Chapter Three

Methodology: towards a post-humanist ethnography

Fig 3.1: A 'god's perspective' on an ethnographic site. Source: Google Earth™.

I climb the ladder to the top of the big concrete vat and crouch uncomfortably three metres above the ground, my head nearly brushing the roof of the cantina shed. I recoil from touching the collection of ancient spider-webs hanging centimetres above me. I unscrew the clasps holding the top cover, and flip it open. A burst of stinging, warm gas hits my mouth and nostrils, making me instantly drunk. Suddenly dizzy, I flop back against a pillar. I feel slightly euphoric, and I try to focus on breathing deeply. There is a shimmering on the edge of the vat, a density to the air like that above hot tarmac on a sunny day, and with a shiver I realise I am watching a barely visible waterfall of deadly CO_2 over-spilling from the vat after a night of closed-lid fermentation. I can hear Alo laughing from below, and then he passes me a heavy rubber pipe: we're going to do some cap-wetting. Wiser now, I hold my breath as the pump starts going and I hold the pipe gushing out heavy must into the vat. All the time I laugh inside, thinking: yeast was trying to kill me. (based on field notes 09/10/08)

3.1   Material entanglements and post-humanist ethnography

This is an ethnography of wines, which naturally overflow my attempts at black-boxing, and immediately force me to say

This is an ethnography of yeast, vines, and sulphur dioxide, but then the perspective warps again, and I have to say

This is an ethnography of wineries, which are composed of workers, ethics, machines, vines, insects, landscapes, moulds (the camera zooms in and out and makes us dizzy, so let's move on to say)

This thesis is an ethnography of a number of socio-natural complexities, and of their modes of ordering. Spatially, here they are, neatly visible on Google Earth™ – the buildings, the vineyards, perhaps even the workers, all nice and static in the green landscape. A cloud came over a part of the picture, so we can't actually see if there is any reality there anymore; you will have to trust my words. This opening page is the only time I evoke a god-like perspective. The rest is messy, situated, and partial.

The concern with this thesis is with the character and impact of material entities (processes, 'things') on the goal-oriented and ethically situated practices of producing organic wine. The questions this thesis seeks to answer are: what are the key 'things' in organic wine production, the effects of which reverberate most strongly in productive networks? How and why do these 'things' matter in organic wine production? And how is the vitality of these 'things' practically and discursively managed in organic wine making and marketisation? Thus in this thesis I try to both chart the most significant human-nonhuman imbroglios of organic winemaking at my research sites, and to decipher what kind of ethical and practical consequences they enact.

In this chapter, I outline the methods I adopted in order to get close to this heterogeneous action of organic winemaking. I suggest that participant observation of the work of organic winemaking made possible a deep engagement with and understanding of the materials

organic winemakers work with. Additionally, participating in practices of work opened the possibility for in-depth discussions with winemakers and other actors about the practical and ethical consequences of working with particular materials.

In this thesis, then, I try to stay true to the messiness of the socio-natural reality of organic wine production, and to write it not as an exercise in human intentionality, but as a collective achievement of a deeply hybrid heterogeneous 'crowd', while losing sight neither of the firmly human-centred goal-orientedness which underlies all production, nor of the ethical and moral dimension of organic winemaking practices.[1] To achieve this, my methodology had to be sensitive to both the 'mechanistic' dimension of organic wine production, tracing the networks of heterogeneous action and identifying the most powerful agents within the agential networks, as well as tracing the practical (material, enacted) impacts of the ethical and moral debates which both surround and inform organic winemaking practice. Consequently, while this thesis takes the non-human as its point of departure, it retains a 'human exemptionalism' (*sic* Murdoch 2001), seeing humans as particular kinds of actors, and valorising the ethical and moral dimension of production networks. At the same time, however, I argue for a very deep relationality of the very category 'human', and draw attention throughout the thesis to the contribution of non-human actors to the construction of producers' ethical identities (Holloway 2002) and the 'cultures' of production. The methodological challenges of writing such a 'mongrel' ethnography in order to answer questions about heterogeneous action in organic wine production are the topic of this chapter.

As a result of my research questions, the focus on the material heterogeneity of action (action as human-nonhuman hybrid) was explicit from the outset of this research. Consequently the ethnographic data on which this thesis builds was collected from a particular ontological position which saw the world as filled 'not, in the first instance, with facts and observations, but with *agency*' (Pickering 1995: 26), agency which is not a property of active subjects enacted on passive objects, but agency understood as a heterogeneous network effect (Law 1991). When we take agency – the capacity of some agents to cause other agents to do something – as the primary object of investigation, particular methodological tools are required. Drawing on Actor Network Theory approaches, I suggest that in an 'agentive ethnography' the task of the ethnographer becomes the tracing of networks of associations along which agency travels. In other words, the first task of an 'agential ethnographer' is create an account of the visible (Pickering 2001), asking questions about what makes productive networks 'work'. That means charting the to-and-fro of human and nonhuman agency falling neither into the trap of materialistic determinism (Law 2000), nor depending on external structures of 'meaning' (Latour 1993). The application of this Actor Network Theory methodology, in which a researcher is attentive to the 'noise' (Latour 2005) actors make in the process of moving others, resulted in a focus in this thesis on the most powerful non-humans, that is those whose effects reverberate most strongly and most widely in agential networks of organic winemaking: yeasts, vines, and sulphur dioxide.

In this thesis, I employ ANT as a basic toolkit, or a sensibility to the heterogeneity of the world (Law 2009). However, I then extend the ANT methodology in important ways. The bulk of ANT

---

[1] As one of my research participants commented on one of my more philosophical questions during a conversation, "this is all very well but in the evening you want to eat!"

research is done retrospectively through following 'paper trails' (although see Latour 1999 Chapter Two), and so struggles to deal with real-time material agency of non-human 'things' (Bruni 2005). Especially, ANT offers little help in dealing with the embodied and affective dimensions of heterogeneous assemblies. As a result, to 'get close to the heterogeneous action' in my methodology I employed approaches which have been more successful in engaging with human and non-human bodies in their 'experiential being' (Whatmore 2002). Secondly, I extended the ANT sensitivity by focusing on the qualitative, not only quantitative (more or less powerful) dimension of action of humans and non-humans in agential networks. In other words in my analysis of the agential worlds of organic wine production I asked not only *how* does agency travel, that is how humans and nonhumans exert influence on one another, but also *why* it travels. This, as I explain below, is the stuff of onto-politics of action (Mol 2002). The intimate milieu of ethnography, in which I employed my own body as a tool of research, and which allowed me insights into the embodied and affective worlds of others, made possible this qualitative engagement with heterogeneous agency.

3.2 Why vines, yeast and sulphur dioxide?

Why did the methodological tools I employed result in a focus on vines, yeast and sulphur dioxide? After all, the world of organic winemaking is awash with fascinating and important entities. Inarguably, practices involving vines, yeast and sulphur dioxide are materially central to the becoming of wine as a product, as well as, I argue, to the becoming of relational ethical identities of organic wine producers. I chose to explore the times and spaces of vines, which are the subject of my first ethnographic chapter (Chapter Four), because they are key in organising the cycles of production, and working with vines provides a constant backdrop to all other winery activity. Unlike yeast and sulphur dioxide, the ontological and ethical status of vines is rarely disputed, and while the levels of care and skill in viticultural work vary between wineries, the ontology of the vine has by now been firmly established as one of a productive plant whose vigour needs to be managed, and whose needs need to be met.

