

# **Climate Ethnography and Wine Environmental Futures**

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Wine is certainly today one of the most globalised and globalising commodities defined by a set of unique local specificities. More than any other edible products, it is a social food which enables us to think about the contemporary world we live in under late capitalism, and it is is one of the few categories of food where standardisation and industrialisation have been frequently challenged. Wine is also an object sensitive to the social structures in which it is made and consumed. For all these reasons, wine as a globalised embedded commodity provides a particularly telling example for the study of climate change having already attracted early scientific attention.

Globalisation and climate change are radically transforming world wine production upsetting the established order of wine ecologies and its associated economies. Studies of climate change in viticulture have focused primarily on the production of systematic models of adaptation and vulnerability, while the human and cultural factors, which are key to adaptation and sustainable futures, remain largely marginalised. Recently a few scholars have started to investigate the human dimension (Teil 2022; Arceno 2022, Neethling & al 2020, Hannin & al 2020). Similarly, a number of volumes for non-specialised audiences have been published (to cite a few: Cuckierman; Quénol and Bouffard 2020; Johnson-Bell 2014; Gladstones 2011). In addition, climate experts have been unanimous in recognising the urgent need for a better understanding of the complex dynamics that shape how climate change is experienced and responded to by human systems. According to the climatologist Cradock-Henry and his colleagues (2019), research into how climate change affects viticulture often neglects the human complex dynamics that shape how climate change is experienced and responded to by human systems.

This gap will be impossible to address if a dialogue is not established between climate science and wine production to understand how producers make sense and experience their own and familiar environment. Yet I would argue that this disjuncture between climatology and the technological changes witnessed in the vineyards requires more than filling a gap. It requires an interdisciplinary focused on 'identifying and foreshadowing problems', bringing to the table different experts and approaches. Meaningful interdisciplinarity can only be developed on the basis of robust disciplinarity (Holmes & al 2018). I would like to argue that Anthropology offers a unique contribution by bridging, as part of its mission, different 'cultures' or 'worldviews', be that of the experts, institutions, corporations, stakeholders or wine producers.

It is important to remember that comparison and cultural relativism are fundamental to the discipline of Anthropology. If the subset was long been associated with European colonialism and caricatural representations of circumscribed peoples and their cultures, anthropology has now distanced itself from these legacies to analyse more complex, multi-scalar, multisited and porous fields. Its unique emic contribution to knowledge provides a better understanding of why people do what they do, and why they do it in this way in specific places or contexts. Ethnography provides a useful lens through which what it means to be human in specific locations can be read and understood. To sum up, 'culture' is defined here as a term that describes and characterizes various ways in which human differences and similarities are recognized and marked, it can be through values, social practices, behaviours and rituals, etc...

Climate ethnography, a term coined by the anthropologist Susan Crate (2011), aims to bridge this growing disjuncture between climate science and everyday life through the exploration of the social meaning of climate change. It seeks to investigate the confrontation of its social salience in different locations and under different environmental guises (Goodman 2018: 340). By understanding how wine producers make sense of the world (and the environment) and act in it, it proposes to focus on the co-production of interdisciplinary knowledge by identifying and foreshadowing problems (Goodman 2018: 342; Goodman & Marshall 2018). It seeks to offer an original, transformative and contrasted perspective to climate change scenarios by investigating human agency -individual or collective- in all



its social, political and cultural diversity. An anthropological approach founded on detailed ethnographies of wine production is ideally placed to address economic, social and cultural disruptions caused by the emergence of these new environmental challenges. Indeed, the community of experts in environmental change have recently called for research that will encompass the human dimension and for more broad-based, integrated through interdisciplinarity, useful knowledge (Castree & al 2014).

My paper seeks to argue for the importance of climate ethnography in bridging different disciplines and discuss what it brings to the study of climate change and wine environmental futures while exploring the limitations of the anthropological approach. I would like to propose three main areas of debate: 1/perspectives and questions underpinning climate change and the environment 2/human and cultural dimensions 3/complexity. I am aiming at defining these three areas and providing you with food for thought.

