [Without the people you really want to connect with], you never have any discussion of how you work and how you do it. That really helps [to inspire improvement]*". In this sense, the community works to contribute a challenge to the vineyard to maintain transparency and to keep various standards otherwise not discussed or taken as a given within agricultural circles.

Insofar as the community involvement in the development of the vineyard in the long term, Horlings mentions that it is "*the responsibility of the community ... [to] give me the opportunity to do my job and to produce good wines and to give me the space. My responsibility to the community is to not only produce good product[s] in a sustainable and transparent way, but also to add something to that*". In this sense, Horlings views his role on the vineyard as a continuation of his life's work, "*I can make a difference in adding knowledge to make more of a difference in the development in agriculture in general. That's very important. That's what I bring from the past till now*".

The Role of Family and Industry Experts

Horlings does well to make a separation of family and experts from other areas of influence mentioned throughout this study. He mentions how family, notably his wife Alice Horlings, his

parents and his son, functions well insofar as providing experience, labor and heritage, while the winemaker is an essential, if not the most essential element, in determining the success of the wines: *"It is always said that you make the wine in the vineyard [meaning that] you can't make exceptionally good wines from bad grapes – from very good grapes you can make very good wine. But you can make very bad wine from good grapes. The role of the wine maker is very important"*. It is still yet further defined that although the winemaker is not a part of the immediate community – initially the definer of the community capital to the vineyard – he is a part of the broader community on which the vineyard depends, thus relenting to the inner and outer community being interconnected during different stages of the wine production.

Ecology - "Flat!"

Regarding the place and ecological influence on the viticultural project of Wijngoed Wilgenhorst, there is a distinct space specific identity that emerges. The Polder areas is very flat, below sea level and barren, apart from planned town or projects carefully determined by local and national authorities. Due to it being so flat and originally sea bed, the clay is rich in salts and chalk – good growing conditions for grapes and emulative of clays found around riverine valleys in which wine vines are typically grown. Additionally, it is also very windy. Consequently, the vineyard is developed in such a way to protect the vines. It has a border of trees and shrubbery that provide shelter from the harsh gales. The vineyard is also planted in a Southerly direction to maximize the protective values of the border and exposure to sunshine. According to Horlings, the terroir itself (usually considered an important element of consideration in the growth of wines) is not especially significant here. In his experience and based on a Dutch study regarding Dutch terroir in which very few defining features of different areas around the Netherlands were observed, Horlings feels that in this case *"terroir is something that's maybe a little bit over-estimated"*. In this case, Horlings feels the winemaker is perhaps the key player in determining the quality of the wines. However, there is a baseline regarding the Dutch terroir mentioned by Horlings: *"River clay is not so different from sea clay...the sea clay has more content of chalk. So, in that way, I think the soil is very suitable"*. Horlings also considers the decisions on vines and grafting techniques. Horlings tends to maximize the efficacy of this knowledge in order to ensure successful growth – in this case, he chooses to graft root systems or stems accustomed to growth in 'rich' terroirs to maximize the result. However, true to his agricultural heritage, he attributes these decisions to being par for the course and 'good agricultural practice'. A given, if you will.

Ecological influences span insofar as water presence in the land. Horlings mentions the high flood vulnerability of the regions but has full faith in the dike system and network of canals that work to protect and channel water away from the crop lands. However, as mentioned later in this analysis, Horlings takes care to consider water in his practices and procedural decisions on the vineyard.

Socio-economic

From a business standpoint, the beginning stages of development seem fruitful – primarily dependent on community word of mouth and their direct investment and engagement with the 'storytelling', which Horlings relies on to propel the brand and infiltrate the identity of the vineyard

into that of the community. Horlings mentions interest by other local businesses to get involved in the developments around the vineyard and the wine business, highlighting the economic viability of the endeavor.

Horlings took care to determine a premium position of the location of the vineyard. As the town expands, the vineyard – now situated on the outskirts – will soon find itself closer to the inner border of the town and its workings. In some senses, as the vineyard grows in stature and popularity, it too grows closer to the community that it serves, which serves the vineyard in return. Additionally, Horlings intends to continue expanding the vineyard to hold buildings for both residential and touristic value, all of which intend to maximize sustainable energy sources from solar and wind, true to the relatively young Flevoland culture.

Horlings focuses on the market/product combination, that being more artisanal wines for local and small output – not the mass-produced supermarket wines. These wines are aimed as being locally-produced and representational gifts valued by local governments, businesses and individuals; good restaurants sporting local goods; and essentially, a local cultural token. Additionally, Horlings considers cost/price a focus for the vineyard, as well as potential challenge to him and to the emerging Dutch viticultural industry. 'Cost/price, in this case, is usually pretty high, so there is some leveling that can be achieved with the mechanization of the production process aimed at reducing cost'. This along with product and service diversification (workshops, tours, education, hospitality, etc.) of the business ensures its viability within his own life and as a business. Insofar as his product maintaining relevancy, Horlings does not seem too concerned. At the end of the day, the wine is *"not only unique because it's produced in Zeewolde, at the bottom of the sea, but it's unique because of its taste and its quality"*.

Policy

It is important to note that the above-mentioned decisions regarding the marketing and economics of the product depend very much on the policies and zoning in the region – with entrepreneurial ideas and endeavors falling in line with policy structures and the inverse happening, whereby the business itself influences the shaping of policies in return.

Policy comes into play within the Dutch planning sector. This viticultural industry is no different. Various zoning policies have therefore also shaped some of the decisions made by Horlings. The 'bestemmings plan' (destination/location plan) is of importance regarding decisions around the diversification of the vineyard to accommodate other endeavors, such as hospitality and agriculture. In this case, Horlings' vineyard has to abide by policies outlining 'light hospitality' in the area, through which light meals etc., can be served and farming of grapes in this agricultural zone can occur. Horlings also highlights that, "zoning was difficult because we first made a plan of the projects - the developer living in the vineyard with all houses around it - but... the government didn't want that". The issue arose around the plan for the building being inherently agricultural and with a surplus of agriculturally based buildings in the area, the government was concerned that it was too much for the zoned area. Additionally, the economic recession resulted in the size of urban plan projections being reduced in the Zeewolde area, therefore limiting construction to one side of the main road only. Horlings' thus encountered even more barriers to completion. However, due to the integrated

usage of the building and attraction to the tourism sector, the project was eventually approved, and construction began in September 2018.

Horlings remained flexible and adaptable to the stringent rules limiting his original approaches to implementing his plan of development. He mentions; *"The destination plan was changed. And the destination plan now says 'Wijngoed' and I think it's the first destination plan in Holland [that state this] ... I think we are quite unique or one of the few destination-plans that say Wijngoed"*. Wijngoed in this sense refers to the touristic value of a productive vineyard and the integration of agriculture and touristic platforms. Horlings identifies the need to abide by zoning and policy configurations – while also inversely influencing and changing them in the process.

Horlings also highlights key areas that he hopes will see improvements in policy and practice: As wine is not inherently a part of the Dutch culture insofar as production and identities. Horlings wishes to make a permanent contribution to the culture of the village and the way that people interact amongst themselves and with the product by introducing a wine cart into weekend traditions in the village center. However, in the meantime, they will need to concede using the barrel wine cart for destination food festivals etc. – monitored and strictly licensed intermittent events.

By developing a relationship with local decision-makers, Horlings mentions that throughout the planning of the initial phases of the farm and the integrated business and zoning approach that was taken, the ministers, gemeente (municipality) and government board of representatives have grown to admire his project. Horlings states that he "know[s] the ways now and can make things happen". An example of this was the local initiative to rent out roundabouts to local businesses for their promotional use. Horlings had the idea to plant some grapes on the roundabout to exemplify the inner workings of the vineyard and to place the identity of the business and the agricultural endeavor within the cultural aesthetics of the village space. At first, there was apprehension as to the project being a distraction or even safety risk to the community members using the road (curiosity, picking grapes, etc.). But now, due to Horlings' knowledge of the inner workings of the decision-maker group and the communicative approach he took, the vineyard can now be represented on the roundabout. Horlings explains that the civil servants initially said no, so therefore the politicians of higher rank were the ones whom he aimed convinced to have the project passed. *"It's called the 'Polder Model' –it sometimes looks more like ... knowing the right people"*. Due to this negotiatory success, Horlings has gone on to plant the vines on the roundabout, as seen below:



Image 3 - Screenshot from Wijngoed Wilgenhorst Facebook page.

Subsidies

Horlings highlights the subsidy programs that he has implemented on the vineyard, such as the "herb-like 'undergrowing' in the vineyard ... around [the] plot near the ditches...good for the reduction of pesticides and fertilizers, although neither herbicides or pesticides are used on the farm". In this sense, it is the reiteration of it being good agricultural practice, yet again. On more commercial farms this subsidy is offered for a very real benefit, however, this subsidy can still benefit smaller operations like Wijngoed Wilgenhorst in the same way, regardless of its inherent improvement to the system.

Resilience and Innovation

In terms of drastic ecological and climate related shifts, Horlings seems less concerned with negative effects and more so looking forward to the opportunities that climate change can bring – namely, increasing suitability for wine production. Horlings mentions that "there are also some studies which show that after 2050, maybe when the climate changes as rapidly as it does now, below Paris may not be able to grow grapes anymore (Image 3) ... It says that, showing that England, Belgium, Holland, Denmark and Germany will be the best areas to grow grapes". In this sense, Horlings views this shift in climate and therefore wine regions a positive for his project, albeit strictly long term and more so a 'legacy' decision level.

Innovation within Wijngoed Wilgenhorst lies within Horlings intrinsically, and somewhat unintentionally, an integrative approach to business development, cultural iteration, community engagement and policy structures. The vineyard and its dependent ecosystems exemplify an intensely interdependent and culturally rich process of development and growth over time that can stand to grow within the healthy parameter definitions of the community itself.

4.2 Vineyard B, Bordeaux, FR

Place

Vineyard B is a typical Bordeaux vineyard, situated in the Haut-Medoc region of Bordeaux. The vineyard itself is first noted in history in 1719 with the origins of the domain, having changed hands a few times. The vineyards withstood the ravaging of diseases phylloxera and mildew and eventually fell into ruin in 1923 at the hands of the then owner – who pulled up part of the vines for a venture in dairy farming, thus ruining the domain and himself. The original vineyard as it stands today, was established in 1838.



Image 4 – Vineyard B Manor.

In 1963, it was later purchased in a state of semi-abandon and was then reinvigorated through the planting 175 hectares of the best grape varieties under the advice and supervision of vineyard specialist and renowned 'forefather of oenology', Professor Émile Peynaud. Peynaud was known as not only a great professor of wine, but also a great influencer of wine production and wine making, advocating for the use of the 'best grapes' to produce wines. This led to his incredible reputation as wine a philosopher and moderniser of the French wine philosophy (Oliver, 2014).

After the vineyards triumphant return to glory, it was included into the portfolio of a noted insurance company, making it one of the largest vineyards in the Medoc in terms of size and production – earning its reputation as being one of the most notable Crus Bourgeois vineyards. It is important to note that after the vineyard's original procurement by the insurance company, other properties were also purchased, increasing the overall production of the wine label. In determining the focus and values of the vineyard in 1999, the vineyard focused on its 'main objectives of long-term product quality, environmental protection and consumer satisfaction' (Website).



Image 5 – Vineyard B Vineyards.

Sustainable Vineyard

The sustainable vineyard is held separate from the rest of the producing vineyard and as an initiative was started in 1999 in order to allow for the adoption of certification designed to assure clientele of the quality of their wines, considering scandals surrounding food production in Europe at the time. The reason for adopting sustainable practices are based primarily on the vineyard management's desire "to perpetuate and pass on four centuries of history" and to "*protect the fragile ecosystems of these ancient terroirs*" (website). The vineyard and management focus on the ethos of a 'new management system, respect for the environment as a great priority, and staff training' as key to their development, resulting in the maintenance of Iso 9001, ISO 14001 and Reasoned Agriculture certifications as well as leading to the rating in 2010 of 'Exemplary' at the level of AFAQ 26000 Sustainable Development by Afnor and being the first European vineyard to obtain this level of recognition. Risk management is now their next focus and element of their business strategy, as well as to maintain the 'equilibrium of our Sustainable Development policy'. Their slogan mirrors the ethos of sustainability as defined by the Brundtland Commission of 1987: "We do not inherit the earth from our parents, we borrow it from our children » Antoine de Saint-Exupéry (Website, 2018).

The website promotes the vineyard as occupying an acting role in the sustainable development of the product and area in which the vineyard is situated. Stating a responsible and informed, controlling, collaborative and prepared 'responsible entrepreneurial' role; focused on skill development, value maintenance, ensuring employee wellbeing, encouraging communication and recognizing skills as 'responsible employers; responsible actors' that further the development of wine tourism, garner local partnerships, reduce impact of travel on the environment, and are accessible and promoting tourism for the region; are *responsible producers* by maintaining quality, meeting the needs of the market and consumers, investing in innovation, responsible purchasing and respecting regulations; and finally are responsible farmers that encourage biodiversity, manage waste, monitor and reduce chemical and fertilizer treatments, prevent pollution and work to preserve the terroir. Examples of which range from a weather station, organic treatments, and supporting innovation initiatives.

"Corporate social responsibility entails seeking a balance between a firm's economic development, the happiness and well-being of its employees, the maintaining of a unique terroir and its biodiversity, procuring pleasure for wine consumers, and a firm's involvement in the social, economic, and cultural fabric of their region". The values of the Vineyard B label include: commitment, respect, dialogue, transparency, sharing, humility, audacity, innovation, and confidence" (Website, 2018).

Sustainability

Director General (DG) mentions that sustainability is a key element of Vineyard B to *"impulse sustainable management" throughout the supply chain on which the vineyard and wine-house depend on, to " share our vision about what is a 'sustainable provider' for us"*.

The idea is to therefore create sustainability along with providers and affiliates to really influence the system at large. In this sense, DG and his stringent approach involving his systems manager and chief of bottling expert, visit locations and ensure that all their personal standards are met – he considers this a 'part of their responsibility'. This ethos extends to influencing people working in the company and even their customers. Using labels like 'sustainable vineyard' for the French label, 'vignoble responsable' (responsible vineyard) navigated away from the then industry standard and differentiated themselves as sustainable leaders and influencers. As a result, they were asked to participate in an international meeting in Brussels whereby his team consulted with Carrefour to talk about sustainability and develop it within the Carrefour company itself. We see a focus on mentality and inner community within the vineyard.