In contrast, yeast and sulphur dioxide, which are discussed in Chapter Five and Chapter Six respectively, emerged for my data as entities the ontologies of which are not only fluid and uncertain, but hotly contested. This conflict over the ontological (and ethical) status of yeasts and sulphur dioxide was what motivated me to make them the focal point of my analysis. I demonstrate that both yeast and sulphur dioxide are multiple objects (Mol 2002), performed in different ways in different practices. The two entities have innate capacities which are crucial for the becoming of wine. Yeast is a creative entity which not only ferments sugars creating alcohol, but is also responsible for a range of tastes and smells in wine. At the same time, in its 'wild' (non-manufactured) form it is an unknown quality, capable of creating beautiful or terrible but always lively (that is, changing) wines. The creative but unpredictable activity of wild yeast is thus an epitome of the mode of ordering I have called making space for nature, and which is characterised by withdrawal of control and decentring of human agency. Sulphur dioxide on the other hand enables control, as it has the capacity to silence microbial and other biochemical processes, stunning and even killing yeast and bacteria alike. Hardly any winemaker manages to make wine without it, and when they do, the capacities of sulphur dioxide have to be laboriously re-created through enrolment of other, multiple entities (see section 6.2.3). Liberal use of sulphur dioxide to both control fermentations and ensure long term bio-chemical stability of wine is thus an exemplary of the pacification mode of ordering,

which is characterised by strong human-centred agency and close control of processes. However, these two modes of ordering never exist in a pure state, and it is in the practices of working with yeasts and sulphur dioxide that both the ethical and practical dimensions of utilising these non-humans are constantly debated and challenged. Thus focusing on yeast and sulphur dioxide I was able to explore the tensions between making space for nature and pacification, tensions which are always present but not always vocalised in practices of making organic wine.

In what follows I take the reader through the methods which allowed me to individuate the three 'bundles of agency', yeast, vines and sulphur dioxide, as the primary movers and shakers of the organic winemaking world. I present the field sites where I encountered, worked with and talked about these non-humans, and discuss the research methods I employed to get close and get a grip on these (sometimes invisible) agents.

3.3 Materialist ethnography

How does one construct an 'agential ethnography' which applies the principal of symmetry of human and nonhuman action while retaining the qualitative, human-centred interest in the (ethical) 'why' of acting? How does one research ontological politics in the context of organic winemaking? In this thesis I combined the classic ethnographic in-depth attention to the everyday and an intimate face-to-face knowledge of communities and groups (Marcus 1995: 99) with the 'follow the action' approach of Actor Network Theory (Latour 2005). In my research this meant actively participating in winemaking and vine growing activities in order to learn about which 'things' were the most important for my research participants, and for what reasons, and with what consequences. I then followed these 'things' into centres of expertise, and traced their legislative and historical trails through further interviews and public data research. [2] While the bulk of my time was spent working and talking with organic winemakers at four key fieldwork sites, I also visited sixteen other conventional and organic wineries, interviewed experts in viticulture and oenology, and followed the 'paper trails', both on- and off-site, of the nonhumans which were brought to my attention. This combined methodology allowed me to 'meet with' (Haraway 2007) the nonhumans of organic winemaking on the intimate level of practice, as well as to explore how their power reverberated in discursive performances at multiple sites. In the following sections I explain in more detail how this combined methodology facilitated an understanding of non-human power as well as (relational) ethics in the world of North Italian organic winemaking.

I first consider the importance of the multi-sitedness of my research. I then explore the three key methods I employed in my exploration of heterogeneous action: embodied practice, attention to rupture, and the following of controversies.

3.3.1   Multi-sited ethnography

For decades now feminist and post-colonial philosophers have grappled with the issue of truth and objectivity in social science. Haraway (1998) memorably critiqued the visual 'god trick' of

---

[2] Expertise is here understood, after Atkins (2010), as goal-oriented knowledge employed to achieve particular objectives.

perfect insight pervasive in social science inquiry, arguing it designated the researchers as outsiders and gave them the authority to speak for the mute Others. She called instead for a recognition, and production, of necessarily situated, multiple and partial knowledge. An assumption that social scientific (or indeed any other inquiry) can provide an untainted insight into a 'culture' of a people or group has been much criticised, perhaps most interestingly in Tsing's ethnography of the marginal and marginalised Meratus (1993) in which she demonstrated how the constant flux and change inherent in the Meratus 'culture' challenged the hegemonising and coherent narratives of peoples and places. I am inspired by Tsing, Law (1994) and Mol (2002) to stress the constructedness and provisionality of the ethnographic account, and to explicitly bring in the figures of human and nonhuman 'teachers' (or 'key informants') as co-writers of this text. While at times I refer to the 'organic winemaking community' and 'the worlds of organic winemaking' in the thesis, these terms are not intended as descriptions of cultural 'realities', but as part of my situated understanding of how the ontologically multiple organic winemaking practices and discourses hang together (or enter into conflict) (Mol 2002) at different sites and times of production. In contrast with the more traditional ethnographic accounts, and following Tsing (1993), Law (1994), Latour (1996) and others, this thesis starts from an ontological position which sees structures and cultures as produced in practices. Through establishing particular connections between practices and sites, this thesis seeks to propose a competing (and hopefully compelling) reading of realit(ies) of organic wine production. I do not attempt here to create a homogenous picture of organic winemaking in Northern Italy. Instead my multi-sited ethnographic approach allows me to trace the world of organic wine production from within, starting with the embodied, affective and ethical world of practice, and in the process of following 'action' to trace where the lines of tension and the sites of power lie.

There were four principal sites in which I conducted my research (see producer profiles below), three of which were identified prior to the commencement of fieldwork. Additionally I visited sixteen subsidiary sites, four 'expert sites', and followed the legislative and political paper trails of the nonhuman actants. The multi-locale setting of this ethnography was not aimed at comparison. Instead, I employed multiple research locales to trace the diversity of organic winemaking practices at different sites, and to follow (or even trigger! See section 6.4.3) controversies surrounding particular multiple objects involved in these practices (Mol 2002). It has to be stressed that these multiple sites were not only always already connected through certain shared, although differing, practices (of making (organic) wine, of competing on the (organic) wine markets, of reflecting on (organic) winemaking policies), but they were also involved in an ongoing process of relational (re)qualification of these practices. Take yeast use as an example. At each site, yeast entered the picture at some point as the fermentator of wine. However, the trajectories of individual yeasts (did it come in a packet/from the vineyard/from the wall of the winery), the amount of power they exercised (were the fermentations nurtured/stopped/'left to develop'), the way their actions were interpreted and contextualised by producers (yeasts as tools/ethical subjects/instances of 'nature') differed. These differences of practice were then employed in the ethical positioning (Holloway 2002) of particular winemaking practices *vis a vis* those of other winemakers; the practices were always relational. The multi-sitedness was therefore central to the construction of ethnographic object(s) which were by their nature neither bound nor local, but hybrid and multi-locale, and which figure in and inform ethical and market-centred debates which are also relationally constructed. The spaces and distributions of these emergent ethnographic phenomena, and

the power plays inherent in ontological politics of multiple objects, themselves became objects of my enquiry (Law and Mol 2001).

The multi-sitedness of this research was also influenced by the temporality of vitivinicultural work, where productive activities are responsive to and organised around the cyclical developments in vines and wines. On the one hand, the cycles of vineyard and winery work are long. One year is hardly enough to make any wine at all. Vineyards become productive only three years after they have been planted, fermentations may finish in a month, or may take two years to complete, not to even mention the multi-year processes of wine maturation. On the other hand, the moments of vineyard and winery work can be extremely short. It only takes a day to prune one small vineyard. It only takes a few hours to inoculate a vat of wine with yeast. It only takes a few minutes to prepare and mix in a measure of sulphur dioxide. In the dance of agency (Pickering 1995) between the human and nonhuman contributors to the becoming of wine, specific human actions take shockingly little time, and are unevenly distributed. The one-year fieldwork model makes it impossible to access the long-term processes directly, while it is also physically impossible, even working at a single location, to witness every single step of winery and vineyard work; there is too much going on at the same time. The unpredictability of winery and vineyard work (who knows exactly when this wine will be ready for filtering/sulphur dioxide addition/blending, this vine for pruning/spraying) poses additional challenges to the anxious researcher worried that wherever they are, the action is not (Law 1994: 45).