## Bringing people back through ethnography

A large body of literature has been devoted to the study of wine and climate change by developing systemic models of adaptation and vulnerability (see for example Holland & Smith 2010; Lereboullet 2013; Pickering 2015; Fleming & Park & Marshall 2015; Cradock-Henry 2021; Cradock-Henry and Frame 2021; Cradock-Henry and al 2019). These models are distinguished by their reliance on quantitative data and future scenarios analysis. As a result, the cultural dimension are often reduced to a handful of interviews and surveys and is rarely rooted in an immersive and interpretive approach. With no explicit treatment of the role of human agency (Holland & Smith 2010: 132), crucial elements of the beliefs, perceptions and practices of the producers is often reduced to a mere footnote. A number of scientists, have, however, tried to address these limitations by proposing more participatory adaptation pathways without having to rely on data-rich or resource intensive methods (Cradock-Henry and al 2021).

Yet these studies remain largely disconnected from the everyday complex realities of producers and often operate within their own bubble without necessarily being understood by viticultural communities. They also fail to capture the complexities at stake when accommodating socio-cultural elements of diverse place-based communities. Winegrowers generally pay a lot of attention to weather phenomena because the annual course of their vineyard operations and the quality of their products is dependent upon the weather and is related to the characteristics of the growing year for their marketing activities (Teil 2022; Battaglini & al 2009). As a result, climate change for wine producers often remains framed within a different worldview (Teil 2022). Many producers still remain indifferent to climate change and do not engage with the agenda unless they are directly affected by extreme events (Lereboullet 2013: 279). Moreover, not all actors respond in the same way to challenges, opportunities, and risks. The range, prevalence, and spatial and temporal distributions of different responses may be crucial to the resilience or the transformation of a social-ecological system and thus have a bearing on human vulnerability and well-being in the face of environmental, socioeconomic, and political change (Leslie & McCabe, 2013).

Beyond the gap identified by the sociologist Geneviève Teil (2022: 431) as a 'divergence in methods used to format and analyse observations and knowledge' between climatologists and wine producers, it is worth pointing out that wine producers are after all human beings and as a result they are the product of our late modernity navigating the world of twitter and Facebook while travelling and exchanging ideas with other producers throughout the globe especially for the younger and well-educated wine-producers. This increasingly reflexive modernity has undeniably transformed locality and ways of producing 'here' and 'there'. Access to information and knowledge especially if you are a speaker of English has facilitated the circulation of knowledge, but it has some negative effects on how and why information is used.

Ethnography, being defined as the study and "thick description" (Geertz 1973) of people's behaviour and social relations in the cultural and ecological contexts in which they live (Barnes & Dove 2015: 4), will enable us to learn a great deal about how people engage with their environments. Ethnographies need be guided by the question of how producers build reflexively their understanding of the environment through time, place and space (Wolkovich 2014). Particular attention will be paid to the



context and place of knowledge production as well as the mapping of environmental debates (see for example Hannah & al 2010 and response by Leuwen & al 2013). This is extremely important as the ethnographies follow the scope of human intentionality and their groundings (Howard, 2018) at a time of major transition, but explore diachronic and synchronic adaptation and experimentation through knowledge production which can then inform attempts to create a more sustainable environment.

# 'A holistic view'

Following Goodman (2018: 341), "ethnography has proved to be an invaluable tool to investigate the materialisation of climate or 'climatisation". Key to the anthropological perspective and beyond the ethnographic approach, holism defined as "the holistic view of society and the environment aims to situates climate change within a broader set of contextual relations and highlights the fact that climate change can only ever be one of a number of influences of people's life" (Barnes & Dove 2015: 9). In the context of viticulture and climate change it could be argued that historically well before the climate change political momentum, wine growers started to become more engaged with their environments and mobilised themselves independently of the threat posed by climate change in their respective locality. Yet climate change today seems to be presented as the consequence of a growing engagement with care and place in viticulture, especially in the terroir-driven places.