This is a key focus and leg of the sustainability factor of the vineyard. Almost generating a culture through which the vineyard workers can seek a shared identity created on the premise of sustainability – Sustainability in the sense of sustainable vine growth, resilience building in light of climate change and technological advancement (mechanization). This also goes so far as creating avenues of communication and therefore trust building with those who live on and around the vineyard.

In investigating these decisions around sustainability and determining the cultural link, DG mentions that sustainability has to do with 'value' and that this is "not specific to a French Bordelaise vineyard. I think, you can deliver everywhere. I think it will be in the industry, care about the environment the same in the industry and for agriculture to give attention to your employees, but it's not specific to Bordelaise, it's for everybody". Consequently, DG chooses to focus on changing the mentality of those who live on and around the vineyard.

Culture

In determining the key cultural foundations of decision-making and action on the vineyard, DG's background is addressed. Beginning his career in viticulture in 1989 with the vineyard, before which he was a winemaker with notable vineyards in France and Chile with distinguished names. When starting work with the Vineyard, he aimed to technically and integratively improve the functioning of the vineyard; "I want to always create, to have a new strategy for the vineyard, for the people and also for all the other partners we have around the estate". In this sense, his professional

development, closely intertwined with a personal ethos of making a difference, strongly influences the trajectory of Vineyard B itself.

Insofar as his management role in the Vineyard's transition, DG looks to integrated management, which officially started in 1999 (during the time of the procurement by the insurance company). This transition was certification-based'. As the certifications, explained more below, were obtained, he began to search for more sustainable developments that navigated away from standardized sustainability procedures. Various certification and evaluation models through the AFAQ 1000NR or ISO 1000 methods were taken on through his guidance – these models of certification being based on genuine contributions by companies to the sustainable development and corporate social responsibility (CSR) practices (Bivi.afnor.org, 2018). DG's aim in this was to work strictly off the three tiers of sustainability (noted in the introduction of this research document) to achieve a balanced approach; "The economic leg, the social and human being leg, and the environment leg. I consider today... that's the only way for a company to work, grow and to develop all their business".

For DG and Vineyard B it was also important to go beyond this concrete, certification-based approach into that of a more communicative approach. DG focuses on 'informing the people', ensuring that the neighbours or those who live close to the property know what is happening on the farm through annual meetings –designed to gather feedback from the community about their interpretations of the past year. Due to this, DG believes that Vineyard B has risen to be one of the leaders in Europe for viticulture and sustainability.

Another aspect of culture readily investigated and utilized by DG and Vineyard B is that of the 'location': "*Our terroir, the people working on the terroir and what's happened with [it]*". Through this lens, DG speaks of value development based on the local interactions with the location and the products that come from it for those involved and the shareholders: To "*be sure that everybody shares the same value*". In this sense, value is managed in terms of risk management, that of 'environmental, human and consumer risk' – iterating key focus areas of the key owner, the insurance company. As the shareholders have placed sustainability in high regard, and since viticulture is not the primary business arena of the insurance company (rather it functions as an investment), it is essential that Vineyard B's practices are a success as well as a good example of what the company can achieve through risk management and sustainable developments in response to climate change. In this sense, DG believes that the practices used on Vineyard B can be implemented in other areas too: "*I think you can do the same everywhere. Not only in agriculture or viticulture, everywhere... probably not more than 30% of the indicators are quite specific for viticulture. And for the rest it could be used everywhere*".

Insofar as culture within the community, DG speaks of Vineyard B as doing well to position themselves as cultural leaders and community developers, such as seen in their effort to enhance communications between neighbouring vineyards and mutually develop community education and welfare programs. DG mentions that Vineyard B, along with 5 other estates, is the 'first to create a specific school dedicated to educating people working on the vineyard'. Additionally, there is a set physical activity program aimed at enabling those working on the vineyard and keeping everyone

physically fit: *"Because we consider that it's a very hard job, we need to be sure that they have all the capacities to do it, and for that we need to help them. We were the first in Bordeaux to do that. And now we have more than 100 people working in the Medoc following the program of physical activities"*.

By determining a sense of internal community structure, cultural development, and cultural action seems to do more than just ensure a strong working culture for the vineyard, it also ensures a dependable and educated community of future viniculturalists. Additionally, there are collaborative/collective actions on the school, such as the exercise programs that reinforce cultural practices and ensure community development.

Cultural Resources

DG focuses on using and engaging the community within and around Vineyard B as a primary resource in developing the sustainable fabric of the vineyard. In this sense, using community as a resource will never alter, despite changes and even automation on the vineyard: *" I consider that a vineyard on a great terroir is nothing without people working in and living around the estate"*. Today, Vineyard B employs over 70 individuals, and DG feel this will either not change and may even increase as time goes on. In addition, it is also a focus on the vineyard to integrate a work-life balance that really focuses on the improvement of worker's lives on and off the vineyard: *" I think when I talked about balance, we consider that if we are well organized with very motivated people. Sure, we will create better wine, a longer plant in the vineyard, a longer life for the vineyard and better results. And we need to share the value we can create together... The preferments of the company will be only with attention on the people working in the company"*.

Ecology

Vineyard B stands as one of the largest estates in the region at 175 hectares with just one plot, having a significant ecological impact on the region. The production of the land reaches 1.3 million bottles a year with a high-quality output. For this reason, Vineyard B and DG ensure that the one of the three sustainability legs, the environment, are greatly considered in their developmental platform. This falls in with the maintenance of the land and adaptation of the crops to changing climates. This works to ensure profitability of the vineyard, as well as maintaining fertility of the land. The growing 'sustainable vineyards' are focused on a low impact, ecologically friendly model aimed at working with nature. Although the entirety of producing vineyards are not yet based on this model, it is the intention of DG to see this expand as time and the market continue.

Socio-Economic

DG seems to have a diversified approach to marketing and economic developments of the vineyard with a strong focus on community investment, supply chain influence and sustainable impulsing and millennial 'vision-sharing'.

DG and Vineyard B also did well to change their marketing strategy, illuminating the wine-broker from the sales strategy and distributing their wines directly. Before, the brokers managed about 80% of the sales, but now it is the inverse with only 20% of the wines being sold through

them. By selling wines directly, they can manage the messaging and market influence more: "now we manage our image, we manage our communication, we manage our customers ". Additionally, Vineyard B focuses on sales of their product directly to chain supermarkets and the export market (USA and Canada). DG mentions that, *"it's the reason why we are unique, because today more or less 80-90% of the estates in Bordeaux sell the wine through the Bordeaux brokers"*. This navigation to directly controlling sales and image more closely associate brand with the actions of the vineyard. In turn, Vineyard B can truly mark the trends in the consumer market, or even inversely influence the trends more actively around the ethos of sustainable developments.

Policy, Certifications & Subsidies

DG refers to a 'usual certification', the ISO 1901/1401, as an environmental management certification determined by the International Organization for Standardization (ISO). This standard, determined to achieve international procedure around business practice, is an independent, non-governmental international organization with a membership of 162 national standards bodies. Through its members, it brings together experts to share knowledge and develop voluntary, consensus-based, market-relevant International Standards that support innovation and provide solutions to global challenges" (ISO.org, 2018).

Insofar as the utilization of the ISO 1000 certification, DG mentions the distinction of this certification from those of more locally-based standards determined by professional committees in Bordeaux. DG states, the " ISO 26000, can [be] use[d] everywhere around the world. And you have... rules to check. It's an obligation of results. It's not only an obligation [of] management and development. You need to have results and measure your results". He also states that for competitive markets that are to really succeed, a globally understood international rule for everybody is most effective – this way, there is not only 'French expertise in sustainability', but also a global interpretation of sustainable knowledge available. This became especially important as the interview continued, with DG mentioning that 'to be able to navigate away from Bordeaux determined varietals to more experimental crops in order to investigate potential resistance to different rots and or resilience to changing climate is essential. Due to this navigation away from strict Bordelaise rules, DG has been able to set up an experimental crop that will provide 5% of the vineyards production with none-traditional grape varieties.

DG also states that the rigidity of the French administration in Bordeaux and other wine regions, making them 'impossible' to change. But it is essential for vineyards to do so anyway in order to remain competitive in the future. DG mentions that *"in 50 years, our location will have more or less the same climate as we have at the South of France... for merlot [a typical Bordeaux grape] it will be too hot...today we have less merlot in our vineyard than 20 years ago. And for more petit Verdot. More Marcelo, Grenache"*. In this sense, with decisions like this being made, it seems to be less about the future of climate, and more about the future of business. DG feels it is more about longevity of production and therefore a better and more robust business decision for the vineyard and the stakeholders. But, as DG mentioned, to be successful and dependent on future business, you 'need to be completely convinced about sustainability' and how this can aid in adaptability and resilience of a business.

Resilience & Innovation

DG so readily mentions, - apart from his investments in different varietals for different climates; his influence on the supply chain and therefore the narrative of the industry, as well as the highly integrated approach to community development and operationalization, highlights his intentions towards a transition- in the next 20 to 30 years, the market will focus more so on the millennial demand on a product, mentioning that millennials don't, "*only [want] a bottle of wine, they want to also share your vision, your value*". It is essential to note that here the concept of 'value' moves beyond the confines of market share and stakeholder value to that of a more culturally-based one. His recent venture into the Canadian market revealed that an investment in this does indeed gain a positive following and recognition for sustainable viticulture and therefore the brand.

DG also does well to speak of future developments insofar as the simplification of administration around viticulture - removing the 'decoration' attributed to making viticulture valid in Bordeaux, and rather simplifying the process. By doing this, companies have more time to focus on what is essentially important. Due to administrations determined by the current French supervision of viticulture, vineyards require a lot of human resources to complete, whereas these resources could be better used elsewhere. As a result, simplification also lies in the digitization of processes - to further define and refine administrative procedures. DG mentions, however, that 'simplification comes with the endurance to find it'. It will not come from the French administration. But, in seeking this out themselves, DG acknowledges that it will help all the people working at Vineyard B to be more 'efficient with internal or external communications'.

With changing markets and increasing competition along with the concerns around climate change, DG spoke of an integrated resilience involving sustainability as well as market resilience in the maintenance of quality at an affordable price to ensure accessibility and relevance in the market. He went on to distinctly highlight the essentiality of, "*good value for the consumer, because we can consider that we can produce great wine in terms of sustainability [that is] not too expensive*". In order to do this, there is a tender balance between growing the three tiers of sustainability in conjunction with that of the business. For the business sector to absorb future costs effectively, it too must grow. DG mentions in his closing statements that; "*I am not only focused on the results, I am focused on how we reach a good result, and not only how many results*".

4.3 Spier Wine Farm, Stellenbosch, SA

Place

Established in 1692, Spier is one of South Africa's oldest wine farms. It has a fascinating history and a legacy that the owners do not take for granted. Initially established within the Stellenbosch region, Spier was first owned by Arnoud Jansz, who settled on the farm. The deed was then signed to him in 1692 by the Governor of the Cape Colony and founder of the Stellenbosch wine region, Simon van der Stel. Over time, various additions were made to the property as it changed hands.



Image 6 - Slave bell (Spier Wine Farm, 2018).

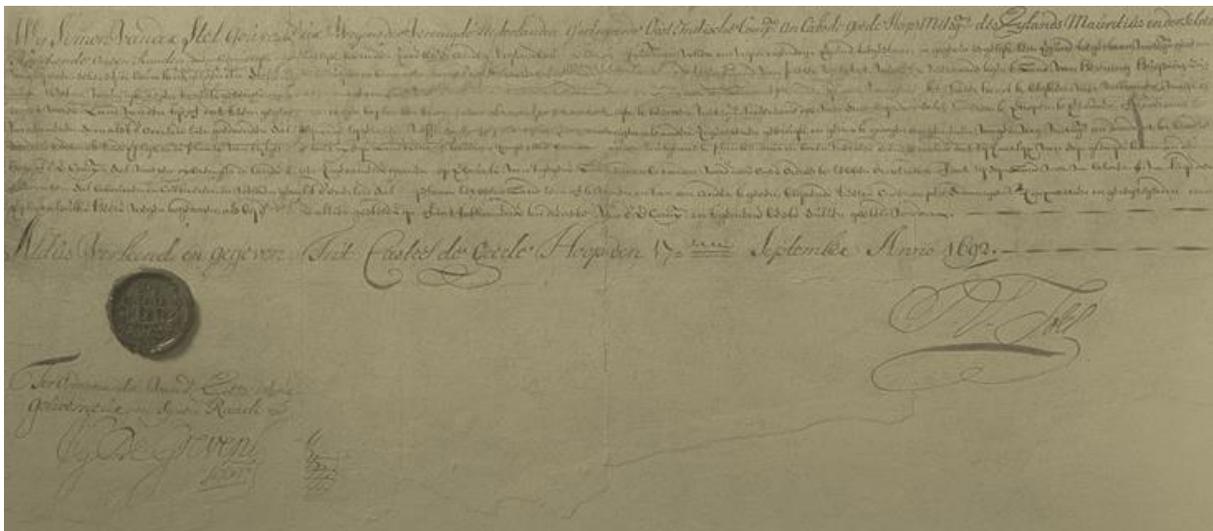


Image 7 - Deed of Ownership (Spier Wine Farm, 2018).

Today, the farm has a modern, conscious energy. Focused on skill and good farming practice, Spier is about farm-to-table food and accoladed wines. "Its people are committed to living and working in ways that bring positive change to our environment and community" (Spier Wine Farm, 2018).

South Africa, as a country and setting of the vineyard and wine region, is also of important consideration in understanding the concept of 'place'. As a relatively new democracy, having ended the Apartheid era with the release of Nelson Mandela and his rise to presidency in 1994, South Africa has seen a quarter century of democracy – a democracy at odds with globalized neo-capitalism and cultural/ethical differences within the country's own social fabric. This new democracy is being built on a fragile foundation of historic colonialism under both Dutch and British rule, slavery and later apartheid and separate development for the races. This gave rise to disproportionate land and resource ownership with commensurate control of the country's wealth and political power by the racial white minority and foreign entities invested in South Africa. Historically, Spier reflected these conditions through its ownership and its use of slave and later indentured labor on the vineyards, then finally adjusting to and embracing the changes brought by the collapse of Apartheid. It is safe to say that within all the turmoil, a myriad of cultures, beliefs and social structures emerged and created into what is now considered a multi-racial and multi-cultural society. Being set in the Cape, the historical Cape Colored communities as well as migrant workers traveling for the harvests in South Africa comprise a large portion of Spier's working force.