As a result, multi-sited ethnography was necessary to get 'close to the heterogeneous action' of organic winemaking on a purely practical level of access. In my research I, first of all, made the best use of the practical, embodied experience wherever and whenever it was possible for me to get it. Multiplying locations facilitated serendipitous engagement on the one hand, while on the other allowed me insights into the differences and similarities in the mundane practices between locations. The second way of 'getting close to the action' involved employing my research participants as ethnographers of events that make up their own lives (Mol 2002). The stories they told me did not just present grids of meaning, but conveyed a lot about their embodied realities of 'dealing with' nonhuman agency on a daily basis. Actors, Latour notes, 'know what they do and we have to learn from them not only what they do, but how and why they do it. It is *us,* the social scientists, who lack the knowledge (…) and not *they* who are missing the explanation of why they are unwittingly manipulated by forces exterior to themselves and known to the social scientist's powerful gaze and methods' (1999: 19). Working with wines and vines, my participants were constantly engaged in processes of post-factum rationalisations of their own actions with reference to the 'power' of the emergent material phenomena which were influencing their work, be that tarrying fermentations or suddenly lively vines. In tracing my agential networks I was therefore guided by my participants as they told me about yeasts which stop them sleeping, vines which cause them nosebleeds, and the concept of 'nature' which stops them from 'interfering' in the unfolding of their wines. While I employed semi-structured interviews at certain junctures, these encounters were always informed by the discourses gleaned during the performance of everyday activities in the vineyards and in the wineries. My participants became co-producers, as by telling me stories of particular materials they directed my attention in particular ways.

The sites of my research differed in important ways in terms of access, duration of stay, and exact research methods employed. As Hine (2007) notes, doing meaningful multi-locale

research is dependent on establishing connections with participants and audiences for whom the project has resonance with their own concerns. As a result small, 'artisan' wineries are over-represented in this project as key research sites, for the shared explicit interest in 'active' non-humans was more prevalent amongst these 'artisan' producers than amongst more standardisation oriented large winery oenologists. This intellectual and emotional common ground made my presence as a researcher in the vineyard and winery more acceptable to those producers, while also facilitating access to both real-time and historical instances of non-human 'power'. Aware of this artisanal skew in my fieldwork location, I complemented the in-situ ethnographic work with sixteen day visits (repeated in two cases) to conventional and organic wineries in Veneto, Piemonte, Toscana, Abruzzo and Marche. While most of my in-situ sites offered me an opportunity to roll up my sleeves and work with the materials of organic vitiviniculture, during the day visits this embodied engagement was not possible. However, as I explain further in the sections which follow, embodied engagement is just one way of 'getting close' to non-human action. By focusing in my interviews on the points of rupture and controversy, and on the challenges the companies were facing from the non-humans they worked with, I was able to collect rich stories of how even at the most conventional, control- and standardisation bent wineries the agency of the nonhuman made itself felt. By asking questions such as: do you have any disaster stories? What problems are you facing at the moment? What do you think about winemaking practices at (for example site x, known for its 'extreme' biodynamic winemaking)?, I was able to gain information about both the practical-ethical consequences and roots of working in particular ways and with particular materials at these subsidiary sites.

An additional challenge of multi-sited ethnography is the ongoing negotiation of the researcher's positionality. Instead of a single arrival on the scene of ethnographic difference, I negotiated multiple arrivals and departures (Marcus 1995: 66). This endangered my access negotiations, especially during the one day visits, where there was a risk I would be easily slotted into the 'journalist' or 'tourist' category of visitors, and be presented only with the official, market-oriented discourses. I worked hard to mitigate this danger in a number of ways. The world of organic winemaking is small, and in introductory emails and phone calls I was sure to include not only details of my research project, but also to present myself as an already accepted if peripheral member of this community by drawing on my existing contacts. Being introduced by another winemaker as a trusted colleague on most occasions was also an important advantage. Furthermore, as my research progressed and my knowledge of the intricacies and controversies of organic winemaking grew I was able to direct my questions towards relevant areas, while avoiding the pitfalls of purely self-promotional discourse. Additionally, following Riley (2010) I employed the 'mobile research encounter' (also called the 'go-along') method, interviewing my research participants as we walked through the wineries and vineyards. My knowledge of machinery, processes and practices was then employed to gain specific insights into the practices at the particular sites.

An important question with any ANT-based inquiry becomes: where to stop? The ethnographic phenomena I ended up writing about are not bounded, and in following the trails of action and controversy I was taken to places I would not have considered visiting or studying in advance (De Laet and Mol 2000). The emergent importance of scientific and expert ways of understanding led me to the vitivinicultural centres of power and expertise: oenological laboratories, viticultural consultants, and specialised vine growers. These visits enriched my

understanding of organic winemaking practice and discourse, and proposed performances of the non-human ontologies which, due to their scientific power, were constantly referred to in other research contexts. Additionally, in the case of SO_2 I was led to engage in depth with the 'paper trail' of the EU-level legislative controversy surrounding this chemical. The publically accessible EU level correspondence and reports on the progress and failure of the legislative change were a 'public face' of a fragmented and private debate, which at the moment of writing is still ongoing amongst organic producers in the EU. Crucially these 'high level debates' were not used to 'contextualise' what was happening 'on the ground', but, in the ANT vein, were seen already present in the in-situ material and discursive practices of organic producers (Law 2004).

The three materialities I focus on in this thesis, that is vines, yeasts and sulphur dioxide, are radically different in kind. The touchable, changing materiality of vines works directly on the bodies of workers, while the largely invisible yeasts and sulphur dioxide are 'implicit presences', displacing the body *sensum stricte* as the primary site of understanding and practice, and employing scientific knowledges and instruments to 'get close' to the non-human activity. As a result of the different materialities of these agents, the practices in which they are involved are of a radically different character, and required radically different methodologies to 'get close' to the heterogeneous action. In the following sections I consider the different methodological tools I employed in researching these materially varied winemaking non-humans.

3.3.2 Praxiography

This thesis focuses on practices as significant moments which produce and reproduce meaningful distinctions between human and nonhuman bodies (Barad 2007). This approach is strongly influenced by the 'praxiography' developed by Annemarie Mol in her study of arthrosclerosis (2002). Tracing the different 'incarnations' of the disease in a Dutch hospital, Mol argued for an important ontological switch in perception of human-material engagements from 'performing practices in pre-given realities' to 'practice performance as production of realities'. 'Things', she suggested, are not as solid and durable as may appear (Law and Mol 1995). Instead, 'things' themselves are enacted within practices: they are effects, not objects, of action. This ontological 'switch' allowed me to abandon the idea of the distinction between human and nonhuman as given, and to explore how these categories were meaningfully enacted. Instead of applying pre-existent categories of 'active' humans acting on 'passive' vines/yeasts/chemicals/wines, a focus on practice as ontology enabled me to write the 'wine-producing-social' as an inherently hybrid domain (Latour 1993). (Natural) objects, just like (human) subjects, became in my methodology 'framed as part of events that occur and plays that are staged. If an object is real this is because it is part of a practice. It is reality *enacted*' (Mol 2002: 44 emphasis in original). It needs to be remembered here that performance is at the same time what individuals do, say and 'act out' (Gregson and Rose 2000) in the world of hybrid materiality, and so in the world of practice the discursive and the material have to be seen working together and influencing one another, engaged in a constant to-and-fro.

What did employing a praxiography as my primary research method mean 'in practice'? It meant adopting participant observation as my primary methodological tool, and the materials winemakers worked with, be they vats, pumps, vineyards, chemicals or bacteria, as my primary objects of interest. During the three stages of my ethnography (see section 3.5.1 this chapter),

and at all of my four main research sites (see Appendix A), I sought to participate in as many winemaking and grape-growing practices as was possible. Both in the vineyard and in the winery, this meant making myself available to the winemakers and vine growers as an assistant and carrying tubes, cleaning out vats, bottling wines, decanting wine vats, pulling down vine branches, pruning green vines, and performing any other winemaking and vine growing activity I was allowed, as an inexperienced worker, to take on. At the same time I followed the winemakers and vine growers around on a daily basis, asking incessant questions about the practicalities of their actions, their projected consequences, their historical roots, their legislative, oenological, and market contexts, and any other dimension which was relevant at the time. In short, I acted as a keen apprentice, learning through stories, practice and observation what winemaking was 'all about' at my four principal sites, for my participants, and how their practices connected with those of other organic winemaking locales through controversies and debates. The more time I spent 'at work' and 'at talk' with my participants, the greater my knowledge of both the practicalities of winegrowing activities, and the ethical and market consequences and roots of these actions became.