During the ethnographic work I conducted in the 1990s in Burgundy, I joined a group of young wine producers who, for different reasons, started to question their knowledge in relation to their own experience and the practices inherited from their parents. Through workshops organised in their local association (the GJPV Group of young Wine Professionals) they discussed a large number of new environmental practices that they wanted to implement. Three decades later, these young producers have now become well-established local figures of the environmental turn and they have continued their journeys into questioning the legacy of the AOC system. French viticulture has indeed developed through the fast transition to an industrial agricultural system France has experienced.

In her aptly titled chapter "Climate or Technical change in wine? Confronting climatologist's and winegrower's analyses', the sociologist Genevieve Teil (2022: 425) explores "wine producers perceptions of climate change not as those of an external reality of climate change but rather, following Holloway (1999) as a process of observation and analysis within the broader activity of managing a farm, a union, a company or such". While climate change is often the dominant factor, it is also often outweighted by other considerations. Preoccupations over the transmission and long-term financial sustainability of the vineyard, the generational and gender divide over environmental matters, the competitive social and economic landscape where the vineyard is located as well as the social and cultural capital of the owner are all attributes of how each producer's climate change imaginary. Moreover, environmental decisions are taken by the producer as part of a fleeting or more problem focused interest in either biodiversity concerns, pruning and frost debates or sometimes the well-being of their manual workers. So, the question of climate change is associated with other broader global changes which if relevant in the locality studied ought to be part of the analysis. According to Cassidy (2012), climate change cannot be unraveled from the complex web of social and material relations that mediate people's interactions with their environments.

### Towards a critical political ecology through grounded complexities

Wine offers an incredible platform to think critically about capitalist societies, nature and culture, science and empirical knowledge (Demossier 2018: viii). The Anthropocene is a planetary-scale phenomenon, whereas the methods of anthropologists and systems ecologists are suited to studies of local, community-scale processes (Orr & al, 2015:156). Exploring knowledge, practices, meanings and beliefs and future wine sustainability in specific places and moving away from the bounded understanding of culture to the complex intricacies of future wine ecologies aims therefore to reconcile the various scales of analysis embedded in wine from localised production to global commodity.

The study of the interaction between human societies, cultures and environmental change is not new to anthropologists who have long been engaged with it through different sub-fields of the discipline



(physical/biological, social/cultural, linguistics and archaeology). The discipline has moved on from the premises of cultural ecology of the 1930s-1950s to cross-cultural trends today, approaching the question of human relations to their environments from a range of perspectives, including the importance of the symbolic dimension or the political and institutional framing of the activity. Although previous scholarship has sought to address global environmental change, using different theoretical frameworks, including World systems theory (Wallerstein 1974; Bateson 1972), Assemblages (Ong 2004) and Frictions (Tsing 2005), a new synthesis is now imperative (Brondizio, Adams & Fiorini, 2017: 10-30).

At the heart of my anthropological preoccupation is the question of how to best capture the Anthropocene and to render analytically the complexity of the relationship between humans and their environments in questioning the nature/culture dualism (Descola, 2013; Latour, 1993). It is important to note that the shifts in anthropological theory of the environment address both the changing units of analysis (from bounded culture to global assemblages) and the changing relationships (deterministic, evolutionary to complexity). My own work has contributed to these shifts examining the ways in which global forms attached to terroir are articulated and translated in a reflexive fashion by local producers (2018). However, my current project seeks to move the debate in a radical new direction by going back to ethnography (Shah 2017) and engaging not only with environmental problem-solving, but also interdisciplinary productive conversations between natural science, anthropology and wine producers. I aim to reconcile the anthropology of human-environment relations with the dynamics of capitalist political structures of symbolic wine ecologies by putting climate ethnography at the forefront of the climate change agenda.