Sustainability

"Our ethos is what binds us. Spier is all about balance. We keep looking for creative ways for our business to grow in balance with our environment and society"

(Spier Wine Farm, 2018).

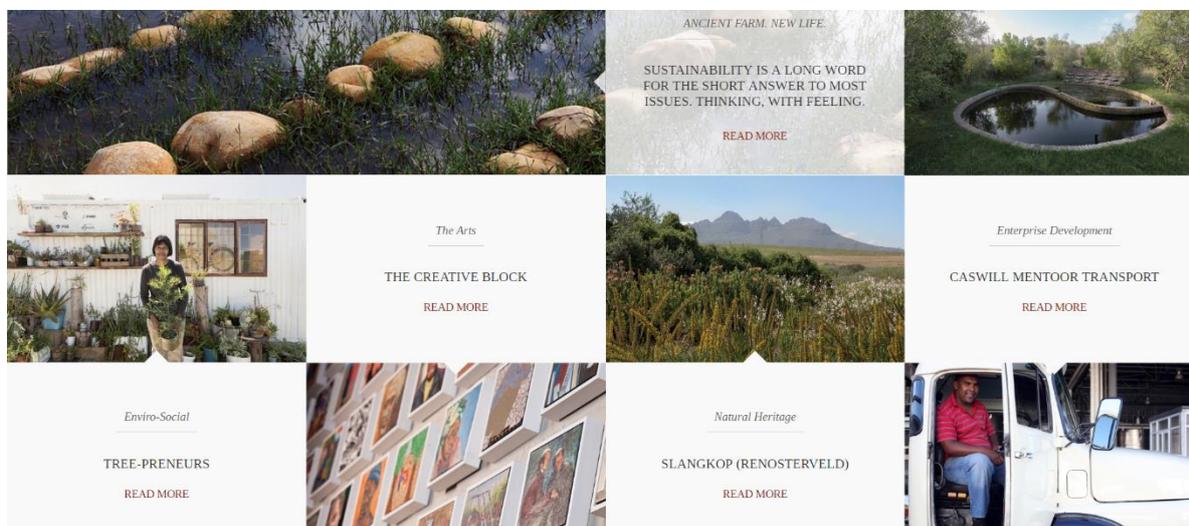


Image 8 - Screen capture of the Spier Wine Farm site exemplifying areas of focus (Spier Wine Farm, 2018).

Spier Wine Farm takes the concept of sustainability very seriously, dedicating most of its communications about the current and future states of the farm to this topic. Viewing both the farm and the region holistically is a key approach, considering aspects of conservation and even restorations of natural systems essential. The vineyard invests quite heavily in this integrated platform, focusing on conservation and wastewater treatment; sustainable business growth without over-extending nature; enterprise development; the arts and festivals; environmental and social

initiatives of empowering impoverished communities to plant and care for indigenous plant species; preserving natural heritage; and targeting social justice issues within the local community groups (Spier Wine Farm, 2018).

To Filander, sustainability is core to the operation, stating that " *we like to say that you are not the owner of the land, but the custodian of the land... whatever we do on the farm will enhance the biodiversity. In 10-years' time it should be in better condition than when we started*". Additionally, Filander mentions that this is essential to the success in production of the vineyards, especially in the long-term. In starting their organic certification in 2013, a focus on enhancing the soil quality and fertility on the farm was part and parcel of the shift. Filander introduced biodynamic farming which, in addition to enhancing soil quality, does a lot for water management and retention on the farmable land – this therefore reduces the water used to nourish crops and the fertilizers needed to maintain healthy plants. Filander mentions that, "*in the past 10 years there is a vast improvement in the organic carbon in the soil... just a 1% increase in carbon content lead[s] to about 4% [increase] in the water that the soil can keep or retain*". This has led to an improved dependence on crops and harvests. Other vineyards have experienced a 32% drop in yield due to the three-year drought cycle in the area. Spier, however, did not drop. Filander also mentioned that due to these improvements in the soil quality, Spier uses 10 to 20% of the recommended irrigation on the vineyards, "*even with a 20% of recommended irrigation, we still have acceptable results on the yields*".

Filander, in addition to increasing carbon content in the soils, focuses on systems management through, cover crops and animal husbandry in the vineyards and on the pastures around the vineyards which use 'manure as part of our fertility program and also to bring the component of bio management into the vineyards when you create balance between the systems using the animals and plants themselves' – this is in the form of cattle grazing in and around the pastures in combination with an adjustable model of workable land. This 'adjustable model' is seen in the usage of land being adjusted based on climatic or seasonal changes. For example, of the 126 hectares available at the time of the interview, due to the drought Filander operated on only 80 hectares of the available land to accommodate for the changes in the climate. This exhibits a distinct balance with natural rhythms and inherent flexibility in planning on the farm.

It is significant to note that when the farm converted over to the organic certification, there was an initial and significant drop in yield and the growth of the plants. However, the systems adjusted and even surpassed expectations with increasing growth and yield, even during the drought seasons. Still, the value in ensuring that agriculture and indigenous systems can cohabit and work to benefit and not damage, is essential: "*if you don't look after the environment in the long term, you won't have production on the agricultural side*".

Culture

Filander works in an integrated managerial role on the farm, focusing not only on the management of the vineyard, but other ecosystems on the farm as well. He is responsible for 'water bodies and general maintenance, as well as environmental management on the farm – this exemplifies a more integrated approach from senior management members.

Spier itself implements a culture of holistic and integrated approaches to every functioning aspect on the farm. Filander exemplified this by stating: *"It's about environment, it's about people. And those are special, because we believe a lot of the projects we do on the farm, as well as our induction programs we have on the farm... The staff would actually take ideas back home and spread the word amongst themselves"*.

Spier initiated a unique approach to sustainable implementation, speaking to its 'stand-alone' and uniquely interactive character, of an effluent processing plant on the farm, run by Spier themselves: *"all our 'black water' is being cleaned and being reused in certain areas for irrigation. Instead of piggybacking on the municipal infrastructure"*. This project does not stand alone, they also have a solar power project aimed at producing their own electricity. This desire to remain independent from the municipal infrastructure and create a degree of self-dependence is unique for a farm of this size and for the region. In this sense, Filander mentions that inspiration for this comes from 'benchmarking' through affiliate or 'conservation champions' such as the World Wildlife Fund (WWF). These affiliations tend to work to inspire and benchmark against certain standards in order to progress competitively and efficiently.

This 'multi-level sustainability' identifies culture as primarily expressed through the staff and new staff - all trained in the common and shared 'company philosophy'. In this sense, Spier work to create a unique and shared culture amongst those who work there – one independent and more influential to the external South African cultures from which it originates. Filander clearly and concisely outlines this with, *"the idea is that, although the business has certain ideals, and philosophies and cultures is to engage with the staff that we have. So, there is also different cultures coming into the business. And we would like to respect all the cultures, but the message that we spread is one of inclusivity"*. The myriad of cultures on which Spier, as a business, relies – those of the traveling or migrant laborers, laborers from surrounding communities, staff from white or black, or mixed origins, etc. - are all respected on their individual bases. He went on to state that, 'the business can accommodate different cultures, while also creating a unique culture to the internal workings of the employees and those working with us in the market'. Filander also outlined that although all cultures are recognized, there is rather a shared internal culture, understood and navigable by all from which everyone interacts and most importantly, interacts with outside parties. Filander so eloquently states:

"I think it's one of the better places to work for, because there is a good policy and there's long term vision already in place. So, if you come from different cultures, and you can align your goals and vision with a business vision, it's quite easy to adjust. A lot of other businesses we sit with individuals and goals which doesn't necessarily align with the business goals, and a lot are quite reactive than proactive. And from the practical perspective, we need to fight for budget and projects on environment and sustainability"(pg. 9-10, 2018).

Filander also believes that the staff and customer alike also need to 'believe in what we do', in turn making it a lot easier to communicate, encourage investment and ensure functionality between

relations. Filander also believes this to be a two-way-street whereby Spier is open to concerns, suggestions and beliefs of both staff, third parties and customers (national and international) alike.

Cultural Resources

Insofar as cultural resources, Spier Wine Farm and Filander look to their staff who bring the internal culture of the vineyard to life, the place and the strong focus on conservation ecology and the international market as a key propeller in certification, policy and business practice. In doing so, Spier aims to maintain relevance in a global market as well as propel the brand into a competitive arena with consideration of the current platforms on which consumers are making decisions – eco-labeling, health standards, environmental or labor standards, etc. Filander provided an example of this thought process by stating; *"We are looking now at the BSCI Code of conduct, which is a European acknowledged standard on ethical product, so that we can align our practices with the latest kind of social and ethical conduct of businesses"*.

Filander noted that the overarching approach works to 'create a culture of bringing diverse ideas together and working with each other through the vision of being 'custodians of the earth'. Everyone's idea has the same weight and how that fits and is involved into the project will be attended to'. However, if something is not working out, then ideas and opinions are outsourced to third party groups in order to gain some perspective and harvest information from beyond the borders of the estate and its staff. Further adjustments are then made to the plan.

Ecology

Over time, the farm has changed hands as well as how it functions. Having been a conventional farm, then an experimental farm for the University of Stellenbosch for the past 50 to 60 years before procurement by the current owners in 1993. Commercial and chemical based farming practices were used and eventually took a toll on the quality of the soils and the land. Conversion to more organic and biodynamic farming practices have done a lot to enhance the growing potential of the land and quality of the soils. With the current 3-year drought cycle and additional concerns of climate change, Filander believes that the resilience of the farm and crops have improved. As the animals graze the manure and disturbance of the soil enhance and encourages growth of the veld, which is essential to achieving the balance of microbes in the soil that he seeks. Filander mentions, "microbes are actually breaking down the soil and feeding the plants. Whereas a conventional system would rely on fertilizer in soluble form ... over the past 10 years growth has reduced, but now it is picking up again. So, we believe that the plants are balanced with the root systems and the vegetative growth; with the animals and using carbon content in the soil". Filander believes that as a result, the 'vineyards are a little bit more buffered against the environmental factors than a normal conventional farm would be'.

Environmentally, Filander mentions the invasive animal and plant program aimed at eradicating unnecessary strain on the local ecosystem and restoring a natural and indigenous balance. There are three rivers on the farm: 'The Eerste Rivier, the Blauwklip Rivier and the Bonte Rivier. By planting trees in the area, they hope to successfully propagate indigenous plants to rehabilitate the area and

slowly phase out the invasive/alien plants – as invasive plants species are revered as being massive water consumers which has a domino effect. Local plant species are more in tune with the local climate and water scarcity, thus ensuring increased water availability within the Spier ecosystem. Additionally, Filander focuses on the conservation of unique natural 'veld' varieties endemic to the Renosterveld area (a UNESCO world heritage site)- 'Swartland Renosterveld, Lourensford Alluvium fynbos, and Ferricrete Fynbos' – a combination of brush, protea and wetland bulbs on and around the pastures of the farm. Filander also stated that some of these areas are 'earmarked for rehabilitation' and cordoned off to animal interference – thus reducing and even eliminating agricultural inputs. In doing so, they hope to be able to declare some of the farm a 'nature reserve'. In the long-term, Filander hopes to officially declare, '20% of the farm as pristine area'.

Filander emphasized the importance of maintaining the natural aesthetic of the winelands for the sake of heritage – the indigenous and agricultural landscape of the area. Spier, he revealed, is in a unique position to be able to preserve additional lands, whereas other farmers are more dependent on their land being used for production. Filander states: "*we don't have to use 100% of the land productively in that sense. But also, whether it is the masterveld or fynbos, in some sense the land is productive*". Filander highlights the inherent value of the land as a tourist destination and that in this sense, visitors gain value from exploring the vineyards and masterveld alike – as a result, he believes in the heritage and inherent value of both areas on the farm.

One of the biggest challenges facing the farm currently is water. Currently, South Africa and especially the Western Cape is experiencing a drought, having continued for 7 years. Secondly, diseases pose a threat to the crops: "*We still have 99% of our neighbors that are conventional farmers and they use pesticides. And there is a trend with the prolonged use of pesticides when you get resistance of some of the diseases, fungal diseases*". Currently, Spier uses organic products, but as neighboring farms continue to use strong chemicals, this will no longer be a realistic solution for Spier. Additional concerns around viral diseases due to profitability issues and resultant mismanagement by labor on other farms threatens Spier's crops as well. Most importantly, this will threaten the success of the organic farming projects, thus showing the inherent benefit to Spier to influence neighboring farming practices.

Socio-Economy

Filander mentions, in this integrated approach, the business of the winery, hotel and function centers, amongst other offering on the estate, all function on a 20-year goal plan focused on 'water consumption, energy consumption and waste/recycle'. Currently, Spier recycles 81% of its used products in addition to managing supply, packaging and reuse of materials. In this sense, Spier has done well to integrate sustainable goals with that of economic goals – making them one in the same. Insofar as competitive approaches, Spier rarely directly compares themselves to competitors: "*live out a certain philosophy with the organic production and the biodynamic principles and the orientation of whatever we do on the farm, so we are quite 'our own focus' program that we are running*".

Filander indicates that Spier has a balanced 50% financial and 50% non-financial resource budget distribution quota. This is unique as other farms tend to fulfill an 80% financial and 20% non-financial budget quota: *"From the management point of view operation, there's good balance and understanding that the two go hand-in-hand.... If we look after the non-financial stuff, the financial gains will be there in time because I think customers and other clients will align more for a sustainable business who will look after their environment than someone who is just chasing the profits"*. Filander also goes on to mention that profits and the sustainability of the business are both essential to maintain one another: *"profits are very important for the longevity and sustainability of the business, but we find our non-financial goals for the business are as important. Even more important than the financial goals of the business"*. As the majority of the profits get 'ploughed back into the sustainable project on the farm, it is also essential to understand that sustainable development will also need to focus on the increase of production in order to expand and therefore adequately fund the necessary sustainable changes on the farm, such as 'noise reduction, recycling, and the rehabilitating flora and fauna of the property'.