This practice-rooted knowledge could then in turn be mobilised in an interview format. At all of my key research sites I undertook interviews with all the principal and some of the temporary workers in the winery and the vineyard, focusing on the practices, challenges and practical and ethical roots and consequences of their production-related activities. I also drew on this practice-rooted knowledge in my interviews with winemakers and winery owners at another sixteen wineries, three of which were conventional wine producing wineries (please see Appendix A for a full list). The significance of oenological understandings of winemaking processes led me to visit the Conegliano School of Oenology, where I interviewed the Director of Teaching about the developments in winemaking as a taught subject and the consequences of oenological understandings on modern winemaking methods, and a researcher specialising in oenological yeast development on the uses of yeast in modern winemaking. I also visited and interviewed the director of an oenological laboratory at a large conventional winery to better understand the differences between small scale artisan and big-scale winemaking practices. Furthermore, I followed the vines to a vine nursery, where I interviewed the vine nursery owner on the socio-material histories of grape-producing vines (see section 4.2.2). For a week I also worked with two vine growing consultants at 'Progetto Natura'. I accompanied these specialists in vine diseases and illnesses on their usual rounds of their clients' vineyards, adopting the same apprentice-like approach I used in my key field sites. Finally, the importance of sulphur dioxide to organic wine production, and its changing legislative context, led me to correspond with the head of the EU-funded organic winemaking research group (ORWINE), and to analyse the publically available documents relating to the failed change in European organic winemaking legislation (see section 6.3.1).

Focusing on practices allowed me to consider 'things' without necessarily referring to their existence or location in Euclidean space. Following lessons of ANT, in this thesis I assume that it is not visibility which makes 'things' 'real', but the detectable effects of their action on the networks within which they are implicated (Law and Singleton 2005). Ultimately, I argue throughout this thesis, it all comes down to ontological politics (Mol 2002) in which ethical and moral discourses are etched into the material world (as vines are pruned, yeasts stunned or nurtured, and wines 'interfered with' or 'protected from intervention'), and equally in which the malleability and obstinacy of materials is constantly discursively framed and re-framed.

Access to this discursive and material world of practice is best granted through the classic ethnographic method of participant observation. However, as I mentioned above, the physical characteristics of the materialities I ended up following, and as a result the different spheres in which their 'power' could be best identified, required a use of different research methods for the visible (vines) and the implied (yeast, sulphur dioxide) presences. In the following sections, I reflexively consider the methods employed in researching these non-humans.

3.4 Researching the touchable: vines

3.4.1 'Letting go'

The practices of vineyard work, be it winter pruning, spring and summer shoot thinning, grape picking or vineyard spraying, regulate the rhythms of winery work, and were therefore of central interest to my research. Vines constantly endanger the goal-oriented practices of winemaking by their incessant production of 'excess material' – productively spurious shoots, branches, leaves and grapes – which require ongoing labour from the vineyard workers. Understanding these practices as spaces of meaningful meeting of human and nonhuman bodies required an active engagement with the practice. Ethnographic practice has always to a certain extent involved auto-ethnography (Atkinson 2006). However, recently more explicit ways of employing the researcher's own body as a tool for the acquisition of situated understanding have become visible, especially in non representational theory approaches (see for example Wylie 2002 on walking, Jones 2005 on cycling, McCormack 2002 on dancing, or Gibson 2006 on music playing). In spite of this 'glut' of embodied approaches, there is a dearth of studies which consider the role of embodiment in the work environment, and, further, which employ the mindbody of the researcher as a self-reflexive apprentice-in-training.

As I explain in the introductory section of Chapter Four, the ongoing training of new vineyard workers at Valli Unite enabled me to engage with the vine pruning processes not as an observer, but as a participant. An additional pair of hands was welcome, and I was taken on board by the vineyard team as a temporary apprentice, and underwent the same experiences of vine work training as other workers who begun their vine work during that winter. This embodied engagement with vines was crucial in forming my understanding of practices of vineyard and winery work. Informed by Hayles's (1999) understanding of embodiment not as an employment of a 'generic' human body, but as a 'specific instantiation generated from the noise of difference' (196), I was able to position my own experiences of vineyard work as situated and particular, while also comparing my experience of practice to that of others and drawing theoretical conclusions about the importance of 'a' body's capacities and limitations in practice-acquisition and performance (see Chapter Four). Even more importantly, working with vines changed how I approached vitivinicultural practice in general. It is to these reflexive insights on how embodied practice changed my analytical gaze that I now turn.

After Frolic (2011), I suggest that nurturing a mindful embodiment enabled me to employ my mind-body as a site of embodied, but also emotional understanding of the impact materiality had on productive practices and practitioners. The impact of the work was felt as aches in my back from the constant stooping, as the scratches and cuts on my palms, and as the sensuous smell of vine sap on my fingers. At the same time, the performance of vineyard work changed my embodied perception, extending my body to see and feel as it has never seen and felt before (Latour 2004a). This in turn led to a change of my analytical gaze, as I resigned my 'self' to the inescapability of the 'dance of agency' between my body and the materials it worked with. I believe it is worthwhile going into some detail of this process to shed light on how I as a researcher was impacted by the materials I worked with, and the theoretical ideas I engaged with in the interpretive process of fieldwork, therefore de-centring my "self" as a powerful, controlling and ordering 'author' of this thesis (which is, admittedly, another form of deceit).

Fig 3.2: The messy vine.

My initial encounters with the vines in the grim winter vineyards were utterly frustrating. With my head full of ideas about tacit knowledge and embodied encounters, I was itching to find out how pruning was taught and learned. My first encounter with the practice, described in section 4.3.1 ended, literally, in tears. I struggled to 'get' the vine just by looking at it. As I looked, squatting in front of it, what did I see? A trunk, a long thick branch, more thinner branches. Its surface was rough, the colour dark brown. It was an enigma. I kept asking myself: How do I use what I see? How do I learn to see? It was the question I was asked all the time by the pruning workers as I followed them around the vineyards – can you see? Can't you see? They made it seem so obvious! They knew, they saw, something I did not. Answering the question of how they created order from what to me seemed like utter chaos became my primary mission.

In the course of winter and during the later stages of green pruning I groped for 'a code' which would allow me to 'read' the vine and comprehend it, and which would give legitimacy to my attempts at intervention. My frustration was not only with my inability to locate this 'master-

key' to vineyard action, but also with the disinterest of my research participants and co-workers in establishing it. I refused to take their statements about the unpredictability of matter and contingency of action seriously, searching instead for the 'hidden truth'. However, the more I spoke with people, the more I observed their work in the vineyards, and the more I myself experimented with engaging with vines, the clearer it became that the 'code' I was groping for did not exist. Instead, action in the vineyards was directed by a set of loosely defined, contextual guidelines. Reading Ingold (2000) was a final moment of epiphany:

> 'The novice becomes skilled not through the acquisition of rules and representations, but at the point where he or she is able to dispense with them. They are like the map of an unfamiliar territory, which can be discarded once you have learned to attend to the features of the landscape, and can place yourself in relation to them.' (Ingold 2000: 415)

My frustrating experiences in the vineyards, combined with my exposure to Ingold's (2000) understanding of practices as a process of co-becoming which occur between the practitioner and the world, in a process within which neither has primacy, resulted eventually in a change in my analytical gaze. This change was a long process of 'letting go' of a modernist, positivist baggage of nature/culture, action/structure dichotomies, and of embracing the indeterminacy of working with the nonhuman, which eventually became a pervasive theme in this thesis. Working with the vines forced me as a researcher to truly 'let go' of ideas of complete human control, and open my eyes and my body to the ongoing dance of agency.

3.4.2   Keeping up: some reflections on temporality and visual methods

A focus on practice in studying the human-non-human encounters brings out the key importance of temporality, a theme still relatively poorly researched in post-human studies. 'Things', especially living 'things', Adam (1998) notes, are nothing but a materialisation of time. Time, she argues, does not exist in abstraction, but only as far as expressed in the irreversibly changing materiality of the world. Temporality is thus an inescapable dimension of practice, although a frequently overlooked one, as academic accounts tend to attempt closure, rather than embracing the temporal becoming and unbecoming of things (Adam 2000). Following Adam (2000), Barad (2007), Ingold (2011) and Pickering (1995) in this thesis I sought to valorise the temporal emergence inherent in performance of practice, especially practice which involves working with constantly changing entities, better imagined as materialising processes. This in turn required a temporality-sensitive methodology.