The study of socio-ecological systems cannot be fully understood without taking into account the world of scientific knowledge. This obliges anthropologists to adopt an interdisciplinary stance. Interactions between wine production and science requires more analysis. At the heart of my investigation is the focus on the wine producer and his/her understanding of natural sciences at a time of crisis, especially in the context of climate change and environmental adaptation. How do producers view science and scientific knowledge? What are the shared social predicaments of environmental innovators and agents of change? How is their understanding rooted in their own viticultural experiences? Are age, gender, socio-economic status and education factors? What are the main obstacles attached to sciences and scientific knowledge? Is language an obstacle? How do producers perceive the relationship between nature and science?

The key question is not only how knowledge is produced and disseminated through the wide range of natural sciences, but also how it is acquired and understood by wine producer. Situated expertise in the context of viticulture cannot be fully analysed without taking into account the power of agricultural industries from advisors for agricultural products to local training schools and schools of viticulture. Through both the historical approach and the ethnographic dimension the project will document how viticultural knowledge is constructed by various agencies and how they interact with wine producers. What kind of knowledge is displayed? How does it influence producers? How is innovation and/or experimentation conducted, adopted and then narrated or demonstrated? The synchronic and diachronic dimensions of experiential knowledge is at the core of the project and my own investigation will be focused on specific places of interaction of knowledge between science and wine producers such as viticulture schools, universities and training centres.

The gap between the wine producer located in a specific socio-ecological system, facing challenges through a kind of 'bricolage', experimenting with diverse kinds of innovation through networks sharing similar interests, and the world of scientific knowledge which is developing and circulating independently of producers remains to be investigated. As a result of this social configuration, science and viticultural political ecology remain largely disconnected from the praxis and experiences of producers who are well-placed to measure more concretely the impact of specific technical methods or innovations. Yet if their experimentation relates to visions of environmental futures, they rarely develop beyond the confines of the vineyards or engage with the work conducted in laboratories and viticultural centres. Some of these innovations or radical new visions which impact on the environment have become fields of contested knowledge permeating areas of natural sciences and contesting the boundaries of specific sub-disciplines through battles for legitimacy. I seek to explore these new areas



of environmental innovation and to question them in the light of scientific knowledge. Further attention needs to be devoted to the professionalisation of specific areas of scientific knowledge and their changing relevance in relation to the Anthropocene and the rise of organic viticulture (here defined in a broader sense on the basis of the practices encountered in the field sites). Interestingly there has been no serious attempt to contextualise the knowledge production of natural sciences and especially the climate change agenda in the light of the institutionalisation of specific professions. For example, pedology -defined as the study of soils in their natural environment- which historically played an important role in legitimising the European terroir ideology has lost its institutional research relevance.

One of the key challenges relates to the study of individual versus collective agency exercised by wine producers in specific local configurations. The term wine producer covers a broad range of often very different economic and social positions, including members of cooperatives, ordinary vineyard workers and producers and wine managers, both in large and small wine estates. They will be the starting point of any ethnography privileging a bottom-up approach which focuses on the producer and follows the circulation of knowledge and conversations established around him/her mapping the socio-ecological system through a fine situated, participative and comparative ethnography. Moving from the individual understanding of what the environment means in specific places, the project seeks to better comprehend how people, plant and place condition attitudes and representations towards environmental topics. Wine producers, the plant and nature will be the starting point of this enquiry while the socio-ecological systems in which they live will constitute another of the research strands. Questions will include: What is specific to the viticultural environmental experience in a specific place? Do wine producers learn from the locally experienced cyclical life of the vine? What are the main challenges? Do producers share the same experience of environmental challenges? How are they articulated at local level? How do they perceive their own actions? And if they do what is learned? How does it change over time? Is the perception of their environment shared from one generation to another, from one producer to the next? How do they understand their agency in the environmental debate? What kinds of adaptation to environment change have they attempted individually and collectively? What is the weight of norms and conventions in particular locations? How can economic viability be reconciled with an environmental and sustainable agenda? What matters to wine communities?

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