Filander outlines the key focuses on the farm, all of which are cornerstones of Spier's holistic conservation- and preservation-based goals. *"Our goals on the vineyards on the high level is to produce the best possible organic line from the grapes. Secondly, is to get good use out of the vineyards. Good quality grapes to sustain... or to create a sustainable brand"*. Filander cited that there are two wineries active on the estate: the commercial winery, producing 3 million liters a year; and the second is a 20 hectare 'farm-to-fork' winery, where the best wines are kept. This was the birthplace of the organic line and experimental part of the farm. Through this, Filander and Spier discovered that organic farming of grapes does indeed work, thus leading to the second goal of the farm, to be the creation of good quality wines from organic grapes – *"we need to try and make the best possible organic wine in the world"*. In addition to this, Spier is also looking into developing a minimum input wine (little to no additives). Currently, they are housing 15 tons of grapes for this purpose. Ultimately, Spier aims to focus on this minimum input wine and a more commercial organic wine for introduction to market – at this point they are still determining the potential of this wine.

The concept of 'home grown' food and wine – 'farm-to-table' – is based on introducing the guest, visitor and Spier wine drinker to a more exclusive experience and engagement with a closed and self-sustaining system. By bringing the philosophy of the farm to the table or the glass of the consumer, Filander hopes to prove that Spier can do organic, biodynamic operations well and therefore influence the industry at large. In doing so, be able to communicate directly with other farmers about their successes and failures in implementation and ensure that other members of the industry can make the transition successfully – in doing so they are able to establish 'best practice partners' and also benefit the ecosystem at large, ensuring that there is no cross contamination of chemicals or negative feedback between farms as well.

Market-wise, Filander remarked, 'Denmark want to grow their market in organic wines to a share of 10% of their total market. Currently, it is less than 1% of what they distribute. There is quite a market for good quality organic stuff' showing value in the investment of the farm to focus on organic productions. However, in breaking into the organic wine arena, competitor wines are poor

quality, thus imparting a rather poor reputation on the concept of organic wine at large. Spier, in this regard, is also interested in boosting organic wine production quality with other farmers, to remedy the now poor reputation and gain market momentum for South African organic wines. This is an interesting approach, as Spier appears to be stewarding a movement of good quality organic wines and biodynamic productions beyond its own borders. Essentially, it is likely that this will benefit them as well, however it is more altruistic than competitive in nature: *"I think that is how we all learn. I mean, we are open for new ideas. And we don't keep secrets. If something for us works well, we will say"*. The next challenge for Filander is to increase production – yield and wine production – with plans for more organic vineyards in the next three years. It is also important to note that the shareholders of Spier are backing up this decision to expand into biodynamic productions, as well as introduce more organic wines to the market.

Policy, Certifications and Subsidies

Spier is one of 29 WWF Conservation Champions and is organically certified, following the Integrated Production of Wine (IPW) criteria - a voluntary environmental sustainability scheme established by the South African wine industry in 1998. In 2011, 'Condé Nast Traveler World Saver Award' recognized Spier as the top international destination *'Doing it All'*. Spier Wine Farm has been recognized by other external organizations including Fair Trade in Tourism (FTT) and the Wine Industry Ethical Trade Association (WIETA). The cellar is FSC22000 certified and is Fair Trade accredited.

Spier relies on local wine industry associations, local governmental mandates for land management and international certifications and policies on which to build or shape decision on the business and functionality of the estate: "all our businesses are affiliated and certified with these organizations, but we are also looking now into international standards". Filander mentions that compliance, especially on the welfare level is something of particular concern – however, it appears once again to be an integrated approach, 'Because it's not just the product that sells itself, there's also other stuff. Other layers that we are constantly looking at'. In being so closely affiliated with the European market, Filander emphasized the degree to which Spier attempts to remain relevant and compliant with the local policies within their target European regions, ensuring that standards are met, and policies are respected. This is a marker of expanding cultural 'influence'. Cultural pioneering is no longer the usage of international customs, techniques and virtues. Rather it is more so the derivative and even overlapping of cultural policy, certification development and recognitions set by other countries within globalized business. It is important to note that these policies and standards align very often with those set up internally within Spier.

Compliance to various protocols determined by various organizations or associations is ensured at Spier. Filander mentions that 'he sees legislation as a minimum requirement' – but what they try and achieve is best practice. Filander does mention that: *"the risk is the legislation (economic and political)"*. Political in the sense of legislation, especially on organic production, although South Africa doesn't have legislation on organic production of its own. Therefore, Spier makes use of European legislation and protocols. Filander looks forward to when local legislation will begin to emerge, making it easier for the local organic community to expand as a result of reductions

in cost involved in outsourcing certifications from Europe and navigating what is now an exclusive market.

Resilience and Innovation

Spier Wine Farm's current owners procured the property in 1993, already then establishing the 'long-term goals' for the farm. In this, they determined that Spier should be a sustainable business and the pillars for that would be: 'people, planet and profit'. It was later revised to be: 'people, planet THEN profit' (pg. 9, 2018). Filander did mention that in the last 10 years it is has been a challenge to implement many of the projects, but it is starting to fall into place.

Insofar as climate change, Filander mentions that despite the threats of rising temperature, the current location of the vineyard is quite moderate insofar as weather. If there are radical changes, he believes that the farm may be alright and if necessary, a move can be made to warmer areas further away. With the water concerns, Filander mentions that they bring water processing functions onto the farm itself (thus recycling 'black water' to be used elsewhere) as well as draw from groundwater. This hat tip to depending on and maintaining a resource within a closed system leads Filander to believe that despite the threats, this can be managed successfully.



chapter

5

5 Case Analyses

The following analysis considers the data accumulated during the interviews previously depicted. The results are then considered in relation to the theory and resulting data analysis gears accumulated and adapted from the theory. The table 3, below, outlines eight key categories of consideration when analyzing the cultural data emerging from the interviews:

- Place
- Sustainability
- Culture
- Cultural resources
- Ecology
- Socio-Economy
- Policy, Certifications & Subsidies
- Resilience and Innovation

Through the above categorizations determined from the interviews and the interview data, the vineyards and the corresponding planning practices will be analyzed according to their progressions and cultural applications through the data analysis gears.

It is also essential to note that these deductions are made based on the research and understanding that " People are not always aware of their values. Also, one does not always act in accordance to one's own values or (sustainable) attitudes" (Horlings, 2015, pg. 270). In this regard, Horlings (2015) notes that this 'discourse analysis' will allow for the understanding of how language (all from second language interviewees – that being English when interviewees inherently speak another language) represents personal goals as well as those of 'ideas' and how these ideas result in different 'world views and realities.

Table 2: Cultural Planning Comparative Grid

	<i>Wijngoed Wilgenhorst, NL, Northern Europe</i>	<i>Vineyard B, Bordeaux, France</i>	<i>Spier Wine Farm, Stellenbosch, South Africa</i>
Place	Netherlands (Innovation based, explorative, pioneering Dutch vinicultural industry); Flevoland; Zeewolde and new polder; outer small village area; agricultural area; underdeveloped/newly-developed	Bordeaux; historic region; major changes (mechanical and infection over time); haut-medoc	South Africa (Complex political, social and cultural makeup); Western cape and winelands (UNESCO world heritage area of the Renosterveld; conservation areas; heritage areas); veld and agricultural area
Sustainability	Self-taught; tech and adaptability based; newness-inspired; knowledge sharing and observational; new varieties of grapes and growth innovations; historical cultural appropriation; investment in community/volunteers	Vineyards (varietals), fertilizers, supply chain, certifications and knowledge sharing/globalization of sustainable knowledge sourcing and standardization;	Organic certification and biodynamic farming methods; conservation and rehabilitation efforts to local flora and fauna; resiliency building; land use; reduce, reuse and recycle materials; water recycling; and solar energy; a determined sustainable vision
Culture and Values	Personal culture (transparency, commitment to sustainability, enterprising, personal development, work/life balance, legacy for his family and son); community culture (volunteers, heritage for the community); Tourism, workshops, community engagement; Local foods and produce within localized area (pride in place and place-based products); history; polder creation/Lely; agriculture/farming Cultureless/Newness	Personal culture (director/influential, driven to success, technical solutions and integrated innovation); Bordelaise foundation and anti-bordelaise progression; sustainability and community input; Human and ecological vitality	South African; internal culture; SPIER culture; globalized and competitive culture; consideration and company-based initiatives; benchmarking to inspire, not compare; knowledge sharing; adding value; community multi-level success; integrated successes with neighboring farms
Cultural Resources	Community; local artisans; polder history; family; winemaker - knowledge (this was more business	Local community of neighbors and fellow vineyard owners engaged through an	Staff (who buy into Spier culture); customers (local and international market); third party suppliers; tourism

	<p>than passion-related); knowledge vs./; terroir; government or decision-maker structures</p>	<p>annual meeting; other farmers and businesses in the area and supply chain/investment in changing the system at large or investing in changing the culture of the system.</p>	<p>– international and national; international or globalized market; local wine industry association; governmental associations; conservation champions (WWF); sourcing ideas within and outside the company</p>
Ecology	<p>Agricultural innovations in favor of lowering impacts on natural systems (subsidies); history – living below the sea and it being a polder (Zeewolde); flat landscape; wind; water</p>	<p>The region, soil, water and grapes all contribute to the sustainability of the vineyard – this is all addressed as a given and standard practice of sustainability; correlation with other farmers; largest vineyard in the region</p>	<p>Renosterveld; water scarce region; integrated and biodynamic land management; rare flora and fauna; river valley; invasive/alien plant species present; integrated value in maintenance of vineyard and indigenous veld; communication with neighboring practices to reduce cross contamination and imbalances</p>
Socio-Economy	<p>Entrepreneurship; diversification goals; adaptivity; local products; traditional marketing and storytelling with the community</p> <p>Artisanal small production product with integrated approach to business and community development</p> <p>Mechanization – no elimination of labor as it was all volunteer.</p>	<p>Market value and competitiveness encourages resilience development through the need and desire for long term success vs. short term success – Risk management; business related changed – prompting sustainable development (SD) along the supply chain = sustainable influencer. Change the strategy to illuminating the broker</p>	<p>International market (80% of sales); reduce, reuse, recycle (RRR) is key market tool for reduction of cost and impact; biodynamic effort to ensure long-term and resilient outcomes; 50/50 distribution of budget; dual and intertwined importance of profit and sustainability; organic wines.</p>
Policy, Certifications & Subsidies	<p>Community integration within local initiatives = subsidies; agricultural vs. urban zoning; population and land use; new communicative vs. traditionalist approaches; integrated design proposals; change on local and national scales</p>	<p>Local Bordeaux policies are a barrier to resilience building on the vineyard (traditional grapes only for various certifications). International and integrated certification are more realistic for competitive and</p>	<p>Organic certification, Fair Trade, EU-based certifications and policy implementation due to lack of SA structures.</p>

	(Wijngoed definition); Eco-practice subsidies.	therefore more resilient markets.	
Resilience & Innovation	New grapes, new wine production and making practices; climate change as a plus for NL; legacy decisions; community investment.	Adaptation of varieties; influence the supply chain; sustainable advocates; community/worker focused; navigate away from local restrictions; keeping the millennial in mind (therefore meaning-based products).	Biodynamic farming; resource management and reuse; working with nature to produce and preserve; sustainable vision: People, planet THEN profit: closed system water management and recycling.

Table 2 - Cultural Planning Comparative Grid

5.1 Assessments and Valuations of 'Culture in Planning'

After careful consideration of key mentions throughout the interviews, the above data table was evaluated to further categorize and outline key areas of analysis.

5.1.1 Culture and Values

Based on results in Table 3, the following gear of analysis is used to properly determine the value progressions of the vineyards, the origins and the impacts of their planning and decision-making on Integral Sustainable Development (SDv). It is essential to point out that although this research speaks to the vineyards' distinct progressions from one quadrant to the other, it is not to say that the vineyards do not engage in the other quadrants – in fact, they do. These conclusions are based on major trends observed through the interview processes and therefore need to be acknowledged in light of this to discern the impacts 'culture' can impose on systems. The question of integrated approaches and complexity can be investigated further in the future.

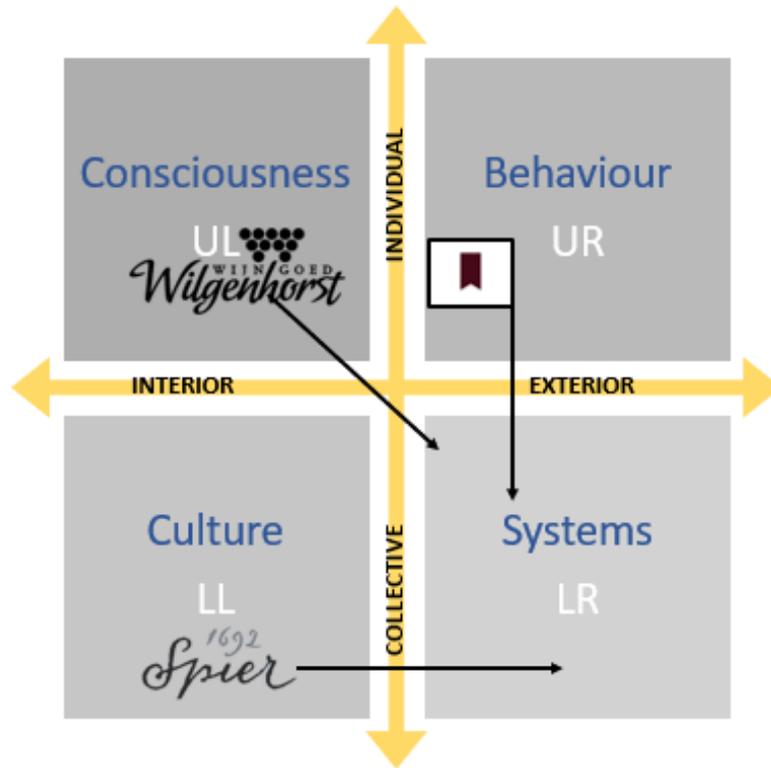


Figure 12 – Integral Framework Analysis Applied (Author's personal illustration).

Through this analysis, the movement and direction of planning logic used by the vineyards is noted. Key areas of focus, as mentioned in Chapter 2, are 'the 'I' quadrant representing values and the 'WE' quadrant representing the collective and intentional dimensions and expressions of the values in place.