Temporalities of vines, yeasts and wines have their own spaces and their own exigencies, disciplining and organising human bodies. To put it bluntly, to communicate this temporality of practice in the living non-human world long periods of ethnographic fieldwork are needed. Methods most often employed in plant geographies such as interviews (Cloke and Jones 2001), garden visits (Hitchings 2003), or 'walking interviews' (Ryan 2010) are not enough when we attempt to take seriously the true impact of living materials on goal-oriented human practice. So far, it seems that in researching plants not only research participants (Hitchings 2007), but also researchers have been uncomfortable with animate non-humans. Additionally, the predominantly domestic and contemplative settings of most plant geographies to date have resulted in the foregrounding of aesthetic and affective dimensions of human-plant meetings, silencing the frustration and conflict inherent in goal-oriented practices which involve lively

materials (although see Power 2009 on some insights into the clashes between human and non-human temporalities).

And yet when dealing with plants, even more perhaps than when dealing with animals, we are drawn into the very heart of the issue of temporality. The annual cycle of growth, fruition and decay, and the longer cycles of sprouting, growing and dying are visible, sense-able in the bodies of plants as time which becomes matter. Their temporarily visible forms are already pregnant with both past and future, with experience and with potential. Each meeting is unique in an immediately obvious sense, as each encounter is punctuated by material change. Only by focus on practice can we understand how particular understandings of nature are shaped and practiced, and consequently how the discursive/ethical and material domains of practice co-constitute one another (Crouch 2003).

The challenges of working with temporarily emergent materialities were aided by employment of visual methods in my research. During research my camera was frequently at hand, and I used it to document sites and materials, and I employed the video option to capture particular material processes and gestures. These visual records were intended primarily for my use, and in this sense functioned as an additional 'visual notebook', helpful during analysis and writing. Additionally, filming became an important part of my apprenticeship in the vineyards. As Grasseni (2004) notes, filming may help the researcher to grasp how ways of seeing are framed by practices. Filming and photo-taking may then become part of the 'apprenticeship of the eye' intrinsic in a researcher's attuning to a structured perceptual environment of skilled action. This indeed was my experience, as both photography and filming allowed me to get to grips with the temporarily changing materiality of vines. Moreover, photographing particular vines before and after pruning interventions, as well as filming the actual processes of pruning and then re-watching them outside the vineyards paradoxically highlighted for me the importance of embodied, tactile engagement over a purely visual one in the acquisition of vine pruning practice as data and as skill (this is an example of retrospective fieldwork through visual thinking noted by Pink 2001).

While I thus acknowledge the inadequacy of purely visual engagement, I employ photographs and video stills throughout my thesis for illustrative purposes. As Orobitg Canal (2004) notes, the technique of using photographs for illustration, as *aide-memoirs,* and as testimony is common in ethnography (see e.g. Malinowski 1922). Additionally, in Chapter Four I employ both photographs and videos to evoke the sense of temporality, and to get closer to the particular moments of human-nonhuman sensuous encounter in the performance of practice (Garrett 2010). I employ visual data in a qualitatively and quantitatively different way to the rest of the thesis in that chapter, reflecting the very different character of vineyard-based practice.

In Chapter Four I work with visual materials to achieve a sense of time and place in a number of ways. Firstly, I run video stills along field note text to aid the reader's understanding of practices and materialities described (see sections 4.3.1 and 4.3.3.1). Secondly, I introduce three short videos. The aim of the first video, 'Winter pruning as a violent intervention', is to call attention to the perceived violence of pruning vines to better contextualise my initial difficulties in getting to grips with the practice. The second video, 'Lucille explains green

pruning to me', aims to call attention to the skilled action involved in pruning vines. [3] Through focusing the camera exclusively on the plant being pruned, and on the hands and gestures of the worker while she narrates her actions, I aim to draw the viewer's attention to the skill and tempo of the pruning practice. Additionally, and more ambitiously, I hope that watching this short video will create in the viewer similar feelings of confusion and amazement I myself felt when faced, for the first time, with the vulnerable body of a spring-time vine. In employing the third video, 'Dirk explains the green pruning of Barbera plants', which, importantly, was shot on a windy day, I aim to achieve both a sense of 'being' in the vineyard, amongst the vines, and to draw attention to the reflexive process of decision making in vineyards, where choices are arrived at collectively through engagement with matter of vines and through an employment of past experiences and vineyard histories, not in abstraction from the touchable materiality. The character of this process would have been difficult to convey purely in writing. Finally, all images employed in Chapter Four, taken together, illustrate the changing material characteristics of vines, from winter-time 'sticks and knots', through sap-crying 'stumps', sensual and delicate shoots of spring, and finally leafy 'jungles' of mid-summer. In this sense the visual illustration is aimed at conveying the sense of change, and highlighting the need to understand vines as materialising processes, not inert 'objects'.

3.5 Researching the un-touchable: yeast and sulphur dioxide

> *'To be accounted for, objects have to enter into accounts.'*
> *(Latour 2005: 79)*

While in the case of vines both visual methods and auto-ethnography were appropriate methods to 'get close to the heterogeneous action', in the case of the largely invisible entities of yeast and sulphur dioxide different methods had to be employed. Although both yeasts and sulphur dioxide could be sensed as tastes, smells and, for a very brief moment, touchable structures, these meetings were not the most significant in the impacts these non-humans had on practices and discourses. For most of the time, the yeasts and SO_2 were 'implied presences' (Lien and Law 2011), accessible not through their visibility, but through the reverberating echoes of their activity in discursive and material practice, in the way my research participants acted on and spoke about their wines. As my fieldwork developed, I realised that the best way of getting close to the action of these agencies was by being attentive to the unexpected ruptures of habitual practice involving these nonhumans, and by following controversies which surrounded them. It was in these instances that their non-human agency became most readily available.

3.5.1   Ruptures

One of the most efficient 'tricks' an ANT researcher can employ to 'make things' talk, Latour (2005) notes, is by paying attention to breakdowns, accidents and strikes, or what I propose to call ruptures. Fortunately for this researcher, ruptures in winemaking happen – all the time. At all stages of production, winemakers are faced with the unpredictably changing material characteristics of the wines, and wine components, they work with. As I explain in Chapter

---

[3] It should be noted here all three videos included in the thesis have been seen and approved for this particular use by the participants who appear in the footage.

Five, the ethical imperative of 'naturalness' in organic winemaking, which results in practices where control and lack of intervention is negotiated in a more self-conscious way than is the case in conventional production, often means that non-humans such as yeasts retain the status of 'matters of concern', without lapsing into mute 'matters of fact'.[4] Within the course of participant observation at the four key sites, I was therefore frequently witness to the bemusement and even alarm caused by unpredictably behaving non-humans. The post-factum rationalisations winemakers employed to explain to me and to themselves the unpredictable happenings were a further source of information.

Ruptures were also available to me through the medium of interviews. Both at my primary and secondary sites, I often turned the conversations to the difficulties and challenges of working with non-humans. This allowed me to sketch out the technical and discursive infrastructures which were in place in particular locations to keep the non-humans 'mute' and uncontroversial on the one hand, while also allowing me to access information on the past challenges. While organic winemaking practices showed a particular sensitivity to the activities of invisible but ethically charged non-humans, even at the most conventional of conventional wineries ruptures happened, and vital non-humans surprised and overcame human intentionality.

3.5.2 Controversies

As was already suggested above, following Annemarie Mol (2002) in this thesis I let go of object singularity in favour of multiplicity of objects, enacted in practices. Controversies happen when two (or more) practices which enact a particular 'object' contradict or clash with each other. When the practices involve a visible and touchable entity, such as the vine, agreement with regards to its role and relevant characteristics is relatively easy to achieve. In the case of invisible actants, however, controversies abound. Latour (2005) notes that controversies are a great source of information about non-humans, uncovering their multiple and complex lives as others struggle to contain them into singularity. This indeed was what I found in my research. In the organic winemaking community, the status of yeasts and SO_2, and the onto-politics of their deployment, were a source of constant debate. As a result even within the framework of day-visits at my subsidiary sites, it was possible for me to engage my participants in the debates surrounding the ontological and ethical status of these 'objects'. As I note in Chapter Six, my ignorance as to the prevailing modes of pacifying the key controversy at the heart of organic winemaking debates resulted in creating spaces of heated conflict in the context of the interviews, as I brought together two contradictory performances of sulphur dioxide, as a market actor on the one hand, and as an ethically loaded object on the other. Following controversies across sites and encounters allowed me a great insight into the key roles played by these invisible and 'mute' non-humans.