5.1.1.1 Wijngoed Wilgenhorst

In considering the vineyards in relation to their respective interview orders, we first address, Wijngoed Wilgenhorst. The investigation of values used in their decision making, highlighted as key factors in the categories 'culture and values', reveals more personal foundation. Horlings mentions concepts of transparency, commitments to sustainability from a self-taught perspective and work/life balance. Horlings' focus on tourism by creating a vineyard through which volunteers can contribute and make a sense of place originate from the foundational elements of the 'UL' quadrant of the figure: the "I experience"; Interior/Individual; and subjective realities outlined by his and his family's experiences and beliefs. However, it is also suggested that with the outcome of these decisions, namely that of the community integration into 'volunteer-based' harvesting, ecologically conscious and low-impact farming methods, as well as local zoning and ordinance impacts through the development of the vineyard, we see a navigation toward the 'LR' quadrant: "WE do"; Exterior/Collective; and societal and environmental structures. A culture of the personal insights for community advancement. Much of this can be assumed based on the small operational aspects of the vineyard and the immediate role Horlings plays in the running and success of the farm.

Horlings mentioned the 'logistical and agricultural' heritage of the Dutch in general, stating that he does not necessarily see his actions on the farm as synonymous with this. In this sense, Horlings seems to acknowledge the Dutch culture of success in these areas but attributes his

decision-making to being more personal. However, throughout the interview process and in investigating the vineyard itself, it appeared that despite Horlings' belief that he did not align with Dutch planning culture per se, he did. Whether this is by the prevailing Dutch norms or even by default of the system through which he functions, every aspect of production and plans set for the new locations are logistical dreams with great initiative from an agricultural perspective. In this regard, the acknowledgement of conscious vs. unconscious engagement with value generations is necessary. Additionally, Horlings' goal of work/life balance, also a trait strongly considered a foundational element in Dutch cultural practice across industry spectrums, is again attributed as more a personal one. In seeking sustainability in work and life, Horlings extends these goals across the spectrum of vineyard and the community in which it is based. Thus, the determinization of the 'UL' quadrant as a considered starting point.

5.1.1.2 Vineyard B

Secondly, we address Vineyard B's progression. Starting from the value-based perspective, Vineyard B seem to navigate from The more 'UR' quadrant: "I do"; Exterior/Individual; visible systems. This is based on the interview suggestions that DG and Vineyard B are more reactionary, taking into consideration the decisions they make as being result oriented, whether it be economically, risk mitigation or solution oriented. This focus on the existing company and the response to climate change, fluctuating markets and internal shareholder initiative sparks a movement toward to 'LR' quadrant: the "WE do": exterior/collective and visible structures that result from the value-based decision making mentioned. This can be acknowledged through the market-value and resilience development through the need and desire for long term success vs. short term success and strong focus on the millennial market and stakeholder/supply chain management. This progression, although from a different origin, results in a similar conclusion to that of Wijngoed Wilgenhorst in that values expressed result in systems change. The culture of leadership for future successes. This can be understood in the light of Vineyard B being a more commercial, public company with the recognition of the responsibility it has for those invested, working and depending on the farm, including that of its environmental impacts and ability to remain fertile in the future.

DG considers that management of different sectors through the company better determines the success of all the sectors. Success on which the workers, shareholders and customers are all dependent. In this sense, the size and therefore economic necessity and power to maintain efficacy and quality of management is essential. If there are issues: such as sustainable issues on the vineyard, or around the vineyard, or in relation to the business, the size of the vineyard and the production, the business power and platform allow for many opportunities to work through them effectivity. This suggests a reactionary response to what is already being done on the farm. Whereas small vineyards are less able to directly impact changes in response to issues due to resource availability. One such example of this, is DG's intention to remove the middle-man or broker from the sales chains, taking direct control of not only production, but also sales and market development. It is easy to see this as a smart and adaptable business tactic, but also, perhaps, an essential decision in determining future resilience within the market and production and in sustainable decision making. In many senses, the Bordeaux brokers culture could be considered a quintessential marker for community belonging and standard determination within the region. In turning away from them, Vineyard B has yet again (as in planting new varieties) made a distinct decision to look beyond

constraining factors associated with cultural preservation and determinants. Yet, by reducing the scope of the supply chain, Vineyard B also done well to simplify and therefore better maintain and control its inner workings and impacts – this ensuring a clear-cut sustainable narrative.

With Vineyard B being distinctly French, and somewhat of a Bordeaux trendsetter, these decisions can be considered culturally determining actions and perhaps linking to the adaptability (market and sustainability-wise) of the vineyard, the owners and the brand.

5.1.1.3 Spier Wine Farm

Finally, Spier Wine Farm reveals a distinct navigation from that of the 'LL' quadrant: "WE experience"; interior/collective; shared values and culture. This is exemplified in the decisions to distinctly invest in an internal vineyard culture whereby the 'People, planet THEN Profit' mentality and benchmarking goals in order to inspire employee-wide insights as opposed to ensuring economic success. This then navigates, as the other vineyards do, towards to the 'LR' quadrant. This is expressed in the focus to influence supply chains, biodynamic farming methods and wine-making goals along with that of the 'farm to table' ethos throughout the tourism aspects of the farm. A culture of people and place to global impacts. It is important to consider that this approach may be necessary based on the multi-cultural and testing nature of South African vinicultural farm areas, meaning that the testing environment and mass influence of people lead to the need for internal cultures and placing people and planet before profit. With this idea of a strong internal culture designed to equalize the playing field and inspire proactive behavior in place, Spier has navigated into an essential arena for directed and effective change-making within the company of a variety of levels.

It is essential to note that South Africa sports distinctive regional and racial expressions of culture, and as a result it is also difficult to determine how these will come together in the working environment. One could almost assume that due to the variety of cultures and influences guaranteed to enter the work environment, that is could be an adaptive (albeit subconscious) management approach to rely so heavily on the internal culture, as well as to go so far as to 'teach' it on the arrival of an employee to the farm. Filander acknowledged, that the basis of the cultural development can occur on a South African level, but due to about 80% of the product being exported, there is a great deal of international influence. This strong sense of internal culture does well to maintain agendas, despite shifts in global trends and pressures.

This is important to consider when recognizing how actively Spier, Filander and his team engage with this concept of staff and community as a source for inspiration, action and development. Additionally, Filander revealed that within this harvesting of ideas from within the community which shares a common idea of sustainability through their shared culture, projects can be implanted and adjusted as they go along.

5.1.1.4 Key Findings

Through the consideration of this analysis gear, we see a distinctly different starting point for all three vineyards, however, they all result in a similar effect in the impacts made within the immediate societal and environmental systems in which they function. This suggests that in place-shaping (practices that affect interaction with place or the makeup of the environment itself) all vineyards' planning and decision-making platforms have similar impacts on the societal and environmental systems in which they function. However, the commonality in cultural- and value-based origins

differ, making it harder to identify a clear method of how culture can be operationalized to effectively impact planning and more importantly, resilient and sustainable developments.

5.1.2 Culture in Sustainability, Place-Shaping and Resilience Building

The following analysis gear allows for the determination of culture in relation to Place-Shaping, Resilience building and transitions, as mentioned in Chapter 2.

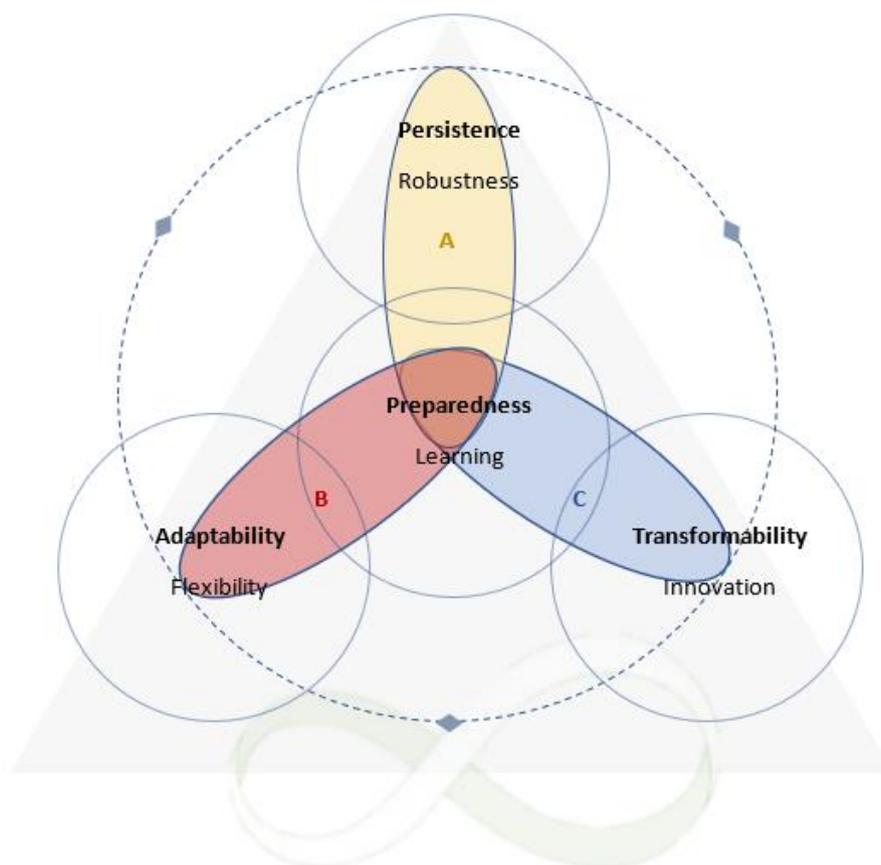


Figure 9 – Cultural Planning in Place-Shaping and Resilience Building (Author's personal illustration).

The figure above represents Place and Place-Shaping (Horlings, 2015), allowing room for cultural planning as a connection of vales place and practice (i.e. the vineyard) and therefore operationalizing culture in planning; the Adaptive Cycle (Davoudi et al., 2013) and Resilience Building (Davoudi et al., 2013), focusing on 'Preparedness' and essentially tapping into cultural capital as an intrinsic preparation factor for changes, dealing with adversities and managing the unpredictability in the environmental sphere.

The following analysis gear allows for the determination of culture in relation to Place-Shaping, Resilience building and transitions, as mentioned in Chapter 2.

Table 3: Figure 9 Analysis Grid

	Wijngoed Wilgenhorst, NL	Vineyard B, France	Spier, SA
A – Re- Positioning and Persistence <i>Culture, Socio-Economy,</i>	<ul style="list-style-type: none"> – Identity & local business interest – Locational timeline – Zoning certifications – Hyperlocal & artisanal products – Diversification of service provision: Tourism Center 	<ul style="list-style-type: none"> – International markets – Focus on the millennial – Competitive sustainability – Risk management – Use of technology 	<ul style="list-style-type: none"> – International markets – Internal, vineyard culture and practices – Equal distribution of profit for market growth and SD
B – Re-grounding & Adaptability <i>Sustainability, Cultural Resources</i>	<ul style="list-style-type: none"> – Integrative & Communicative approach – Local, volunteer workforce – Appreciation for local administrations & willingness to change them – Rooted in professional ethos of sustainable farming practices 	<ul style="list-style-type: none"> – Navigation away from traditional and rigid farming practices – Local community input system – Supply chain and partner circular feedback network 	<ul style="list-style-type: none"> – Organic certifications and biodynamic farming methods – Land use and closed cycles (RRR) – Local staff and stakeholder insights
C – Re-appreciating & Transformability <i>Ecology, Place, Policy and Certifications,</i>	<ul style="list-style-type: none"> – Storytelling – Wine Barrel and Roundabouts – Bio-farming subsidies – Zuiderzee celebrations & product recognitions – Investment in local crafts 	<ul style="list-style-type: none"> – Ecology as vital sustainable focus – International certification investments – Sustainable certifications & farming methods 	<ul style="list-style-type: none"> – International certification investments – Strong local heritage/ Conservation incentives – Strong focus on futures
Sustainable Place-Shaping and Preparedness <i>Resilience & Innovation</i>	<ul style="list-style-type: none"> – Wijngoed (the first) – Capitalizing on Climate Change – Organic vineyards – Personal & community centric approach – Transparency & Educational, tourism platform – Creating traditions – Wine tourism 	<ul style="list-style-type: none"> – Capitalizing on Climate Change – Move beyond Bordelaise culture – Sustainable Vineyards – Sustainable influencer – Global Relevance and Recognition – International Markets – Wine tourism 	<ul style="list-style-type: none"> – Working within the realities of climate change – Internal cultural platform – Biodynamic vineyards – Sustainable influencer – Global Relevance and Recognition – International Markets – Wine tourism
Colored statements: Identify repetitions/trends in planning expressions within the scope of the analysis			

Table 3 - Cultural Planning Comparison Analysis

5.1.2.1 A – Re-positioning and Persistence

When considering the drivers of sustainable change and positioning of it through the lens of the vineyards, we consider the values behind decision-making and competitive sustainability as a driver for innovation and business vitality. According to an article on the interplay between social capital, leadership and policy arrangements in European rural regions, 'social capital' is defined as a qualitative dimension of networks, cooperation and social relations comprised of norms that enable people to act collectively (Horlings, 2012, p. 218). These concepts are especially important when contemplating the stimulatory and contributive influence these vineyards can have on communities at large.

In the case of Wijngoed Wilgenhorst, Horlings mentions the need to remain and almost depend on the concept of hyper-localism – identifying that one community should have only one vineyard and that his product would be essentially meaningless if sold elsewhere, such as in Limburg. This is an interesting point as Horlings discerns a direct connection between community identities and place-shaping, while simultaneously capitalizing on this. Horlings also identifies that insofar as a cultural resource, the immediate community does well to provide most of this through feedback and volunteerism. This concept extends beyond the limitations of place, to that of the creation of place. The integration of the Zuiderzee 100-year celebration, local artist and authenticity of the wine in local forums exemplifies how cultural identities are being used as a resource.

The involvement of volunteers in the harvesting process work in two ways: Firstly, there is the intention of 'leadership' in the facilitation of workshopping with volunteers to pass on knowledge about the grapes, integrate local interactions with this inherently cultural product and knowledge share with locals so to further define the brand, local agricultural identity and simultaneously invest long-term promoters within the process itself. Horlings mentions these volunteers as being 'ambassadors of the wines, the product and the business' and being a part of the 'network' and coloration of the 'story'. And Secondly, the 'social capital' element where the vineyard does well to create an area of engagement for community members to relate over a common and shared activity and knowledge development task contribute to a long-lasting part of the vineyard's identity and consequently the identities within the community. In this sense, the vineyard platform allows for community meeting around the apex theme of sustainability to take root – therefore neatly incorporating it as a foregone element in Zeewolde identity and expression. The decentralization of governance of the region of Flevoland and the new integration of a tourist platform on which Horlings functions allows for a framework of bottom-up, landscape-based (insofar as Horlings alterations and addition to the new landscape structures of the area with the addition of the vineyard) and almost a co-design elements integrated with the shared or mutual roles of Horlings and community, albeit indirectly and as a response to the gap in community education and knowledge around sustainable agriculture. It can be argued that in this case the vineyard has been created in light of this and has therefore filled the role of a landscape-based administrative unit, resulting in this overlap of different administrative and legal frameworks (UNU-IAS and IGES (eds.), 2016). In doing this, the vineyard and the projects that stem from it have successfully reified itself as a place-specific, landscape governance tool – a shaper of communities and culture.