3.6   In the field

The engagements with the various non-humans hinted at above took place in four key and sixteen subsidiary sites. In the following section I briefly narrate the partly planned, partly serendipitous course of my engagement with the wineries which became my key and

---

[4] And where this is not the case, the tracing of networks which allow them to become 'mute' uncovers the real power of these intermediaries.

subsidiary field sites. I consider the practicalities of studying organic wine making in Italy, and explain the logic behind the geographical focus of this thesis. Profiles of all sites visited, and the key interlocutors there, can be found in Appendix A.

3.6.1   Access and key research sites

My first point of contact with the producers was through UK organic wine wholesalers. Early phone conversations and face-to-face interviews allowed me to get a provisional understanding of how organic wine markets operated, and establish contact with some producers. During the first year of my PhD I attended a tasting event organised by an organic wine wholesaler Vintage Roots in London, and took the opportunity to speak with organic wine producers present there about my research. It was at this stage that Italy was chosen as a good location for my research. Italy is not an obvious choice for a wine researcher. Much more work in wine research both in terms of ethnographic (Demossier 2011, Ulin 1996, although see Pratt 1994), scientific and market-centred work on wine is done in France, which is also still the biggest producer of wine in the world, with Italy the second biggest. The question of location was key from the outset of this research project. An important factor which influenced my decision was my existing fluency in spoken and written Italian. While it may have been possible for me to arrive at a relatively good level of spoken French before embarking on my fieldwork, it would have never reached the same standard as my already existing Italian, making it much more difficult to conduct long-term ethnographic research within the existing budget. Just as important, however, was the advice offered by my early research contacts, the UK-based organic wine wholesalers, and the producers encountered at the tasting. They made it clear to me that from their perspective Italy was just as important a producer of organic wines as France was, that there was a lot of intellectual exchange between the two countries, and that I would not be 'missing out' on any important trends and practices in organic winemaking by choosing to focus on Italy.

Organic winemaking is present on the whole of the Italian peninsula, and it was clear I had to make a choice regarding the location of my research. I decided to focus on the Northern and to a lesser extent Central regions of Italy (see producer locations in Appendix A) due both to research and pragmatic concerns. Weather is an important factor in wine production, as wetter, colder climates provide the perfect breeding ground for fungal and viral diseases which plague European vineyards, while the hotter, drier climates in the south naturally prevent these developments. Organic wine production bans the use of chemical pesticides and fungicides, and organic vineyards are therefore more prone to such diseases. This in turn translates into more problems on the level of wine production, as wines made from infected grapes are more likely to develop bacterial contamination. From the onset I was interested in exploring how winemakers responded to these fungal and bacterial challenges, and therefore decided to focus on wineries located in the more problematic areas.

In April 2008 I attended one of the biggest European wine exhibitions, VinItaly, in Verona, where I made further contacts with organic and conventional wine producers in the North and Central Italy. I finally established permanent contact with three of my main fieldworks sites during a preliminary visit in July 2008, and established further contact with the fourth site once the research commenced. These four sites were chosen due to their differences rather than similarities, and as a result provided me with a good overview of the various approaches to organic winemaking. The first key site, Perlage, was a large organic winery with strong market

links with the UK. It was important for me to include a large producer in this study, as the challenges and practices of making organic wine on a large scale differ considerably from more 'artisan' methods. The second site, La Biancara, was a small artisan producer with an interest in biodynamic winemaking. The practices of this producer stood in sharp contrast with those of the large winery, offering me insights into the two extremes of organic winemaking practice. At the same time the winemaker at La Biancara was a well known and controversial figure, and having first-hand experience of working with him allowed me to delve deep into the controversies surrounding the practices of wild fermentation and SO_2 addition in organic winemaking when interviewing other, more 'middle-ground' producers. The third site, Valli Unite, was chosen as it offered long-term access due to a cooperative structure, inherently open to visitors and part-time workers. The fourth site, Erbaluna, was chosen due to its high-end, boutique character, making expensive wines for demanding markets.

The seasonality of winemaking work meant it was crucial I should have a year-long overview of the winemaking practices at each site. As a result the main part of my research took place during three distinct visits in Italy. The visits were planned to fall within different parts of the year, and to cover all the important stages in the yearly cycle of production. The first visit fell within the harvest period (September – November 2008). During this period, the bulk of my research focused on the activities of the wineries. The second visit took place during the winter and early spring period (January – March 2009), and research during this time was dominated by the physical work of pruning in the vineyards. The final visit took place during the summer (May – July 2009). In between stretches of fieldwork I returned to the UK, where I continued to transcribe and translate material, conducted primary analysis, and continued to read relevant literature. This dialectical process was very beneficial both for linguistic reasons, as I discuss in section 3.6, and in terms of data interpretation, as empirical data reshaped my theoretical ideas, while theories I read changed the way I viewed my empirical data (Cerwonka and Makki 2007). I reflect more on this process below.

These four key research sites, which are described in more detail in Appendix A, offered me a good overview of various organic winemaking methods, from biodynamic to classically oenological, and various market involvements, from large UK supermarkets to distant Japanese speciality wholesalers. While the bulk of my time was spent at four key sites, I also visited sixteen additional conventional and organic wineries during my fieldwork, some of which were suggested to me by my research participants as sites of potential interest. These were typically pre-arranged one-day visits during which I interviewed the company owner(s), winemaker(s) and/or oenologist(s) as well as office staff, depending on availability. In addition to visiting wineries, the importance of expert knowledge resulted in interviews with workers at an oenological laboratory, at the oenology research wing of the prestigious Conegliano Institute of Oenology, at a vine nursery, and a vineyard management consultancy. The additional day visits allowed me to validate the information about what I identified as key 'objects' and key controversies of organic winemaking at those sites. By comparing companies which differed in terms of size, market engagement, and wine typology, I was able to reach a point of theoretical saturation (Crang and Cook 1995) with regards to organic winemaking discourses and practices. In accordance with the grounded theory approach I used in analysing my data, comparing sites allowed me to strengthen my analytical assumptions and further informed data collection (Becker 2007). This choice of additional locations was then not motivated by a notion of representativeness, but by an interest in experiencing (even second

hand) as wide a range of practices as possible. This variety, as I explain throughout the thesis, is an effect of the particular producers' way of managing the space of tensions between the pull of the two modes of ordering.

Please see Appendix A for a full list of the companies and institutions visited, and the character of those visits. While not all make it to the final text of the thesis, they all contributed to a deep understanding of the workings of the organic wine sector in Italy. Each of the key research sites offered different opportunities and presented different challenges, which impacted upon my data collection and analysis at each site, as I discuss below.

3.7 Positionality in 'working abroad', translation, and analysis

Reflecting on my particular view from whereabouts (Haraway 1988) and the consequent perspective on my research certainly feels like opening a can of worms. While I am perhaps able to recognise some aspects of my positionality, their impact on the way I conducted my research, and the way I analysed its outcomes, it is impossible to completely 'dissect myself' and establish the countless ways in which my nationality, my multi-lingual and cross-border life experience, my gender or indeed my character impacted upon the data collection, analysis and writing. Following the 'crisis of representation' in the mid 1980s in which the impartiality and 'objectivity' of ethnographers was questioned and finally dismantled such 'disclosure' of one's own positionality has become a staple element of research presentation. It is impossible to ignore Haraway's 1988 paper in which she challenged the 'god-trick' of absolute unbiased vision, and argued for a recognition of social science knowledge as co-constructed, partial and situated, and for a discussion of how the mechanisms of research and the social standing of the researcher shape their particular 'view from whereabouts'. However, these attempts at creating a transparent researcher-self through 'declaration' of one's' position in the power hierarchies have also been thoroughly critiqued, perhaps most forcefully by Rose (1997) who argued that not only is full disclosure impossible considering the complexity of psychological processes, but furthermore that these efforts mimic rather than undermine the 'god-trick' criticised by Haraway by creating an illusion of a knowable 'self' and of similarly knowable 'power structures'.