In the case of Vineyard B, value and risk management, go hand in hand. DG mentions 'environmental, human and consumer risk' iterates the integrated nature of this business and internal functions. The varied inputs insofar as management and business goals all contribute to this framework – thus diversifying and ultimately strengthening its framework. A platform of adaptability and potentially effective sustainable management. In this sense the universal and globalized sustainable agendas of the farm can be attributed to the interpretations of sustainability adopted and expressed by DG, the managers and stakeholders of the vineyard - not necessarily something that is essentially French/Bordelaise. This is further emphasized as DG outlines the transferability of the of practices into other areas beyond viticulture and even agriculture.

Vineyard B also stands to invest further in technologies, especially those centered around communication to further refine and simplify the administration processes on the farm and beyond to further free up time for innovation purposes and allow for room to grow.

In the case of Spier, utilization of an internal cultural narrative and focus on international markets allows for a defines and streamlined approach to a distinct goal that can be understood and attained by all who work on the farm. This activation of all members of the Spier community in idea development, solution proposals and growth concepts allow for an inherent injection of local 'value' in the decision-making on the vineyard. One determined and filtered through the internal philosophy of 'Planet, People THEN profit'.

The distinct reinvestment of 50% of the overall company profits to sustainable developments also does well to put their money where their mouths are, further reifying and empowering Spier communities and decision-makers in the quest of sustainable developments within business growth.

5.1.2.2 B – Re-grounding and Adaptability

In considering the adaptability and flexibility of plan and spatial-developments, we have to consider the interpretations of sustainability and use of cultural resources beyond that of values, as well as the ability for these things to adapt over time and through challenges.

To Wijngoed Wilgenhorst, innovation lies within Horlings' intrinsic, and somewhat unintentional, integrative approach to business development, cultural iteration, community engagement and policy navigation. The vineyard and its dependent ecosystems exemplify an intensely interdependent and culturally rich process of development and growth over time that can stand to grow within the healthy parameter definitions of the community itself. Horlings speaks to a feedback mechanism between him and community members, kept alive by the educational and touristic platform on which the vineyard functions. In this sense, culture of the community to which he caters is actively utilized in the developments, maintenance and adjustment to the vineyard. His interactions with local policy makers and enforcers take on a distinctly communicative approach with an integrative application. The chance for Horlings to then contribute actively to policy in return is apparent – this is seen in the development of the Wijngoed zoning definition developed as a result of his personal campaigning. In the sustainable decision-making on the vineyard, Horlings still chooses to rely on the bureaucratic, top-down decision makers having the last word by awaiting responses and even valuing the prestige their permission awards him in various results – a more traditional approach in planning. Perhaps reminiscent of the country's approach to implementing new plans, the grassroots,

go-getting approach seems to be less of a necessity and more of a novelty. Whether this is as a result of Horlings' professional background and respect for the system, or the general cultural approach to plan development of the Dutch, it is not clear. However, this is something to take into consideration when analyzing the 'pioneering' status that Horlings seems to assume in the world of Flevoland and Dutch viticulture and the attitudes that accompany it.

Vineyard B depends greatly on the internationally and European acclaimed standards on sustainable rankings and certifications. Relying heavily on meeting and then exceeding the standards dictated by these arenas. This, in many respects, functions as a hat tip to the internationally understood ideals of sustainability and therefore utilization of 'international culture'. What was made clear throughout the interview, however, was this is not where the vineyard stops. Success in sustainability, according to DG, is more so in exceeding these expectations and propelling the vineyard and its stakeholders into furthering sustainable developments at large. It is important to note, however, that with the status, revenue and goals of the vineyard as a business, it is therefore easier to invest in sustainable developments and innovation around sustainable viticulture due to liquid revenue streams; and there is a massive recognition of a shift in consumer preferences to more sustainably sourced and biological products, making this not only an internal initiative, but one sparked by what could be considered an emerging consumer demand and culture. In this sense, cultural resources emerge as tools from international forums and consumer culture, current and future. The role of the market is therefore a massive driver of cultural resource interpretation and utilization, as well as a determiner of sustainability for Vineyard B.

Spier represents itself similarly to that of Vineyard B in that international markets and sustainable certifications determine many actions for Spier, however, the reasons for arriving here differ. Spier's location within developing South Africa calls for an outsourcing of certifications in order to maintain international standards and relevance as certification processes within South Africa itself either do not exist or do not meet international standards. For Spier to survive, the international market is their life-source. Insofar as sustainable developments, these initiatives come as a response to local climate and ecological standards, whether it be maintenance of crop viability or conservation of local biomes, Spier implements these based on an internal ethos and not necessarily a demand by the market. This is further exemplified by the current obstacles to organic wine production and the rather poor reputation organic wine have. Spier attempts to, with their farm-to-table identity and biodynamic farming methods buttressed by the reputation of the existing brand, aspires to redefine organic wines to the market and therefore further propel the sustainable shift for them and eventually the viticultural market at large. In this sense cultural resources stem from the applications of local knowledge in the implementation of resource RRR programs, the innovations that outperform current local and international certification standards and maintenance of internal cultural feedback mechanisms in problem solving.

5.1.2.3 C – Re-appreciating and Transformability

When considering the transformability and re-appreciation of place, this research considers the ecological, policy and certification structures. The injection of tradition and expression of this within space and place is measured.

In the case of Wijngoed Wilgenhorst, we see a major focus on 'storytelling' and implementation of visible structures in place, namely that of the barrel wine cart Horlings wishes to use on weekends in the town center, or the presence of vines on the roundabout as an educational and promotional item. Similarly, the injection of the wines into the Zuiderzee celebrations as a token also does well to posture it in a hyper-local light and the vineyard as an essential, ecological element in what is a relatively new and ecologically barren place. The inherent agricultural role of the Flevoland region is colorized by the addition of the vineyard tourism and practice. In addition, Horlings interactions with local administrators and implementation of policy with the use of subsidy is an interesting digestion of local cultures and expressions.

Horlings mentions the receipt of subsidies based on farming practices implementing various plant growth along water ways to prevent toxin leaching into water systems from agricultural additives. Although Horlings himself does not use pesticides or herbicides, he still accepts the subsidy and implements the adjustment to the land. It can be interpreted that in both cases, it seems that the subsidies have positively influenced farming practices and gone ahead to further reify Horlings decisions to pursue sustainable adjustments to his farm. However, based on his background in sustainable agricultural consulting and his attempt to ensure the sustainable approaches of land-use policy and farmers in practice, it perhaps would be a more sustainable or rather adaptable move to not necessarily accept the subsidy based on this loophole.

Vineyard B's inherent engagement in influencing the industry sustainable narrative in multiple areas - be it the vineyard, cork providers, stakeholder distributor groups, etc. - truly places a controlling hand on the developing a new wave of sustainable engagement within the supply chain and in many ways does well to shape the environments in which it functions. DG mentions the use of internationally acclaimed certifications to determine internationally understood sustainable practice and standards on which the vineyard bases its decisions around various developments. This global narrative that is proposed navigates away from a purely French or Bordelaise certification or interpretation of development. It is important to note that DG mentions the constricting influence various French specific certifications hold - almost functioning to impede sustainable developments and the value that can be sought for the vineyards and business in the future. It is in implementing these international certifications that Vineyard B's team have been able to explore more innovative and new-age approaches in viticulture and sustainable developments.

In this regard, dependence on the local contexts and cultures, and the maintenance of these in the production of the wines, result in a rigid and maladaptation in the practice of viticulture - impeding the flexibility required to implement adaptive and ultimately truly sustainable practices considering climate change, etc. The concept of simultaneously determining a sustainable 'identity' within the inner working groups of the vineyard also does well to solidify the universal sustainable narrative at play here and the absorption of this into the internal narrative. Using phrases, such as, "it is part of our responsibility", influences the intentions within every human aspect of the vineyard, suggesting to the onlooker a deep identification with this as a social need and not just a business preference.

Spier's investment in local identities in relation to people and place stand true throughout the implementations of new procedures and crops on the farm, keeping history and tradition close at hand, while also navigating into arenas of innovation in sustainable developments. Perseverance in biodynamic farming methods have reaped rewards insofar as production and quality of grapes and vines, ensured better biome synchronicity between the areas of the farm, which also has a deep-set touristic value. The massive investment in ecological well-being, whether it is in creating self-sufficient closed systems or maintaining rare and revered veld varieties, Spier has taken on the stewardship of the farm environment with gusto. However, the progress made in light of biodynamic farming lies vulnerable without neighboring properties doing the same. In this sense, Spier's financial ability to buttress the stressors and initial drop in tiled in relation to these more 'long-term' investments in sustainability speaks to the issues in sustainable developments, especially in developing countries like South Africa.

The background features several microscopic images of biological structures. A large, circular, pinkish ring-like structure is the central focus. To its left is a smaller, rounded, reddish structure. Below the ring is a larger, textured, reddish structure. The images are arranged in a grid-like pattern with some fading.

chapter

6

6 Discussion and Conclusion

The aim of this study was to explore the cultural link to resilience building in sustainable developments within the contexts of viticulture. Essentially, to determine how culture plays a role in planning practices and sustainable developments; and how can it better enable resilience planning practice. Culture as an informant and resilience builder in sustainable development proves to be both complex and elusive. Throughout this research, a distinct difference in the utilization of explicit culture between the vineyards is noted, however, it is difficult to determine essential and impactful cultural elements in decision-making and implementations in sustainable developments per se. It is clear, however that, "culture plays a mediating role between people or society and the environment, influencing people's intentions, way of life, sense of place, practices, norms and rules" (Horlings, 2015, p. 259). It is in this mediating role that this research was able to determine that the community, internal and external, play a key mediatory role to implement or to better local culture in plans. As the values associated with culture can be 'considered dynamic in space, place and time', the inherent resilience and more so adaptability of culturally-based planning could pose to be the next paradigm shift in planning practice (Horlings, 2015). For this reason, conclusions lie in planning preparations and determining key areas of cultural influence and focus for tailoring planning to specifics in place through communities.

It is essential to note that this research reveals culture has a multitude of expressions, both obvious and metaphysical, leading to this being a largely misunderstood and underutilized arena for planners at present. The coding used throughout the analysis measured culture in relation to other key arenas of action, namely those defined in *Table 2*. As a result, micro- and macro- cultures were both referenced and expressed in varied ways on the vineyards. The results revealed that by analyzing sustainable decision-making and actions of the vineyards through *Table 3*, key motivations and goals can be identified and therefore linked to culture.

Culture in this sense has been considered by Wijngoed Wilgenhorst more from the personal standpoint of Horlings who postures for the development of culture along with the community in which the vineyard functions through platforms of education, tourism, artisanal products and local Flevoland environment. Wijngoed Wilgenhorst works to create a sense of culture and tradition from the bottom-up, or from the individual to the collective arenas (Brown, 2015), while also working within the parameters of current land-use and local, political administration. In this sense more so a focus on the political-economic approaches through the lens of personal socio-cultural expressions (Horlings, 2016). However, Horlings also does well to work to create connection to place through culturally specific tasks, like the Zuider Zee celebrations and wine tribute to the 100-year anniversary.

Vineyard B, on the other hand, poses to move beyond the confining scenarios of the Bordelaise viticultural sector into a more self-maintained and globalized platform with a focus on the millennial market. Additionally, Vineyard B also focuses on influencing stakeholder groups into implementing certified sustainable practices, while also sourcing input from immediate community members so as to enhance and fully validate the vineyard's set sustainable narrative. This developmental focus determines an overarching exterior motivation posed more within a globalizing context of practice,

whereby socio-cultural influence spans beyond the internationally revered Bordelaise culture to that of also the more global narratives of what sustainability should look like in viticulture. Insofar as ecological influences, parameters of action lie more so in the future projections of climate change on the viability of crops and therefore from a business standpoint. This does suggest an element of preparedness, as noted in Davoudi's (2013) *Figure 7*, however the origins of change do not stem directly from localized culture and more so from international markets and narratives. This suggests a shift of the meaning of culture to that of a more globalized one.

Spier fully promotes an internal culture on which decision-making, sustainable narratives and company growth is based. Although there is a greater acknowledgement of community outside of the Spier parameters and their range of influence and interdependence, the collaborative approach is yet to be formally implemented beyond the vineyard border itself. In this sense, the progression of decision-making from interior, individual origins to impacts resulting in collective, exterior expressions shows a clear connection of cultural influence to actions. Despite the universal and global narrative of sustainability still being a primary driver for changes on the farm, the digestion of the narrative through the Spier community framework has allowed for expressions of culture in decision-making, and thus being more socio-cultural and ecologically based (Horlings, 2016). With the ecology of the region as a key element of consideration, parameters of change are always considered and inherently place-based, along with strong implementation strategies digestible by employees working on the farm. This absorbability of change for all involved allows for the further integration into place-specific cultural expressions.

Thus, all vineyards seem to utilize 'culture' as a tool, whether it is creating, applying or implementing culture in their actions. However, as suggested in Horlings (2015) it is in the 'self-organization, self-efficacy and the participative society where actors are expected to take responsibility for their environment, individually and collectively' that sustainable place-shaping takes place. This acknowledgement of the sector of action in the forms of individual versus the collective and internal versus external arenas of action mark the key factors of consideration both by decisionmakers on the farms and professional planners when considering cultural resources to plan development (Brown, 2015). Through place-shaping practice, the activities of the vineyards have been considered as cultural actions and as a result a framework of informing suitable developments in planning can be discussed.