Unable to claim to know a 'truth' through powers of absolute insight, but similarly incapable of stepping outside ourselves to become transparent objects of our own scrutiny, what is left for social scientists who nonetheless want to put their name on a certain account of what they have seen and learnt without reducing it to 'just more text' (Crang 2005)? Envisaging ethnographic texts, and social science knowledge more generally, as co-produced in particular times and particular places, and as arrived at in an "in-between" (Smith 1996) where meaning is constructed and stabilised between researcher and researched, seems to offer a way forward. Taking my cue from Despret's research on animals and their scientists (2005, 2008), I also suggest that good research has to be characterised by "interestingness" which is shared by participants and researchers, and so by a politeness of both inquiry and of writing. A polite communication of research findings must then include both the messiness and uncertainty of knowledge production, and recognise the impact of relations through which research progresses. It should refuse the illusion of an unchanging knowing 'self', and instead offer multiple narratives to arrive at particular conclusions. Keeping these lessons in mind, in this thesis I include my research-self in the text, highlight moments of tension and misunderstanding during data collection. In my editorial choices I work to remain truthful to

both the partiality and the co-constructed character of the arguments I present. While writing is necessarily a form of ordering and making sense, I am careful not to 'smooth away' too much of the serendipity and partiality of my data collection process.

The challenges of the 'crisis of representation' in social science are interestingly mirrored in debates surrounding the issues of translation in qualitative research. The dominant view of translation as an automatic act of transferring meaning from one stable and objective sign-system to another is slowly starting to be challenged, and an understanding of translation as a result of co-operation over meaning between researchers and researched is emerging. In the following section I consider the role of language and translation in the becoming of this thesis.

3.7.1 'Problems' of translation

The data which informs this thesis was collected in multiple languages. The conversations and interviews were recorded in Italian, and transcribed directly into English by me. I wrote my field diary mostly in English, partly in Italian, occasionally in Polish. The literature I read throughout the fieldwork, analysis and writing up was mainly in English, occasionally in Italian. Thinking about my data, and data analysis, certainly mirrored the usual multi-lingual patterns of my thought. Considering my already multi-lingual and cross-cultural life, speaking about the problems of working in a 'foreign language', as it is most often portrayed, seems rather artificial – my whole life, after all, is lived in foreign languages, of which 'English academic speak' is only one. Although my experience is by no means unusual in academia today, there is a dearth of articles which would move beyond agonising over the English-to-Other translation 'issues', and recognise the multiplicity of languages lived in by all researchers, all the time (see Temple 2006, Temple and Koterba 2009 for an important exception).

Many authors' worries about translation are rooted in anxiety over a loss of meaning. This very position assumes that (native) language offers unmediated access to 'reality', access which can be obscured through 'bad' acts of translation. However, in reality there is always a gap between experience and expression. In this thesis I challenge the imagined dominance of vocalised over non-vocalised or 'tacit' understandings of the world (Thirft 1999), and approach and present vocalised statements as elements of socio-technical landscapes rather than 'objective' or 'subjective' descriptions of 'reality'. I suggest that in thinking about translation we need to consider every statement as a creative act of meaning-making which is relevant to the situation and the interlocutors, and challenge the idea of meaning as static and attached to language. Thus thinking about translation is an opportunity to think reflexively about the research process itself (Tremlett 2009), as a process of meaning production (Crane et al. 2009), and as production of knowledge done in-between researcher and researched.

How can approaching research as a collaborative process help us think about translation's key challenges: of accuracy, and of representation? Translation of vocalised statements is not an unproblematic process: each translation is also an ontological and political act of choosing particular meanings (Temple 2005). As Simon notes, in translation cultural sensibility as well as language capacity are at work, and the task of the translator/researcher 'has less to do with finding the cultural inscription of a term than in reconstructing its value' (1996: 138, quoted in Temple 2005). The value is linked to what the researcher-translator believes was *meant* at a particular moment. As we can never get inside another's head, and as we are ethically responsible for the necessarily subjective statements we make, the creation of meaning has to

be collaborative, and we have to provide our research participants with opportunities to disagree with our statements (Despret 2008). This is true of single or multi-language research alike.

A lot of the data informing this thesis was collected as vocalised statements, which had to be translated. In my research I used a compact voice recorder on a daily basis, recording conversations and interviews with my informants, and using it to take notes and capture my own moments of insight. I transcribed the majority of this verbal material myself directly into English while still in the field. This method of direct translation (as opposed to transcription and subsequent translation, or using original language materials in analysis) has been criticised by some authors, who argue that a direct transcription from source language into English can result in the dominance of English-centric analytical categories, and a silencing of 'native' interpretations (see e.g. Watson 2004). This critique certainly echoes the familiar worries of forcing 'our' interpretations onto disempowered 'others'.

I suggest that approaching research as a collaborative undertaking is a way to manage these representational worries both in the context of social science ethics, and of translation. In my case transcription in the field was a useful tool for deepening my dialogue with the research participants and establishing shared understandings, often through the process of language-learning. Although I had a very good grasp of Italian language before I began my fieldwork, technical vitivinicultural terms, which varied from region to region, posed quite a challenge. [5] Attempting transcription forced me to acknowledge the easily forgotten moments of misunderstanding, and offered an opportunity for object- and practice-centred discussions. These in turn uncovered assumptions about the character of particular materialities held by my research participants. [6] Thus language-learning with my research participants became an important research method in my fieldwork as the situation of novelty generated by working in a new environment was further exacerbated by gaps in my linguistic knowledge. [7] My ignorance became a useful tool for a temporary opening of 'black boxes' of practice by problematising taken for granted words or turns of phrase, leading not only to explanations, but also to some self-reflection on the part of my research participants.

Furthermore, the process of in-field transcription offered important moments of analytical reflection and allowed me to draw tentative conclusions which could be then subsequently 'tested back' in the field of practice (in accordance with the grounded theory analytical approach (Crang and Cook 1995)), making data generation an explicitly collaborative project while also ensuring linguistic accuracy. During the weeks and months of interaction with my participants I was not a passive collector of quotes, but a communicating partner in the conversations about production methods, natures and markets. After an evening's transcription I would frequently return to the same interlocutors and discuss issues I found

---

[5] I had studied Italian for four years at university level, and lived in a North Italian city for a year and a half.

[6] For example it took me a couple of weeks to decipher the meaning of the word '*stomber*' used by one of the vineyard workers. Establishing its meaning as the same as '*sperone*', or 'spur', took us into discussions about the behaviour of 'old' and 'new' vine wood, and the importance of tactile engagement with the vines when recognising their visually similar textures.

[7] While I imagine this is not an unusual situation, the role of language learning as a methodology is rarely discussed. See Watson (2004) for an important exception.

myself struggling with, or go over the same ground with them in a different context. By referring to previous conversations, I ensured both my understanding of my participants' positions, and communicated my own perspectives. My constant, repeated engagement with the participants ensured continued dialogue, and resulted in a stabilisation of agreed upon meanings, beliefs, and points of view.

The act of translation has been often conceptualised as an exercise of unequal power, especially with relation to representation (e.g. Tymoczo and Gentzler 2002, Rubel and Rosman 2003). As Spivak memorably put it, translating foreign language data into English linguistic structures can be seen as an act of colonial dominance, and can result in a social science 'translatese' in which 'the literature by a woman in Palestine begins to resemble, in the feel of its prose, something by a man in Taiwan' (1993/2000, cited in Temple 2005). The form of the translated text becomes therefore a political issue (Temple 2005), but also an epistemological one, with a potential to challenge the assumed 'transparency' of language. Keeping this in mind, in the translation of the quotes included in this text I avoided too much tidying-up, and I tried to maintain the rhythm and sentence construction typical to Italian, changing the syntax only when I felt it obscured the meaning.[8] Additionally, I employ the 'holus-bolus' strategy (Müller 2007), retaining some original Italian words which do not have obvious translations into English, but also wanting to draw attention to the foreign-language setting and to problematise the automatic fixation of meaning.[9] These entries are always *italicised* and defined. Additionally, in the quotes included in the body of this thesis I sometimes insert descriptions of significant gestures, inflection or pauses, or translation notes, into the transcribed conversations, in square brackets. I also utilise the underline to communicate stresses in particular quotes. Speaking about wine was often a passionate affair, and I wish to convey this passion, at least partially, to the readers of the 'dead' text (Jackson 2001).