This can be observed in Wijngoed Wilgenhorst as Horlings mentions the mutual responsibility of him to the community and the community to him, highlighting the shared benefit of this vineyard as part of community identity and place-shaping. Vineyard B has also suggested an interesting interactive element by including the community through communicative methods, by creating a two-way feedback mechanism between him and the vineyard stakeholders and informants. As a result, relations can be managed, and feedback can be attained in order to determine necessary adjustments to the vineyards and community. Spier does the same in the procedure of referencing immediate community members and staff in problem-solving and developments on the farm, with a secondary reference to third-party informants when necessary. It is through these actions that the relationships to the place-shaping and grounding aspects of actions to culture is also identified. Thus, Horlings' (2016) political-economic and globalizing influences of growth; socio-cultural frameworks

of meanings and values in place allowing connection to space and distinctiveness in planning; and the ecological spectrum of the vineyards in place as a consideration of the parameters of action arenas can be considered key elements of cultural informant frameworks, as represented in *Figure 3*. Now that a connection in sustainable developments can be made to culture, what does this say about resilience building?

In investigating the operationalization of culture as a mechanism to assist in resilience planning and achieving sustainability, it seems to have emerged as more placeless than place-based. The impacts of homogenized narratives of sustainability in conjunction with globalization reveal a step away from more context-specific business and land-use practice. Through this investigation into 'sustainability' in 'viculture' we are seeing a regurgitation of dictated approaches and expressions, somewhat adjusted to adapt to major changes in environment, and no more. Resultantly, there seems to be no distinct or blatant expression of 'culture' in resilience building as one would have expected. However, in the universal acceptance of sustainability across the different vineyards, we also see an opportunity for another paradigm shift in planning practice to one that more readily comes back to the local, community context an essential aid in culturally informed sustainable development and resilient planning.

The effects of globalization and fixed, shared narratives cannot be overlooked when considering the arena in which resilience-building in place-shaping occurs. The development of a shared strategy involving a set and universally understood and graded versions of sustainability seems to reveal a movement towards a more widespread trend and application of sustainable developments that overlook place-based planning. For the planning community, this is essential to acknowledge so as to further determine the directions plans may take when implemented and, most importantly, when they are maintained over time. In acknowledging the emergence of global influence and homogenized approaches to sustainable development, it is still essential to utilize the power of people, place and product within particular contexts to ensure resilience. As mentioned by Latour recently in his works regarding climate change and globalization, "the call to globalization is so ambiguous that its pliancy contaminates what can be expected from the local. This is why from the beginning of modernization, any attachment to any soil at all has been read as a sign of backwardness" (pg. 17, 2018). This warning calls for not only the acknowledgement of globalization and a drive to modernize, but more importantly to not confuse connectedness to place and culture with antiquated planning practice. In fact, it suggests the opposite by allowing diversity of application in plan making and therefore a tailored approach to sustainable development. With this in mind, the harvesting and tourism efforts made by Wijngoed and Wilgenhorst, educational and feedback platforms initiated by Vineyard B, and efforts to solidify internal culture by Spier, we see an effort of all the vineyards to connect to context. This trend in itself reveals the relevance and essentiality of sustainable development with the additional leg of culture.

In moving beyond the initial understanding of culture, the code of sustainable developments and the power of place-shaping, the question of resilience and adaptation emerges yet again. As the world in which we function adjust to ever more complex issues, be it environmental, socioeconomic or political, we are begged the questions: How can we adapt and remain resilient beyond the initial

plans we set out? And more specifically, how can culture enable and inform resilience building? In the comparison between the vineyards, we see a distinct expression of preparedness in reactions to global market trends and implementation of sustainable narrative norms through greater consideration of vineyard impacts to onlookers. Preparedness, in this sense, represents business longevity and product viability as opposed to a truly integrative inter-scalar/-system management. Although Wijngoed Wilgenhorst considers the role of ecology to be essential to the identity of the product, the applications of culturally informed sustainable developments tend to still rely on the traditional approaches of planning practice that leave little room for distinctive cultural expression, such as in the case of the wine barrel cart Horlings wished to implement but could not. Vineyard B allows room for the community and application of the sustainable vineyard based on sustainable trends placing high regard on certifications that function on a place-less foundation. Finally, Spier Wine Farm tends to consider preparedness as a reactionary business approach to ensure workability of the land and wine brand, overlooking the potential benefits of more integrative and resilient decisions involving the communities of farmers at large. This finding implies a need for a more specific and culturally-based planning approaches for resilience planning, whether by professional planner or, in this case, viniculturalists. The application of specific categories of cultural input arenas outlined through this thesis could allow for better thought-out, thorough and, most importantly, more culturally tailored sustainable planning. In applying strategies through the integrated platform in *Figure 9*, application and then reflection and adaptation of plans can be implemented and better informed by culture. Although more research into the definable effects culturally informed planning can have on resilience in sustainable developments needs to be performed, it is clear that connections and criteria of consideration can be determined.

The data collected suggests that the concept of resilience-building in place-shaping on the vineyards is not as readily apparent and can better be tailored toward 'preparedness' (Davoudi, 2013), by tapping into cultural capital as an intrinsic preparation factor for changes, adversities and unpredictability in global environments. By inherently linking culture, as a naturally flexible and adaptive structure, to sustainable planning processes and place-shaping, more localized inclusion, control and dependability of actors in contexts can be achieved. Therefore, despite the unpredictability of futures, plans can be left to adapt without the controlling and dictatorial hand of planners necessary. It is acknowledged, however, as mentioned by Nunes et al. in Asikainen et al. (2017), that complexities that arise as a result of this approach could indeed inhibit the progression of plan making, however, the concept of complexity within any well-investigated and applied planning arena can be expected and therefore should not be shied away from. On the contrary, as the basic premise of complexity depends on the interwoven myriad of influences, it can indeed offer an opportunity for appropriate solution integration as opposed to posing as a sheer obstacle. Complexity, and in this sense the complexity of culture, offers an opportunity to 'shift away from traditional, more simplified approaches' in planning practice, allows opportunity to make use of problem solving within context while consequently referencing what the planner knows about the world (Morin, 1996). This, despite not fully confirming the hypothesis that culture does ensure better resilience planning, rather it reveals that culture on a local scale can be further integrated to explore resilience planning within contexts. However, hard integration in planning spheres still poses to be an issue.

The notable acknowledgment of communities, sustainable narratives and the unique interpretations of this on the vineyards express the promise of culturally informed planning. Through the storytelling adopted by all three vineyards the call for identity, internally or externally achieved, is apparent. In this sense, we see how culture as informant to sustainability can be viewed as a 'transdisciplinary' and 'does not belong to one discipline or exist within a hierarchical system of concepts' per se – 'it is transversal and overarching at the same time' (Nunes et al. as found in Asikainen et al., pg. 33, 2017). By incorporating multiple- backgrounds and approaches, the inherent ability for a plan to manifest cultural sensitivities can be actualized. By asking the questions: 'What is the intention of this plan?', 'How does it affect the specific arenas of the project?', 'who is answerable and affected by these plans?' and 'how dependable and adjustable is this plan over time in this place (resilience)?', the universality and particularity of culture can be accounted for. This outlook therefore suggests a foundation of consideration when designing and implementing sustainable plans in the future.

By identifying key criteria of consideration through the theories used and then combine and apply them through *Figure 9*, this research has outlined a proposed framework for culturally informed planning that can hopefully allow for: 1. more thorough analysis of cases and the role of culture; 2. better consideration and influence to the design of sustainable plans, or 3. Engagement of future research into culturally informed planning and even better determine the efficacy of this to resilience building. As planners, it is our responsibility to not only trust culture and its communities to best inform us about plan efficacy and procedure, but to also entrust plan development itself to communities.

6.1 Future Research

Needless to say, these observations and conclusions are based on only three cases and more research is required to better understand how culture as an informant can be identified and applied for more resilient plans. Research must advance beyond the primary decision-makers of vineyards and explore actions, opinions and intentions of the communities that work in, on and around the vineyards. Additionally, the world of culture in cyberspace and social media platforms is also of essential consideration as brands and society at large start to represent themselves through these new-age mediums. Additionally, the role culture in a social networking medium as a unique and definable medium is also of interest. It is also essential to investigate the role community and culture can play in preventing resilience and adaptation. In viewing sustainable planning from this perspective, it may reveal much for about the power of culture and community, and thus the solid roles they can assume in planning and sustainable development practice. Most importantly, the affects and trials of culturally informed planning practice and its contributions to increasing resilience need to be conducted over time to thoroughly establish the efficacy of this approach to planning practice.

6.2 Reflection

The results from this thesis reveals that there is a link of culture to sustainable development and it calls for more research into cultural planning practices and place-based planning. A qualitative investigation within a comparative framework in vinicultural practice is somewhat unique and similar research projects of this kind stand to enlighten us more as to the informing nature of culture to sustainable development. The broader focus on agriculture is, however, beginning to emerge from a more bottom-up, community perspective. Research regarding practical applications of culture as a vital informer of planning practice is still to be further developed – making this and other research in this direction particularly interesting and essential in order to 'crack the code'.

Interviews and observations were limited due to geographical locations, namely those not situated within the Netherlands, making the full observational scope limited and lacking in the investigation and analysis process. More strictly codes questionnaires and even focus groups could stand to contribute more distinctly to the research process. Additionally, having one high-standing representative form each vineyard proved to be a more one-dimensional informant as opposed to a preferred sample from a variety of social and cultural influencers surrounding the vineyard as well. The interviews were conducted via internet video chats, making the observations of interactions, facial expression and non-verbal communications necessary to truly interpret values and beliefs of individuals difficult.

The comparative nature of this research proved to be necessary in defining and identifying key values and contributing factors to understanding 'culture' in vinicultural practice. Without this, this research would have been vaguer and non-ratifiable. However, due to the scope of the research (being it a Master's thesis), perhaps a less overarching and more specific investigation should have been done for the sake of time and result interpretation. However, it is essential to note that this process has done well at scratching the surface of comparative investigations into culture as a planning informant.

This research investigated the role culture play in planning practice as an informer to sustainable developments and eventually resilience planning. The research revealed less about the particularities of culture and more so about the particular approaches in the application the universally understood ideals of sustainable development. In turn, the opportunity to better integrate culture into formal and global understandings of sustainable development was observed, as well as further research into the role culture can play as an inhibitor and how it functions in social-media networks. Additionally, future research needs to consider broader samples of interviewees form different roles and stakeholder groups in relation to the vineyards.

Final results revealed that community integration, considered in all three cases, is a key tool in cultural implementation in planning practice and sustainable developments. Whether this indeed affects resilience planning is yet to be thoroughly seen, as the vineyards need to ideally be observed over a longer period of time.

Acknowledgments

This thesis would have been impossible without the support of my educators in and resources provided by the Faculty of Spatial Sciences at the University of Groningen, and the vineyards that allowed me to conduct valuable research enlightening us to the role of culture. A special mention to Geert Horlings and his family from Wijngoed Wilgenhorst, Interviewee B from French Vineyard, and Orlando Filander from Spier Wine Farm for your learned insights, time and passion towards this project. To my family and community for your insights and support through this long and challenging process. Finally, the most important contributor and enabler of this research, my advisor Prof. L.G. Horlings. Your unwavering encouragement and masterful acumen on this topic ignited my passion and encourages me to continue within this sphere. I hope that this work aids the faculty and future research in the development of cultural planning practices towards a more sustainable and resilient and future.

References & Recommended Reading

- Asikainen, S., Brites, C., Plebańczyk, K., Rogač Mijatović, L. & Soini, K. (2017). Culture in sustainability : Towards a transdisciplinary approach. 1st ed. [ebook] University of Jyväskylä, Department of Social Sciences and Philosophy. Available at: <https://jyx.jyu.fi/bitstream/handle/123456789/56075/978-951-39-7267-7.pdf?sequence=1&isAllowed=y> [Accessed 19 Oct. 2018].
- Bivi.afnor.org. (2018). *AFAQ 1000NR ou l'évaluation de votre démarche de développement durable pour préparer demain - Bivi - Qualite*. [online] Available at: <https://bivi.afnor.org/notice-details/afaq-1000nr-ou-levaluation-de-votre-demarche-de-developpement-durable-pour-preparer-demain/1294270> [Accessed 8 Oct. 2018].
- Bordeaux site. (2018). *The wines of the Médoc: the Margaux and Saint-Julien appellations*. [online] Available at: <https://www.bordeaux.com/uk/Our-Terroir/The-Medoc#jepvdtzf7D98I81W.97> [Accessed 8 Oct. 2018].
- Brown, B.C. (2005). Theory and practice of integral sustainable development, part 1. *Journal of Integral Theory and Practice*, 1, 2–39.
- Brundtland Commission. (1987). *Our common future: Report of the World Commission on Environment and Development (Brundtland Commission Report)*. Oxford: Oxford University Press
- Charters, S. (2006). *Wine and Society: The Social and Cultural Context of a Drink*. Burlington: Elsevier/Butterworth-Heinemann.
- Davies, A. (2001). "What Silence Knows - Planning, Public Participation and Environmental Values," *Environmental Values*, 10(1), pp. 77–102.
- Davoudi, S., Brooks, E. & Mehmood, A. (2013). "Evolutionary Resilience and Strategies for Climate Adaptation," *Planning Practice & Research*, 28(3), pp. 307–322. doi: 10.1080/02697459.2013.787695.
- Dessein, J., Soini, K., Fairclough, G. & Horlings, L. (eds) (2015). *Culture in, for and as Sustainable Development. Conclusions from the COST Action IS1007 Investigating Cultural Sustainability*. University of Jyväskylä, Finland.
- Escobar, A. (2001). "Culture sits in places: reflections on globalism and subaltern strategies of localization", *Political Geography*, vol.20, pp.139–174.