3.7.2 Making sense: a reiterative process

While the bulk of data analysis occurred once I had more or less firmly closed the 'fieldwork' stage of my research, a large amount of the analytical work was done during the fieldwork year. As I mentioned above, transcription 'in the field' inevitably brought with it analytical reflection (Jackson 2001), which I included as part of my research diary. Additionally, in between the three stages of my field research I had an opportunity to discuss my observations and preliminary findings with my supervisors back in the UK. These meetings informed my further reading, which in turn influenced the way I viewed my data (Cerwonka and Malkki 2007). I still remember reading Mol's (2002) *Body Multiple* in a hammock after a day's work in the vineyard, and the wonderful feeling of 'eureka' her performative ontology brought to my understanding of yeasts and sulphur dioxides.

In hindsight, my coding process was probably messier and more drawn-out than it needed to be had I worked with coding software, which I avoided using due to concerns about getting sucked into the 'coding game' and spending too much time striving for perfect 'saturation' (see

---

[8] This often results in very long sentences (in comparison to typically short English ones) in which multiple narratives are woven together.
[9] For example *vivaio* – which roughly translates as 'nursery grower', and which describes a profession of growing young plants.

e.g. Schiellerup 2008). I believe it could have saved me a lot of time in my constant to-and-fro between theory and empirical materials. However, I do appreciate the constant contextualisation my manual 'grouping' strategy gave me. Throughout the analysis process I was dealing with large chunks of material rather than 'disembodied snippets', and thus the complexity and interweaving of issues was always kept in the foreground.

After returning to the UK, the first stage of my analysis had to do with identifying the most 'central' non-human agencies and materialities in the processes of organic winemaking. The reasons for choosing yeast, sulphur dioxide, and vines, as I had mentioned at the beginning of this chapter, had to do with their centrality to the processes of making wine, and so to the sheer quantity of material I gathered on them. But, just as importantly, my choice of yeasts and SO_2 had to do with their controversial ontological status, and the ethical dilemmas discussing these entities opened up for my research participants. In my analytical work, I wanted to get to the bottom of the powerful tensions expressed in the conversations about yeasts and SO_2.

I initially re-read (and re-watched) all the data I had gathered. I then grouped the data into large meta-documents according to what was being talked about (or worked with, or experienced). This produced documents focusing on yeasts, vines and sulphur dioxide, as well as on other 'entities' such as oenological machines, and vine diseases. Additionally, I created meta-documents which focused on the 'non-material' issues, such as markets and nature (naturalness), or typicity/authenticity. Having grouped my ethnographic material thus, I read 'across' these documents, coding in an open manner in the light of the theoretical concerns of my project (Crang 2001) to identify common themes. It was at this stage that I begun to connect the conversations about markets and nature with the practices at the winery and vineyards, and to unpack the relationships between markets, nature, identities and ethics.

Following this, I wrote short chapter drafts/reports in which I tried to organise the events, issues and debates which occurred in relation to the three non-human materials in a theoretically-informed narrative structure. These reports included excerpts from the transcribed interview data, from my field notes, and from the film data and analytical observations.[10] It was at this stage that I started to identify key interview/conversation quotes. Some of those initial choices were maintained in the final chapters as they provide good descriptions of practice, provide illustrations of key themes, or are expressive of the key tensions. In many instances I decided to use much longer quotes or entire fragments of conversations in the final chapters to demonstrate the relationships between discourses and practices, and to preserve the polyvocality of the research (Coffey 2002) (see below).

I have found that all non-humans 'followed' in my analysis were brought together as effects in the context of marketisation and market-creation practices. Thus the final chapter of my thesis is dedicated to these issues, bringing together the market-related and ethical effects of the non-humans discussed in more detail earlier, and exploring 'the market' as both real, made in practices, and imagined, through relationships with buyers and consumers. It was also at this stage that the similarity between the performances of yeast and of SO_2 became apparent. Both were multiple objects, both generated controversies, and both were implicated in ethics and in

---

[10] I had transcribed the video recordings into English and written video synopsis for each recording.

markets of organic wine production. To avoid duplication of material, I decided to give my stories of these two non-humans a different analytical focus, with the chapter on yeast (Chapter Five) focusing more explicitly on ethical issues, and the chapter on SO_2 (Chapter Six) discussing market-making in greater detail. This decision had also to do with my willingness to engage with the ethics in animal studies agenda in relation to yeast.

3.7.3 Co-constructed text

As I mentioned at the very start of this chapter, the ontological position I took when collecting the data for this thesis was firmly rooted in post-humanist theoretical approaches. As a result my final thesis explicitly employs the data from the field to illuminate, critique and/or extend particular theoretical themes. At the same time, in my research I sought first of all to be 'polite' to my research participants by constructing a space of inquiry which was interesting to all of us (Despret 2008). As a result the text of the thesis is not, in the first instance, an 'ethnography' in the classic sense of the word. It does not aim to create an overall view of an assumed 'cultural whole' (Crang and Cook 1995). Instead, through tracing particular key encounters between humans and nonhumans in work practice, which are significant both for me and for my research participants (sometimes for different reasons), it offers situated 'points of view', which, by the end of the thesis, hopefully provide a relatively rounded image of what goes on in organic winemaking 'in general', while also offering multiple interesting insights into what goes on 'in particular'.

To highlight this co-constructed character of knowledge production in this thesis I chose to valorise the polyvocality of research (Coffey 2002), and its collaborative character. Following Annemarie's Mol ethnography of a disease (2002), I too offer multiple vantage points from which to study the multiple and contested, but nonetheless 'hanging together' object: organic wine. Additionally, I want to acknowledge the partial knowledges and partial perspectives of my various research participants, and the various moments of negotiation in which their agency is overcome by that of the nonhuman (Pickering 1995). This results in a text in which a number of situated and provisional knowledges are brought together to sketch the relevant outlines of 'multiple objects'. This strategy is employed not just to communicate my own positionality, but also to communicate that this is how organic winemaking works, that claims to god-like perspective and absolute knowledge and absolute control are as false in the case of 'knowing wine' as in the case of my 'knowing wine research' (Haraway 1988). (Human) research participants are present in the text as 'disembodied voices' in long conversation/interview excerpts, with myself firmly present as an interlocutor. I also include only very slightly edited fragments of my research diary to explicitly position myself in the field of study, and to highlight the temporal character of the experiences I draw on in building theoretical insights. These excerpts are discernible from the rest of the text through formatting.

This thesis is also structured in such a way as to provide a good understanding of the temporality, physicality and labour of organic winemaking. The ethnographic chapters follow the temporal unfolding of the winemaking processes, charting a progress of work on/with wine from vine to market. In order to avoid lengthy technical description, 'scientific explanations' and legal frameworks of organic winemaking practices are included in text boxes where appropriate. Additionally, the structure of this thesis follows a development of the methods employed in 'getting to grips' with non-humans, from embodied and intimate

encounters enabled by the physical presence of vines, to the more dis-embodied assumed presence of yeast, which is performed into being, to the multiple and controversy-generating sulphur dioxide, and finally the performed and performative space of markets.

3.8 Conclusion

In this chapter, I outlined the methodological tools I employed in my research, highlighting the need for long-term and embodied approaches in gathering data about heterogeneous action relations in the context of organic wine production. My ontological position which sees making organic wine as a 'crowd achievement' led me to focus on practices of production using participant observation and interview methods. This enabled me to identify key 'things' the effects of which were felt most strongly, on a practical (material) and discursive level, within the worlds of organic wine: vines, yeasts and sulphur dioxide. It has also led me to focus on the key conflict and controversy between the two dominant and competing modes of ordering of organic winemaking practice, that of making space for nature and that of pacification.

In the following chapters, I chart the emergence, co-existence and conflict between the two modes of ordering, of pacification and of making space for nature, at key stages of organic winemaking: during vine pruning, wine fermentation, wine preservation, and wine marketisation. I demonstrate how these two modes of ordering are both embodied in and challenged by the vital materials of organic winemaking. I begin by inviting the readers to the vineyards to examine the emergence of the heterogeneous taskscapes (Ingold 2000) of human-vine relations, and the embodied practices of vine work in the following chapter.