- Gugerell, K., Penker, M. & Kieninger, P. (2016). Landscape Co-Management Practises and Power Structures in the UNESCO World Heritage Site Wachau (Austria). *Cultural Sustainability*, Chapter 7, pp. 1-19.
- Hannah, L., Roehrdanz, P. R., Ikegami, M., Shepard, A. V., Shaw, M. R., Tabor, G., Zhi, L., Marquet, P. A. & Hijmans, R. J. (2013). "Climate Change, Wine, and Conservation," *Proceedings of the National Academy of Sciences of the United States of America*, 110(17), pp. 6907–6912.
- Hawkes, J. (2001). The fourth pillar of sustainability. Culture's essential role in public planning. Melbourne, Australia: Cultural Development Network & Common Ground Press. Retrieved from [http://www.culturaldevelopment.net.au/community/Downloads/HawkesJon\(2001\)TheFourthPillarOfSustainability.pdf](http://www.culturaldevelopment.net.au/community/Downloads/HawkesJon(2001)TheFourthPillarOfSustainability.pdf)
- Horlings, L.G. (2012). The interplay between social capital, leadership and policy arrangements in European rural regions. In: M. Sotarauta, L.G. Horlings and J. Liddle. (Eds.) *Leadership in Regional Sustainable Development*, London/New York: Routledge, chapter 7, pp.121-144.
- Horlings, L.G. (2015). "Values in Place; a Value-Oriented Approach Toward Sustainable Place-Shaping," *Regional Studies, Regional Science*, 2(1), pp. 257–274. doi: 10.1080/21681376.2015.1014062.
- Horlings, L.G. (2016). Connecting people to place: sustainable place-shaping practices as transformative power. *Current Opinion in Environmental Sustainability*, 20, pp.32-40.
- Innes, J. E. (1995). "Planning Theory's Emerging Paradigm: Communicative Action and Interactive Practice," *Journal of Planning Education and Research*, 14(3), pp. 183–189. doi: 10.1177/0739456X9501400307.
- Innes, J. E. (2004). "Consensus Building: Clarifications for the Critics," *Planning Theory*, 3(1), pp. 5–20.
- Iso.org. (2018). *ISO - International Organization for Standardization*. [online] Available at: <https://www.iso.org/home.html> [Accessed 8 Oct. 2018].
- Latour, B. (2018). *Down to earth : politics in the new climatic regime*. CAMBRIDGE: POLITY PRESS. Available at: INSERT-MISSING-URL (Accessed: February 25, 2019).
- Massey, Doreen (2004.) Geographies of responsibility. *Geografiska Annaler: Series B, Human Geography*, 86(1) pp. 5–18.
- Miller, R. (2007). Futures literacy: A hybrid strategic scenario method. *Futures* 39: 241–362.

- Morin, E. (1996). A new way of thinking. UNESCO Courier, 49(2), 10-14. Retrieved from <http://unesdoc.unesco.org/images/0010/001025/102554eo.pdf>
- Nienhuis, I., van Dijk, T. & de Roo, G. (2011). "Let's Collaborate! But Who's Really Collaborating? Individual Interests As a Leitmotiv for Urban Renewal and Regeneration Strategies," *Planning Theory & Practice*, 12(1), pp. 95–109. doi: 10.1080/14649357.2011.546671.
- O'Brien, K. (2012). Global environmental change II: From adaptation to deliberate transformation. *Progress in Human Geography*, 36, 667–676.
- Oliver, S. (2004). *Emile Peynaud dies at 92*. [online] Decanter. Available at: <https://www.decanter.com/wine-news/emile-peynaud-dies-at-92-101059> / [Accessed 8 Oct. 2018].
- Reid, M. & Schwab, W. (2006). "Barriers to Sustainable Development," *Journal of Asian and African Studies*, 41(5-6), pp. 439–457.
- Spier Wine Farm. (2018). *More than three centuries of Cape Winelands history | Spier Wine Farm*. [online] Available at: <http://www.spier.co.za/farm/heritage> [Accessed 9 Oct. 2018].
- Srivastava, J. (2011). "'norm' of Sustainable Development," *India Quarterly: A Journal of International Affairs*, 67(2), pp. 93–110.
- Stevenson, D. (2005). "Cultural Planning in Australia: Texts and Contexts," *The Journal of Arts Management, Law, and Society*, 35(1), pp. 36–48. doi: 10.3200/JAML.35.1.36-48.
- UNESCO. (2017). Cultural Diversity [Online] Available at: <http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/cultural-diversity/> [Accessed: 12 December 2017].
- UNESCO. General Conference (31st : 2001 : Paris, France) (2002). "Universal Declaration on Cultural Diversity."
- UNU-IAS & IGES (eds.) (2016). Mainstreaming concepts and approaches of socio-ecological production landscapes and seascapes into policy and decision-making (Satoyama Initiative Thematic Review vol. 2), United Nations University Institute for the Advanced Study of Sustainability, Tokyo.
- Veldleeuwerik. (2019). *How the Skylark Foundation came to be*. [online] Available at: <https://veldleeuwerik.nl/en/skylark/how-the-skylark-foundation-came-to-be/> [Accessed 25 Jan. 2019].

Wijngoed Wilgenhorst. (2019). *Wijngoed Wilgenhorst*. [online] Available at: <https://wijngoedwilgenhorst.nl/> [Accessed 25 Jan. 2019].

(Vineyard B references unavailable due to anonymity clause).



Appendix

Appendix 1: Interview Tools

General determining questions:

1. Why did you start working with the vineyard?
2. What does sustainability mean to you? How important is it really to production and long-term success of the vineyard?
3. What does culture mean to you? [*Specify ecology, economy and socio-cultural elements*]

Value Questions:

1. What is the motivation to start working with this vineyard? Did this change over time?
2. What is your goal short-term and long-term?
3. What underlying principles/values guide you in your work? How and why?
4. You run your vineyard using methods, what is your motivation for this?
5. What do you consider to be a cultural resource for your farm?
6. To what extent does 'culture' play a role in your business?

Place and Practice questions

1. How important is community to you?
2. What would you consider your community to be (*I.e. Surrounding residents, workers, family, volunteers, etc.*)?
3. What are the main characteristics of the landscape/place you are in?
4. How unique is your place/vineyard (*4a*) and your product/wines (*4b*) in comparison to others?

5. Re-appreciation [socio-cultural]

- How do you feel your place and culture are represented in your business?
- What meanings, for yourself and others, are connected to your wines and why? Did you intend these?
- Does your community share these interpretations?

- Would you consider this a community project?

6. Re-grounding [ecological]

- How would you say the physical characteristics of your vineyard represent your culture and place? Has this changed over time and how/why?
- How do you deal with ecological changes, such as climate, weather, floods, changes in flora and fauna, etc.?
- Do you think your location/ecology of the area contributes to your product? Why?
- If so, with the changing climate and resultant extreme weather conditions, how do you plan to maintain this?

7. Repositioning [political-economic]

- How does your product fit into the market today?
- What changes or challenges do you predict for your business?
- What changes would you promote or feel need to happen to adapt to the market situation in the future?

Policy questions

1. What policies are relevant for this place and vineyard?
2. To what extent do they hinder or support your business plans (past, now, future)?
3. Do these policies reflect your values and place?
4. Would you like to see any changes? If so, to what?

Resilience building questions

1. To what extent do you aim to work in a sustainable way?
2. How do you think the location and community support/hinder this goal?
3. Does the community support sustainable developments on the farm?
4. What have you learnt about sustainable development in recent years?

5. What is the role of the vineyard owner and winemaker in ensuring the future of production?
6. What is your responsibility to your community and vice versa?
7. How do you feel your personal culture or values contributes to this?

General Finish

1. How important do you feel culture is to your business and sustainability?
2. What challenges do you see in the future?
3. Are you ready for these challenges and how do you plan to adapt to these?
4. What will you need to learn for this?

Appendix 2: Supervisor Permission Document

Information Letter and Consent Form for Invitation to be Interviewed

13/02/2018

Dear (***):

This letter is an invitation to consider participating in a study I am conducting as part of my MSc degree in the Planning Department of the Faculty of Spatial Sciences at the University of Groningen under the supervision of Prof. Dr. Ina Horlings. I would like to provide you with more information about this project and what your involvement would entail if you decide to take part.

As the risks associated with climate change to resources and agriculture alike increase, the question of our ability to not only adapt, but become resilient while remaining productive emerges as a primary concern. This research investigates the role culture and therefore 'cultural planning' can play in sustainable and resilience development within complex and globalizing contexts. The research will investigate three vineyards, in South Africa, France and the Netherlands, to perform a cross comparison on culturally rich planning practice in light of this threat. The relevance of this research is in determining culture as a central theme to sustainable planning practice and as a significant and necessary mechanism to direct and continue resilience planning goals within viticulture and beyond.

This study will focus on viticultural practices, decision making, values and motivations and changes (past and future) in the organizations over time. When faced with an issue, such as climate change and associated economic, social and policy developments, it is important to take note of key influencing factors and investigate how structures, such as your vineyard, are able to harness their potential in ensuring success and/or predict how they may respond. Therefore, I would like to include your vineyard as one of three organizations to be involved in my study. I believe that because you are actively involved in the management and operation of your vineyard, you are best suited to speak to the various issues, such as climate change, economic pressures, global competition, resource availability, social impact and ecology.

Participation in this study is voluntary. It will involve an interview of approximately 1 – 1 ½ hours in length to take place via video/audio call. You may decline to answer any of the interview questions if you so wish. Further, you may decide to withdraw from this study at any time without any negative consequences by advising the researcher. With your permission, the interview will be tape-recorded to facilitate collection of information, and later transcribed for analysis. Shortly after the interview has been completed, I will send you a copy of the transcript to give you an opportunity to confirm the accuracy of our conversation and to add or clarify any points that you wish. All information you provide is considered completely confidential until such time as you confirm the details of the interview. Your name will not appear in any thesis or report resulting from this study, unless you so specify in the consent form. However, with your permission, quotations may be used according to

your preference. Data collected during this study will be retained in a secure location. Only researchers associated with this project will have access. There are no known or anticipated risks to you as a participant in this study.

If you have any questions regarding this study or would like additional information to assist you in reaching a decision about participation, please contact me at +31 62 18 43653 or by e-mail at j.a.immelman@student.rug.nl. You can also contact my supervisor, Prof. Dr. Ina Horlings of the Faculty of Spatial Sciences at +31 50 36 33895 or e-mail l.g.horlings@rug.nl.

I would like to assure you that this study has been reviewed and received clearance through my advisor. However, the final decision about participation is yours. If you have any comments or concerns resulting from your participation in this study, please feel free to communicate this to any of those listed above.

I hope that the results of my study will be of benefit to those organizations directly involved in the study, other voluntary recreation organizations not directly involved in the study, as well as to the broader research community.

I very much look forward to speaking with you and thank you in advance for your assistance in this project.

Sincerely,

Jessica A. Immelman
Student Researcher
Planning Department, Faculty of Spatial Sciences

Prof. Dr. Ina Horlings
Adjunct Professor of Socio-Spatial Planning
Planning Department, Faculty of Spatial Sciences

Appendix 3: Consent Forms

Appendix 3.1: Wijngoed Wilgenhorst Consent Form

CONSENT FORM

I have read the information presented in the information letter about a study being conducted by Jessica Immelman of the Department of Planning, Faculty of Spatial Sciences at the University of Groningen. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be tape recorded to ensure an accurate recording of my responses.

I am also aware that excerpts from the interview may be included in the thesis and/or publications to come from this research and that the quotations will be referenced as per my specifications below, knowing that the region will remain specified. I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project had been reviewed and received clearance by Prof. Dr. Ina Horlings. I was informed that if I have comments or concerns resulting from my participation in his study, I may contact either Jessica Immelman (+31 62 18 43653; j.a.immelman@student.rug.nl) and/or Prof. Dr. Ina Horlings (+31 50 36 33895; I.g.horlings@rug.nl).

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

YES NO

I agree to have my interview tape recorded.

YES NO

a. I wish to remain anonymous.

b. I wish the vineyard to remain anonymous.

YES NO

YES NO

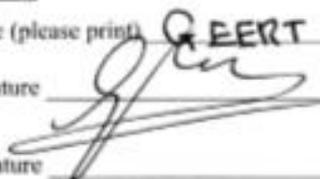
I agree to the use of quotations in any thesis or publication that comes of this research.

YES NO

Participant's Name (please print)

GEERT HORLINGAS

Participant's Signature



Date 1-3-2018

Researcher's Signature

Date _____

Researcher's Title _____

Department _____

Faculty Advisor Signature _____

Date _____

Faculty Advisor Title _____

Department _____

Appendix 3.2: Vineyard B Consent Form

CONSENT FORM

I have read the information presented in the information letter about a study being conducted by Jessica Immelman of the Department of Planning, Faculty of Spatial Sciences at the University of Groningen. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be tape recorded to ensure an accurate recording of my responses.

I am also aware that excerpts from the interview may be included in the thesis and/or publications to come from this research and that the quotations will be referenced as per my specifications below, knowing that the region will remain specified. I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project had been reviewed and received clearance by Prof. Dr. Ina Horlings. I was informed that if I have comments or concerns resulting from my participation in his study, I may contact either Jessica Immelman (+31 62 18 43653; j.a.immelman@student.rug.nl) and/or Prof. Dr. Ina Horlings (+31 50 36 33895; i.g.horlings@rug.nl).

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

YES NO

I agree to have my interview tape recorded.

YES NO

a. I wish to remain anonymous.

b. I wish the vineyard to remain anonymous.

YES NO

YES NO

I agree to the use of quotations in any thesis or publication that comes of this research.

YES NO

Participant's Name (please print) Bijou

Participant's Signature [Signature] Date _____

Researcher's Signature _____ Date 04/03/2018

Researcher's Title _____ Department _____

Faculty Advisor Signature _____ Date _____

Faculty Advisor Title _____ Department _____

Appendix 3.3: Spier Wine Farm Consent Form

CONSENT FORM

I have read the information presented in the information letter about a study being conducted by Jessica Immelman of the Department of Planning, Faculty of Spatial Sciences at the University of Groningen. I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be tape recorded to ensure an accurate recording of my responses.

I am also aware that excerpts from the interview may be included in the thesis and/or publications to come from this research and that the quotations will be referenced as per my specifications below, knowing that the region will remain specified. I was informed that I may withdraw my consent at any time without penalty by advising the researcher.

This project had been reviewed and received clearance by Prof. Dr. Ina Horlings. I was informed that if I have comments or concerns resulting from my participation in his study, I may contact either Jessica Immelman (+31 62 18 43653; j.a.immelman@student.rug.nl) and/or Prof. Dr. Ina Horlings (+31 50 36 33895; i.g.horlings@rug.nl).

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

YES NO

I agree to have my interview tape recorded.

YES NO

a. I wish to remain anonymous.

b. I wish the vineyard to remain anonymous.

YES NO

YES NO

I agree to the use of quotations in any thesis or publication that comes of this research.

YES NO

Participant's Name (please print)

ORLANDO FILANDER

Participant's Signature

[Handwritten Signature]

Date

25/01/2019

Researcher's Signature

Date

Researcher's Title

Department

Faculty Advisor Signature

Date

Faculty Advisor Title

Department

Appendix 4: Interview Transcripts

[Interview transcripts and surveys are available upon request]

